# ATTACHMENT H


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# Metals

# Inorganic Data
# ( ICP Analysis)

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-01 | Date Collected | : 03/04/25 14:43 |
| Client ID | : 2A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 22:42 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2038860.pdf | Instrument ID | : TRACE9 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0200 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 24.7 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | 0.0066 | 0.0100 | 0.0022 | J |
| 7439-89-6 | Iron, Dissolved | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 4.35 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | ND | 0.0100 | 0.0016 | U |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | 2.17 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 9.70 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0278 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-02 | Date Collected | : 03/04/25 14:40 |
| Client ID | : 2B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 22:45 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2038860.pdf | Instrument ID | : TRACE9 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0395 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 25.2 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Dissolved | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 5.61 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | ND | 0.0100 | 0.0016 | U |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | 0.949 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 9.53 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0172 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-04 | Date Collected | : 03/04/25 12:25 |
| Client ID | : 3A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 22:49 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2038860.pdf | Instrument ID | : TRACE9 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/10/25 |

| CAS NO. | Parameter | mg/l Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0247 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 27.8 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | 0.0069 | 0.0100 | 0.0022 | J |
| 7439-89-6 | Iron, Dissolved | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 5.41 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | 0.0060 | 0.0100 | 0.0016 | J |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | 1.91 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 10.4 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0247 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-05 | Date Collected | : 03/04/25 12:45 |
| Client ID | : 3B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 23:17 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2038860.pdf | Instrument ID | : TRACE9 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0207 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 26.7 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Dissolved | 0.0177 | 0.0500 | 0.0090 | J |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 5.80 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | 0.0069 | 0.0100 | 0.0016 | J |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | 1.69 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 10.8 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0153 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-07 | Date Collected | : 03/04/25 09:25 |
| Client ID | : 4A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 23:20 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2038860.pdf | Instrument ID | : TRACE9 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0159 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 26.0 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | 0.0138 | 0.0100 | 0.0022 | |
| 7439-89-6 | Iron, Dissolved | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 5.16 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | 0.0143 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | 2.18 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 10.1 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0362 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-08 | Date Collected | : 03/04/25 10:10 |
| Client ID | : 4B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 22:52 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2038860.pdf | Instrument ID | : TRACE9 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/10/25 |

| CAS NO. | Parameter | mg/l Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0178 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 20.0 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | 0.0060 | 0.0100 | 0.0022 | J |
| 7439-89-6 | Iron, Dissolved | 0.0115 | 0.0500 | 0.0090 | J |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 5.26 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | 0.0017 | 0.0100 | 0.0016 | J |
| 7440-02-0 | Nickel, Dissolved | 0.0322 | 0.0250 | 0.0024 | |
| 7440-09-7 | Potassium, Dissolved | 1.00 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 10.3 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0254 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038690-1 | Date Collected | : NA |
| Client ID | : WG2038690-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/11/25 22:35 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2038860.pdf | Instrument ID | : TRACE9 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | ND | 0.100 | 0.0350 | U |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Dissolved | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | ND | 0.100 | 0.0153 | U |
| 7439-96-5 | Manganese, Dissolved | ND | 0.0100 | 0.0016 | U |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | ND | 2.50 | 0.237 | U |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | ND | 2.00 | 0.120 | U |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | ND | 0.0050 | 0.0021 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038690-4 | Date Collected | : 03/04/25 10:10 |
| Client ID | : 4BDUP | Date Received | : 03/04/25 |
| Sample Location | : | Date Analyzed | : 03/11/25 22:59 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2038860.pdf | Instrument ID | : TRACE9 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/10/25 |

| CAS NO. | Parameter | mg/l Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.032 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.007 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.002 | U |
| 7440-39-3 | Barium, Dissolved | 0.0174 | 0.0100 | 0.002 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.001 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.001 | U |
| 7440-70-2 | Calcium, Dissolved | 19.6 | 0.100 | 0.035 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.002 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.002 | U |
| 7440-50-8 | Copper, Dissolved | 0.0054 | 0.0100 | 0.002 | J |
| 7439-89-6 | Iron, Dissolved | ND | 0.0500 | 0.009 | U |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.003 | U |
| 7439-95-4 | Magnesium, Dissolved | 5.18 | 0.100 | 0.015 | |
| 7439-96-5 | Manganese, Dissolved | ND | 0.0100 | 0.002 | U |
| 7440-02-0 | Nickel, Dissolved | 0.0304 | 0.0250 | 0.002 | |
| 7440-09-7 | Potassium, Dissolved | 0.988 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.004 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.003 | U |
| 7440-23-5 | Sodium, Dissolved | 10.1 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.003 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.002 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0249 | 0.0050 | 0.002 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038690-6 | Date Collected | : |
| Client ID | : Serial Dilution | Date Received | : |
| Sample Location | : | Date Analyzed | : 03/11/25 23:06 |
| Sample Matrix | : WATER | Dilution Factor | : 5 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2038860.pdf | Instrument ID | : TRACE9 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7440-70-2 | Calcium, Dissolved | 19.8 | 0.500 | 0.175 | |
| 7439-95-4 | Magnesium, Dissolved | 5.16 | 0.500 | 0.077 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-01 | Date Collected | : 03/04/25 14:43 |
| Client ID | : 2A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:09 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2038860.pdf | Instrument ID | : TRACE9 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| CAS NO. | Parameter | mg/l Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum, Total | 0.0678 | 0.100 | 0.0318 | J |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.0210 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 25.0 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | 0.0921 | 0.0500 | 0.0090 | |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 4.41 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | 0.0109 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | 2.17 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 9.83 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | 0.0147 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-04 | Date Collected | : 03/04/25 12:25 |
| Client ID | : 3A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:06 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2038860.pdf | Instrument ID | : TRACE9 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.0246 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 27.7 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | 0.0105 | 0.0500 | 0.0090 | J |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 5.40 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | 0.0065 | 0.0100 | 0.0016 | J |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | 1.88 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 10.4 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | 0.0143 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-05 | Date Collected | : 03/04/25 12:45 |
| Client ID | : 3B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:37 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2038860.pdf | Instrument ID | : TRACE9 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| CAS NO. | Parameter | mg/l Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum, Total | 0.0749 | 0.100 | 0.0318 | J |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.0221 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 27.3 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | 0.110 | 0.0500 | 0.0090 | |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 5.94 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | 0.0101 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | 1.70 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 10.7 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | 0.0155 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-07 | Date Collected | : 03/04/25 09:25 |
| Client ID | : 4A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:41 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2038860.pdf | Instrument ID | : TRACE9 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| CAS NO. | Parameter | mg/l Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum, Total | 0.0323 | 0.100 | 0.0318 | J |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.0163 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 27.0 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | 0.795 | 0.0500 | 0.0090 | |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 5.32 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | 0.0194 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | 2.21 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 10.1 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | 0.0142 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-08 | Date Collected | : 03/04/25 10:10 |
| Client ID | : 4B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:44 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2038860.pdf | Instrument ID | : TRACE9 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| CAS NO. | Parameter | mg/l Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum, Total | 0.138 | 0.100 | 0.0318 | |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.0197 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 20.3 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | 0.0142 | 0.0100 | 0.0021 | |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | 0.246 | 0.0500 | 0.0090 | |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 5.42 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | 0.0126 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Total | 0.0309 | 0.0250 | 0.0024 | |
| 7440-09-7 | Potassium, Total | 1.05 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 10.5 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | 0.0310 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038695-1 | Date Collected | : NA |
| Client ID | : WG2038695-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/11/25 15:50 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2038860.pdf | Instrument ID | : TRACE9 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | ND | 0.100 | 0.0350 | U |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | ND | 0.100 | 0.0153 | U |
| 7439-96-5 | Manganese, Total | ND | 0.0100 | 0.0016 | U |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | ND | 2.50 | 0.237 | U |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | ND | 2.00 | 0.120 | U |
| 7440-28-0 | Thallium, Total | 0.0033 | 0.0200 | 0.0025 | J |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | ND | 0.0050 | 0.0021 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038695-4 | Date Collected | : 03/04/25 14:43 |
| Client ID | : 2ADUP | Date Received | : 03/04/25 |
| Sample Location | : | Date Analyzed | : 03/11/25 16:16 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2038860.pdf | Instrument ID | : TRACE9 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| CAS NO. | Parameter | mg/l Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum, Total | 0.0652 | 0.100 | 0.032 | J |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.007 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.002 | U |
| 7440-39-3 | Barium, Total | 0.0213 | 0.0100 | 0.002 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.001 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.001 | U |
| 7440-70-2 | Calcium, Total | 25.4 | 0.100 | 0.035 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.002 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.002 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.002 | U |
| 7439-89-6 | Iron, Total | 0.0929 | 0.0500 | 0.009 | |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.003 | U |
| 7439-95-4 | Magnesium, Total | 4.38 | 0.100 | 0.015 | |
| 7439-96-5 | Manganese, Total | 0.0112 | 0.0100 | 0.002 | |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.002 | U |
| 7440-09-7 | Potassium, Total | 2.19 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.004 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.003 | U |
| 7440-23-5 | Sodium, Total | 9.92 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.003 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.002 | U |
| 7440-66-6 | Zinc, Total | 0.0154 | 0.0050 | 0.002 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038695-6 | Date Collected | : |
| Client ID | : Serial Dilution | Date Received | : |
| Sample Location | : | Date Analyzed | : 03/11/25 16:23 |
| Sample Matrix | : WATER | Dilution Factor | : 5 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2038860.pdf | Instrument ID | : TRACE9 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7440-70-2 | Calcium, Total | 25.2 | 0.500 | 0.175 | |
| 7439-95-4 | Magnesium, Total | 4.40 | 0.500 | 0.077 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038695-8 | Date Collected | : 03/05/25 08:35 |
| Client ID | : WG2038695-8 DUP | Date Received | : 03/05/25 |
| Sample Location | : | Date Analyzed | : 03/11/25 17:02 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2038860.pdf | Instrument ID | : TRACE9 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-89-6 | Iron, Total | 0.673 | 0.0500 | 0.009 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-02 | Date Collected | : 03/04/25 14:40 |
| Client ID | : 2B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/14/25 17:22 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : JMF |
| Lab File ID | : WG2040539.pdf | Instrument ID | : TRACE8 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/14/25 |

| CAS NO. | Parameter | mg/l Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.0416 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 24.6 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 6.34 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | ND | 0.0100 | 0.0016 | U |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | 0.950 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | ND | 0.0050 | 0.0021 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2040264-1 | Date Collected | : NA |
| Client ID | : WG2040264-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/14/25 15:17 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : JMF |
| Lab File ID | : WG2040539.pdf | Instrument ID | : TRACE8 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/14/25 |

| CAS NO. | Parameter | mg/l Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | ND | 0.100 | 0.0350 | U |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | ND | 0.100 | 0.0153 | U |
| 7439-96-5 | Manganese, Total | ND | 0.0100 | 0.0016 | U |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | ND | 2.50 | 0.237 | U |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | ND | 2.00 | 0.120 | U |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | ND | 0.0050 | 0.0021 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2040264-4 | Date Collected | : 03/06/25 07:00 |
| Client ID | : WG2040264-4 DUP | Date Received | : 03/07/25 |
| Sample Location | : | Date Analyzed | : 03/14/25 15:48 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : JMF |
| Lab File ID | : WG2040539.pdf | Instrument ID | : TRACE8 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/14/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Total | 0.0326 | 0.100 | 0.032 | J |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.002 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.001 | U |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.002 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.002 | U |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.003 | U |
| 7440-02-0 | Nickel, Total | 0.0051 | 0.0250 | 0.002 | J |
| 7782-49-2 | Selenium, Total | 0.0279 | 0.0100 | 0.004 | |
| 7440-22-4 | Silver, Total | 0.0318 | 0.0070 | 0.003 | |
| 7440-66-6 | Zinc, Total | 0.0040 | 0.0050 | 0.002 | J |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2040264-8 | Date Collected | : 03/07/25 11:18 |
| Client ID | : WG2040264-8 DUP | Date Received | : 03/07/25 |
| Sample Location | : | Date Analyzed | : 03/14/25 16:45 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : JMF |
| Lab File ID | : WG2040539.pdf | Instrument ID | : TRACE8 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/14/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.002 | U |
| 7440-50-8 | Copper, Total | 1.15 | 0.0100 | 0.002 | |
| 7439-92-1 | Lead, Total | 0.0029 | 0.0100 | 0.003 | J |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-02 | Date Collected | : 03/04/25 14:40 |
| Client ID | : 2B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/17/25 12:18 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : JMF |
| Lab File ID | : WG2041355.pdf | Instrument ID | : TRACE7 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/14/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7440-23-5 | Sodium, Total | 9.71 | 2.00 | 0.120 | |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939061-1 | | | | | | | | | |
| Date Analyzed : | 03/11/25 06:24 | | | | | | | | | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | 0.500 | 0.4870 | 97 | | | | | | | |
| Antimony | 0.500 | 0.5020 | 100 | | | | | | | |
| Arsenic | 0.500 | 0.4990 | 100 | | | | | | | |
| Barium | 0.500 | 0.4900 | 98 | | | | | | | |
| Beryllium | 0.500 | 0.5150 | 103 | | | | | | | |
| Cadmium | 0.500 | 0.5080 | 102 | | | | | | | |
| Calcium | 0.500 | 0.5030 | 101 | | | | | | | |
| Chromium | 0.500 | 0.5030 | 101 | | | | | | | |
| Cobalt | 0.500 | 0.5180 | 104 | | | | | | | |
| Copper | 0.500 | 0.4830 | 97 | | | | | | | |
| Iron | 0.500 | 0.5210 | 104 | | | | | | | |
| Lead | 0.500 | 0.5110 | 102 | | | | | | | |
| Magnesium | 0.500 | 0.4970 | 99 | | | | | | | |
| Manganese | 0.500 | 0.5010 | 100 | | | | | | | |
| Nickel | 0.500 | 0.5140 | 103 | | | | | | | |
| Potassium | 5.00 | 5.2100 | 104 | | | | | | | |
| Selenium | 0.500 | 0.4980 | 100 | | | | | | | |
| Silver | 0.500 | 0.4890 | 98 | | | | | | | |
| Sodium | 10.0 | 10.2000 | 102 | | | | | | | |
| Thallium | 0.500 | 0.4970 | 99 | | | | | | | |
| Vanadium | 0.500 | 0.4990 | 100 | | | | | | | |
| Zinc | 0.500 | 0.5150 | 103 | | | | | | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939061-3 | | | R1939061-6 | | | R1939061-8 | | R1939061-10 | |
| Date Analyzed : | 03/11/25 06:31 | | | 03/11/25 07:22 | | | 03/11/25 08:18 | | 03/11/25 09:40 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | 0.500 | 0.4920 | 98 | 0.5000 | 0.475 | 95 | 0.484 | 97 | 0.492 | 98 |
| Antimony | 0.500 | 0.4990 | 100 | 0.5000 | 0.489 | 98 | 0.499 | 100 | 0.506 | 101 |
| Arsenic | 0.500 | 0.5000 | 100 | 0.5000 | 0.487 | 97 | 0.501 | 100 | 0.513 | 103 |
| Barium | 0.500 | 0.4890 | 98 | 0.5000 | 0.476 | 95 | 0.483 | 97 | 0.481 | 96 |
| Beryllium | 0.500 | 0.5160 | 103 | 0.5000 | 0.502 | 100 | 0.512 | 102 | 0.516 | 103 |
| Cadmium | 0.500 | 0.5060 | 101 | 0.5000 | 0.483 | 97 | 0.492 | 98 | 0.494 | 99 |
| Calcium | 0.500 | 0.5060 | 101 | 0.5000 | 0.482 | 96 | 0.494 | 99 | 0.493 | 99 |
| Chromium | 0.500 | 0.5040 | 101 | 0.5000 | 0.481 | 96 | 0.491 | 98 | 0.490 | 98 |
| Cobalt | 0.500 | 0.5140 | 103 | 0.5000 | 0.491 | 98 | 0.501 | 100 | 0.504 | 101 |
| Copper | 0.500 | 0.4800 | 96 | 0.5000 | 0.458 | 92 | 0.469 | 94 | 0.471 | 94 |
| Iron | 0.500 | 0.5180 | 104 | 0.5000 | 0.499 | 100 | 0.512 | 102 | 0.514 | 103 |
| Lead | 0.500 | 0.5130 | 103 | 0.5000 | 0.488 | 98 | 0.506 | 101 | 0.509 | 102 |
| Magnesium | 0.500 | 0.4970 | 99 | 0.5000 | 0.473 | 95 | 0.486 | 97 | 0.482 | 96 |
| Manganese | 0.500 | 0.5030 | 101 | 0.5000 | 0.485 | 97 | 0.490 | 98 | 0.492 | 98 |
| Nickel | 0.500 | 0.5160 | 103 | 0.5000 | 0.492 | 98 | 0.504 | 101 | 0.497 | 99 |
| Potassium | 5.00 | 5.2400 | 105 | 5.0000 | 5.10 | 102 | 5.18 | 104 | 5.24 | 105 |
| Selenium | 0.500 | 0.5040 | 101 | 0.5000 | 0.486 | 97 | 0.502 | 100 | 0.507 | 101 |
| Silver | 0.500 | 0.4780 | 96 | 0.5000 | 0.468 | 94 | 0.480 | 96 | 0.482 | 96 |
| Sodium | 10.0 | 10.2000 | 102 | 10.0000 | 10.0 | 100 | 10.2 | 102 | 10.3 | 103 |
| Thallium | 0.500 | 0.4990 | 100 | 0.5000 | 0.477 | 95 | 0.492 | 98 | 0.500 | 100 |
| Vanadium | 0.500 | 0.4980 | 100 | 0.5000 | 0.475 | 95 | 0.487 | 97 | 0.486 | 97 |
| Zinc | 0.500 | 0.5170 | 103 | 0.5000 | 0.493 | 99 | 0.503 | 101 | 0.497 | 99 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1939061-12 | | | R1939061-14 | | R1939061-16 | |
| Date Analyzed : | | | | 03/11/25 12:09 | | | 03/11/25 12:27 | | 03/11/25 13:29 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | | | | 0.5000 | 0.504 | 101 | 0.503 | 101 | 0.494 | 99 |
| Antimony | | | | 0.5000 | 0.507 | 101 | 0.502 | 100 | 0.510 | 102 |
| Arsenic | | | | 0.5000 | 0.512 | 102 | 0.511 | 102 | 0.510 | 102 |
| Barium | | | | 0.5000 | 0.479 | 96 | 0.479 | 96 | 0.480 | 96 |
| Beryllium | | | | 0.5000 | 0.516 | 103 | 0.516 | 103 | 0.513 | 103 |
| Cadmium | | | | 0.5000 | 0.494 | 99 | 0.491 | 98 | 0.490 | 98 |
| Calcium | | | | 0.5000 | 0.496 | 99 | 0.496 | 99 | 0.494 | 99 |
| Chromium | | | | 0.5000 | 0.496 | 99 | 0.494 | 99 | 0.493 | 99 |
| Cobalt | | | | 0.5000 | 0.506 | 101 | 0.503 | 101 | 0.501 | 100 |
| Copper | | | | 0.5000 | 0.472 | 94 | 0.474 | 95 | 0.471 | 94 |
| Iron | | | | 0.5000 | 0.518 | 104 | 0.521 | 104 | 0.514 | 103 |
| Lead | | | | 0.5000 | 0.508 | 102 | 0.506 | 101 | 0.504 | 101 |
| Magnesium | | | | 0.5000 | 0.482 | 96 | 0.481 | 96 | 0.480 | 96 |
| Manganese | | | | 0.5000 | 0.498 | 100 | 0.496 | 99 | 0.496 | 99 |
| Nickel | | | | 0.5000 | 0.505 | 101 | 0.506 | 101 | 0.504 | 101 |
| Potassium | | | | 5.0000 | 5.23 | 105 | 5.23 | 105 | 5.23 | 105 |
| Selenium | | | | 0.5000 | 0.507 | 101 | 0.510 | 102 | 0.506 | 101 |
| Silver | | | | 0.5000 | 0.486 | 97 | 0.485 | 97 | 0.482 | 96 |
| Sodium | | | | 10.0000 | 10.3 | 103 | 10.4 | 104 | 10.2 | 102 |
| Thallium | | | | 0.5000 | 0.495 | 99 | 0.500 | 100 | 0.495 | 99 |
| Vanadium | | | | 0.5000 | 0.489 | 98 | 0.487 | 97 | 0.486 | 97 |
| Zinc | | | | 0.5000 | 0.504 | 101 | 0.503 | 101 | 0.502 | 100 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1939061-18 | | | R1939061-20 | | R1939061-22 | |
| Date Analyzed : | | | | 03/11/25 14:11 | | | 03/11/25 14:44 | | 03/11/25 15:41 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | | | | 0.5000 | 0.491 | 98 | 0.492 | 98 | 0.484 | 97 |
| Antimony | | | | 0.5000 | 0.499 | 100 | 0.492 | 98 | 0.493 | 99 |
| Arsenic | | | | 0.5000 | 0.500 | 100 | 0.497 | 99 | 0.496 | 99 |
| Barium | | | | 0.5000 | 0.478 | 96 | 0.471 | 94 | 0.472 | 94 |
| Beryllium | | | | 0.5000 | 0.512 | 102 | 0.508 | 102 | 0.508 | 102 |
| Cadmium | | | | 0.5000 | 0.486 | 97 | 0.484 | 97 | 0.480 | 96 |
| Calcium | | | | 0.5000 | 0.492 | 98 | 0.488 | 98 | 0.488 | 98 |
| Chromium | | | | 0.5000 | 0.490 | 98 | 0.486 | 97 | 0.482 | 96 |
| Cobalt | | | | 0.5000 | 0.497 | 99 | 0.493 | 99 | 0.491 | 98 |
| Copper | | | | 0.5000 | 0.469 | 94 | 0.465 | 93 | 0.462 | 92 |
| Iron | | | | 0.5000 | 0.514 | 103 | 0.511 | 102 | 0.508 | 102 |
| Lead | | | | 0.5000 | 0.498 | 100 | 0.496 | 99 | 0.497 | 99 |
| Magnesium | | | | 0.5000 | 0.477 | 95 | 0.473 | 95 | 0.472 | 94 |
| Manganese | | | | 0.5000 | 0.493 | 99 | 0.492 | 98 | 0.489 | 98 |
| Nickel | | | | 0.5000 | 0.499 | 100 | 0.496 | 99 | 0.493 | 99 |
| Potassium | | | | 5.0000 | 5.24 | 105 | 5.22 | 104 | 5.17 | 103 |
| Selenium | | | | 0.5000 | 0.498 | 100 | 0.492 | 98 | 0.494 | 99 |
| Silver | | | | 0.5000 | 0.479 | 96 | 0.478 | 96 | 0.472 | 94 |
| Sodium | | | | 10.0000 | 10.3 | 103 | 10.2 | 102 | 10.2 | 102 |
| Thallium | | | | 0.5000 | 0.484 | 97 | 0.484 | 97 | 0.485 | 97 |
| Vanadium | | | | 0.5000 | 0.483 | 97 | 0.479 | 96 | 0.477 | 95 |
| Zinc | | | | 0.5000 | 0.498 | 100 | 0.494 | 99 | 0.489 | 98 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1939061-24 | | | R1939061-26 | | R1939061-28 | |
| Date Analyzed : | | | | 03/11/25 16:26 | | | 03/11/25 17:12 | | 03/11/25 17:37 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | | | | 0.5000 | 0.492 | 98 | 0.490 | 98 | 0.486 | 97 |
| Antimony | | | | 0.5000 | 0.503 | 101 | 0.501 | 100 | 0.498 | 100 |
| Arsenic | | | | 0.5000 | 0.496 | 99 | 0.501 | 100 | 0.495 | 99 |
| Barium | | | | 0.5000 | 0.482 | 96 | 0.476 | 95 | 0.476 | 95 |
| Beryllium | | | | 0.5000 | 0.511 | 102 | 0.510 | 102 | 0.507 | 101 |
| Cadmium | | | | 0.5000 | 0.480 | 96 | 0.480 | 96 | 0.482 | 96 |
| Calcium | | | | 0.5000 | 0.489 | 98 | 0.485 | 97 | 0.490 | 98 |
| Chromium | | | | 0.5000 | 0.487 | 97 | 0.484 | 97 | 0.485 | 97 |
| Cobalt | | | | 0.5000 | 0.492 | 98 | 0.494 | 99 | 0.495 | 99 |
| Copper | | | | 0.5000 | 0.466 | 93 | 0.464 | 93 | 0.466 | 93 |
| Iron | | | | 0.5000 | 0.508 | 102 | 0.506 | 101 | 0.510 | 102 |
| Lead | | | | 0.5000 | 0.494 | 99 | 0.498 | 100 | 0.495 | 99 |
| Magnesium | | | | 0.5000 | 0.472 | 94 | 0.470 | 94 | 0.473 | 95 |
| Manganese | | | | 0.5000 | 0.496 | 99 | 0.493 | 99 | 0.492 | 98 |
| Nickel | | | | 0.5000 | 0.499 | 100 | 0.494 | 99 | 0.495 | 99 |
| Potassium | | | | 5.0000 | 5.25 | 105 | 5.23 | 105 | 5.22 | 104 |
| Selenium | | | | 0.5000 | 0.498 | 100 | 0.501 | 100 | 0.495 | 99 |
| Silver | | | | 0.5000 | 0.477 | 95 | 0.474 | 95 | 0.476 | 95 |
| Sodium | | | | 10.0000 | 10.3 | 103 | 10.2 | 102 | 10.2 | 102 |
| Thallium | | | | 0.5000 | 0.482 | 96 | 0.486 | 97 | 0.481 | 96 |
| Vanadium | | | | 0.5000 | 0.481 | 96 | 0.478 | 96 | 0.480 | 96 |
| Zinc | | | | 0.5000 | 0.495 | 99 | 0.490 | 98 | 0.493 | 99 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1939061-30 | | | R1939061-32 | | R1939061-34 | |
| Date Analyzed : | | | | 03/11/25 18:32 | | | 03/11/25 19:07 | | 03/11/25 20:01 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | | | | 0.5000 | 0.481 | 96 | 0.488 | 98 | 0.493 | 99 |
| Antimony | | | | 0.5000 | 0.496 | 99 | 0.496 | 99 | 0.500 | 100 |
| Arsenic | | | | 0.5000 | 0.494 | 99 | 0.498 | 100 | 0.502 | 100 |
| Barium | | | | 0.5000 | 0.470 | 94 | 0.474 | 95 | 0.478 | 96 |
| Beryllium | | | | 0.5000 | 0.506 | 101 | 0.510 | 102 | 0.514 | 103 |
| Cadmium | | | | 0.5000 | 0.477 | 95 | 0.483 | 97 | 0.488 | 98 |
| Calcium | | | | 0.5000 | 0.485 | 97 | 0.487 | 97 | 0.490 | 98 |
| Chromium | | | | 0.5000 | 0.479 | 96 | 0.486 | 97 | 0.487 | 97 |
| Cobalt | | | | 0.5000 | 0.490 | 98 | 0.494 | 99 | 0.497 | 99 |
| Copper | | | | 0.5000 | 0.460 | 92 | 0.464 | 93 | 0.469 | 94 |
| Iron | | | | 0.5000 | 0.504 | 101 | 0.509 | 102 | 0.513 | 103 |
| Lead | | | | 0.5000 | 0.492 | 98 | 0.497 | 99 | 0.503 | 101 |
| Magnesium | | | | 0.5000 | 0.467 | 93 | 0.472 | 94 | 0.475 | 95 |
| Manganese | | | | 0.5000 | 0.490 | 98 | 0.489 | 98 | 0.497 | 99 |
| Nickel | | | | 0.5000 | 0.491 | 98 | 0.496 | 99 | 0.498 | 100 |
| Potassium | | | | 5.0000 | 5.20 | 104 | 5.27 | 105 | 5.26 | 105 |
| Selenium | | | | 0.5000 | 0.496 | 99 | 0.495 | 99 | 0.498 | 100 |
| Silver | | | | 0.5000 | 0.469 | 94 | 0.477 | 95 | 0.480 | 96 |
| Sodium | | | | 10.0000 | 10.2 | 102 | 10.2 | 102 | 10.4 | 104 |
| Thallium | | | | 0.5000 | 0.478 | 96 | 0.484 | 97 | 0.489 | 98 |
| Vanadium | | | | 0.5000 | 0.476 | 95 | 0.479 | 96 | 0.483 | 97 |
| Zinc | | | | 0.5000 | 0.488 | 98 | 0.494 | 99 | 0.495 | 99 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1939061-36 | | | R1939061-38 | | R1939061-40 | |
| Date Analyzed : | | | | 03/11/25 20:35 | | | 03/11/25 21:39 | | 03/11/25 22:27 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | | | | 0.5000 | 0.498 | 100 | 0.494 | 99 | 0.483 | 97 |
| Antimony | | | | 0.5000 | 0.497 | 99 | 0.505 | 101 | 0.492 | 98 |
| Arsenic | | | | 0.5000 | 0.501 | 100 | 0.503 | 101 | 0.492 | 98 |
| Barium | | | | 0.5000 | 0.478 | 96 | 0.476 | 95 | 0.467 | 93 |
| Beryllium | | | | 0.5000 | 0.515 | 103 | 0.516 | 103 | 0.508 | 102 |
| Cadmium | | | | 0.5000 | 0.486 | 97 | 0.489 | 98 | 0.478 | 96 |
| Calcium | | | | 0.5000 | 0.492 | 98 | 0.490 | 98 | 0.480 | 96 |
| Chromium | | | | 0.5000 | 0.489 | 98 | 0.490 | 98 | 0.479 | 96 |
| Cobalt | | | | 0.5000 | 0.494 | 99 | 0.500 | 100 | 0.490 | 98 |
| Copper | | | | 0.5000 | 0.469 | 94 | 0.472 | 94 | 0.459 | 92 |
| Iron | | | | 0.5000 | 0.515 | 103 | 0.513 | 103 | 0.504 | 101 |
| Lead | | | | 0.5000 | 0.502 | 100 | 0.498 | 100 | 0.493 | 99 |
| Magnesium | | | | 0.5000 | 0.474 | 95 | 0.476 | 95 | 0.469 | 94 |
| Manganese | | | | 0.5000 | 0.493 | 99 | 0.498 | 100 | 0.486 | 97 |
| Nickel | | | | 0.5000 | 0.494 | 99 | 0.497 | 99 | 0.488 | 98 |
| Potassium | | | | 5.0000 | 5.31 | 106 | 5.27 | 105 | 5.16 | 103 |
| Selenium | | | | 0.5000 | 0.497 | 99 | 0.499 | 100 | 0.490 | 98 |
| Silver | | | | 0.5000 | 0.481 | 96 | 0.482 | 96 | 0.470 | 94 |
| Sodium | | | | 10.0000 | 10.4 | 104 | 10.4 | 104 | 10.1 | 101 |
| Thallium | | | | 0.5000 | 0.490 | 98 | 0.487 | 97 | 0.478 | 96 |
| Vanadium | | | | 0.5000 | 0.482 | 96 | 0.484 | 97 | 0.474 | 95 |
| Zinc | | | | 0.5000 | 0.492 | 98 | 0.496 | 99 | 0.485 | 97 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1939061-42 | | | R1939061-44 | | | |
| Date Analyzed : | | | | 03/11/25 23:10 | | | 03/11/25 23:24 | | | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | | | | 0.5000 | 0.474 | 95 | 0.471 | 94 | | |
| Antimony | | | | 0.5000 | 0.494 | 99 | 0.489 | 98 | | |
| Arsenic | | | | 0.5000 | 0.494 | 99 | 0.487 | 97 | | |
| Barium | | | | 0.5000 | 0.468 | 94 | 0.470 | 94 | | |
| Beryllium | | | | 0.5000 | 0.507 | 101 | 0.507 | 101 | | |
| Cadmium | | | | 0.5000 | 0.473 | 95 | 0.469 | 94 | | |
| Calcium | | | | 0.5000 | 0.480 | 96 | 0.481 | 96 | | |
| Chromium | | | | 0.5000 | 0.471 | 94 | 0.473 | 95 | | |
| Cobalt | | | | 0.5000 | 0.486 | 97 | 0.483 | 97 | | |
| Copper | | | | 0.5000 | 0.460 | 92 | 0.457 | 91 | | |
| Iron | | | | 0.5000 | 0.502 | 100 | 0.503 | 101 | | |
| Lead | | | | 0.5000 | 0.494 | 99 | 0.490 | 98 | | |
| Magnesium | | | | 0.5000 | 0.463 | 93 | 0.466 | 93 | | |
| Manganese | | | | 0.5000 | 0.483 | 97 | 0.485 | 97 | | |
| Nickel | | | | 0.5000 | 0.478 | 96 | 0.480 | 96 | | |
| Potassium | | | | 5.0000 | 5.15 | 103 | 5.17 | 103 | | |
| Selenium | | | | 0.5000 | 0.493 | 99 | 0.490 | 98 | | |
| Silver | | | | 0.5000 | 0.467 | 93 | 0.466 | 93 | | |
| Sodium | | | | 10.0000 | 10.1 | 101 | 10.2 | 102 | | |
| Thallium | | | | 0.5000 | 0.478 | 96 | 0.473 | 95 | | |
| Vanadium | | | | 0.5000 | 0.473 | 95 | 0.472 | 94 | | |
| Zinc | | | | 0.5000 | 0.477 | 95 | 0.476 | 95 | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939061-1 | | | | | | | | | |
| Date Analyzed : | 03/11/25 06:24 | | | | | | | | | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | 0.500 | 0.4870 | 97 | | | | | | | |
| Antimony | 0.500 | 0.5020 | 100 | | | | | | | |
| Arsenic | 0.500 | 0.4990 | 100 | | | | | | | |
| Barium | 0.500 | 0.4900 | 98 | | | | | | | |
| Beryllium | 0.500 | 0.5150 | 103 | | | | | | | |
| Cadmium | 0.500 | 0.5080 | 102 | | | | | | | |
| Calcium | 0.500 | 0.5030 | 101 | | | | | | | |
| Chromium | 0.500 | 0.5030 | 101 | | | | | | | |
| Cobalt | 0.500 | 0.5180 | 104 | | | | | | | |
| Copper | 0.500 | 0.4830 | 97 | | | | | | | |
| Iron | 0.500 | 0.5210 | 104 | | | | | | | |
| Lead | 0.500 | 0.5110 | 102 | | | | | | | |
| Magnesium | 0.500 | 0.4970 | 99 | | | | | | | |
| Manganese | 0.500 | 0.5010 | 100 | | | | | | | |
| Nickel | 0.500 | 0.5140 | 103 | | | | | | | |
| Potassium | 5.00 | 5.2100 | 104 | | | | | | | |
| Selenium | 0.500 | 0.4980 | 100 | | | | | | | |
| Silver | 0.500 | 0.4890 | 98 | | | | | | | |
| Sodium | 10.0 | 10.2000 | 102 | | | | | | | |
| Thallium | 0.500 | 0.4970 | 99 | | | | | | | |
| Vanadium | 0.500 | 0.4990 | 100 | | | | | | | |
| Zinc | 0.500 | 0.5150 | 103 | | | | | | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939061-3 | | | R1939061-6 | | | R1939061-8 | | R1939061-10 | |
| Date Analyzed : | 03/11/25 06:31 | | | 03/11/25 07:22 | | | 03/11/25 08:18 | | 03/11/25 09:40 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | 0.500 | 0.4920 | 98 | 0.5000 | 0.475 | 95 | 0.484 | 97 | 0.492 | 98 |
| Antimony | 0.500 | 0.4990 | 100 | 0.5000 | 0.489 | 98 | 0.499 | 100 | 0.506 | 101 |
| Arsenic | 0.500 | 0.5000 | 100 | 0.5000 | 0.487 | 97 | 0.501 | 100 | 0.513 | 103 |
| Barium | 0.500 | 0.4890 | 98 | 0.5000 | 0.476 | 95 | 0.483 | 97 | 0.481 | 96 |
| Beryllium | 0.500 | 0.5160 | 103 | 0.5000 | 0.502 | 100 | 0.512 | 102 | 0.516 | 103 |
| Cadmium | 0.500 | 0.5060 | 101 | 0.5000 | 0.483 | 97 | 0.492 | 98 | 0.494 | 99 |
| Calcium | 0.500 | 0.5060 | 101 | 0.5000 | 0.482 | 96 | 0.494 | 99 | 0.493 | 99 |
| Chromium | 0.500 | 0.5040 | 101 | 0.5000 | 0.481 | 96 | 0.491 | 98 | 0.490 | 98 |
| Cobalt | 0.500 | 0.5140 | 103 | 0.5000 | 0.491 | 98 | 0.501 | 100 | 0.504 | 101 |
| Copper | 0.500 | 0.4800 | 96 | 0.5000 | 0.458 | 92 | 0.469 | 94 | 0.471 | 94 |
| Iron | 0.500 | 0.5180 | 104 | 0.5000 | 0.499 | 100 | 0.512 | 102 | 0.514 | 103 |
| Lead | 0.500 | 0.5130 | 103 | 0.5000 | 0.488 | 98 | 0.506 | 101 | 0.509 | 102 |
| Magnesium | 0.500 | 0.4970 | 99 | 0.5000 | 0.473 | 95 | 0.486 | 97 | 0.482 | 96 |
| Manganese | 0.500 | 0.5030 | 101 | 0.5000 | 0.485 | 97 | 0.490 | 98 | 0.492 | 98 |
| Nickel | 0.500 | 0.5160 | 103 | 0.5000 | 0.492 | 98 | 0.504 | 101 | 0.497 | 99 |
| Potassium | 5.00 | 5.2400 | 105 | 5.0000 | 5.10 | 102 | 5.18 | 104 | 5.24 | 105 |
| Selenium | 0.500 | 0.5040 | 101 | 0.5000 | 0.486 | 97 | 0.502 | 100 | 0.507 | 101 |
| Silver | 0.500 | 0.4780 | 96 | 0.5000 | 0.468 | 94 | 0.480 | 96 | 0.482 | 96 |
| Sodium | 10.0 | 10.2000 | 102 | 10.0000 | 10.0 | 100 | 10.2 | 102 | 10.3 | 103 |
| Thallium | 0.500 | 0.4990 | 100 | 0.5000 | 0.477 | 95 | 0.492 | 98 | 0.500 | 100 |
| Vanadium | 0.500 | 0.4980 | 100 | 0.5000 | 0.475 | 95 | 0.487 | 97 | 0.486 | 97 |
| Zinc | 0.500 | 0.5170 | 103 | 0.5000 | 0.493 | 99 | 0.503 | 101 | 0.497 | 99 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1939061-12 | | | R1939061-14 | | R1939061-16 | |
| Date Analyzed : | | | | 03/11/25 12:09 | | | 03/11/25 12:27 | | 03/11/25 13:29 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | | | | 0.5000 | 0.504 | 101 | 0.503 | 101 | 0.494 | 99 |
| Antimony | | | | 0.5000 | 0.507 | 101 | 0.502 | 100 | 0.510 | 102 |
| Arsenic | | | | 0.5000 | 0.512 | 102 | 0.511 | 102 | 0.510 | 102 |
| Barium | | | | 0.5000 | 0.479 | 96 | 0.479 | 96 | 0.480 | 96 |
| Beryllium | | | | 0.5000 | 0.516 | 103 | 0.516 | 103 | 0.513 | 103 |
| Cadmium | | | | 0.5000 | 0.494 | 99 | 0.491 | 98 | 0.490 | 98 |
| Calcium | | | | 0.5000 | 0.496 | 99 | 0.496 | 99 | 0.494 | 99 |
| Chromium | | | | 0.5000 | 0.496 | 99 | 0.494 | 99 | 0.493 | 99 |
| Cobalt | | | | 0.5000 | 0.506 | 101 | 0.503 | 101 | 0.501 | 100 |
| Copper | | | | 0.5000 | 0.472 | 94 | 0.474 | 95 | 0.471 | 94 |
| Iron | | | | 0.5000 | 0.518 | 104 | 0.521 | 104 | 0.514 | 103 |
| Lead | | | | 0.5000 | 0.508 | 102 | 0.506 | 101 | 0.504 | 101 |
| Magnesium | | | | 0.5000 | 0.482 | 96 | 0.481 | 96 | 0.480 | 96 |
| Manganese | | | | 0.5000 | 0.498 | 100 | 0.496 | 99 | 0.496 | 99 |
| Nickel | | | | 0.5000 | 0.505 | 101 | 0.506 | 101 | 0.504 | 101 |
| Potassium | | | | 5.0000 | 5.23 | 105 | 5.23 | 105 | 5.23 | 105 |
| Selenium | | | | 0.5000 | 0.507 | 101 | 0.510 | 102 | 0.506 | 101 |
| Silver | | | | 0.5000 | 0.486 | 97 | 0.485 | 97 | 0.482 | 96 |
| Sodium | | | | 10.0000 | 10.3 | 103 | 10.4 | 104 | 10.2 | 102 |
| Thallium | | | | 0.5000 | 0.495 | 99 | 0.500 | 100 | 0.495 | 99 |
| Vanadium | | | | 0.5000 | 0.489 | 98 | 0.487 | 97 | 0.486 | 97 |
| Zinc | | | | 0.5000 | 0.504 | 101 | 0.503 | 101 | 0.502 | 100 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1939061-18 | | | R1939061-20 | | R1939061-22 | |
| Date Analyzed : | | | | 03/11/25 14:11 | | | 03/11/25 14:44 | | 03/11/25 15:41 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | | | | 0.5000 | 0.491 | 98 | 0.492 | 98 | 0.484 | 97 |
| Antimony | | | | 0.5000 | 0.499 | 100 | 0.492 | 98 | 0.493 | 99 |
| Arsenic | | | | 0.5000 | 0.500 | 100 | 0.497 | 99 | 0.496 | 99 |
| Barium | | | | 0.5000 | 0.478 | 96 | 0.471 | 94 | 0.472 | 94 |
| Beryllium | | | | 0.5000 | 0.512 | 102 | 0.508 | 102 | 0.508 | 102 |
| Cadmium | | | | 0.5000 | 0.486 | 97 | 0.484 | 97 | 0.480 | 96 |
| Calcium | | | | 0.5000 | 0.492 | 98 | 0.488 | 98 | 0.488 | 98 |
| Chromium | | | | 0.5000 | 0.490 | 98 | 0.486 | 97 | 0.482 | 96 |
| Cobalt | | | | 0.5000 | 0.497 | 99 | 0.493 | 99 | 0.491 | 98 |
| Copper | | | | 0.5000 | 0.469 | 94 | 0.465 | 93 | 0.462 | 92 |
| Iron | | | | 0.5000 | 0.514 | 103 | 0.511 | 102 | 0.508 | 102 |
| Lead | | | | 0.5000 | 0.498 | 100 | 0.496 | 99 | 0.497 | 99 |
| Magnesium | | | | 0.5000 | 0.477 | 95 | 0.473 | 95 | 0.472 | 94 |
| Manganese | | | | 0.5000 | 0.493 | 99 | 0.492 | 98 | 0.489 | 98 |
| Nickel | | | | 0.5000 | 0.499 | 100 | 0.496 | 99 | 0.493 | 99 |
| Potassium | | | | 5.0000 | 5.24 | 105 | 5.22 | 104 | 5.17 | 103 |
| Selenium | | | | 0.5000 | 0.498 | 100 | 0.492 | 98 | 0.494 | 99 |
| Silver | | | | 0.5000 | 0.479 | 96 | 0.478 | 96 | 0.472 | 94 |
| Sodium | | | | 10.0000 | 10.3 | 103 | 10.2 | 102 | 10.2 | 102 |
| Thallium | | | | 0.5000 | 0.484 | 97 | 0.484 | 97 | 0.485 | 97 |
| Vanadium | | | | 0.5000 | 0.483 | 97 | 0.479 | 96 | 0.477 | 95 |
| Zinc | | | | 0.5000 | 0.498 | 100 | 0.494 | 99 | 0.489 | 98 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1939061-24 | | | R1939061-26 | | R1939061-28 | |
| Date Analyzed : | | | | 03/11/25 16:26 | | | 03/11/25 17:12 | | 03/11/25 17:37 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | | | | 0.5000 | 0.492 | 98 | 0.490 | 98 | 0.486 | 97 |
| Antimony | | | | 0.5000 | 0.503 | 101 | 0.501 | 100 | 0.498 | 100 |
| Arsenic | | | | 0.5000 | 0.496 | 99 | 0.501 | 100 | 0.495 | 99 |
| Barium | | | | 0.5000 | 0.482 | 96 | 0.476 | 95 | 0.476 | 95 |
| Beryllium | | | | 0.5000 | 0.511 | 102 | 0.510 | 102 | 0.507 | 101 |
| Cadmium | | | | 0.5000 | 0.480 | 96 | 0.480 | 96 | 0.482 | 96 |
| Calcium | | | | 0.5000 | 0.489 | 98 | 0.485 | 97 | 0.490 | 98 |
| Chromium | | | | 0.5000 | 0.487 | 97 | 0.484 | 97 | 0.485 | 97 |
| Cobalt | | | | 0.5000 | 0.492 | 98 | 0.494 | 99 | 0.495 | 99 |
| Copper | | | | 0.5000 | 0.466 | 93 | 0.464 | 93 | 0.466 | 93 |
| Iron | | | | 0.5000 | 0.508 | 102 | 0.506 | 101 | 0.510 | 102 |
| Lead | | | | 0.5000 | 0.494 | 99 | 0.498 | 100 | 0.495 | 99 |
| Magnesium | | | | 0.5000 | 0.472 | 94 | 0.470 | 94 | 0.473 | 95 |
| Manganese | | | | 0.5000 | 0.496 | 99 | 0.493 | 99 | 0.492 | 98 |
| Nickel | | | | 0.5000 | 0.499 | 100 | 0.494 | 99 | 0.495 | 99 |
| Potassium | | | | 5.0000 | 5.25 | 105 | 5.23 | 105 | 5.22 | 104 |
| Selenium | | | | 0.5000 | 0.498 | 100 | 0.501 | 100 | 0.495 | 99 |
| Silver | | | | 0.5000 | 0.477 | 95 | 0.474 | 95 | 0.476 | 95 |
| Sodium | | | | 10.0000 | 10.3 | 103 | 10.2 | 102 | 10.2 | 102 |
| Thallium | | | | 0.5000 | 0.482 | 96 | 0.486 | 97 | 0.481 | 96 |
| Vanadium | | | | 0.5000 | 0.481 | 96 | 0.478 | 96 | 0.480 | 96 |
| Zinc | | | | 0.5000 | 0.495 | 99 | 0.490 | 98 | 0.493 | 99 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1939061-30 | | | R1939061-32 | | R1939061-34 | |
| Date Analyzed : | | | | 03/11/25 18:32 | | | 03/11/25 19:07 | | 03/11/25 20:01 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | | | | 0.5000 | 0.481 | 96 | 0.488 | 98 | 0.493 | 99 |
| Antimony | | | | 0.5000 | 0.496 | 99 | 0.496 | 99 | 0.500 | 100 |
| Arsenic | | | | 0.5000 | 0.494 | 99 | 0.498 | 100 | 0.502 | 100 |
| Barium | | | | 0.5000 | 0.470 | 94 | 0.474 | 95 | 0.478 | 96 |
| Beryllium | | | | 0.5000 | 0.506 | 101 | 0.510 | 102 | 0.514 | 103 |
| Cadmium | | | | 0.5000 | 0.477 | 95 | 0.483 | 97 | 0.488 | 98 |
| Calcium | | | | 0.5000 | 0.485 | 97 | 0.487 | 97 | 0.490 | 98 |
| Chromium | | | | 0.5000 | 0.479 | 96 | 0.486 | 97 | 0.487 | 97 |
| Cobalt | | | | 0.5000 | 0.490 | 98 | 0.494 | 99 | 0.497 | 99 |
| Copper | | | | 0.5000 | 0.460 | 92 | 0.464 | 93 | 0.469 | 94 |
| Iron | | | | 0.5000 | 0.504 | 101 | 0.509 | 102 | 0.513 | 103 |
| Lead | | | | 0.5000 | 0.492 | 98 | 0.497 | 99 | 0.503 | 101 |
| Magnesium | | | | 0.5000 | 0.467 | 93 | 0.472 | 94 | 0.475 | 95 |
| Manganese | | | | 0.5000 | 0.490 | 98 | 0.489 | 98 | 0.497 | 99 |
| Nickel | | | | 0.5000 | 0.491 | 98 | 0.496 | 99 | 0.498 | 100 |
| Potassium | | | | 5.0000 | 5.20 | 104 | 5.27 | 105 | 5.26 | 105 |
| Selenium | | | | 0.5000 | 0.496 | 99 | 0.495 | 99 | 0.498 | 100 |
| Silver | | | | 0.5000 | 0.469 | 94 | 0.477 | 95 | 0.480 | 96 |
| Sodium | | | | 10.0000 | 10.2 | 102 | 10.2 | 102 | 10.4 | 104 |
| Thallium | | | | 0.5000 | 0.478 | 96 | 0.484 | 97 | 0.489 | 98 |
| Vanadium | | | | 0.5000 | 0.476 | 95 | 0.479 | 96 | 0.483 | 97 |
| Zinc | | | | 0.5000 | 0.488 | 98 | 0.494 | 99 | 0.495 | 99 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1939061-36 | | | | | | |
| Date Analyzed : | | | | 03/11/25 20:35 | | | | | | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | | | | 0.5000 | 0.498 | 100 | | | | |
| Antimony | | | | 0.5000 | 0.497 | 99 | | | | |
| Arsenic | | | | 0.5000 | 0.501 | 100 | | | | |
| Barium | | | | 0.5000 | 0.478 | 96 | | | | |
| Beryllium | | | | 0.5000 | 0.515 | 103 | | | | |
| Cadmium | | | | 0.5000 | 0.486 | 97 | | | | |
| Calcium | | | | 0.5000 | 0.492 | 98 | | | | |
| Chromium | | | | 0.5000 | 0.489 | 98 | | | | |
| Cobalt | | | | 0.5000 | 0.494 | 99 | | | | |
| Copper | | | | 0.5000 | 0.469 | 94 | | | | |
| Iron | | | | 0.5000 | 0.515 | 103 | | | | |
| Lead | | | | 0.5000 | 0.502 | 100 | | | | |
| Magnesium | | | | 0.5000 | 0.474 | 95 | | | | |
| Manganese | | | | 0.5000 | 0.493 | 99 | | | | |
| Nickel | | | | 0.5000 | 0.494 | 99 | | | | |
| Potassium | | | | 5.0000 | 5.31 | 106 | | | | |
| Selenium | | | | 0.5000 | 0.497 | 99 | | | | |
| Silver | | | | 0.5000 | 0.481 | 96 | | | | |
| Sodium | | | | 10.0000 | 10.4 | 104 | | | | |
| Thallium | | | | 0.5000 | 0.490 | 98 | | | | |
| Vanadium | | | | 0.5000 | 0.482 | 96 | | | | |
| Zinc | | | | 0.5000 | 0.492 | 98 | | | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : TRACE7 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939620-1 | | | | | | | | | |
| Date Analyzed : | 03/12/25 06:45 | | | | | | | | | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Antimony | 0.500 | 0.5030 | 101 | | | | | | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : TRACE7 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939620-3 | | | R1939620-6 | | | R1939620-8 | | R1939620-10 | |
| Date Analyzed : | 03/12/25 06:55 | | | 03/12/25 09:31 | | | 03/12/25 09:41 | | 03/12/25 10:56 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Antimony | 0.500 | 0.5080 | 102 | 0.5000 | 0.503 | 101 | 0.508 | 102 | 0.496 | 99 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE8 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1940691-1 | | | | | | | | | |
| Date Analyzed : | 03/14/25 09:18 | | | | | | | | | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | 0.500 | 0.5010 | 100 | | | | | | | |
| Antimony | 0.500 | 0.5340 | 107 | | | | | | | |
| Arsenic | 0.500 | 0.4880 | 98 | | | | | | | |
| Barium | 0.500 | 0.5030 | 101 | | | | | | | |
| Beryllium | 0.500 | 0.5290 | 106 | | | | | | | |
| Cadmium | 0.500 | 0.5220 | 104 | | | | | | | |
| Calcium | 0.500 | 0.5220 | 104 | | | | | | | |
| Chromium | 0.500 | 0.5170 | 103 | | | | | | | |
| Cobalt | 0.500 | 0.5270 | 105 | | | | | | | |
| Copper | 0.500 | 0.5350 | 107 | | | | | | | |
| Iron | 0.500 | 0.5300 | 106 | | | | | | | |
| Lead | 0.500 | 0.5070 | 101 | | | | | | | |
| Magnesium | 0.500 | 0.5350 | 107 | | | | | | | |
| Manganese | 0.500 | 0.5080 | 102 | | | | | | | |
| Nickel | 0.500 | 0.5340 | 107 | | | | | | | |
| Potassium | 5.00 | 5.3400 | 107 | | | | | | | |
| Selenium | 0.500 | 0.5040 | 101 | | | | | | | |
| Silver | 0.500 | 0.5250 | 105 | | | | | | | |
| Sodium | 10.0 | 10.4000 | 104 | | | | | | | |
| Thallium | 0.500 | 0.5190 | 104 | | | | | | | |
| Vanadium | 0.500 | 0.5160 | 103 | | | | | | | |
| Zinc | 0.500 | 0.5250 | 105 | | | | | | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE8 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1940691-3 | | | R1940691-6 | | | R1940691-8 | | R1940691-10 | |
| Date Analyzed : | 03/14/25 09:27 | | | 03/14/25 11:10 | | | 03/14/25 12:15 | | 03/14/25 13:20 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | 0.500 | 0.4910 | 98 | 0.5000 | 0.492 | 98 | 0.500 | 100 | 0.502 | 100 |
| Antimony | 0.500 | 0.5240 | 105 | 0.5000 | 0.532 | 106 | 0.514 | 103 | 0.507 | 101 |
| Arsenic | 0.500 | 0.4870 | 97 | 0.5000 | 0.481 | 96 | 0.471 | 94 | 0.479 | 96 |
| Barium | 0.500 | 0.4940 | 99 | 0.5000 | 0.489 | 98 | 0.508 | 102 | 0.503 | 101 |
| Beryllium | 0.500 | 0.5180 | 104 | 0.5000 | 0.510 | 102 | 0.502 | 100 | 0.506 | 101 |
| Cadmium | 0.500 | 0.5160 | 103 | 0.5000 | 0.511 | 102 | 0.510 | 102 | 0.504 | 101 |
| Calcium | 0.500 | 0.5090 | 102 | 0.5000 | 0.502 | 100 | 0.482 | 96 | 0.490 | 98 |
| Chromium | 0.500 | 0.5100 | 102 | 0.5000 | 0.509 | 102 | 0.508 | 102 | 0.498 | 100 |
| Cobalt | 0.500 | 0.5180 | 104 | 0.5000 | 0.523 | 105 | 0.510 | 102 | 0.512 | 102 |
| Copper | 0.500 | 0.5130 | 103 | 0.5000 | 0.525 | 105 | 0.518 | 104 | 0.506 | 101 |
| Iron | 0.500 | 0.5240 | 105 | 0.5000 | 0.505 | 101 | 0.506 | 101 | 0.517 | 103 |
| Lead | 0.500 | 0.5070 | 101 | 0.5000 | 0.498 | 100 | 0.492 | 98 | 0.502 | 100 |
| Magnesium | 0.500 | 0.5190 | 104 | 0.5000 | 0.523 | 105 | 0.515 | 103 | 0.512 | 102 |
| Manganese | 0.500 | 0.4970 | 99 | 0.5000 | 0.492 | 98 | 0.479 | 96 | 0.482 | 96 |
| Nickel | 0.500 | 0.5260 | 105 | 0.5000 | 0.525 | 105 | 0.520 | 104 | 0.511 | 102 |
| Potassium | 5.00 | 5.2200 | 104 | 5.0000 | 5.14 | 103 | 5.23 | 105 | 5.29 | 106 |
| Selenium | 0.500 | 0.4960 | 99 | 0.5000 | 0.496 | 99 | 0.478 | 96 | 0.485 | 97 |
| Silver | 0.500 | 0.5050 | 101 | 0.5000 | 0.518 | 104 | 0.507 | 101 | 0.494 | 99 |
| Sodium | 10.0 | 10.2000 | 102 | 10.0000 | 10.1 | 101 | 10.4 | 104 | 10.4 | 104 |
| Thallium | 0.500 | 0.5130 | 103 | 0.5000 | 0.507 | 101 | 0.494 | 99 | 0.505 | 101 |
| Vanadium | 0.500 | 0.5090 | 102 | 0.5000 | 0.509 | 102 | 0.512 | 102 | 0.504 | 101 |
| Zinc | 0.500 | 0.5210 | 104 | 0.5000 | 0.516 | 103 | 0.512 | 102 | 0.501 | 100 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE8 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1940691-12 | | | R1940691-14 | | R1940691-16 | |
| Date Analyzed : | | | | 03/14/25 14:23 | | | 03/14/25 14:53 | | 03/14/25 16:01 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | | | | 0.5000 | 0.521 | 104 | 0.510 | 102 | 0.511 | 102 |
| Antimony | | | | 0.5000 | 0.515 | 103 | 0.531 | 106 | 0.543 | 109 |
| Arsenic | | | | 0.5000 | 0.500 | 100 | 0.491 | 98 | 0.480 | 96 |
| Barium | | | | 0.5000 | 0.523 | 105 | 0.515 | 103 | 0.514 | 103 |
| Beryllium | | | | 0.5000 | 0.513 | 103 | 0.502 | 100 | 0.514 | 103 |
| Cadmium | | | | 0.5000 | 0.496 | 99 | 0.514 | 103 | 0.518 | 104 |
| Calcium | | | | 0.5000 | 0.490 | 98 | 0.482 | 96 | 0.497 | 99 |
| Chromium | | | | 0.5000 | 0.498 | 100 | 0.518 | 104 | 0.514 | 103 |
| Cobalt | | | | 0.5000 | 0.509 | 102 | 0.528 | 106 | 0.532 | 106 |
| Copper | | | | 0.5000 | 0.514 | 103 | 0.533 | 107 | 0.519 | 104 |
| Iron | | | | 0.5000 | 0.517 | 103 | 0.518 | 104 | 0.512 | 102 |
| Lead | | | | 0.5000 | 0.525 | 105 | 0.515 | 103 | 0.506 | 101 |
| Magnesium | | | | 0.5000 | 0.506 | 101 | 0.522 | 104 | 0.523 | 105 |
| Manganese | | | | 0.5000 | 0.486 | 97 | 0.479 | 96 | 0.488 | 98 |
| Nickel | | | | 0.5000 | 0.511 | 102 | 0.529 | 106 | 0.527 | 105 |
| Potassium | | | | 5.0000 | 5.43 | 109 | 5.31 | 106 | 5.44 | 109 |
| Selenium | | | | 0.5000 | 0.511 | 102 | 0.500 | 100 | 0.489 | 98 |
| Silver | | | | 0.5000 | 0.502 | 100 | 0.519 | 104 | 0.507 | 101 |
| Sodium | | | | 10.0000 | 10.9 | 109 | 10.7 | 107 | 10.7 | 107 |
| Thallium | | | | 0.5000 | 0.531 | 106 | 0.524 | 105 | 0.508 | 102 |
| Vanadium | | | | 0.5000 | 0.504 | 101 | 0.525 | 105 | 0.519 | 104 |
| Zinc | | | | 0.5000 | 0.494 | 99 | 0.512 | 102 | 0.515 | 103 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE8 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1940691-18 | | | R1940691-20 | | | |
| Date Analyzed : | | | | 03/14/25 16:58 | | | 03/14/25 18:07 | | | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | | | | 0.5000 | 0.517 | 103 | 0.514 | 103 | | |
| Antimony | | | | 0.5000 | 0.541 | 108 | 0.539 | 108 | | |
| Arsenic | | | | 0.5000 | 0.491 | 98 | 0.488 | 98 | | |
| Barium | | | | 0.5000 | 0.526 | 105 | 0.523 | 105 | | |
| Beryllium | | | | 0.5000 | 0.506 | 101 | 0.504 | 101 | | |
| Cadmium | | | | 0.5000 | 0.501 | 100 | 0.512 | 102 | | |
| Calcium | | | | 0.5000 | 0.476 | 95 | 0.471 | 94 | | |
| Chromium | | | | 0.5000 | 0.510 | 102 | 0.525 | 105 | | |
| Cobalt | | | | 0.5000 | 0.514 | 103 | 0.529 | 106 | | |
| Copper | | | | 0.5000 | 0.535 | 107 | 0.548 | 110 | | |
| Iron | | | | 0.5000 | 0.500 | 100 | 0.494 | 99 | | |
| Lead | | | | 0.5000 | 0.513 | 103 | 0.509 | 102 | | |
| Magnesium | | | | 0.5000 | 0.518 | 104 | 0.528 | 106 | | |
| Manganese | | | | 0.5000 | 0.477 | 95 | 0.475 | 95 | | |
| Nickel | | | | 0.5000 | 0.526 | 105 | 0.537 | 107 | | |
| Potassium | | | | 5.0000 | 5.60 | 112 | 5.55 | 111 | | |
| Selenium | | | | 0.5000 | 0.501 | 100 | 0.505 | 101 | | |
| Silver | | | | 0.5000 | 0.519 | 104 | 0.534 | 107 | | |
| Sodium | | | | 10.0000 | 11.1 | 111 | 11.4 | 114 | | |
| Thallium | | | | 0.5000 | 0.522 | 104 | 0.517 | 103 | | |
| Vanadium | | | | 0.5000 | 0.520 | 104 | 0.530 | 106 | | |
| Zinc | | | | 0.5000 | 0.497 | 99 | 0.514 | 103 | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : TRACE7 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1941430-1 | | | | | | | | | |
| Date Analyzed : | 03/17/25 09:54 | | | | | | | | | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Sodium | 10.0 | 10.0000 | 100 | | | | | | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : TRACE7 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1941430-3 | | | R1941430-6 | | | R1941430-8 | | | |
| Date Analyzed : | 03/17/25 10:04 | | | 03/17/25 11:57 | | | 03/17/25 13:00 | | | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Sodium | 10.0 | 10.1000 | 101 | 10.0000 | 10.2 | 102 | 10.0 | 100 | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939061-2 | | R1939061-7 | | R1939061-9 | | R1939061-11 | | WG2038690-1 | |
| Date Analyzed : | 03/11/25 06:27 | | 03/11/25 07:26 | | 03/11/25 08:21 | | 03/11/25 09:43 | | 03/11/25 22:35 | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q |
| Aluminum | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U |
| Antimony | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.0071 | U |
| Arsenic | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.0019 | U |
| Barium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.0021 | U |
| Beryllium | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.0009 | U |
| Cadmium | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.0010 | U |
| Calcium | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U |
| Chromium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.0021 | U |
| Cobalt | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.0017 | U |
| Copper | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.0022 | U |
| Iron | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.0090 | U |
| Lead | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.0027 | U |
| Magnesium | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U |
| Manganese | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.0016 | U |
| Nickel | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.0024 | U |
| Potassium | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U |
| Selenium | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.0035 | U |
| Silver | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.0028 | U |
| Sodium | 0.120 | U | 0.120 | U | 0.120 | U | 0.120 | U | 0.120 | U |
| Thallium | 0.00312 | J | 0.00250 | U | 0.00250 | U | 0.00250 | U | 0.0025 | U |
| Vanadium | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.0020 | U |
| Zinc | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.0021 | U |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939061-4 | | R1939061-13 | | R1939061-15 | | R1939061-17 | | | |
| Date Analyzed : | 03/11/25 06:34 | | 03/11/25 12:12 | | 03/11/25 12:31 | | 03/11/25 13:33 | | | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U | | |
| Antimony | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.00190 | U | | |
| Barium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | 0.120 | U | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | 0.00250 | U | 0.00250 | U | 0.00250 | U | 0.00250 | U | | |
| Vanadium | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939061-19 | | R1939061-21 | | R1939061-23 | | | |
| Date Analyzed : | | | 03/11/25 14:15 | | 03/11/25 14:47 | | 03/11/25 15:44 | | | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | | | 0.0318 | U | 0.0318 | U | 0.0318 | U | | |
| Antimony | | | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | | | 0.00190 | U | 0.00190 | U | 0.00190 | U | | |
| Barium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | | | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | | | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | | | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | | | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | | | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | | | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | | | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | | | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | | | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | | | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | | | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | | | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | | | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | | | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | | | 0.00250 | U | 0.00250 | U | 0.00286 | J | | |
| Vanadium | | | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939061-25 | | R1939061-27 | | R1939061-29 | | | |
| Date Analyzed : | | | 03/11/25 16:30 | | 03/11/25 17:16 | | 03/11/25 17:40 | | | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | | | 0.0318 | U | 0.0318 | U | 0.0318 | U | | |
| Antimony | | | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | | | 0.00190 | U | 0.00190 | U | 0.00190 | U | | |
| Barium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | | | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | | | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | | | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | | | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | | | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | | | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | | | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | | | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | | | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | | | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | | | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | | | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | | | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | | | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | | | 0.00250 | U | 0.00250 | U | 0.00250 | U | | |
| Vanadium | | | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939061-31 | | R1939061-33 | | R1939061-35 | | | |
| Date Analyzed : | | | 03/11/25 18:36 | | 03/11/25 19:11 | | 03/11/25 20:04 | | | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | | | 0.0318 | U | 0.0318 | U | 0.0318 | U | | |
| Antimony | | | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | | | 0.00190 | U | 0.00190 | U | 0.00190 | U | | |
| Barium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | | | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | | | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | | | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | | | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | | | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | | | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | | | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | | | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | | | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | | | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | | | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | | | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | | | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | | | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | | | 0.00250 | U | 0.00250 | U | 0.00335 | J | | |
| Vanadium | | | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939061-37 | | R1939061-39 | | R1939061-41 | | | |
| Date Analyzed : | | | 03/11/25 20:38 | | 03/11/25 21:43 | | 03/11/25 22:31 | | | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | | | 0.0318 | U | 0.0318 | U | 0.0318 | U | | |
| Antimony | | | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | | | 0.00190 | U | 0.00190 | U | 0.00190 | U | | |
| Barium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | | | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | | | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | | | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | | | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | | | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | | | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | | | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | | | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | | | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | | | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | | | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | | | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | | | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | | | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | | | 0.00276 | J | 0.00250 | U | 0.00270 | J | | |
| Vanadium | | | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939061-43 | | R1939061-45 | | | | | |
| Date Analyzed : | | | 03/11/25 23:13 | | 03/11/25 23:27 | | | | | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | | | 0.0318 | U | 0.0318 | U | | | | |
| Antimony | | | 0.00710 | U | 0.00710 | U | | | | |
| Arsenic | | | 0.00190 | U | 0.00190 | U | | | | |
| Barium | | | 0.00210 | U | 0.00210 | U | | | | |
| Beryllium | | | 0.000900 | U | 0.000900 | U | | | | |
| Cadmium | | | 0.00100 | U | 0.00100 | U | | | | |
| Calcium | | | 0.0350 | U | 0.0350 | U | | | | |
| Chromium | | | 0.00210 | U | 0.00210 | U | | | | |
| Cobalt | | | 0.00170 | U | 0.00170 | U | | | | |
| Copper | | | 0.00220 | U | 0.00220 | U | | | | |
| Iron | | | 0.00900 | U | 0.00900 | U | | | | |
| Lead | | | 0.00270 | U | 0.00270 | U | | | | |
| Magnesium | | | 0.0153 | U | 0.0153 | U | | | | |
| Manganese | | | 0.00160 | U | 0.00160 | U | | | | |
| Nickel | | | 0.00240 | U | 0.00240 | U | | | | |
| Potassium | | | 0.237 | U | 0.237 | U | | | | |
| Selenium | | | 0.00350 | U | 0.00350 | U | | | | |
| Silver | | | 0.00280 | U | 0.00280 | U | | | | |
| Sodium | | | 0.120 | U | 0.120 | U | | | | |
| Thallium | | | 0.00457 | J | 0.00250 | U | | | | |
| Vanadium | | | 0.00200 | U | 0.00200 | U | | | | |
| Zinc | | | 0.00210 | U | 0.00210 | U | | | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939061-2 | | R1939061-7 | | R1939061-9 | | R1939061-11 | | WG2038695-1 | |
| Date Analyzed : | 03/11/25 06:27 | | 03/11/25 07:26 | | 03/11/25 08:21 | | 03/11/25 09:43 | | 03/11/25 15:50 | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q |
| Aluminum | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U |
| Antimony | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.0071 | U |
| Arsenic | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.0019 | U |
| Barium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.0021 | U |
| Beryllium | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.0009 | U |
| Cadmium | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.0010 | U |
| Calcium | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U |
| Chromium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.0021 | U |
| Cobalt | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.0017 | U |
| Copper | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.0022 | U |
| Iron | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.0090 | U |
| Lead | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.0027 | U |
| Magnesium | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U |
| Manganese | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.0016 | U |
| Nickel | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.0024 | U |
| Potassium | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U |
| Selenium | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.0035 | U |
| Silver | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.0028 | U |
| Sodium | 0.120 | U | 0.120 | U | 0.120 | U | 0.120 | U | 0.120 | U |
| Thallium | 0.00312 | J | 0.00250 | U | 0.00250 | U | 0.00250 | U | 0.0033 | J |
| Vanadium | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.0020 | U |
| Zinc | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.0021 | U |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939061-4 | | R1939061-13 | | R1939061-15 | | R1939061-17 | | | |
| Date Analyzed : | 03/11/25 06:34 | | 03/11/25 12:12 | | 03/11/25 12:31 | | 03/11/25 13:33 | | | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U | | |
| Antimony | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.00190 | U | | |
| Barium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | 0.120 | U | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | 0.00250 | U | 0.00250 | U | 0.00250 | U | 0.00250 | U | | |
| Vanadium | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939061-19 | | R1939061-21 | | R1939061-23 | | | |
| Date Analyzed : | | | 03/11/25 14:15 | | 03/11/25 14:47 | | 03/11/25 15:44 | | | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | | | 0.0318 | U | 0.0318 | U | 0.0318 | U | | |
| Antimony | | | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | | | 0.00190 | U | 0.00190 | U | 0.00190 | U | | |
| Barium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | | | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | | | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | | | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | | | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | | | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | | | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | | | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | | | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | | | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | | | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | | | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | | | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | | | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | | | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | | | 0.00250 | U | 0.00250 | U | 0.00286 | J | | |
| Vanadium | | | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939061-25 | | R1939061-27 | | R1939061-29 | | | |
| Date Analyzed : | | | 03/11/25 16:30 | | 03/11/25 17:16 | | 03/11/25 17:40 | | | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | | | 0.0318 | U | 0.0318 | U | 0.0318 | U | | |
| Antimony | | | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | | | 0.00190 | U | 0.00190 | U | 0.00190 | U | | |
| Barium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | | | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | | | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | | | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | | | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | | | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | | | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | | | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | | | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | | | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | | | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | | | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | | | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | | | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | | | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | | | 0.00250 | U | 0.00250 | U | 0.00250 | U | | |
| Vanadium | | | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939061-31 | | R1939061-33 | | R1939061-35 | | | |
| Date Analyzed : | | | 03/11/25 18:36 | | 03/11/25 19:11 | | 03/11/25 20:04 | | | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | | | 0.0318 | U | 0.0318 | U | 0.0318 | U | | |
| Antimony | | | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | | | 0.00190 | U | 0.00190 | U | 0.00190 | U | | |
| Barium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | | | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | | | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | | | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | | | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | | | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | | | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | | | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | | | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | | | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | | | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | | | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | | | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | | | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | | | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | | | 0.00250 | U | 0.00250 | U | 0.00335 | J | | |
| Vanadium | | | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939061-37 | | | | | | | |
| Date Analyzed : | | | 03/11/25 20:38 | | | | | | | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | | | 0.0318 | U | | | | | | |
| Antimony | | | 0.00710 | U | | | | | | |
| Arsenic | | | 0.00190 | U | | | | | | |
| Barium | | | 0.00210 | U | | | | | | |
| Beryllium | | | 0.000900 | U | | | | | | |
| Cadmium | | | 0.00100 | U | | | | | | |
| Calcium | | | 0.0350 | U | | | | | | |
| Chromium | | | 0.00210 | U | | | | | | |
| Cobalt | | | 0.00170 | U | | | | | | |
| Copper | | | 0.00220 | U | | | | | | |
| Iron | | | 0.00900 | U | | | | | | |
| Lead | | | 0.00270 | U | | | | | | |
| Magnesium | | | 0.0153 | U | | | | | | |
| Manganese | | | 0.00160 | U | | | | | | |
| Nickel | | | 0.00240 | U | | | | | | |
| Potassium | | | 0.237 | U | | | | | | |
| Selenium | | | 0.00350 | U | | | | | | |
| Silver | | | 0.00280 | U | | | | | | |
| Sodium | | | 0.120 | U | | | | | | |
| Thallium | | | 0.00276 | J | | | | | | |
| Vanadium | | | 0.00200 | U | | | | | | |
| Zinc | | | 0.00210 | U | | | | | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : TRACE7 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939620-2 | | R1939620-7 | | R1939620-9 | | R1939620-11 | | | |
| Date Analyzed : | 03/12/25 06:50 | | 03/12/25 09:35 | | 03/12/25 09:46 | | 03/12/25 11:01 | | | |
| **Parameter** | **mg/l** | **Q** | **mg/l** | **Q** | **mg/l** | **Q** | **mg/l** | **Q** | | **Q** |
| Antimony | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | Preparation Blank |
|---|---|---|---|---|---|---|---|
| Lab ID : | R1939620-4 | | | | | | |
| Date Analyzed : | 03/12/25 07:00 | | | | | | |
| **Parameter** | **mg/l** | **Q** | **Q** | **Q** | **Q** | **Q** | **Q** |
| Antimony | 0.00710 | U | | | | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE8 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1940691-2 | | R1940691-7 | | R1940691-9 | | R1940691-11 | | WG2040264-1 | |
| Date Analyzed : | 03/14/25 09:22 | | 03/14/25 11:14 | | 03/14/25 12:20 | | 03/14/25 13:25 | | 03/14/25 15:17 | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q |
| Aluminum | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U |
| Antimony | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.0071 | U |
| Arsenic | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.0019 | U |
| Barium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.0021 | U |
| Beryllium | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.0009 | U |
| Cadmium | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.0010 | U |
| Calcium | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U |
| Chromium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.0021 | U |
| Cobalt | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.0017 | U |
| Copper | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.0022 | U |
| Iron | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.0090 | U |
| Lead | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.0027 | U |
| Magnesium | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U |
| Manganese | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.0016 | U |
| Nickel | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.0024 | U |
| Potassium | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U |
| Selenium | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.0035 | U |
| Silver | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.0028 | U |
| Sodium | 0.120 | U | 0.120 | U | 0.120 | U | 0.120 | U | 0.120 | U |
| Thallium | 0.00250 | U | 0.00250 | U | 0.00250 | U | 0.00250 | U | 0.0025 | U |
| Vanadium | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.0020 | U |
| Zinc | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.0021 | U |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE8 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1940691-4 | | R1940691-13 | | R1940691-15 | | R1940691-17 | | | |
| Date Analyzed : | 03/14/25 09:31 | | 03/14/25 14:27 | | 03/14/25 14:57 | | 03/14/25 16:06 | | | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U | | |
| Antimony | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.00190 | U | | |
| Barium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | 0.120 | U | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | 0.00250 | U | 0.00250 | U | 0.00250 | U | 0.00250 | U | | |
| Vanadium | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE8 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1940691-19 | | R1940691-21 | | | | | |
| Date Analyzed : | | | 03/14/25 17:03 | | 03/14/25 18:12 | | | | | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | | | 0.0318 | U | 0.0318 | U | | | | |
| Antimony | | | 0.00710 | U | 0.00710 | U | | | | |
| Arsenic | | | 0.00190 | U | 0.00190 | U | | | | |
| Barium | | | 0.00210 | U | 0.00210 | U | | | | |
| Beryllium | | | 0.000900 | U | 0.000900 | U | | | | |
| Cadmium | | | 0.00100 | U | 0.00100 | U | | | | |
| Calcium | | | 0.0350 | U | 0.0350 | U | | | | |
| Chromium | | | 0.00210 | U | 0.00210 | U | | | | |
| Cobalt | | | 0.00170 | U | 0.00170 | U | | | | |
| Copper | | | 0.00220 | U | 0.00220 | U | | | | |
| Iron | | | 0.00900 | U | 0.00900 | U | | | | |
| Lead | | | 0.00270 | U | 0.00270 | U | | | | |
| Magnesium | | | 0.0153 | U | 0.0153 | U | | | | |
| Manganese | | | 0.00160 | U | 0.00160 | U | | | | |
| Nickel | | | 0.00240 | U | 0.00240 | U | | | | |
| Potassium | | | 0.237 | U | 0.237 | U | | | | |
| Selenium | | | 0.00350 | U | 0.00350 | U | | | | |
| Silver | | | 0.00280 | U | 0.00280 | U | | | | |
| Sodium | | | 0.120 | U | 0.120 | U | | | | |
| Thallium | | | 0.00250 | U | 0.00250 | U | | | | |
| Vanadium | | | 0.00200 | U | 0.00200 | U | | | | |
| Zinc | | | 0.00210 | U | 0.00210 | U | | | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : TRACE7 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1941430-2 | | R1941430-7 | | R1941430-9 | | | | | |
| Date Analyzed : | 03/17/25 09:59 | | 03/17/25 12:02 | | 03/17/25 13:05 | | | | | |
| **Parameter** | **mg/l** | **Q** | **mg/l** | **Q** | **mg/l** | **Q** | **mg/l** | **Q** | | **Q** |
| Sodium | 0.120 | U | 0.120 | U | 0.120 | U | | | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1941430-4 | | | | | | | |
| Date Analyzed : | 03/17/25 10:09 | | | | | | | |
| **Parameter** | **mg/l** | **Q** | **Q** | **Q** | **Q** | **Q** | **Q** | |
| Sodium | 0.120 | U | | | | | | |

# Form 4a
# Interference Check Sample

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Concentration Units | : mg/l |

| | True | | Initial Found | | | | Final Found | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939061-5 | | | | | | | |
| Analysis Date : | | | 03/11/25 06:42 | | | | | | | |
| Analyte | Sol. A | Sol. AB | Sol. A | %R | Sol. AB | %R | Sol. A | %R | Sol. AB | %R |
| Aluminum | 500 | | 520. | 104 | | | | | | |
| Antimony | | | -0.0192 | | | | | | | |
| Arsenic | | | -0.00621 | | | | | | | |
| Barium | | | 0.00149 | | | | | | | |
| Beryllium | | | 0.0000536 | | | | | | | |
| Cadmium | | | -0.00133 | | | | | | | |
| Calcium | 500 | | 485. | 97 | | | | | | |
| Chromium | | | -0.00111 | | | | | | | |
| Cobalt | | | -0.00101 | | | | | | | |
| Copper | | | -0.00382 | | | | | | | |
| Iron | 200 | | 191. | 96 | | | | | | |
| Lead | | | 0.00415 | | | | | | | |
| Magnesium | 500 | | 485. | 97 | | | | | | |
| Manganese | | | -0.000472 | | | | | | | |
| Nickel | | | -0.00000799 | | | | | | | |
| Potassium | | | 0.0105 | | | | | | | |
| Selenium | | | 0.00185 | | | | | | | |
| Silver | | | -0.000288 | | | | | | | |
| Sodium | | | 0.0135 | | | | | | | |
| Thallium | | | 0.00577 | | | | | | | |
| Vanadium | | | -0.00207 | | | | | | | |
| Zinc | | | -0.00324 | | | | | | | |

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

# Form 4a
# Interference Check Sample

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Concentration Units | : mg/l |

| | True | | Initial Found | | | | Final Found | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939061-5 | | | | | | | |
| Analysis Date : | | | 03/11/25 06:42 | | | | | | | |
| Analyte | Sol. A | Sol. AB | Sol. A | %R | Sol. AB | %R | Sol. A | %R | Sol. AB | %R |
| Aluminum | 500 | | 520. | 104 | | | | | | |
| Antimony | | | -0.0192 | | | | | | | |
| Arsenic | | | -0.00621 | | | | | | | |
| Barium | | | 0.00149 | | | | | | | |
| Beryllium | | | 0.0000536 | | | | | | | |
| Cadmium | | | -0.00133 | | | | | | | |
| Calcium | 500 | | 485. | 97 | | | | | | |
| Chromium | | | -0.00111 | | | | | | | |
| Cobalt | | | -0.00101 | | | | | | | |
| Copper | | | -0.00382 | | | | | | | |
| Iron | 200 | | 191. | 96 | | | | | | |
| Lead | | | 0.00415 | | | | | | | |
| Magnesium | 500 | | 485. | 97 | | | | | | |
| Manganese | | | -0.000472 | | | | | | | |
| Nickel | | | -0.00000799 | | | | | | | |
| Potassium | | | 0.0105 | | | | | | | |
| Selenium | | | 0.00185 | | | | | | | |
| Silver | | | -0.000288 | | | | | | | |
| Sodium | | | 0.0135 | | | | | | | |
| Thallium | | | 0.00577 | | | | | | | |
| Vanadium | | | -0.00207 | | | | | | | |
| Zinc | | | -0.00324 | | | | | | | |

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

# Form 4a
# Interference Check Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : TRACE7 | **Concentration Units** | : mg/l |

| | True | | Initial Found | | | | Final Found | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939620-5 | | | | | | | |
| Analysis Date : | | | 03/12/25 07:10 | | | | | | | |
| | Sol. | Sol. | Sol. | | Sol. | | Sol. | | Sol. | |
| Analyte | A | AB | A | %R | AB | %R | A | %R | AB | %R |
| Antimony | | | -0.0187 | | | | | | | |

**Acceptance Criteria:** Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

# Form 4a
# Interference Check Sample

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE8 | Concentration Units | : mg/l |

| | True | | Initial Found | | | | Final Found | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1940691-5 | | | | | | | |
| Analysis Date : | | | 03/14/25 09:40 | | | | | | | |
| Analyte | Sol. A | Sol. AB | Sol. A | %R | Sol. AB | %R | Sol. A | %R | Sol. AB | %R |
| Aluminum | 500 | | 498. | 100 | | | | | | |
| Antimony | | | -0.00172 | | | | | | | |
| Arsenic | | | 0.00224 | | | | | | | |
| Barium | | | 0.00128 | | | | | | | |
| Beryllium | | | 0.0000698 | | | | | | | |
| Cadmium | | | -0.00174 | | | | | | | |
| Calcium | 500 | | 442. | 88 | | | | | | |
| Chromium | | | -0.00114 | | | | | | | |
| Cobalt | | | -0.00000991 | | | | | | | |
| Copper | | | -0.00834 | | | | | | | |
| Iron | 200 | | 183. | 92 | | | | | | |
| Lead | | | -0.00803 | | | | | | | |
| Magnesium | 500 | | 477. | 95 | | | | | | |
| Manganese | | | 0.00151 | | | | | | | |
| Nickel | | | 0.000252 | | | | | | | |
| Potassium | | | -0.0248 | | | | | | | |
| Selenium | | | -0.00384 | | | | | | | |
| Silver | | | -0.000733 | | | | | | | |
| Sodium | | | 0.00874 | | | | | | | |
| Thallium | | | 0.00110 | | | | | | | |
| Vanadium | | | 0.00194 | | | | | | | |
| Zinc | | | -0.00260 | | | | | | | |

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

# Form 4a
# Interference Check Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : TRACE7 | **Concentration Units** | : mg/l |

| | True | | Initial Found | | | | Final Found | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1941430-5 | | | | | | | |
| Analysis Date : | | | 03/17/25 10:19 | | | | | | | |
| | Sol. | Sol. | Sol. | | Sol. | | Sol. | | Sol. | |
| Analyte | A | AB | A | %R | AB | %R | A | %R | AB | %R |
| Sodium | | | 0.0158 | | | | | | | |

**Acceptance Criteria:** Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Client Sample ID | : 4B | Matrix | : WATER |
| Lab Sample ID | : L2511919-08 | | |
| Matrix Spike | : WG2038690-3 | MS Analysis Date | : 03/11/25 22:56 |
| Matrix Spike Dup | : | MSD Analysis Date | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Aluminum, Dissolved | ND | 2 | 2.01 | 100 | | | | | 75-125 | 20 |
| Antimony, Dissolved | ND | 0.5 | 0.424 | 85 | | | | | 75-125 | 20 |
| Arsenic, Dissolved | ND | 0.12 | 0.119 | 99 | | | | | 75-125 | 20 |
| Barium, Dissolved | 0.0178 | 2 | 1.96 | 97 | | | | | 75-125 | 20 |
| Beryllium, Dissolved | ND | 0.05 | 0.0523 | 105 | | | | | 75-125 | 20 |
| Cadmium, Dissolved | ND | 0.053 | 0.0508 | 96 | | | | | 75-125 | 20 |
| Calcium, Dissolved | 20.0 | 10 | 29.5 | 95 | | | | | 75-125 | 20 |
| Chromium, Dissolved | ND | 0.2 | 0.196 | 98 | | | | | 75-125 | 20 |
| Cobalt, Dissolved | ND | 0.5 | 0.485 | 97 | | | | | 75-125 | 20 |
| Copper, Dissolved | 0.0060J | 0.25 | 0.249 | 100 | | | | | 75-125 | 20 |
| Iron, Dissolved | 0.0115J | 1 | 1.04 | 104 | | | | | 75-125 | 20 |
| Lead, Dissolved | ND | 0.53 | 0.527 | 99 | | | | | 75-125 | 20 |
| Magnesium, Dissolved | 5.26 | 10 | 14.8 | 95 | | | | | 75-125 | 20 |
| Manganese, Dissolved | 0.0017J | 0.5 | 0.509 | 102 | | | | | 75-125 | 20 |
| Nickel, Dissolved | 0.0322 | 0.5 | 0.521 | 98 | | | | | 75-125 | 20 |
| Potassium, Dissolved | 1.00J | 10 | 11.8 | 118 | | | | | 75-125 | 20 |
| Selenium, Dissolved | ND | 0.12 | 0.118 | 98 | | | | | 75-125 | 20 |
| Silver, Dissolved | ND | 0.05 | 0.0499 | 100 | | | | | 75-125 | 20 |
| Sodium, Dissolved | 10.3 | 10 | 20.7 | 104 | | | | | 75-125 | 20 |
| Thallium, Dissolved | ND | 0.12 | 0.113 | 94 | | | | | 75-125 | 20 |
| Vanadium, Dissolved | ND | 0.5 | 0.498 | 100 | | | | | 75-125 | 20 |
| Zinc, Dissolved | 0.0254 | 0.5 | 0.523 | 100 | | | | | 75-125 | 20 |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Client Sample ID | : 2A | Matrix | : WATER |
| Lab Sample ID | : L2511919-01 | | |
| Matrix Spike | : WG2038695-3 | MS Analysis Date | : 03/11/25 16:13 |
| Matrix Spike Dup | : | MSD Analysis Date | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Aluminum, Total | 0.0678J | 2 | 2.08 | 104 | | | | | 75-125 | 20 |
| Antimony, Total | ND | 0.5 | 0.432 | 86 | | | | | 75-125 | 20 |
| Arsenic, Total | ND | 0.12 | 0.119 | 99 | | | | | 75-125 | 20 |
| Barium, Total | 0.0210 | 2 | 1.97 | 97 | | | | | 75-125 | 20 |
| Beryllium, Total | ND | 0.05 | 0.0522 | 104 | | | | | 75-125 | 20 |
| Cadmium, Total | ND | 0.053 | 0.0510 | 96 | | | | | 75-125 | 20 |
| Calcium, Total | 25.0 | 10 | 34.6 | 96 | | | | | 75-125 | 20 |
| Chromium, Total | ND | 0.2 | 0.196 | 98 | | | | | 75-125 | 20 |
| Cobalt, Total | ND | 0.5 | 0.486 | 97 | | | | | 75-125 | 20 |
| Copper, Total | ND | 0.25 | 0.244 | 98 | | | | | 75-125 | 20 |
| Iron, Total | 0.0921 | 1 | 1.13 | 104 | | | | | 75-125 | 20 |
| Lead, Total | ND | 0.53 | 0.530 | 100 | | | | | 75-125 | 20 |
| Magnesium, Total | 4.41 | 10 | 14.0 | 96 | | | | | 75-125 | 20 |
| Manganese, Total | 0.0109 | 0.5 | 0.518 | 101 | | | | | 75-125 | 20 |
| Nickel, Total | ND | 0.5 | 0.492 | 98 | | | | | 75-125 | 20 |
| Potassium, Total | 2.17J | 10 | 12.8 | 128 Q | | | | | 75-125 | 20 |
| Selenium, Total | ND | 0.12 | 0.118 | 98 | | | | | 75-125 | 20 |
| Silver, Total | ND | 0.05 | 0.0502 | 100 | | | | | 75-125 | 20 |
| Sodium, Total | 9.83 | 10 | 20.2 | 104 | | | | | 75-125 | 20 |
| Thallium, Total | ND | 0.12 | 0.115 | 96 | | | | | 75-125 | 20 |
| Vanadium, Total | ND | 0.5 | 0.499 | 100 | | | | | 75-125 | 20 |
| Zinc, Total | 0.0147 | 0.5 | 0.511 | 99 | | | | | 75-125 | 20 |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Client Sample ID | : NA | Matrix | : WATER |
| Lab Sample ID | : L2512156-01 | | |
| Matrix Spike | : WG2038695-7 | MS Analysis Date | : 03/11/25 16:58 |
| Matrix Spike Dup | : | MSD Analysis Date | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Aluminum, Total | 0.486 | 2 | 2.54 | 103 | | | | | 75-125 | 20 |
| Antimony, Total | ND | 0.5 | 0.438 | 88 | | | | | 75-125 | 20 |
| Arsenic, Total | ND | 0.12 | 0.117 | 98 | | | | | 75-125 | 20 |
| Barium, Total | 0.007J | 2 | 1.96 | 98 | | | | | 75-125 | 20 |
| Beryllium, Total | ND | 0.05 | 0.0523 | 105 | | | | | 75-125 | 20 |
| Cadmium, Total | ND | 0.053 | 0.0506 | 95 | | | | | 75-125 | 20 |
| Calcium, Total | 26.9 | 10 | 36.5 | 96 | | | | | 75-125 | 20 |
| Chromium, Total | ND | 0.2 | 0.196 | 98 | | | | | 75-125 | 20 |
| Cobalt, Total | ND | 0.5 | 0.487 | 97 | | | | | 75-125 | 20 |
| Copper, Total | 0.005J | 0.25 | 0.252 | 101 | | | | | 75-125 | 20 |
| Iron, Total | 0.666 | 1 | 1.68 | 101 | | | | | 75-125 | 20 |
| Lead, Total | ND | 0.53 | 0.530 | 100 | | | | | 75-125 | 20 |
| Magnesium, Total | 1.88 | 10 | 11.6 | 97 | | | | | 75-125 | 20 |
| Manganese, Total | 0.030 | 0.5 | 0.536 | 101 | | | | | 75-125 | 20 |
| Nickel, Total | ND | 0.5 | 0.498 | 100 | | | | | 75-125 | 20 |
| Potassium, Total | 0.420J | 10 | 11.1 | 111 | | | | | 75-125 | 20 |
| Selenium, Total | ND | 0.12 | 0.118 | 98 | | | | | 75-125 | 20 |
| Silver, Total | ND | 0.05 | 0.0502 | 100 | | | | | 75-125 | 20 |
| Sodium, Total | 38.4 | 10 | 48.4 | 100 | | | | | 75-125 | 20 |
| Thallium, Total | ND | 0.12 | 0.114 | 95 | | | | | 75-125 | 20 |
| Vanadium, Total | 0.004J | 0.5 | 0.501 | 100 | | | | | 75-125 | 20 |
| Zinc, Total | 0.041 | 0.5 | 0.540 | 100 | | | | | 75-125 | 20 |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Client Sample ID | : NA | Matrix | : WATER |
| Lab Sample ID | : L2512981-01 | | |
| Matrix Spike | : WG2040264-3 | MS Analysis Date | : 03/14/25 15:44 |
| Matrix Spike Dup | : | MSD Analysis Date | : |

| | | Matrix Spike Sample | | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Aluminum, Total | 0.0352J | 2 | 2.02 | 101 | | | | | | 75-125 | 20 |
| Antimony, Total | ND | 0.5 | 0.429 | 86 | | | | | | 75-125 | 20 |
| Arsenic, Total | ND | 0.12 | 0.129 | 108 | | | | | | 75-125 | 20 |
| Barium, Total | 0.038 | 2 | 2.01 | 99 | | | | | | 75-125 | 20 |
| Beryllium, Total | ND | 0.05 | 0.0494 | 99 | | | | | | 75-125 | 20 |
| Cadmium, Total | ND | 0.053 | 0.0557 | 105 | | | | | | 75-125 | 20 |
| Calcium, Total | 1.61 | 10 | 11.5 | 99 | | | | | | 75-125 | 20 |
| Chromium, Total | ND | 0.2 | 0.204 | 102 | | | | | | 75-125 | 20 |
| Cobalt, Total | ND | 0.5 | 0.484 | 97 | | | | | | 75-125 | 20 |
| Copper, Total | ND | 0.25 | 0.257 | 103 | | | | | | 75-125 | 20 |
| Iron, Total | 0.021J | 1 | 0.994 | 99 | | | | | | 75-125 | 20 |
| Lead, Total | ND | 0.53 | 0.554 | 104 | | | | | | 75-125 | 20 |
| Magnesium, Total | 0.394 | 10 | 10.2 | 98 | | | | | | 75-125 | 20 |
| Manganese, Total | 0.130 | 0.5 | 0.617 | 97 | | | | | | 75-125 | 20 |
| Nickel, Total | 0.0048J | 0.5 | 0.509 | 102 | | | | | | 75-125 | 20 |
| Potassium, Total | 1.64J | 10 | 12.2 | 122 | | | | | | 75-125 | 20 |
| Selenium, Total | 0.0280 | 0.12 | 0.154 | 105 | | | | | | 75-125 | 20 |
| Silver, Total | 0.0316 | 0.05 | 0.0852 | 107 | | | | | | 75-125 | 20 |
| Sodium, Total | 1040 | 10 | 1040 | 0 | Q | | | | | 75-125 | 20 |
| Thallium, Total | ND | 0.12 | 0.107 | 89 | | | | | | 75-125 | 20 |
| Vanadium, Total | ND | 0.5 | 0.534 | 107 | | | | | | 75-125 | 20 |
| Zinc, Total | 0.0052 | 0.5 | 0.543 | 108 | | | | | | 75-125 | 20 |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Client Sample ID | : NA | Matrix | : WATER |
| Lab Sample ID | : L2512983-01 | | |
| Matrix Spike | : WG2040264-7 | MS Analysis Date | : 03/14/25 16:40 |
| Matrix Spike Dup | : | MSD Analysis Date | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Aluminum, Total | 0.033J | 2 | 2.06 | 103 | | | | | 75-125 | 20 |
| Antimony, Total | ND | 0.5 | 0.425 | 85 | | | | | 75-125 | 20 |
| Arsenic, Total | ND | 0.12 | 0.125 | 104 | | | | | 75-125 | 20 |
| Barium, Total | 0.006J | 2 | 2.04 | 102 | | | | | 75-125 | 20 |
| Beryllium, Total | ND | 0.05 | 0.0496 | 99 | | | | | 75-125 | 20 |
| Cadmium, Total | ND | 0.053 | 0.0538 | 102 | | | | | 75-125 | 20 |
| Calcium, Total | 9.44 | 10 | 18.6 | 92 | | | | | 75-125 | 20 |
| Chromium, Total | ND | 0.2 | 0.203 | 102 | | | | | 75-125 | 20 |
| Cobalt, Total | ND | 0.5 | 0.490 | 98 | | | | | 75-125 | 20 |
| Copper, Total | 1.17 | 0.25 | 1.40 | 92 | | | | | 75-125 | 20 |
| Iron, Total | 0.177 | 1 | 1.14 | 96 | | | | | 75-125 | 20 |
| Lead, Total | ND | 0.53 | 0.552 | 104 | | | | | 75-125 | 20 |
| Magnesium, Total | 5.42 | 10 | 15.5 | 101 | | | | | 75-125 | 20 |
| Manganese, Total | 0.025 | 0.5 | 0.504 | 96 | | | | | 75-125 | 20 |
| Nickel, Total | 0.025J | 0.5 | 0.535 | 107 | | | | | 75-125 | 20 |
| Potassium, Total | 12.1 | 10 | 23.1 | 110 | | | | | 75-125 | 20 |
| Selenium, Total | ND | 0.12 | 0.122 | 102 | | | | | 75-125 | 20 |
| Silver, Total | 0.011 | 0.05 | 0.0623 | 103 | | | | | 75-125 | 20 |
| Sodium, Total | 231 | 10 | 241. | 100 | | | | | 75-125 | 20 |
| Thallium, Total | ND | 0.12 | 0.113 | 94 | | | | | 75-125 | 20 |
| Vanadium, Total | ND | 0.5 | 0.531 | 106 | | | | | 75-125 | 20 |
| Zinc, Total | 0.861 | 0.5 | 1.36 | 100 | | | | | 75-125 | 20 |

# Form 5b
# Post Digest Spike Recovery

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 2A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2511919-01 | | |
| **Post Spike** | : WG2038695-5 | **PS Analysis Date** | : 03/11/25 16:19 |

| | | Post Spike Sample | | | |
|---|---|---|---|---|---|
| **Parameter** | **Sample Conc. (mg/l)** | **Spike Added (mg/l)** | **Spike Conc. (mg/l)** | **%R** | **Recovery Limits** |
| **Potassium, Total** | 2.17J | 10 | 13.0 | 130 | 75-125 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Client Sample ID | : 4B | Matrix | : WATER |
| Lab Sample ID | : L2511919-08 | Analysis Date | : 03/11/25 22:52 |
| Dup Sample ID | : WG2038690-4 | DUP Analysis Date | : 03/11/25 22:59 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Aluminum, Dissolved | ND | ND | NC | 20 |
| Antimony, Dissolved | ND | ND | NC | 20 |
| Arsenic, Dissolved | ND | ND | NC | 20 |
| Barium, Dissolved | 0.0178 | 0.0174 | 2 | 20 |
| Beryllium, Dissolved | ND | ND | NC | 20 |
| Cadmium, Dissolved | ND | ND | NC | 20 |
| Calcium, Dissolved | 20.0 | 19.6 | 2 | 20 |
| Chromium, Dissolved | ND | ND | NC | 20 |
| Cobalt, Dissolved | ND | ND | NC | 20 |
| Copper, Dissolved | 0.0060J | 0.0054J | NC | 20 |
| Iron, Dissolved | 0.0115J | ND | NC | 20 |
| Lead, Dissolved | ND | ND | NC | 20 |
| Magnesium, Dissolved | 5.26 | 5.18 | 2 | 20 |
| Manganese, Dissolved | 0.0017J | ND | NC | 20 |
| Nickel, Dissolved | 0.0322 | 0.0304 | 6 | 20 |
| Potassium, Dissolved | 1.00J | 0.988J | NC | 20 |
| Selenium, Dissolved | ND | ND | NC | 20 |
| Silver, Dissolved | ND | ND | NC | 20 |
| Sodium, Dissolved | 10.3 | 10.1 | 2 | 20 |
| Thallium, Dissolved | ND | ND | NC | 20 |
| Vanadium, Dissolved | ND | ND | NC | 20 |
| Zinc, Dissolved | 0.0254 | 0.0249 | 2 | 20 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Client Sample ID | : 2A | Matrix | : WATER |
| Lab Sample ID | : L2511919-01 | Analysis Date | : 03/11/25 16:09 |
| Dup Sample ID | : WG2038695-4 | DUP Analysis Date | : 03/11/25 16:16 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Aluminum, Total | 0.0678J | 0.0652J | NC | 20 |
| Antimony, Total | ND | ND | NC | 20 |
| Arsenic, Total | ND | ND | NC | 20 |
| Barium, Total | 0.0210 | 0.0213 | 1 | 20 |
| Beryllium, Total | ND | ND | NC | 20 |
| Cadmium, Total | ND | ND | NC | 20 |
| Calcium, Total | 25.0 | 25.4 | 2 | 20 |
| Chromium, Total | ND | ND | NC | 20 |
| Cobalt, Total | ND | ND | NC | 20 |
| Copper, Total | ND | ND | NC | 20 |
| Iron, Total | 0.0921 | 0.0929 | 1 | 20 |
| Lead, Total | ND | ND | NC | 20 |
| Magnesium, Total | 4.41 | 4.38 | 1 | 20 |
| Manganese, Total | 0.0109 | 0.0112 | 3 | 20 |
| Nickel, Total | ND | ND | NC | 20 |
| Potassium, Total | 2.17J | 2.19J | NC | 20 |
| Selenium, Total | ND | ND | NC | 20 |
| Silver, Total | ND | ND | NC | 20 |
| Sodium, Total | 9.83 | 9.92 | 1 | 20 |
| Thallium, Total | ND | ND | NC | 20 |
| Vanadium, Total | ND | ND | NC | 20 |
| Zinc, Total | 0.0147 | 0.0154 | 5 | 20 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : NA | **Analysis Date** | : 03/11/25 16:55 |
| **Dup Sample ID** | : WG2038695-8 | **DUP Analysis Date** | : 03/11/25 17:02 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Iron, Total | 0.666 | 0.673 | 1 | 20 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Client Sample ID | : NA | Matrix | : WATER |
| Lab Sample ID | : NA | Analysis Date | : 03/14/25 15:39 |
| Dup Sample ID | : WG2040264-4 | DUP Analysis Date | : 03/14/25 15:48 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Aluminum, Total | 0.0352J | 0.0326J | NC | 20 |
| Arsenic, Total | ND | ND | NC | 20 |
| Cadmium, Total | ND | ND | NC | 20 |
| Chromium, Total | ND | ND | NC | 20 |
| Copper, Total | ND | ND | NC | 20 |
| Lead, Total | ND | ND | NC | 20 |
| Nickel, Total | 0.0048J | 0.0051J | NC | 20 |
| Selenium, Total | 0.0280 | 0.0279 | 0 | 20 |
| Silver, Total | 0.0316 | 0.0318 | 1 | 20 |
| Zinc, Total | 0.0052 | 0.0040J | NC | 20 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Client Sample ID | : NA | Matrix | : WATER |
| Lab Sample ID | : NA | Analysis Date | : 03/14/25 16:36 |
| Dup Sample ID | : WG2040264-8 | DUP Analysis Date | : 03/14/25 16:45 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Arsenic, Total | ND | ND | NC | 20 |
| Copper, Total | 1.17 | 1.15 | 2 | 20 |
| Lead, Total | ND | 0.0029J | NC | 20 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Client Sample ID | : NA | Matrix | : WATER |
| Lab Sample ID | : WG2038690-2 | LCS Analysis Date | : 03/11/25 22:38 |
| Dup Sample ID | : | LCSD Analysis Date | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Aluminum, Dissolved | 2.00 | 2.01 | 100. | | | | | 85-115 | 20 |
| Arsenic, Dissolved | 0.120 | 0.119 | 99. | | | | | 85-115 | 20 |
| Barium, Dissolved | 2.00 | 1.92 | 96. | | | | | 85-115 | 20 |
| Beryllium, Dissolved | 0.0500 | 0.0516 | 103. | | | | | 85-115 | 20 |
| Cadmium, Dissolved | 0.0530 | 0.0514 | 97. | | | | | 85-115 | 20 |
| Calcium, Dissolved | 10.0 | 9.86 | 99. | | | | | 85-115 | 20 |
| Chromium, Dissolved | 0.200 | 0.194 | 97. | | | | | 85-115 | 20 |
| Cobalt, Dissolved | 0.500 | 0.488 | 98. | | | | | 85-115 | 20 |
| Copper, Dissolved | 0.250 | 0.240 | 96. | | | | | 85-115 | 20 |
| Iron, Dissolved | 1.00 | 1.03 | 103. | | | | | 85-115 | 20 |
| Lead, Dissolved | 0.530 | 0.528 | 100. | | | | | 85-115 | 20 |
| Magnesium, Dissolved | 10.0 | 9.69 | 97. | | | | | 85-115 | 20 |
| Manganese, Dissolved | 0.500 | 0.504 | 101. | | | | | 85-115 | 20 |
| Nickel, Dissolved | 0.500 | 0.490 | 98. | | | | | 85-115 | 20 |
| Potassium, Dissolved | 10.0 | 10.5 | 105. | | | | | 85-115 | 20 |
| Selenium, Dissolved | 0.120 | 0.115 | 96. | | | | | 85-115 | 20 |
| Silver, Dissolved | 0.0500 | 0.0493 | 99. | | | | | 85-115 | 20 |
| Sodium, Dissolved | 10.0 | 10.6 | 106. | | | | | 85-115 | 20 |
| Thallium, Dissolved | 0.120 | 0.112 | 93. | | | | | 85-115 | 20 |
| Vanadium, Dissolved | 0.500 | 0.495 | 99. | | | | | 85-115 | 20 |
| Zinc, Dissolved | 0.500 | 0.491 | 98. | | | | | 85-115 | 20 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Client Sample ID | : NA | Matrix | : WATER |
| Lab Sample ID | : WG2038695-2 | LCS Analysis Date | : 03/11/25 15:53 |
| Dup Sample ID | : | LCSD Analysis Date | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Aluminum, Total | 2.00 | 2.04 | 102. | | | | | 85-115 | 20 |
| Arsenic, Total | 0.120 | 0.118 | 98. | | | | | 85-115 | 20 |
| Barium, Total | 2.00 | 1.95 | 98. | | | | | 85-115 | 20 |
| Beryllium, Total | 0.0500 | 0.0521 | 104. | | | | | 85-115 | 20 |
| Cadmium, Total | 0.0530 | 0.0519 | 98. | | | | | 85-115 | 20 |
| Calcium, Total | 10.0 | 10.2 | 102. | | | | | 85-115 | 20 |
| Chromium, Total | 0.200 | 0.197 | 98. | | | | | 85-115 | 20 |
| Cobalt, Total | 0.500 | 0.494 | 99. | | | | | 85-115 | 20 |
| Copper, Total | 0.250 | 0.242 | 97. | | | | | 85-115 | 20 |
| Iron, Total | 1.00 | 1.04 | 104. | | | | | 85-115 | 20 |
| Lead, Total | 0.530 | 0.538 | 102. | | | | | 85-115 | 20 |
| Magnesium, Total | 10.0 | 9.81 | 98. | | | | | 85-115 | 20 |
| Manganese, Total | 0.500 | 0.513 | 103. | | | | | 85-115 | 20 |
| Nickel, Total | 0.500 | 0.498 | 100. | | | | | 85-115 | 20 |
| Potassium, Total | 10.0 | 10.7 | 107. | | | | | 85-115 | 20 |
| Selenium, Total | 0.120 | 0.116 | 97. | | | | | 85-115 | 20 |
| Silver, Total | 0.0500 | 0.0498 | 100. | | | | | 85-115 | 20 |
| Sodium, Total | 10.0 | 10.7 | 107. | | | | | 85-115 | 20 |
| Thallium, Total | 0.120 | 0.114 | 95. | | | | | 85-115 | 20 |
| Vanadium, Total | 0.500 | 0.500 | 100. | | | | | 85-115 | 20 |
| Zinc, Total | 0.500 | 0.506 | 101. | | | | | 85-115 | 20 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2038695-2 | **LCS Analysis Date** | : 03/11/25 20:17 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Antimony, Total | 0.500 | 0.440 | 88. | | | | | 85-115 | 20 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2038690-2 | **LCS Analysis Date** | : 03/12/25 10:10 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Antimony, Dissolved | 0.500 | 0.475 | 95. | | | | | 85-115 | 20 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Client Sample ID | : NA | Matrix | : WATER |
| Lab Sample ID | : WG2040264-2 | LCS Analysis Date | : 03/14/25 15:22 |
| Dup Sample ID | : | LCSD Analysis Date | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Aluminum, Total | 2.00 | 2.04 | 102. | | | | | 85-115 | 20 |
| Antimony, Total | 0.500 | 0.440 | 88. | | | | | 85-115 | 20 |
| Arsenic, Total | 0.120 | 0.119 | 99. | | | | | 85-115 | 20 |
| Barium, Total | 2.00 | 2.05 | 102. | | | | | 85-115 | 20 |
| Beryllium, Total | 0.0500 | 0.0494 | 99. | | | | | 85-115 | 20 |
| Cadmium, Total | 0.0530 | 0.0539 | 102. | | | | | 85-115 | 20 |
| Calcium, Total | 10.0 | 9.80 | 98. | | | | | 85-115 | 20 |
| Chromium, Total | 0.200 | 0.206 | 103. | | | | | 85-115 | 20 |
| Cobalt, Total | 0.500 | 0.499 | 100. | | | | | 85-115 | 20 |
| Copper, Total | 0.250 | 0.271 | 108. | | | | | 85-115 | 20 |
| Iron, Total | 1.00 | 0.984 | 98. | | | | | 85-115 | 20 |
| Lead, Total | 0.530 | 0.578 | 109. | | | | | 85-115 | 20 |
| Magnesium, Total | 10.0 | 10.8 | 108. | | | | | 85-115 | 20 |
| Manganese, Total | 0.500 | 0.488 | 98. | | | | | 85-115 | 20 |
| Nickel, Total | 0.500 | 0.523 | 105. | | | | | 85-115 | 20 |
| Potassium, Total | 10.0 | 10.8 | 108. | | | | | 85-115 | 20 |
| Selenium, Total | 0.120 | 0.122 | 102. | | | | | 85-115 | 20 |
| Silver, Total | 0.0500 | 0.0530 | 106. | | | | | 85-115 | 20 |
| Sodium, Total | 10.0 | 11.1 | 111. | | | | | 85-115 | 20 |
| Thallium, Total | 0.120 | 0.124 | 103. | | | | | 85-115 | 20 |
| Vanadium, Total | 0.500 | 0.530 | 106. | | | | | 85-115 | 20 |
| Zinc, Total | 0.500 | 0.512 | 102. | | | | | 85-115 | 20 |

# Form 8
# Serial Dilutions

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 4B | **Matrix** | : WATER |
| **Lab Sample ID** | : L2511919-08 | **Analysis Date** | : 03/11/25 22:52 |
| **Serial Dilution ID** | : WG2038690-6 | **Analysis Date** | : 03/11/25 23:06 |

| Parameter | Initial Sample Result (mg/l) | Serial Dilution Result (mg/l) | % Difference | %D Limit |
|---|---|---|---|---|
| Calcium, Dissolved | 20.0 | 19.8 | 1 | 20 |
| Magnesium, Dissolved | 5.26 | 5.16 | 2 | 20 |

# Form 8
# Serial Dilutions

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 2A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2511919-01 | **Analysis Date** | : 03/11/25 16:09 |
| **Serial Dilution ID** | : WG2038695-6 | **Analysis Date** | : 03/11/25 16:23 |

| Parameter | Initial Sample Result (mg/l) | Serial Dilution Result (mg/l) | % Difference | %D Limit |
|---|---|---|---|---|
| Calcium, Total | 25.0 | 25.2 | 1 | 20 |
| Magnesium, Total | 4.41 | 4.40 | 0 | 20 |

U.S. EPA - CLP
10A-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument: TRACE4 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Al | Ca | Fe | Mg | __ |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000020 | -0.0000310 | -0.0000090 | |
| Antimony | 206.83 | -0.0000020 | 0.0000040 | -0.0000110 | -0.0000050 | |
| Arsenic | 189.04 | 0.0000090 | -0.0000010 | -0.0000700 | 0.0000000 | |
| Barium | 455.40 | -0.0000040 | -0.0000020 | -0.0000110 | -0.0000010 | |
| Beryllium | 313.40 | -0.0000020 | -0.0000020 | -0.0000050 | 0.0000000 | |
| Cadmium | 214.44 | 0.0000000 | -0.0000030 | 0.0000000 | -0.0000010 | |
| Calcium | 315.89 | 0.0000780 | 0.0000000 | -0.0000170 | 0.0000710 | |
| Chromium | 267.72 | 0.0000050 | -0.0000020 | 0.0000120 | 0.0000000 | |
| Cobalt | 228.62 | -0.0000120 | -0.0000060 | -0.0000250 | -0.0000020 | |
| Copper | 324.75 | -0.0000030 | -0.0000020 | -0.0000040 | 0.0000110 | |
| Iron | 259.94 | 0.0000180 | -0.0000120 | 0.0000000 | -0.0000030 | |
| Lead | 220.35 | 0.0001100 | -0.0000010 | 0.0000180 | -0.0000010 | |
| Magnesium | 279.08 | -0.0000540 | -0.0000280 | 0.0000190 | 0.0000000 | |
| Manganese | 257.61 | -0.0000030 | -0.0000020 | -0.0000080 | 0.0000020 | |
| Mercury | | | | | | |
| Nickel | 231.60 | -0.0000130 | -0.0000050 | -0.0000240 | -0.0000020 | |
| Potassium | 766.49 | -0.0012590 | -0.0007040 | -0.0028490 | -0.0002350 | |
| Selenium | 196.09 | -0.0000200 | 0.0000000 | -0.0000290 | -0.0000010 | |
| Silver | 328.07 | -0.0000040 | -0.0000020 | -0.0000090 | -0.0000010 | |
| Sodium | 589.59 | -0.0006160 | -0.0005220 | -0.0020960 | -0.0001600 | |
| Thallium | 190.86 | -0.0000060 | -0.0000040 | -0.0000050 | -0.0000010 | |
| Vanadium | 292.40 | -0.0000050 | -0.0000030 | 0.0000100 | -0.0000020 | |
| Zinc | 206.20 | 0.0002750 | 0.0000030 | -0.0007990 | -0.0000040 | |
| | | | | | | |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE4 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Sb | As | Ba | Be | Cd |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0022950 | -0.0018570 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0003900 | -0.0000120 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000210 | -0.0001780 | -0.0001730 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0002050 | -0.0002030 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0000860 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0002090 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0020880 | -0.0018790 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0002010 | -0.0003100 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0004810 | -0.0004970 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0002330 | -0.0002260 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0012310 | -0.0009570 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0001700 | -0.0001850 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0022440 | -0.0017830 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0001950 | -0.0002020 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0005490 | -0.0005200 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0522980 | -0.0517110 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000060 | 0.0000030 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0001740 | -0.0001560 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0417330 | -0.0407400 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0002650 | -0.0002240 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0002090 | -0.0002040 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0000320 | -0.0009250 |
| | | | | | | |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE4 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Cr | Co | Cu | Pb | Mn |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | -0.0020320 | -0.0005350 | -0.0005960 | 0.0000000 | -0.0003930 |
| Antimony | 206.83 | 0.0049920 | -0.0001600 | -0.0001410 | 0.0000000 | -0.0001780 |
| Arsenic | 189.04 | 0.0002670 | -0.0001290 | -0.0000570 | 0.0000000 | -0.0000030 |
| Barium | 455.40 | -0.0002000 | -0.0000500 | -0.0000660 | 0.0000000 | -0.0000350 |
| Beryllium | 313.40 | -0.0000900 | -0.0000220 | -0.0000300 | 0.0000000 | -0.0000110 |
| Cadmium | 214.44 | -0.0000290 | -0.0000520 | -0.0000680 | 0.0000000 | -0.0000270 |
| Calcium | 315.89 | -0.0020720 | 0.0009940 | -0.0005720 | 0.0000000 | -0.0000920 |
| Chromium | 267.72 | 0.0000000 | -0.0000480 | -0.0000690 | 0.0000000 | 0.0001140 |
| Cobalt | 228.62 | -0.0005870 | 0.0000000 | -0.0001660 | 0.0000000 | -0.0000740 |
| Copper | 324.75 | -0.0002130 | -0.0000490 | 0.0000000 | 0.0000000 | 0.0000300 |
| Iron | 259.94 | -0.0010370 | -0.0002940 | -0.0003760 | 0.0000000 | -0.0001890 |
| Lead | 220.35 | -0.0001960 | -0.0003260 | 0.0002710 | 0.0000000 | 0.0000640 |
| Magnesium | 279.08 | -0.0024620 | -0.0005640 | -0.0008730 | 0.0000000 | -0.0069760 |
| Manganese | 257.61 | -0.0002060 | -0.0000480 | -0.0000750 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | -0.0005230 | -0.0002210 | -0.0001810 | 0.0000000 | -0.0000730 |
| Potassium | 766.49 | -0.0512430 | -0.0126240 | -0.0178480 | 0.0000000 | -0.0089880 |
| Selenium | 196.09 | -0.0000520 | 0.0000530 | -0.0000240 | 0.0000000 | 0.0003780 |
| Silver | 328.07 | -0.0001430 | -0.0000370 | -0.0000450 | 0.0000000 | 0.0001940 |
| Sodium | 589.59 | -0.0407180 | -0.0097580 | -0.0137660 | 0.0000000 | -0.0070470 |
| Thallium | 190.86 | -0.0000390 | 0.0020440 | -0.0000840 | -0.0000200 | 0.0003990 |
| Vanadium | 292.40 | -0.0002210 | -0.0000500 | -0.0000650 | 0.0000000 | 0.0001060 |
| Zinc | 206.20 | -0.0012900 | 0.0000070 | 0.0003430 | 0.0001200 | -0.0001520 |
| | | | | | | |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE4 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Ni | K | Se | Ag | Na |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10A-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument: TRACE5 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Al | Ca | Fe | Mg | Mo |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000960 | 0.0000000 | 0.0000000 | 0.0573510 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0016160 |
| Arsenic | 189.04 | -0.0000310 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0009550 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000010 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0009910 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000120 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0004030 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0003010 | 0.0000000 | 0.0000210 | 0.0000000 | -0.0026290 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0001760 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000340 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000180 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000310 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE5 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Sb | As | Ba | Be | Cd |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE5 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Cr | Co | Cu | Pb | Mn |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0114090 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0003850 | -0.0000480 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0007800 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0092850 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | -0.0001620 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000620 | 0.0000000 | 0.0000000 | 0.0006770 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | -0.0019910 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0004360 |
| Zinc | 206.20 | | | | | |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE5 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Ni | K | Se | Ag | Na |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000930 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0002270 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | -0.0003390 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE5 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Tl | V | Zn | | |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Beryllium | 313.40 | 0.0000000 | 0.0018940 | 0.0000000 | | |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Cobalt | 228.62 | 0.0017990 | 0.0000000 | 0.0000000 | | |
| Copper | 324.75 | 0.0000000 | -0.0003720 | 0.0000000 | | |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Lead | 220.35 | 0.0000000 | -0.0001170 | 0.0000000 | | |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0005790 | 0.0000000 | 0.0000000 | | |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Silver | 328.07 | 0.0000000 | -0.0017200 | 0.0000000 | | |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Thallium | 190.86 | 0.0000000 | 0.0002820 | 0.0000000 | | |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | | |
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Comments:

U.S. EPA - CLP
10A-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument: TRACE6 Date: 11/10/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Al | Ca | Fe | Mg | Mo |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000960 | 0.0000000 | 0.0000000 | 0.0573510 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0016160 |
| Arsenic | 189.04 | -0.0000310 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0009550 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000010 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0009910 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000120 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0004030 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0003010 | 0.0000000 | 0.0000210 | 0.0000000 | -0.0026290 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0001760 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000340 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000180 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000310 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE6 Date: 11/10/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Sb | As | Ba | Be | Cd |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE6 Date: 11/10/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Cr | Co | Cu | Pb | Mn |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0114090 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0003850 | -0.0000480 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0007800 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0092850 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | -0.0001620 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000620 | 0.0000000 | 0.0000000 | 0.0006770 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | -0.0019910 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0004360 |
| Zinc | 206.20 | | | | | |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE6 Date: 11/10/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Ni | K | Se | Ag | Na |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000930 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0002270 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | -0.0003390 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE6 Date: 11/10/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Tl | V | Zn | | |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Beryllium | 313.40 | 0.0000000 | 0.0018940 | 0.0000000 | | |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Cobalt | 228.62 | 0.0017990 | 0.0000000 | 0.0000000 | | |
| Copper | 324.75 | 0.0000000 | -0.0003720 | 0.0000000 | | |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Lead | 220.35 | 0.0000000 | -0.0001170 | 0.0000000 | | |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0005790 | 0.0000000 | 0.0000000 | | |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Silver | 328.07 | 0.0000000 | -0.0017200 | 0.0000000 | | |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Thallium | 190.86 | 0.0000000 | 0.0002820 | 0.0000000 | | |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | | |
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Comments:

U.S. EPA - CLP
10A-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument: TRACE7 Date: 05/17/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Al | Ca | Fe | Mg | Mo |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000960 | 0.0000000 | 0.0000000 | 0.0573510 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0016160 |
| Arsenic | 189.04 | 0.0001500 | 0.0000000 | -0.0004550 | 0.0000000 | 0.0038670 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000380 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0009910 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000120 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0004030 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000340 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0001750 | 0.0000000 | 0.0002100 | 0.0000000 | -0.0026290 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0001760 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | -0.0000350 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000180 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000100 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument: TRACE7 Date: 05/17/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Sb | As | Ba | Be | Cd |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument: TRACE7 Date: 05/17/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Cr | Co | Cu | Pb | Mn |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0114090 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0017890 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0007800 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0092850 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | -0.0001620 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000620 | 0.0000000 | 0.0000000 | 0.0006770 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | -0.0019910 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0004360 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument: TRACE7 Date: 05/17/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Ni | K | Se | Ag | Na |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000930 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0002270 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | -0.0003390 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument: TRACE7 Date: 05/17/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Tl | V | Zn | | |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Beryllium | 313.40 | 0.0000000 | 0.0018940 | 0.0000000 | | |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Cobalt | 228.62 | 0.0017990 | 0.0000000 | 0.0000000 | | |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Lead | 220.35 | 0.0000000 | -0.0001170 | 0.0000000 | | |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0005790 | 0.0000000 | 0.0000000 | | |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Vanadium | 292.40 | 0.0011610 | 0.0000000 | 0.0000000 | | |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | | |
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Comments:

| EPA 200.7, EPA 6010D | | Linear Dynamic Range | | | | | |
|---|---|---|---|---|---|---|---|
| | | All values are in mg/L and are 90% of the established LDR concentration. | | | | | |
| | Instrument ID: | Trace 4 | Trace 5 | Trace 6 | Trace 7 | Trace 8 | Trace 9 |
| 2023 Complete | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Ag | Silver | 36 | 27 | 9 | 13 | 90 | 45 |
| Al | Aluminum | 900 | 540 | 450 | 900 | 900 | 900 |
| As | Arsenic | 90 | 54 | 90 | 72 | 180 | 90 |
| B | Boron | 90 | 90 | 9 | 45 | 90 | 54 |
| Ba | Barium | 90 | 27 | 18 | 13 | 135 | 27 |
| Be | Beryllium | 27 | 36 | 9 | 9 | 11 | 31 |
| Ca | Calcium | 450 | 900 | 675 | 900 | 900 | 900 |
| Cd | Cadmium | 11 | 9 | 9 | 11 | 27 | 18 |
| Co | Cobalt | 90 | 63 | 45 | 22 | 135 | 90 |
| Cr | Chromium | 45 | 63 | 9 | 45 | 157 | 90 |
| Cu | Copper | 90 | 54 | 45 | 45 | 90 | 67 |
| Fe | Iron | 630 | 900 | 450 | 450 | 540 | 540 |
| K | Potassium | 900 | 900 | 675 | 720 | 900 | 900 |
| Mg | Magnesium | 450 | 900 | 360 | 900 | 900 | 900 |
| Mn | Manganese | 90 | 31 | 90 | 67 | 90 | 90 |
| Mo | Molybdenum | 45 | 36 | 9 | 22 | 67 | 45 |
| Na | Sodium | 675 | 900 | 450 | 405 | 630 | 900 |
| Ni | Nickel | 90 | 45 | 45 | 22 | 135 | 90 |
| Pb | Lead | 180 | 180 | 90 | 90 | 225 | 90 |
| S | Sulfur | - | 90 | - | - | - | - |
| Sb | Antimony | 22 | 45 | 45 | 4.5 | 90 | 45 |
| Se | Selenium | 27 | 27 | 45 | 22 | 15 | 45 |
| Si | Silica | 45 | 90 | 22 | 22 | 90 | 45 |
| Sn | Tin | 45 | 45 | 13 | 22 | 72 | 45 |
| Sr | Strontium | 45 | 45 | 9 | 9 | 67 | 45 |
| Ti | Titanium | 45 | 90 | 9 | 90 | 72 | 45 |
| Tl | Thallium | 45 | 90 | 45 | 22 | 135 | 45 |
| V | Vanadium | 90 | 90 | 90 | 90 | 112 | 45 |
| Zn | Zinc | 45 | 27 | 45 | 22 | 63 | 22 |

# Form 12
# Preparation Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Matrix** | : WATER | **Prep Method** | : EPA 3005A |

| Sample Number | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| L2511919-01 | 03/10/25 16:52 | - | 50 |
| L2511919-02 | 03/10/25 16:52 | - | 50 |
| L2511919-04 | 03/10/25 16:52 | - | 50 |
| L2511919-05 | 03/10/25 16:52 | - | 50 |
| L2511919-07 | 03/10/25 16:52 | - | 50 |
| L2511919-08 | 03/10/25 16:52 | - | 50 |
| WG2038690-1 | 03/10/25 16:52 | - | 50 |
| WG2038690-2 | 03/10/25 16:52 | - | 50 |
| WG2038690-3 | 03/10/25 16:52 | - | 50 |
| WG2038690-4 | 03/10/25 16:52 | - | 50 |
| WG2038690-6 | 03/10/25 16:52 | - | 50 |

# Form 12
# Preparation Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Matrix** | : WATER | **Prep Method** | : EPA 3005A |

| Sample Number | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| L2511919-01 | 03/11/25 04:33 | - | 50 |
| L2511919-04 | 03/11/25 04:33 | - | 50 |
| L2511919-05 | 03/11/25 04:33 | - | 50 |
| L2511919-07 | 03/11/25 04:33 | - | 50 |
| L2511919-08 | 03/11/25 04:33 | - | 50 |
| WG2038695-1 | 03/11/25 04:33 | - | 50 |
| WG2038695-2 | 03/11/25 04:33 | - | 50 |
| WG2038695-3 | 03/11/25 04:33 | - | 50 |
| WG2038695-4 | 03/11/25 04:33 | - | 50 |
| WG2038695-5 | 03/11/25 04:33 | - | 50 |
| WG2038695-6 | 03/11/25 04:33 | - | 50 |
| WG2038695-7 | 03/11/25 04:33 | - | 50 |
| WG2038695-8 | 03/11/25 04:33 | - | 50 |

# Form 12
# Preparation Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Matrix** | : WATER | **Prep Method** | : EPA 3005A |

| Sample Number | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| WG2038690-2 | 03/10/25 16:52 | - | 50 |

# Form 12
# Preparation Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Matrix** | : WATER | **Prep Method** | : EPA 3005A |

| Sample Number | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| L2511919-02 | 03/14/25 10:54 | - | 50 |
| WG2040264-1 | 03/14/25 10:54 | - | 50 |
| WG2040264-2 | 03/14/25 10:54 | - | 50 |
| WG2040264-3 | 03/14/25 10:54 | - | 50 |
| WG2040264-4 | 03/14/25 10:54 | - | 50 |
| WG2040264-7 | 03/14/25 10:54 | - | 50 |
| WG2040264-8 | 03/14/25 10:54 | - | 50 |

# Form 12
# Preparation Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Matrix** | : WATER | **Prep Method** | : EPA 3005A |

| Sample Number | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| L2511919-02 | 03/14/25 10:54 | - | 50 |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : TRACE9 | **Analysis Method** | : 19,200.7 |
| **Start Date** | : 03/11/25 06:24 | **End Date** | : 03/11/25 23:27 |

| Sample Number | Dilution Factor | Analysis Time | Aluminum, Dissolved | Antimony, Dissolved | Arsenic, Dissolved | Barium, Dissolved | Beryllium, Dissolved | Cadmium, Dissolved | Calcium, Dissolved | Chromium, Dissolved | Cobalt, Dissolved | Copper, Dissolved | Iron, Dissolved | Lead, Dissolved | Magnesium, Dissolved | Manganese, Dissolved | Nickel, Dissolved | Potassium, Dissolved | Selenium, Dissolved | Silver, Dissolved | Sodium, Dissolved | Thallium, Dissolved | Vanadium, Dissolved | Zinc, Dissolved |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R1939061-1 ICV | 1 | 06:24:13 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-2 ICB | 1 | 06:27:40 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-3 ICV | 1 | 06:31:08 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-4 ICB | 1 | 06:34:39 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-5 ICSA | 1 | 06:42:13 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-6 CCV | 1 | 07:22:53 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-7 CCB | 1 | 07:26:40 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-8 CCV | 1 | 08:18:18 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-9 CCB | 1 | 08:21:46 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-10 CCV | 1 | 09:40:09 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-11 CCB | 1 | 09:43:37 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-12 CCV | 1 | 12:09:05 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-13 CCB | 1 | 12:12:33 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-14 CCV | 1 | 12:27:48 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-15 CCB | 1 | 12:31:16 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-16 CCV | 1 | 13:29:56 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-17 CCB | 1 | 13:33:23 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-18 CCV | 1 | 14:11:50 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-19 CCB | 1 | 14:15:18 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-20 CCV | 1 | 14:44:04 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-21 CCB | 1 | 14:47:32 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-22 CCV | 1 | 15:41:17 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-23 CCB | 1 | 15:44:51 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-24 CCV | 1 | 16:26:55 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-25 CCB | 1 | 16:30:23 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-26 CCV | 1 | 17:12:38 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-27 CCB | 1 | 17:16:06 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Analysis Method | : 19,200.7 |
| Start Date | : 03/11/25 06:24 | End Date | : 03/11/25 23:27 |

| Sample Number | Dilution Factor | Analysis Time | Aluminum, Dissolved | Antimony, Dissolved | Arsenic, Dissolved | Barium, Dissolved | Beryllium, Dissolved | Cadmium, Dissolved | Calcium, Dissolved | Chromium, Dissolved | Cobalt, Dissolved | Copper, Dissolved | Iron, Dissolved | Lead, Dissolved | Magnesium, Dissolved | Manganese, Dissolved | Nickel, Dissolved | Potassium, Dissolved | Selenium, Dissolved | Silver, Dissolved | Sodium, Dissolved | Thallium, Dissolved | Vanadium, Dissolved | Zinc, Dissolved |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R1939061-28 CCV | 1 | 17:37:07 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-29 CCB | 1 | 17:40:35 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-30 CCV | 1 | 18:32:45 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-31 CCB | 1 | 18:36:13 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-32 CCV | 1 | 19:07:31 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-33 CCB | 1 | 19:11:00 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-34 CCV | 1 | 20:01:00 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-35 CCB | 1 | 20:04:29 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-36 CCV | 1 | 20:35:28 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-37 CCB | 1 | 20:38:57 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-38 CCV | 1 | 21:39:51 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-39 CCB | 1 | 21:43:20 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-40 CCV | 1 | 22:27:33 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-41 CCB | 1 | 22:31:02 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2038690-1 BLANK | 1 | 22:35:18 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2038690-2 LCS | 1 | 22:38:48 | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2511919-01 | 1 | 22:42:19 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2511919-02 | 1 | 22:45:49 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2511919-04 | 1 | 22:49:19 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2511919-08 | 1 | 22:52:50 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2038690-3 MS | 1 | 22:56:20 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2038690-4 DUP | 1 | 22:59:51 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2038690-6 SERDIL | 5 | 23:06:52 | | | | | | | X | | | | | | X | | | | | | | | | |
| R1939061-42 CCV | 1 | 23:10:22 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-43 CCB | 1 | 23:13:52 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2511919-05 | 1 | 23:17:21 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2511919-07 | 1 | 23:20:52 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : TRACE9 | **Analysis Method** | : 19,200.7 |
| **Start Date** | : 03/11/25 06:24 | **End Date** | : 03/11/25 23:27 |

| Sample Number | Dilution Factor | Analysis Time | Aluminum, Dissolved | Antimony, Dissolved | Arsenic, Dissolved | Barium, Dissolved | Beryllium, Dissolved | Cadmium, Dissolved | Calcium, Dissolved | Chromium, Dissolved | Cobalt, Dissolved | Copper, Dissolved | Iron, Dissolved | Lead, Dissolved | Magnesium, Dissolved | Manganese, Dissolved | Nickel, Dissolved | Potassium, Dissolved | Selenium, Dissolved | Silver, Dissolved | Sodium, Dissolved | Thallium, Dissolved | Vanadium, Dissolved | Zinc, Dissolved |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R1939061-44 CCV | 1 | 23:24:23 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-45 CCB | 1 | 23:27:53 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : TRACE9 | **Analysis Method** | : 19,200.7 |
| **Start Date** | : 03/11/25 06:24 | **End Date** | : 03/11/25 20:38 |

| Sample Number | Dilution Factor | Analysis Time | Aluminum, Total | Antimony, Total | Arsenic, Total | Barium, Total | Beryllium, Total | Cadmium, Total | Calcium, Total | Chromium, Total | Cobalt, Total | Copper, Total | Iron, Total | Lead, Total | Magnesium, Total | Manganese, Total | Nickel, Total | Potassium, Total | Selenium, Total | Silver, Total | Sodium, Total | Thallium, Total | Vanadium, Total | Zinc, Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R1939061-1 ICV | 1 | 06:24:13 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-2 ICB | 1 | 06:27:40 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-3 ICV | 1 | 06:31:08 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-4 ICB | 1 | 06:34:39 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-5 ICSA | 1 | 06:42:13 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-6 CCV | 1 | 07:22:53 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-7 CCB | 1 | 07:26:40 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-8 CCV | 1 | 08:18:18 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-9 CCB | 1 | 08:21:46 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-10 CCV | 1 | 09:40:09 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-11 CCB | 1 | 09:43:37 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-12 CCV | 1 | 12:09:05 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-13 CCB | 1 | 12:12:33 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-14 CCV | 1 | 12:27:48 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-15 CCB | 1 | 12:31:16 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-16 CCV | 1 | 13:29:56 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-17 CCB | 1 | 13:33:23 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-18 CCV | 1 | 14:11:50 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-19 CCB | 1 | 14:15:18 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-20 CCV | 1 | 14:44:04 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-21 CCB | 1 | 14:47:32 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-22 CCV | 1 | 15:41:17 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-23 CCB | 1 | 15:44:51 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2038695-1 BLANK | 1 | 15:50:00 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2038695-2 LCS | 1 | 15:53:28 | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2511919-04 | 1 | 16:06:08 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2511919-01 | 1 | 16:09:36 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Analysis Method | : 19,200.7 |
| Start Date | : 03/11/25 06:24 | End Date | : 03/11/25 20:38 |

| Sample Number | Dilution Factor | Analysis Time | Aluminum, Total | Antimony, Total | Arsenic, Total | Barium, Total | Beryllium, Total | Cadmium, Total | Calcium, Total | Chromium, Total | Cobalt, Total | Copper, Total | Iron, Total | Lead, Total | Magnesium, Total | Manganese, Total | Nickel, Total | Potassium, Total | Selenium, Total | Silver, Total | Sodium, Total | Thallium, Total | Vanadium, Total | Zinc, Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WG2038695-3 MS | 1 | 16:13:04 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2038695-4 DUP | 1 | 16:16:31 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2038695-5 PS | 1 | 16:19:58 | | | | | | | | | | | | | | | | X | | | | | | |
| WG2038695-6 SERDIL | 5 | 16:23:26 | | | | | | | X | | | | | | X | | | | | | | | | |
| R1939061-24 CCV | 1 | 16:26:55 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-25 CCB | 1 | 16:30:23 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2511919-05 | 1 | 16:37:47 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2511919-07 | 1 | 16:41:21 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2511919-08 | 1 | 16:44:50 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2038695-7 MS | 1 | 16:58:43 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2038695-8 DUP | 1 | 17:02:11 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-26 CCV | 1 | 17:12:38 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-27 CCB | 1 | 17:16:06 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-28 CCV | 1 | 17:37:07 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-29 CCB | 1 | 17:40:35 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-30 CCV | 1 | 18:32:45 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-31 CCB | 1 | 18:36:13 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-32 CCV | 1 | 19:07:31 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-33 CCB | 1 | 19:11:00 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-34 CCV | 1 | 20:01:00 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-35 CCB | 1 | 20:04:29 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2038695-2 LCS | 1 | 20:17:57 | | X | | | | | | | | | | | | | | | | | | | | |
| R1939061-36 CCV | 1 | 20:35:28 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939061-37 CCB | 1 | 20:38:57 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : | **Analysis Method** | : |
| **Start Date** | : 03/12/25 06:45 | **End Date** | : 03/12/25 11:01 |

| Sample Number | Dilution Factor | Analysis Time | Antimony, Dissolved |
|---|---|---|---|
| R1939620-1 ICV | 1 | 06:45:15 | X |
| R1939620-2 ICB | 1 | 06:50:08 | X |
| R1939620-3 ICV | 1 | 06:55:21 | X |
| R1939620-4 ICB | 1 | 07:00:17 | X |
| R1939620-5 ICSA | 1 | 07:10:39 | X |
| R1939620-6 CCV | 1 | 09:31:03 | X |
| R1939620-7 CCB | 1 | 09:35:56 | X |
| R1939620-8 CCV | 1 | 09:41:08 | X |
| R1939620-9 CCB | 1 | 09:46:04 | X |
| WG2038690-2 LCS | 1 | 10:10:44 | X |
| R1939620-10 CCV | 1 | 10:56:09 | X |
| R1939620-11 CCB | 1 | 11:01:01 | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : TRACE8 | **Analysis Method** | : 19,200.7 |
| **Start Date** | : 03/14/25 09:18 | **End Date** | : 03/14/25 18:12 |

| Sample Number | Dilution Factor | Analysis Time | Aluminum, Total | Antimony, Total | Arsenic, Total | Barium, Total | Beryllium, Total | Cadmium, Total | Calcium, Total | Chromium, Total | Cobalt, Total | Copper, Total | Iron, Total | Lead, Total | Magnesium, Total | Manganese, Total | Nickel, Total | Potassium, Total | Selenium, Total | Silver, Total | Sodium, Total | Thallium, Total | Vanadium, Total | Zinc, Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R1940691-1 ICV | 1 | 09:18:14 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940691-2 ICB | 1 | 09:22:51 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940691-3 ICV | 1 | 09:27:17 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940691-4 ICB | 1 | 09:31:45 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940691-5 ICSA | 1 | 09:40:41 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940691-6 CCV | 1 | 11:10:14 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940691-7 CCB | 1 | 11:14:53 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940691-8 CCV | 1 | 12:15:45 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940691-9 CCB | 1 | 12:20:11 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940691-10 CCV | 1 | 13:20:37 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940691-11 CCB | 1 | 13:25:02 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940691-12 CCV | 1 | 14:23:24 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940691-13 CCB | 1 | 14:27:50 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940691-14 CCV | 1 | 14:53:26 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940691-15 CCB | 1 | 14:57:52 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2040264-1 BLANK | 1 | 15:17:21 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2040264-2 LCS | 1 | 15:22:04 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2040264-3 MS | 1 | 15:44:16 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2040264-4 DUP | 1 | 15:48:41 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940691-16 CCV | 1 | 16:01:58 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940691-17 CCB | 1 | 16:06:25 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2040264-7 MS | 1 | 16:40:58 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2040264-8 DUP | 1 | 16:45:25 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940691-18 CCV | 1 | 16:58:46 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940691-19 CCB | 1 | 17:03:13 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2511919-02 | 1 | 17:22:28 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X |
| R1940691-20 CCV | 1 | 18:07:57 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : TRACE8 | **Analysis Method** | : 19,200.7 |
| **Start Date** | : 03/14/25 09:18 | **End Date** | : 03/14/25 18:12 |

| Sample Number | Dilution Factor | Analysis Time | Aluminum, Total | Antimony, Total | Arsenic, Total | Barium, Total | Beryllium, Total | Cadmium, Total | Calcium, Total | Chromium, Total | Cobalt, Total | Copper, Total | Iron, Total | Lead, Total | Magnesium, Total | Manganese, Total | Nickel, Total | Potassium, Total | Selenium, Total | Silver, Total | Sodium, Total | Thallium, Total | Vanadium, Total | Zinc, Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R1940691-21 CCB | 1 | 18:12:23 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : TRACE7 | **Analysis Method** | : 19,200.7 |
| **Start Date** | : 03/17/25 09:54 | **End Date** | : 03/17/25 13:05 |

| Sample Number | Dilution Factor | Analysis Time | Sodium, Total |
|---|---|---|---|
| R1941430-1 ICV | 1 | 09:54:31 | X |
| R1941430-2 ICB | 1 | 09:59:24 | X |
| R1941430-3 ICV | 1 | 10:04:36 | X |
| R1941430-4 ICB | 1 | 10:09:36 | X |
| R1941430-5 ICSA | 1 | 10:19:58 | X |
| R1941430-6 CCV | 1 | 11:57:21 | X |
| R1941430-7 CCB | 1 | 12:02:13 | X |
| L2511919-02 | 1 | 12:18:28 | X |
| R1941430-8 CCV | 1 | 13:00:35 | X |
| R1941430-9 CCB | 1 | 13:05:28 | X |

**Date Created:** 11/04/16
**Created By:** Jason Hebert
**File:** PM2960-2
**Page:** 1

**METALS by 200.7, 6010C (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | 7429-90-5 | 0.1 | 0.0318 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Antimony | 7440-36-0 | 0.05 | 0.0071 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Arsenic | 7440-38-2 | 0.005 | 0.0019 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Barium | 7440-39-3 | 0.01 | 0.0021 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Beryllium | 7440-41-7 | 0.005 | 0.0009 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Cadmium | 7440-43-9 | 0.005 | 0.001 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Calcium | 7440-70-2 | 0.1 | 0.035 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Chromium | 7440-47-3 | 0.01 | 0.0021 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Cobalt | 7440-48-4 | 0.02 | 0.0017 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Copper | 7440-50-8 | 0.01 | 0.0022 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Iron | 7439-89-6 | 0.05 | 0.009 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Lead | 7439-92-1 | 0.01 | 0.0027 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Magnesium | 7439-95-4 | 0.1 | 0.0153 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Manganese | 7439-96-5 | 0.01 | 0.0016 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Nickel | 7440-02-0 | 0.025 | 0.0024 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Potassium | 7440-09-7 | 2.5 | 0.237 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Selenium | 7782-49-2 | 0.01 | 0.0035 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Silver | 7440-22-4 | 0.007 | 0.0028 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Sodium | 7440-23-5 | 2 | 0.12 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Thallium | 7440-28-0 | 0.02 | 0.0025 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Vanadium | 7440-62-2 | 0.01 | 0.002 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Zinc | 7440-66-6 | 0.05 | 0.0021 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.***

**Date Created:** 11/04/16
**Created By:** Jason Hebert
**File:** PM2962-1
**Page:** 1

**METALS by 6010C (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum, Total | 7429-90-5 | 4 | 1.08 | mg/kg | 48-151 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Antimony, Total | 7440-36-0 | 2 | 0.152 | mg/kg | 1-208 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Arsenic, Total | 7440-38-2 | 0.4 | 0.0832 | mg/kg | 79-121 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Barium, Total | 7440-39-3 | 0.4 | 0.0696 | mg/kg | 83-117 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Beryllium, Total | 7440-41-7 | 0.2 | 0.0132 | mg/kg | 83-117 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Cadmium, Total | 7440-43-9 | 0.4 | 0.0392 | mg/kg | 83-117 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Calcium, Total | 7440-70-2 | 4 | 1.4 | mg/kg | 81-119 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Chromium, Total | 7440-47-3 | 0.4 | 0.0384 | mg/kg | 80-120 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Cobalt, Total | 7440-48-4 | 0.8 | 0.0664 | mg/kg | 84-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Copper, Total | 7440-50-8 | 0.4 | 0.1032 | mg/kg | 81-118 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Iron, Total | 7439-89-6 | 2 | 0.3612 | mg/kg | 45-155 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Lead, Total | 7439-92-1 | 2 | 0.1072 | mg/kg | 81-117 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Magnesium, Total | 7439-95-4 | 4 | 0.616 | mg/kg | 76-124 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Manganese, Total | 7439-96-5 | 0.4 | 0.0636 | mg/kg | 81-117 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Nickel, Total | 7440-02-0 | 1 | 0.0968 | mg/kg | 83-117 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Potassium, Total | 7440-09-7 | 100 | 5.76 | mg/kg | 71-129 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Selenium, Total | 7782-49-2 | 0.8 | 0.1032 | mg/kg | 78-122 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Silver, Total | 7440-22-4 | 0.4 | 0.1132 | mg/kg | 75-124 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Sodium, Total | 7440-23-5 | 80 | 1.26 | mg/kg | 72-127 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Thallium, Total | 7440-28-0 | 0.8 | 0.126 | mg/kg | 80-120 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Vanadium, Total | 7440-62-2 | 0.4 | 0.0812 | mg/kg | 78-122 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Zinc, Total | 7440-66-6 | 2 | 0.1172 | mg/kg | 82-118 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.***

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: Blank DHL Trace9
Analysis started at: 3/11/2025 6:16:56 AM
Rack 0
Vial 1
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -0.2 % | -1.0 % | -0.6 % | -0.9 % | 0.2 % | -0.5 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | 1.1 % | 0.3 % | -0.2 % | -0.2 % | 2.8 % | -0.2 % | 0.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | 3.3 % | -1.2 % | 2.2 % | -0.6 % | 0.3 % | 0.9 % | -8.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | 3.4 % | 0.1 % | 0.4 % | -8.5 % | -0.5 % | -0.2 % | -84.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % |
| Concentration per Run | 0.0000 ppm | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % |
| Concentration RSD | 0.3 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: ICAL
Analysis started at: 3/11/2025 6:20:46 AM
Rack 0
Vial 2
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 10.0000 ppm |
| Concentration per Run 1 | 1.0057 ppm | 25.0951 ppm | 1.0024 ppm | 0.9995 ppm | 1.0026 ppm | 1.0016 ppm | 10.0227 ppm |
| Concentration per Run 2 | 0.9939 ppm | 24.9672 ppm | 0.9963 ppm | 0.9949 ppm | 0.9991 ppm | 1.0019 ppm | 10.0003 ppm |
| Concentration per Run 3 | 1.0004 ppm | 24.9378 ppm | 1.0013 ppm | 1.0056 ppm | 0.9983 ppm | 0.9965 ppm | 9.9771 ppm |
| Concentration RSD | 0.6 % | 0.3 % | 0.3 % | 0.5 % | 0.2 % | 0.3 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 35.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 1.0062 ppm | 1.0044 ppm | 1.0019 ppm | 1.0054 ppm | 24.9833 ppm | 35.1253 ppm | 1.0043 ppm |
| Concentration per Run 2 | 0.9962 ppm | 0.9983 ppm | 0.9928 ppm | 0.9973 ppm | 25.0622 ppm | 34.9562 ppm | 0.9968 ppm |
| Concentration per Run 3 | 0.9976 ppm | 0.9974 ppm | 1.0053 ppm | 0.9972 ppm | 24.9545 ppm | 34.9185 ppm | 0.9989 ppm |
| Concentration RSD | 0.5 % | 0.4 % | 0.6 % | 0.5 % | 0.2 % | 0.3 % | 0.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.0000 ppm | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 10.0496 ppm | 1.0050 ppm | 0.9967 ppm | 25.1795 ppm | 1.0053 ppm | 1.0010 ppm | 0.9991 ppm |
| Concentration per Run 2 | 9.9651 ppm | 0.9998 ppm | 1.0010 ppm | 25.0218 ppm | 0.9918 ppm | 0.9964 ppm | 1.0012 ppm |
| Concentration per Run 3 | 9.9853 ppm | 0.9952 ppm | 1.0023 ppm | 24.7988 ppm | 1.0029 ppm | 1.0026 ppm | 0.9997 ppm |
| Concentration RSD | 0.4 % | 0.5 % | 0.3 % | 0.8 % | 0.7 % | 0.3 % | 0.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 10.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 0.9981 ppm | 10.0061 ppm | 1.0006 ppm | 1.0014 ppm | 1.0039 ppm | 1.0009 ppm | 1.0021 ppm |
| Concentration per Run 2 | 0.9996 ppm | 9.9888 ppm | 0.9936 ppm | 1.0012 ppm | 0.9953 ppm | 0.9942 ppm | 0.9994 ppm |
| Concentration per Run 3 | 1.0022 ppm | 10.0051 ppm | 1.0058 ppm | 0.9974 ppm | 1.0008 ppm | 1.0049 ppm | 0.9985 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 0.6 % | 0.2 % | 0.4 % | 0.5 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 104.7241 % | 101.4792 % | 101.8977 % | 101.5807 % | 98.3789 % | 97.7145 % |
| Concentration per Run 1 | 1.0033 ppm | 105.2623 % | 100.8990 % | 102.2680 % | 101.8545 % | 97.7646 % | 98.1778 % |
| Concentration per Run 2 | 0.9940 ppm | 105.7196 % | 101.5830 % | 102.2504 % | 103.0117 % | 98.7061 % | 97.8503 % |
| Concentration per Run 3 | 1.0027 ppm | 103.1905 % | 101.9554 % | 101.1746 % | 99.8758 % | 98.6660 % | 97.1155 % |
| Concentration RSD | 0.5 % | 1.3 % | 0.5 % | 0.6 % | 1.6 % | 0.5 % | 0.6 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: ICV
Analysis started at: 3/11/2025 6:24:13 AM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4893 ppm | 0.4869 ppm | 0.4991 ppm | 0.4934 ppm | 0.4905 ppm | 0.5151 ppm | 0.5035 ppm |
| Concentration per Run 1 | 0.4917 ppm | 0.4875 ppm | 0.4979 ppm | 0.4948 ppm | 0.4895 ppm | 0.5140 ppm | 0.5088 ppm |
| Concentration per Run 2 | 0.4899 ppm | 0.4833 ppm | 0.4995 ppm | 0.4955 ppm | 0.4921 ppm | 0.5163 ppm | 0.5016 ppm |
| Concentration per Run 3 | 0.4863 ppm | 0.4898 ppm | 0.5000 ppm | 0.4900 ppm | 0.4898 ppm | 0.5149 ppm | 0.5001 ppm |
| Recovery Percentage 1 | 97.851 % | 97.376 % | 99.827 % | 98.682 % | 98.098 % | 103.015 % | 100.697 % |
| Concentration RSD | 0.6 % | 0.7 % | 0.2 % | 0.6 % | 0.3 % | 0.2 % | 0.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5078 ppm | 0.5178 ppm | 0.5031 ppm | 0.4826 ppm | 0.5211 ppm | 5.2076 ppm | 0.5154 ppm |
| Concentration per Run 1 | 0.5119 ppm | 0.5211 ppm | 0.5042 ppm | 0.4867 ppm | 0.5234 ppm | 5.2277 ppm | 0.5147 ppm |
| Concentration per Run 2 | 0.5093 ppm | 0.5178 ppm | 0.5058 ppm | 0.4819 ppm | 0.5174 ppm | 5.2065 ppm | 0.5174 ppm |
| Concentration per Run 3 | 0.5024 ppm | 0.5145 ppm | 0.4992 ppm | 0.4793 ppm | 0.5224 ppm | 5.1887 ppm | 0.5142 ppm |
| Recovery Percentage 1 | 101.569 % | 103.557 % | 100.611 % | 96.523 % | 104.210 % | 104.152 % | 103.086 % |
| Concentration RSD | 1.0 % | 0.6 % | 0.7 % | 0.8 % | 0.6 % | 0.4 % | 0.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4966 ppm | 0.5013 ppm | 0.5017 ppm | 10.2362 ppm | 0.5144 ppm | 0.5115 ppm | 0.5023 ppm |
| Concentration per Run 1 | 0.5006 ppm | 0.5049 ppm | 0.5012 ppm | 10.2296 ppm | 0.5133 ppm | 0.5151 ppm | 0.4979 ppm |
| Concentration per Run 2 | 0.4973 ppm | 0.4998 ppm | 0.5038 ppm | 10.2547 ppm | 0.5216 ppm | 0.5074 ppm | 0.5065 ppm |
| Concentration per Run 3 | 0.4921 ppm | 0.4991 ppm | 0.5000 ppm | 10.2241 ppm | 0.5084 ppm | 0.5118 ppm | 0.5026 ppm |
| Recovery Percentage 1 | 99.330 % | 100.255 % | 100.332 % | 102.362 % | 102.881 % | 102.291 % | 100.460 % |
| Concentration RSD | 0.9 % | 0.6 % | 0.4 % | 0.2 % | 1.3 % | 0.8 % | 0.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4980 ppm | 5.6079 ppm | 0.5286 ppm | 0.5060 ppm | 0.5025 ppm | 0.4971 ppm | 0.4986 ppm |
| Concentration per Run 1 | 0.4958 ppm | 5.6230 ppm | 0.5323 ppm | 0.5050 ppm | 0.5043 ppm | 0.4949 ppm | 0.5003 ppm |
| Concentration per Run 2 | 0.4963 ppm | 5.6228 ppm | 0.5287 ppm | 0.5065 ppm | 0.5052 ppm | 0.4986 ppm | 0.4985 ppm |
| Concentration per Run 3 | 0.5018 ppm | 5.5778 ppm | 0.5250 ppm | 0.5064 ppm | 0.4981 ppm | 0.4979 ppm | 0.4972 ppm |
| Recovery Percentage 1 | 99.593 % | 106.816 % | 105.730 % | 101.198 % | 100.504 % | 99.419 % | 99.729 % |
| Concentration RSD | 0.7 % | 0.5 % | 0.7 % | 0.2 % | 0.8 % | 0.4 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5154 ppm | 103.6468 % | 101.6996 % | 101.0160 % | 101.9840 % | 99.6462 % | 98.6151 % |
| Concentration per Run 1 | 0.5183 ppm | 103.4667 % | 101.2774 % | 101.3386 % | 101.7950 % | 99.4691 % | 98.9533 % |
| Concentration per Run 2 | 0.5183 ppm | 103.6675 % | 101.6696 % | 101.4740 % | 101.8691 % | 99.4922 % | 98.7767 % |
| Concentration per Run 3 | 0.5096 ppm | 103.8062 % | 102.1519 % | 100.2353 % | 102.2878 % | 99.9774 % | 98.1154 % |
| Recovery Percentage 1 | 103.080 % | | | | | | |
| Concentration RSD | 1.0 % | 0.2 % | 0.4 % | 0.7 % | 0.3 % | 0.3 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: ICB
Analysis started at: 3/11/2025 6:27:40 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0027 ppm | -0.0001 ppm | 0.0002 ppm | -0.0001 ppm | 0.0000 ppm | 0.0024 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0049 ppm | -0.0002 ppm | -0.0011 ppm | 0.0000 ppm | 0.0000 ppm | 0.0044 ppm |
| Concentration per Run 2 | 0.0006 ppm | -0.0011 ppm | 0.0008 ppm | 0.0004 ppm | -0.0001 ppm | 0.0000 ppm | 0.0017 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0042 ppm | -0.0009 ppm | 0.0014 ppm | -0.0001 ppm | 0.0000 ppm | 0.0010 ppm |
| Recovery Percentage 1 | 7.800 % | 2.654 % | -1.806 % | 0.646 % | -0.652 % | 0.367 % | 2.384 % |
| Concentration RSD | 13.7 % | 124.6 % | 992.3 % | 647.8 % | 128.4 % | 237.6 % | 75.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | -0.0006 ppm | -0.0001 ppm | 0.0023 ppm | 0.0100 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0004 ppm | -0.0001 ppm | 0.0001 ppm | 0.0048 ppm | 0.0142 ppm | -0.0003 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0008 ppm | -0.0006 ppm | -0.0003 ppm | 0.0008 ppm | 0.0022 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0004 ppm | -0.0009 ppm | 0.0000 ppm | 0.0012 ppm | 0.0135 ppm | -0.0007 ppm |
| Recovery Percentage 1 | -0.096 % | -0.020 % | -5.600 % | -0.605 % | 4.530 % | 0.399 % | -0.544 % |
| Concentration RSD | 2,492.4 % | 18,267.2 % | 72.8 % | 317.1 % | 96.8 % | 67.5 % | 3,011.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0028 ppm | -0.0001 ppm | 0.0027 ppm | 0.0048 ppm | -0.0009 ppm | -0.0024 ppm | -0.0002 ppm |
| Concentration per Run 1 | -0.0027 ppm | -0.0002 ppm | 0.0024 ppm | 0.0047 ppm | -0.0002 ppm | -0.0022 ppm | -0.0013 ppm |
| Concentration per Run 2 | -0.0046 ppm | -0.0001 ppm | 0.0027 ppm | 0.0041 ppm | -0.0014 ppm | -0.0035 ppm | 0.0018 ppm |
| Concentration per Run 3 | -0.0011 ppm | 0.0000 ppm | 0.0030 ppm | 0.0058 ppm | -0.0011 ppm | -0.0014 ppm | -0.0012 ppm |
| Recovery Percentage 1 | -2.794 % | -0.929 % | 5.333 % | 0.242 % | -3.575 % | -23.988 % | -0.449 % |
| Concentration RSD | 64.2 % | 94.1 % | 10.9 % | 17.7 % | 69.8 % | 44.9 % | 778.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | -0.0045 ppm | 0.0001 ppm | 0.0000 ppm | 0.0002 ppm | 0.0031 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0017 ppm | -0.0054 ppm | -0.0004 ppm | 0.0000 ppm | 0.0005 ppm | 0.0036 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0017 ppm | -0.0040 ppm | 0.0014 ppm | 0.0000 ppm | 0.0001 ppm | 0.0039 ppm | -0.0003 ppm |
| Concentration per Run 3 | -0.0035 ppm | -0.0042 ppm | -0.0008 ppm | 0.0000 ppm | 0.0000 ppm | 0.0018 ppm | 0.0001 ppm |
| Recovery Percentage 1 | -11.817 % | -0.905 % | 0.113 % | -0.316 % | 2.006 % | 15.619 % | -0.815 % |
| Concentration RSD | 223.8 % | 16.7 % | 2,091.6 % | 34.1 % | 138.5 % | 36.7 % | 270.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 101.9631 % | 100.2746 % | 100.2551 % | 102.4325 % | 99.8440 % | 100.0533 % |
| Concentration per Run 1 | -0.0009 ppm | 102.0776 % | 100.6374 % | 99.6896 % | 102.5600 % | 100.1299 % | 99.8510 % |
| Concentration per Run 2 | -0.0005 ppm | 102.3143 % | 99.9945 % | 100.2519 % | 102.8931 % | 99.7233 % | 100.2289 % |
| Concentration per Run 3 | -0.0004 ppm | 101.4975 % | 100.1920 % | 100.8236 % | 101.8445 % | 99.6787 % | 100.0800 % |
| Recovery Percentage 1 | -11.683 % | | | | | | |
| Concentration RSD | 41.3 % | 0.4 % | 0.3 % | 0.6 % | 0.5 % | 0.2 % | 0.2 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: ICV
Analysis started at: 3/11/2025 6:31:08 AM
Rack 0
Vial 10
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4785 ppm | 0.4925 ppm | 0.4997 ppm | 0.4906 ppm | 0.4887 ppm | 0.5159 ppm | 0.5063 ppm |
| Concentration per Run 1 | 0.4797 ppm | 0.4895 ppm | 0.4985 ppm | 0.4873 ppm | 0.4871 ppm | 0.5147 ppm | 0.5042 ppm |
| Concentration per Run 2 | 0.4773 ppm | 0.4960 ppm | 0.5012 ppm | 0.4905 ppm | 0.4863 ppm | 0.5146 ppm | 0.5057 ppm |
| Concentration per Run 3 | 0.4785 ppm | 0.4920 ppm | 0.4992 ppm | 0.4941 ppm | 0.4927 ppm | 0.5185 ppm | 0.5089 ppm |
| Recovery Percentage 1 | 95.700 % | 98.500 % | 99.930 % | 98.124 % | 97.741 % | 103.185 % | 101.258 % |
| Concentration RSD | 0.3 % | 0.7 % | 0.3 % | 0.7 % | 0.7 % | 0.4 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5059 ppm | 0.5142 ppm | 0.5037 ppm | 0.4800 ppm | 0.5177 ppm | 5.2420 ppm | 0.5147 ppm |
| Concentration per Run 1 | 0.5094 ppm | 0.5161 ppm | 0.5069 ppm | 0.4814 ppm | 0.5158 ppm | 5.2506 ppm | 0.5126 ppm |
| Concentration per Run 2 | 0.5044 ppm | 0.5126 ppm | 0.5004 ppm | 0.4814 ppm | 0.5180 ppm | 5.2269 ppm | 0.5158 ppm |
| Concentration per Run 3 | 0.5039 ppm | 0.5139 ppm | 0.5038 ppm | 0.4771 ppm | 0.5192 ppm | 5.2486 ppm | 0.5156 ppm |
| Recovery Percentage 1 | 101.178 % | 102.844 % | 100.744 % | 95.993 % | 103.533 % | 104.840 % | 102.937 % |
| Concentration RSD | 0.6 % | 0.3 % | 0.6 % | 0.5 % | 0.3 % | 0.3 % | 0.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4970 ppm | 0.5026 ppm | 0.4987 ppm | 10.2172 ppm | 0.5159 ppm | 0.5126 ppm | 0.4992 ppm |
| Concentration per Run 1 | 0.5005 ppm | 0.5017 ppm | 0.4969 ppm | 10.2145 ppm | 0.5186 ppm | 0.5075 ppm | 0.4939 ppm |
| Concentration per Run 2 | 0.4907 ppm | 0.5036 ppm | 0.4988 ppm | 10.2418 ppm | 0.5099 ppm | 0.5134 ppm | 0.5028 ppm |
| Concentration per Run 3 | 0.4997 ppm | 0.5026 ppm | 0.5004 ppm | 10.1952 ppm | 0.5191 ppm | 0.5170 ppm | 0.5010 ppm |
| Recovery Percentage 1 | 99.392 % | 100.523 % | 99.743 % | 102.172 % | 103.172 % | 102.522 % | 99.841 % |
| Concentration RSD | 1.1 % | 0.2 % | 0.3 % | 0.2 % | 1.0 % | 0.9 % | 0.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5038 ppm | 5.6072 ppm | 0.5193 ppm | 0.5089 ppm | 0.5029 ppm | 0.4991 ppm | 0.4980 ppm |
| Concentration per Run 1 | 0.5025 ppm | 5.6096 ppm | 0.5233 ppm | 0.5079 ppm | 0.5049 ppm | 0.5004 ppm | 0.4977 ppm |
| Concentration per Run 2 | 0.5019 ppm | 5.5932 ppm | 0.5127 ppm | 0.5080 ppm | 0.5010 ppm | 0.4986 ppm | 0.4985 ppm |
| Concentration per Run 3 | 0.5071 ppm | 5.6189 ppm | 0.5219 ppm | 0.5108 ppm | 0.5029 ppm | 0.4984 ppm | 0.4979 ppm |
| Recovery Percentage 1 | 100.764 % | 106.805 % | 103.857 % | 101.778 % | 100.587 % | 99.827 % | 99.609 % |
| Concentration RSD | 0.6 % | 0.2 % | 1.1 % | 0.3 % | 0.4 % | 0.2 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5174 ppm | 103.9944 % | 101.3231 % | 101.2912 % | 102.5790 % | 99.0086 % | 99.1312 % |
| Concentration per Run 1 | 0.5200 ppm | 103.4645 % | 101.5265 % | 101.8369 % | 102.0488 % | 99.1350 % | 99.4936 % |
| Concentration per Run 2 | 0.5143 ppm | 104.5657 % | 101.0547 % | 101.3694 % | 103.5584 % | 99.1075 % | 99.4234 % |
| Concentration per Run 3 | 0.5179 ppm | 103.9530 % | 101.3880 % | 100.6674 % | 102.1297 % | 98.7834 % | 98.4766 % |
| Recovery Percentage 1 | 103.481 % | | | | | | |
| Concentration RSD | 0.6 % | 0.5 % | 0.2 % | 0.6 % | 0.8 % | 0.2 % | 0.6 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: ICB
Analysis started at: 3/11/2025 6:34:39 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0022 ppm | -0.0009 ppm | 0.0006 ppm | 0.0000 ppm | 0.0000 ppm | -0.0012 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0070 ppm | 0.0000 ppm | 0.0007 ppm | 0.0000 ppm | 0.0000 ppm | -0.0039 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0018 ppm | 0.0000 ppm | 0.0004 ppm | 0.0001 ppm | 0.0000 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0004 ppm | -0.0023 ppm | -0.0026 ppm | 0.0006 ppm | -0.0002 ppm | 0.0000 ppm | -0.0009 ppm |
| Recovery Percentage 1 | 8.610 % | 2.192 % | -17.080 % | 1.881 % | -0.141 % | 0.996 % | -1.232 % |
| Concentration RSD | 69.8 % | 212.8 % | 173.1 % | 30.8 % | 872.9 % | 21.9 % | 202.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | 0.0004 ppm | 0.0002 ppm | 0.0007 ppm | -0.0068 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0003 ppm | 0.0001 ppm | 0.0009 ppm | 0.0019 ppm | -0.0043 ppm | -0.0005 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0002 ppm | 0.0002 ppm | 0.0000 ppm | 0.0022 ppm | 0.0112 ppm | -0.0003 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0002 ppm | 0.0009 ppm | -0.0004 ppm | -0.0021 ppm | -0.0272 ppm | 0.0004 ppm |
| Recovery Percentage 1 | 0.103 % | -0.492 % | 3.983 % | 1.890 % | 1.382 % | -0.271 % | -2.319 % |
| Concentration RSD | 972.2 % | 255.9 % | 106.8 % | 358.1 % | 345.8 % | 284.5 % | 422.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0030 ppm | -0.0002 ppm | 0.0024 ppm | -0.0028 ppm | -0.0008 ppm | -0.0009 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0038 ppm | -0.0003 ppm | 0.0019 ppm | -0.0030 ppm | -0.0001 ppm | -0.0030 ppm | -0.0003 ppm |
| Concentration per Run 2 | -0.0030 ppm | 0.0001 ppm | 0.0027 ppm | 0.0002 ppm | -0.0016 ppm | 0.0005 ppm | 0.0025 ppm |
| Concentration per Run 3 | -0.0021 ppm | -0.0002 ppm | 0.0025 ppm | -0.0055 ppm | -0.0008 ppm | -0.0003 ppm | -0.0012 ppm |
| Recovery Percentage 1 | -2.986 % | -1.669 % | 4.771 % | -0.139 % | -3.259 % | -9.299 % | 0.606 % |
| Concentration RSD | 28.4 % | 125.1 % | 18.2 % | 102.7 % | 91.4 % | 192.9 % | 633.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | -0.0038 ppm | -0.0005 ppm | 0.0001 ppm | 0.0001 ppm | 0.0012 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0037 ppm | -0.0043 ppm | -0.0006 ppm | 0.0001 ppm | -0.0001 ppm | 0.0004 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0008 ppm | -0.0030 ppm | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0026 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0006 ppm | -0.0040 ppm | -0.0009 ppm | 0.0002 ppm | 0.0001 ppm | 0.0006 ppm | 0.0007 ppm |
| Recovery Percentage 1 | -7.666 % | -0.752 % | -1.001 % | 0.900 % | 0.662 % | 5.963 % | 3.215 % |
| Concentration RSD | 334.9 % | 18.6 % | 95.9 % | 95.2 % | 160.1 % | 99.2 % | 143.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 101.1046 % | 99.4707 % | 99.4874 % | 101.7692 % | 99.6175 % | 99.2793 % |
| Concentration per Run 1 | -0.0002 ppm | 101.8718 % | 99.3603 % | 99.9814 % | 102.1926 % | 99.1319 % | 99.4143 % |
| Concentration per Run 2 | -0.0006 ppm | 100.2185 % | 99.0555 % | 100.0372 % | 100.5432 % | 99.6449 % | 99.7988 % |
| Concentration per Run 3 | -0.0006 ppm | 101.2236 % | 99.9962 % | 98.4435 % | 102.5719 % | 100.0756 % | 98.6248 % |
| Recovery Percentage 1 | -9.402 % | | | | | | |
| Concentration RSD | 51.5 % | 0.8 % | 0.5 % | 0.9 % | 1.1 % | 0.5 % | 0.6 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: LLOQ
Analysis started at: 3/11/2025 6:38:45 AM
Rack 0
Vial 5
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0053 ppm | 0.0991 ppm | 0.0051 ppm | 0.0301 ppm | 0.0098 ppm | 0.0051 ppm | 0.1020 ppm |
| Concentration per Run 1 | 0.0058 ppm | 0.0951 ppm | 0.0046 ppm | 0.0310 ppm | 0.0098 ppm | 0.0051 ppm | 0.1002 ppm |
| Concentration per Run 2 | 0.0048 ppm | 0.1035 ppm | 0.0054 ppm | 0.0289 ppm | 0.0098 ppm | 0.0051 ppm | 0.1026 ppm |
| Concentration per Run 3 | 0.0053 ppm | 0.0987 ppm | 0.0054 ppm | 0.0304 ppm | 0.0097 ppm | 0.0051 ppm | 0.1030 ppm |
| Recovery Percentage 1 | 106.072 % | 99.095 % | 102.729 % | 100.394 % | 97.900 % | 101.986 % | 101.953 % |
| Concentration RSD | 9.4 % | 4.3 % | 9.0 % | 3.6 % | 0.6 % | 0.7 % | 1.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0040 ppm | 0.0104 ppm | 0.0100 ppm | 0.0097 ppm | 0.0554 ppm | 2.5946 ppm | 0.0107 ppm |
| Concentration per Run 1 | 0.0039 ppm | 0.0102 ppm | 0.0103 ppm | 0.0097 ppm | 0.0557 ppm | 2.5854 ppm | 0.0106 ppm |
| Concentration per Run 2 | 0.0041 ppm | 0.0104 ppm | 0.0097 ppm | 0.0099 ppm | 0.0560 ppm | 2.6055 ppm | 0.0111 ppm |
| Concentration per Run 3 | 0.0040 ppm | 0.0107 ppm | 0.0100 ppm | 0.0095 ppm | 0.0544 ppm | 2.5927 ppm | 0.0102 ppm |
| Recovery Percentage 1 | 99.453 % | 104.329 % | 100.277 % | 96.826 % | 110.772 % | 103.782 % | 106.658 % |
| Concentration RSD | 2.3 % | 2.5 % | 3.2 % | 2.3 % | 1.5 % | 0.4 % | 4.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1007 ppm | 0.0103 ppm | 0.0493 ppm | 2.0527 ppm | 0.0208 ppm | 0.0099 ppm | 0.0480 ppm |
| Concentration per Run 1 | 0.0997 ppm | 0.0102 ppm | 0.0486 ppm | 2.0439 ppm | 0.0205 ppm | 0.0101 ppm | 0.0520 ppm |
| Concentration per Run 2 | 0.1030 ppm | 0.0105 ppm | 0.0488 ppm | 2.0547 ppm | 0.0204 ppm | 0.0093 ppm | 0.0445 ppm |
| Concentration per Run 3 | 0.0993 ppm | 0.0101 ppm | 0.0504 ppm | 2.0596 ppm | 0.0214 ppm | 0.0102 ppm | 0.0475 ppm |
| Recovery Percentage 1 | 100.660 % | 102.874 % | 98.592 % | 102.636 % | 83.086 % | 98.855 % | 96.020 % |
| Concentration RSD | 2.0 % | 1.9 % | 2.0 % | 0.4 % | 2.4 % | 5.3 % | 7.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0111 ppm | 0.5173 ppm | 0.0508 ppm | 0.0101 ppm | 0.0100 ppm | 0.0197 ppm | 0.0101 ppm |
| Concentration per Run 1 | 0.0103 ppm | 0.5138 ppm | 0.0511 ppm | 0.0101 ppm | 0.0101 ppm | 0.0182 ppm | 0.0104 ppm |
| Concentration per Run 2 | 0.0113 ppm | 0.5165 ppm | 0.0500 ppm | 0.0101 ppm | 0.0098 ppm | 0.0182 ppm | 0.0101 ppm |
| Concentration per Run 3 | 0.0118 ppm | 0.5217 ppm | 0.0513 ppm | 0.0100 ppm | 0.0102 ppm | 0.0227 ppm | 0.0100 ppm |
| Recovery Percentage 1 | 111.271 % | 103.465 % | 101.585 % | 100.654 % | 100.187 % | 98.586 % | 101.369 % |
| Concentration RSD | 6.7 % | 0.8 % | 1.4 % | 0.2 % | 1.8 % | 13.3 % | 2.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0048 ppm | 105.6481 % | 102.3940 % | 102.8474 % | 104.1245 % | 100.4443 % | 101.4301 % |
| Concentration per Run 1 | 0.0048 ppm | 106.7524 % | 102.8372 % | 103.2132 % | 105.3255 % | 100.9656 % | 101.7244 % |
| Concentration per Run 2 | 0.0047 ppm | 106.0934 % | 102.4362 % | 103.3378 % | 104.6158 % | 100.4454 % | 101.3786 % |
| Concentration per Run 3 | 0.0048 ppm | 104.0984 % | 101.9087 % | 101.9912 % | 102.4322 % | 99.9218 % | 101.1873 % |
| Recovery Percentage 1 | 95.596 % | | | | | | |
| Concentration RSD | 2.0 % | 1.3 % | 0.5 % | 0.7 % | 1.4 % | 0.5 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: ICSA
Analysis started at: 3/11/2025 6:42:13 AM
Rack 0
Vial 6
Comment LDR +/-10%

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 519.6043 [SIC 500] | -0.0062 ppm | -0.0056 ppm | 0.0015 ppm | 0.0001 ppm | 485.1594 ppm |
| Concentration per Run 1 | 0.0001 ppm | 519.4526 ppm | -0.0050 ppm | -0.0043 ppm | 0.0014 ppm | 0.0001 ppm | 484.1585 ppm |
| Concentration per Run 2 | -0.0004 ppm | 517.0235 ppm | -0.0075 ppm | -0.0053 ppm | 0.0016 ppm | 0.0000 ppm | 484.1468 ppm |
| Concentration per Run 3 | -0.0006 ppm | 522.3368 ppm | -0.0061 ppm | -0.0073 ppm | 0.0014 ppm | 0.0000 ppm | 487.1729 ppm |
| Recovery Percentage 1 | -4.110 % | | -124.229 % | -18.789 % | 14.869 % | 1.339 % | |
| Concentration RSD | 126.9 % | 0.5 % | 20.2 % | 26.6 % | 6.0 % | 80.4 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0013 ppm | -0.0010 ppm | -0.0011 ppm | -0.0038 ppm | 190.6118 ppm | 0.0105 ppm | -0.0015 ppm |
| Concentration per Run 1 | -0.0015 ppm | -0.0012 ppm | -0.0013 ppm | -0.0049 ppm | 190.2990 ppm | 0.0239 ppm | -0.0006 ppm |
| Concentration per Run 2 | -0.0015 ppm | -0.0005 ppm | -0.0012 ppm | -0.0027 ppm | 191.1335 ppm | 0.0135 ppm | -0.0016 ppm |
| Concentration per Run 3 | -0.0010 ppm | -0.0014 ppm | -0.0009 ppm | -0.0038 ppm | 190.4028 ppm | -0.0060 ppm | -0.0022 ppm |
| Recovery Percentage 1 | -26.684 % | -5.040 % | -11.128 % | -38.153 % | | 0.419 % | -29.457 % |
| Concentration RSD | 19.1 % | 45.6 % | 18.5 % | 28.9 % | 0.2 % | 144.8 % | 55.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 484.9663 ppm | -0.0005 ppm | -0.0005 ppm | 0.0135 ppm | 0.0000 ppm | 0.0041 ppm | -0.0193 ppm |
| Concentration per Run 1 | 483.6252 ppm | -0.0005 ppm | -0.0001 ppm | 0.0121 ppm | 0.0007 ppm | 0.0069 ppm | -0.0170 ppm |
| Concentration per Run 2 | 483.5571 ppm | -0.0005 ppm | -0.0010 ppm | 0.0151 ppm | 0.0000 ppm | -0.0007 ppm | -0.0254 ppm |
| Concentration per Run 3 | 487.7165 ppm | -0.0005 ppm | -0.0003 ppm | 0.0132 ppm | -0.0007 ppm | 0.0063 ppm | -0.0153 ppm |
| Recovery Percentage 1 | | -4.716 % | -0.962 % | 0.673 % | -0.032 % | 41.486 % | -38.512 % |
| Concentration RSD | 0.5 % | 2.4 % | 95.5 % | 11.3 % | 8,904.6 % | 102.4 % | 28.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0018 ppm | 0.0052 ppm | -0.0002 ppm | 0.0027 ppm | 0.0037 ppm | 0.0058 ppm | -0.0021 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0024 ppm | -0.0004 ppm | 0.0028 ppm | 0.0041 ppm | 0.0030 ppm | -0.0020 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0105 ppm | -0.0009 ppm | 0.0027 ppm | 0.0036 ppm | 0.0078 ppm | -0.0021 ppm |
| Concentration per Run 3 | 0.0051 ppm | 0.0026 ppm | 0.0007 ppm | 0.0027 ppm | 0.0033 ppm | 0.0065 ppm | -0.0021 ppm |
| Recovery Percentage 1 | 18.499 % | 1.036 % | -0.364 % | 27.370 % | 36.747 % | 28.844 % | -20.731 % |
| Concentration RSD | 153.0 % | 89.2 % | 442.7 % | 3.6 % | 11.3 % | 43.4 % | 1.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0032 ppm | 97.8444 % | 93.2436 % | 86.6908 % | 94.2564 % | 90.6938 % | 88.0459 % |
| Concentration per Run 1 | -0.0031 ppm | 98.2482 % | 93.3676 % | 87.7106 % | 94.6941 % | 90.7796 % | 88.8083 % |
| Concentration per Run 2 | -0.0030 ppm | 97.7628 % | 93.3030 % | 86.5815 % | 94.2105 % | 90.7298 % | 88.4253 % |
| Concentration per Run 3 | -0.0036 ppm | 97.5221 % | 93.0603 % | 85.7805 % | 93.8645 % | 90.5720 % | 86.9041 % |
| Recovery Percentage 1 | -64.758 % | | | | | | |
| Concentration RSD | 8.9 % | 0.4 % | 0.2 % | 1.1 % | 0.4 % | 0.1 % | 1.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: SIC Multi
Analysis started at: 3/11/2025 6:47:43 AM
Rack 0
Vial 7
Comment LDR +/-10%

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 0.0113 ppm | -0.0017 ppm | 0.0034 ppm | 0.0001 ppm | -0.0011 ppm | -0.0100 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0109 ppm | -0.0011 ppm | 0.0029 ppm | 0.0000 ppm | -0.0014 ppm | -0.0083 ppm |
| Concentration per Run 2 | -0.0005 ppm | 0.0078 ppm | -0.0002 ppm | 0.0042 ppm | 0.0002 ppm | -0.0011 ppm | -0.0082 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0151 ppm | -0.0038 ppm | 0.0030 ppm | 0.0002 ppm | -0.0009 ppm | -0.0135 ppm |
| Recovery Percentage 1 | -5.258 % | 11.279 % | -34.670 % | 11.273 % | 1.296 % | -28.057 % | -9.987 % |
| Concentration RSD | 42.6 % | 32.5 % | 107.7 % | 22.3 % | 71.9 % | 20.4 % | 30.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | -0.0029 ppm | **20.4974 ppm** | -0.0027 ppm | 0.0075 ppm | 0.0003 ppm | -0.0002 ppm |
| Concentration per Run 1 | -0.0004 ppm | -0.0023 ppm | 20.5057 ppm | -0.0023 ppm | 0.0086 ppm | -0.0018 ppm | 0.0005 ppm |
| Concentration per Run 2 | -0.0003 ppm | -0.0031 ppm | 20.4758 ppm | -0.0025 ppm | 0.0078 ppm | 0.0074 ppm | -0.0007 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0033 ppm | 20.5108 ppm | -0.0032 ppm | 0.0063 ppm | -0.0047 ppm | -0.0004 ppm |
| Recovery Percentage 1 | -6.074 % | -14.589 % | 204,974.303 % | -26.716 % | 15.049 % | 0.011 % | -3.358 % |
| Concentration RSD | 46.9 % | 19.6 % | **0.1 %** | 17.1 % | 15.5 % | 2,318.2 % | 365.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0054 ppm | **20.4290 [SIC 100]** | -0.0019 ppm | 0.0046 ppm | -0.0005 ppm | -0.0023 ppm | -0.0013 ppm |
| Concentration per Run 1 | -0.0022 ppm | 20.4633 ppm | -0.0022 ppm | 0.0061 ppm | -0.0007 ppm | -0.0025 ppm | 0.0066 ppm |
| Concentration per Run 2 | -0.0069 ppm | 20.4271 ppm | -0.0017 ppm | 0.0042 ppm | -0.0001 ppm | -0.0030 ppm | -0.0057 ppm |
| Concentration per Run 3 | -0.0071 ppm | 20.3966 ppm | -0.0019 ppm | 0.0035 ppm | -0.0007 ppm | -0.0016 ppm | -0.0049 ppm |
| Recovery Percentage 1 | -5.391 % | 204,289.595 % | -3.809 % | 0.230 % | -2.140 % | -23.467 % | -2.684 % |
| Concentration RSD | 51.9 % | **0.2 %** | 14.4 % | 29.2 % | 63.3 % | 30.9 % | 512.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0019 ppm | 0.0354 ppm | 0.0023 ppm | 0.0001 ppm | **19.4758 ppm** | **0.0105 ppm** | **9.9438 ppm** |
| Concentration per Run 1 | -0.0035 ppm | -0.0001 ppm | 0.0025 ppm | 0.0002 ppm | 19.3983 ppm | 0.0088 ppm | 9.9238 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0496 ppm | 0.0020 ppm | 0.0001 ppm | 19.4954 ppm | 0.0096 ppm | 9.9472 ppm |
| Concentration per Run 3 | -0.0032 ppm | 0.0568 ppm | 0.0023 ppm | 0.0001 ppm | 19.5337 ppm | 0.0131 ppm | 9.9602 ppm |
| Recovery Percentage 1 | -19.254 % | 7.086 % | 4.540 % | 1.293 % | 194,757.907 % | 52.482 % | 99,437.565 % |
| Concentration RSD | 128.2 % | 87.5 % | 10.6 % | 21.4 % | **0.4 %** | **21.9 %** | **0.2 %** |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | 106.0959 % | 102.0708 % | 120.0131 % | 104.2106 % | 100.2262 % | 101.5487 % |
| Concentration per Run 1 | -0.0008 ppm | 106.1874 % | 101.7448 % | 120.4920 % | 104.5517 % | 99.9621 % | 102.0366 % |
| Concentration per Run 2 | -0.0014 ppm | 106.0606 % | 102.4036 % | 119.4688 % | 103.8220 % | 100.3724 % | 101.3483 % |
| Concentration per Run 3 | -0.0014 ppm | 106.0397 % | 102.0640 % | 120.0785 % | 104.2581 % | 100.3442 % | 101.2612 % |
| Recovery Percentage 1 | -23.582 % | | | | | | |
| Concentration RSD | 29.6 % | 0.1 % | 0.3 % | 0.4 % | 0.4 % | 0.2 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: LDR Check
Analysis started at: 3/11/2025 6:52:16 AM
Rack 0
Vial 8
Comment LDR +/-10%

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0028 ppm | 0.0337 ppm | 20.6060 ppm | 19.0036 ppm | 19.0832 ppm | 4.8255 ppm | 0.0232 ppm |
| Concentration per Run 1 | 0.0031 ppm | 0.0334 ppm | 20.5868 ppm | 18.9581 ppm | 19.1169 ppm | 4.8316 ppm | 0.0225 ppm |
| Concentration per Run 2 | 0.0029 ppm | 0.0228 ppm | 20.5833 ppm | 19.0217 ppm | 19.0577 ppm | 4.8190 ppm | 0.0229 ppm |
| Concentration per Run 3 | 0.0024 ppm | 0.0448 ppm | 20.6478 ppm | 19.0309 ppm | 19.0751 ppm | 4.8258 ppm | 0.0243 ppm |
| Recovery Percentage 1 | | | 103.030 % | 95.018 % | 95.416 % | | |
| Concentration RSD | 13.1 % | 32.7 % | 0.2 % | 0.2 % | 0.2 % | 0.1 % | 4.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.6316 ppm | 4.7942 ppm | 0.0008 ppm | 20.0516 [SIC 60] | 0.0022 ppm | 518.6183 ppm | 19.6211 ppm |
| Concentration per Run 1 | 4.6689 ppm | 4.8294 ppm | 0.0014 ppm | 20.2305 ppm | 0.0033 ppm | 517.8383 ppm | 19.5824 ppm |
| Concentration per Run 2 | 4.6123 ppm | 4.7766 ppm | 0.0009 ppm | 19.9797 ppm | 0.0013 ppm | 518.2264 ppm | 19.5809 ppm |
| Concentration per Run 3 | 4.6135 ppm | 4.7765 ppm | 0.0001 ppm | 19.9447 ppm | 0.0022 ppm | 519.7901 ppm | 19.6999 ppm |
| Recovery Percentage 1 | 92.631 % | 95.883 % | | 100.258 % | | 103.724 % | 98.105 % |
| Concentration RSD | 0.7 % | 0.6 % | 84.4 % | 0.8 % | 44.6 % | 0.2 % | 0.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0041 ppm | 0.0001 ppm | 4.9656 ppm | 459.6341 ppm | 9.4433 ppm | 52.1127 ppm | 4.9993 ppm |
| Concentration per Run 1 | -0.0029 ppm | 0.0001 ppm | 4.9619 ppm | 458.8485 ppm | 9.4325 ppm | 52.0439 ppm | 4.9944 ppm |
| Concentration per Run 2 | -0.0040 ppm | 0.0001 ppm | 4.9612 ppm | 459.6156 ppm | 9.4928 ppm | 52.1040 ppm | 4.9961 ppm |
| Concentration per Run 3 | -0.0053 ppm | 0.0001 ppm | 4.9737 ppm | 460.4381 ppm | 9.4047 ppm | 52.1902 ppm | 5.0073 ppm |
| Recovery Percentage 1 | | 0.000 % | 99.312 % | 91.927 % | 94.433 % | 104.225 % | 99.986 % |
| Concentration RSD | 28.7 % | 37.4 % | 0.1 % | 0.2 % | 0.5 % | 0.1 % | 0.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.9400 ppm | 21.3080 [SIC 100] | 9.7629 ppm | 4.9609 ppm | 0.0084 ppm | 5.0260 ppm | 0.0016 ppm |
| Concentration per Run 1 | 4.9323 ppm | 21.1916 ppm | 9.7743 ppm | 4.9709 ppm | 0.0095 ppm | 5.0120 ppm | 0.0010 ppm |
| Concentration per Run 2 | 4.9262 ppm | 21.4408 ppm | 9.7534 ppm | 4.9570 ppm | 0.0087 ppm | 5.0104 ppm | 0.0019 ppm |
| Concentration per Run 3 | 4.9615 ppm | 21.2917 ppm | 9.7610 ppm | 4.9548 ppm | 0.0071 ppm | 5.0556 ppm | 0.0019 ppm |
| Recovery Percentage 1 | 98.800 % | 106.540 % | 97.629 % | 99.218 % | 0.000 % | 100.520 % | 0.000 % |
| Concentration RSD | 0.4 % | 0.6 % | 0.1 % | 0.2 % | 14.2 % | 0.5 % | 31.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 18.7697 ppm | 104.2054 % | 97.9362 % | 97.3947 % | 103.0327 % | 95.6839 % | 91.3558 % |
| Concentration per Run 1 | 18.8355 ppm | 104.0729 % | 98.2599 % | 97.4980 % | 102.3823 % | 95.8153 % | 91.4799 % |
| Concentration per Run 2 | 18.7567 ppm | 104.3352 % | 98.2078 % | 97.9736 % | 103.6549 % | 96.0086 % | 91.6853 % |
| Concentration per Run 3 | 18.7169 ppm | 104.2081 % | 97.3410 % | 96.7124 % | 103.0609 % | 95.2279 % | 90.9021 % |
| Recovery Percentage 1 | 93.848 % | | | | | | |
| Concentration RSD | 0.3 % | 0.1 % | 0.5 % | 0.7 % | 0.6 % | 0.4 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCV
Analysis started at: 3/11/2025 7:22:53 AM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4683 ppm | 0.4748 ppm | 0.4870 ppm | 0.4785 ppm | 0.4756 ppm | 0.5016 ppm | 0.4822 ppm |
| Concentration per Run 1 | 0.4696 ppm | 0.4795 ppm | 0.4866 ppm | 0.4753 ppm | 0.4768 ppm | 0.5023 ppm | 0.4843 ppm |
| Concentration per Run 2 | 0.4679 ppm | 0.4697 ppm | 0.4907 ppm | 0.4780 ppm | 0.4770 ppm | 0.5032 ppm | 0.4786 ppm |
| Concentration per Run 3 | 0.4676 ppm | 0.4752 ppm | 0.4837 ppm | 0.4823 ppm | 0.4731 ppm | 0.4992 ppm | 0.4837 ppm |
| Recovery Percentage 1 | 93.668 % | 94.959 % | 97.399 % | 95.705 % | 95.128 % | 100.311 % | 96.440 % |
| Concentration RSD | 0.2 % | 1.0 % | 0.7 % | 0.7 % | 0.5 % | 0.4 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4827 ppm | 0.4915 ppm | 0.4806 ppm | 0.4585 ppm | 0.4993 ppm | 5.0957 ppm | 0.5095 ppm |
| Concentration per Run 1 | 0.4825 ppm | 0.4926 ppm | 0.4808 ppm | 0.4613 ppm | 0.5000 ppm | 5.1012 ppm | 0.5094 ppm |
| Concentration per Run 2 | 0.4855 ppm | 0.4930 ppm | 0.4835 ppm | 0.4573 ppm | 0.4991 ppm | 5.0938 ppm | 0.5093 ppm |
| Concentration per Run 3 | 0.4801 ppm | 0.4888 ppm | 0.4775 ppm | 0.4570 ppm | 0.4987 ppm | 5.0921 ppm | 0.5097 ppm |
| Recovery Percentage 1 | 96.535 % | 98.293 % | 96.125 % | 91.706 % | 99.854 % | 101.914 % | 101.897 % |
| Concentration RSD | 0.6 % | 0.5 % | 0.6 % | 0.5 % | 0.1 % | 0.1 % | 0.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4729 ppm | 0.4850 ppm | 0.4764 ppm | 10.0285 ppm | 0.4921 ppm | 0.4885 ppm | 0.4892 ppm |
| Concentration per Run 1 | 0.4724 ppm | 0.4849 ppm | 0.4753 ppm | 9.9948 ppm | 0.4918 ppm | 0.4878 ppm | 0.4896 ppm |
| Concentration per Run 2 | 0.4758 ppm | 0.4841 ppm | 0.4779 ppm | 10.0669 ppm | 0.4958 ppm | 0.4908 ppm | 0.4879 ppm |
| Concentration per Run 3 | 0.4706 ppm | 0.4861 ppm | 0.4760 ppm | 10.0238 ppm | 0.4887 ppm | 0.4870 ppm | 0.4901 ppm |
| Recovery Percentage 1 | 94.583 % | 97.005 % | 95.285 % | 100.285 % | 98.420 % | 97.707 % | 97.843 % |
| Concentration RSD | 0.6 % | 0.2 % | 0.3 % | 0.4 % | 0.7 % | 0.4 % | 0.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4858 ppm | 5.4022 ppm | 0.5036 ppm | 0.4870 ppm | 0.4800 ppm | 0.4768 ppm | 0.4753 ppm |
| Concentration per Run 1 | 0.4863 ppm | 5.3840 ppm | 0.5008 ppm | 0.4895 ppm | 0.4815 ppm | 0.4757 ppm | 0.4748 ppm |
| Concentration per Run 2 | 0.4865 ppm | 5.4240 ppm | 0.5065 ppm | 0.4860 ppm | 0.4810 ppm | 0.4784 ppm | 0.4770 ppm |
| Concentration per Run 3 | 0.4845 ppm | 5.3987 ppm | 0.5036 ppm | 0.4856 ppm | 0.4776 ppm | 0.4763 ppm | 0.4741 ppm |
| Recovery Percentage 1 | 97.151 % | 102.900 % | 100.729 % | 97.410 % | 96.005 % | 95.356 % | 95.064 % |
| Concentration RSD | 0.2 % | 0.4 % | 0.6 % | 0.4 % | 0.4 % | 0.3 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4932 ppm | 105.8806 % | 103.7769 % | 104.1625 % | 103.8626 % | 101.0917 % | 101.9222 % |
| Concentration per Run 1 | 0.4920 ppm | 105.6660 % | 103.9052 % | 103.7434 % | 103.7411 % | 101.0927 % | 101.6505 % |
| Concentration per Run 2 | 0.4972 ppm | 105.7810 % | 103.5228 % | 104.4681 % | 104.1222 % | 100.9248 % | 102.5110 % |
| Concentration per Run 3 | 0.4904 ppm | 106.1948 % | 103.9025 % | 104.2759 % | 103.7245 % | 101.2578 % | 101.6052 % |
| Recovery Percentage 1 | 98.635 % | | | | | | |
| Concentration RSD | 0.7 % | 0.3 % | 0.2 % | 0.4 % | 0.2 % | 0.2 % | 0.5 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCB
Analysis started at: 3/11/2025 7:26:40 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0029 ppm | 0.0010 ppm | 0.0002 ppm | 0.0001 ppm | 0.0000 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0011 ppm | -0.0027 ppm | 0.0003 ppm | 0.0002 ppm | 0.0001 ppm | 0.0001 ppm | 0.0019 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0055 ppm | -0.0006 ppm | -0.0002 ppm | 0.0001 ppm | 0.0000 ppm | -0.0028 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0059 ppm | 0.0034 ppm | 0.0006 ppm | 0.0001 ppm | 0.0000 ppm | 0.0023 ppm |
| Recovery Percentage 1 | 12.373 % | 2.911 % | 20.000 % | 0.794 % | 0.727 % | 0.871 % | 0.439 % |
| Concentration RSD | 20.9 % | 167.0 % | 209.1 % | 162.0 % | 26.9 % | 60.9 % | 642.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | -0.0001 ppm | 0.0003 ppm | 0.0000 ppm | 0.0278 ppm | 0.0014 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | -0.0001 ppm | 0.0009 ppm | 0.0001 ppm | 0.0237 ppm | 0.0009 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0002 ppm | 0.0000 ppm | 0.0000 ppm | -0.0012 ppm | 0.0306 ppm | 0.0015 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0005 ppm | -0.0002 ppm | 0.0000 ppm | 0.0010 ppm | 0.0290 ppm | 0.0017 ppm |
| Recovery Percentage 1 | -0.049 % | -0.313 % | -0.796 % | 3.045 % | -0.051 % | 1.111 % | 27.677 % |
| Concentration RSD | 2,210.8 % | 597.1 % | 129.6 % | 169.9 % | 4,461.5 % | 12.9 % | 29.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0011 ppm | -0.0001 ppm | 0.0020 ppm | 0.0101 ppm | -0.0009 ppm | -0.0023 ppm | -0.0012 ppm |
| Concentration per Run 1 | 0.0004 ppm | -0.0001 ppm | 0.0018 ppm | 0.0096 ppm | -0.0005 ppm | -0.0027 ppm | 0.0014 ppm |
| Concentration per Run 2 | -0.0008 ppm | -0.0001 ppm | 0.0017 ppm | 0.0116 ppm | -0.0011 ppm | -0.0030 ppm | -0.0008 ppm |
| Concentration per Run 3 | -0.0029 ppm | -0.0001 ppm | 0.0024 ppm | 0.0090 ppm | -0.0012 ppm | -0.0011 ppm | -0.0043 ppm |
| Recovery Percentage 1 | -1.099 % | -0.987 % | 3.938 % | 0.504 % | -3.790 % | -22.833 % | -2.448 % |
| Concentration RSD | 155.2 % | 25.3 % | 21.0 % | 13.5 % | 41.3 % | 43.5 % | 236.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | -0.0038 ppm | -0.0008 ppm | 0.0001 ppm | 0.0003 ppm | 0.0009 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0053 ppm | -0.0001 ppm | 0.0002 ppm | 0.0004 ppm | 0.0002 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0025 ppm | -0.0033 ppm | -0.0007 ppm | 0.0001 ppm | -0.0003 ppm | 0.0031 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0011 ppm | -0.0028 ppm | -0.0015 ppm | 0.0000 ppm | 0.0006 ppm | -0.0008 ppm | 0.0000 ppm |
| Recovery Percentage 1 | -12.126 % | -0.760 % | -1.519 % | 0.712 % | 2.532 % | 4.331 % | 0.415 % |
| Concentration RSD | 105.3 % | 35.0 % | 90.2 % | 111.4 % | 174.1 % | 232.9 % | 185.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 101.6130 % | 100.5126 % | 99.5968 % | 102.0023 % | 99.8586 % | 99.4119 % |
| Concentration per Run 1 | -0.0003 ppm | 101.7868 % | 100.3385 % | 100.7684 % | 102.2494 % | 99.5304 % | 99.9243 % |
| Concentration per Run 2 | -0.0004 ppm | 101.3865 % | 101.1614 % | 99.5804 % | 101.7490 % | 100.5795 % | 99.2804 % |
| Concentration per Run 3 | -0.0003 ppm | 101.6657 % | 100.0380 % | 98.4417 % | 102.0084 % | 99.4659 % | 99.0310 % |
| Recovery Percentage 1 | -7.064 % | | | | | | |
| Concentration RSD | 14.2 % | 0.2 % | 0.6 % | 1.2 % | 0.2 % | 0.6 % | 0.5 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038582-1 WG2038582
Analysis started at: 3/11/2025 7:48:03 AM
Rack 1
Vial 1
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0063 ppm | 0.0014 ppm | 0.0016 ppm | 0.0001 ppm | 0.0000 ppm | 0.0094 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0029 ppm | 0.0020 ppm | 0.0008 ppm | 0.0001 ppm | 0.0000 ppm | 0.0090 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0113 ppm | 0.0004 ppm | 0.0019 ppm | 0.0002 ppm | 0.0000 ppm | 0.0120 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0048 ppm | 0.0017 ppm | 0.0021 ppm | 0.0001 ppm | 0.0000 ppm | 0.0073 ppm |
| Recovery Percentage 1 | 7.718 % | 6.303 % | 27.135 % | 5.288 % | 1.283 % | 0.122 % | 9.441 % |
| Concentration RSD | 72.3 % | 69.6 % | 63.2 % | 44.3 % | 70.6 % | 718.5 % | 25.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0001 ppm | 0.0005 ppm | -0.0001 ppm | 0.0021 ppm | 0.0672 ppm | 0.0017 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0004 ppm | 0.0006 ppm | -0.0003 ppm | 0.0014 ppm | 0.0582 ppm | 0.0021 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0000 ppm | 0.0003 ppm | -0.0001 ppm | 0.0026 ppm | 0.0805 ppm | 0.0012 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0003 ppm | 0.0004 ppm | 0.0001 ppm | 0.0023 ppm | 0.0628 ppm | 0.0017 ppm |
| Recovery Percentage 1 | -3.095 % | -0.274 % | 4.576 % | -1.248 % | 4.150 % | 2.686 % | 33.434 % |
| Concentration RSD | 145.2 % | 674.1 % | 29.3 % | 175.0 % | 28.7 % | 17.6 % | 28.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 0.0003 ppm | 0.0000 ppm | 134.1738 ppm | -0.0016 ppm | -0.0025 ppm | -0.0008 ppm |
| Concentration per Run 1 | -0.0007 ppm | 0.0004 ppm | -0.0005 ppm | 134.1296 ppm | -0.0019 ppm | -0.0050 ppm | -0.0061 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0003 ppm | 0.0003 ppm | 134.2401 ppm | -0.0014 ppm | -0.0023 ppm | -0.0012 ppm |
| Concentration per Run 3 | -0.0024 ppm | 0.0001 ppm | 0.0001 ppm | 134.1519 ppm | -0.0014 ppm | -0.0001 ppm | 0.0051 ppm |
| Recovery Percentage 1 | -0.641 % | 2.845 % | -0.040 % | 6,708.692 % | -6.283 % | -24.616 % | -1.527 % |
| Concentration RSD | 272.3 % | 44.7 % | 2,076.1 % | 0.0 % | 19.6 % | 98.5 % | 735.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0161 ppm | -0.0004 ppm | 0.0000 ppm | 0.0001 ppm | -0.0015 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0156 ppm | -0.0006 ppm | -0.0001 ppm | -0.0001 ppm | -0.0005 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0014 ppm | 0.0176 ppm | -0.0007 ppm | 0.0001 ppm | 0.0000 ppm | -0.0024 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0152 ppm | 0.0002 ppm | 0.0001 ppm | 0.0004 ppm | -0.0016 ppm | -0.0005 ppm |
| Recovery Percentage 1 | 6.496 % | 3.225 % | -0.777 % | 0.410 % | 1.189 % | -7.500 % | -0.841 % |
| Concentration RSD | 121.0 % | 7.9 % | 133.9 % | 232.0 % | 238.5 % | 62.1 % | 519.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 103.3851 % | 100.2325 % | 99.3237 % | 101.4208 % | 97.5682 % | 96.4900 % |
| Concentration per Run 1 | 0.0006 ppm | 103.4713 % | 100.2037 % | 98.7763 % | 101.7352 % | 97.7540 % | 96.0402 % |
| Concentration per Run 2 | 0.0004 ppm | 103.4165 % | 100.2690 % | 99.3433 % | 101.5479 % | 97.2936 % | 96.6022 % |
| Concentration per Run 3 | 0.0007 ppm | 103.2674 % | 100.2248 % | 99.8514 % | 100.9793 % | 97.6569 % | 96.8276 % |
| Recovery Percentage 1 | 11.338 % | | | | | | |
| Concentration RSD | 26.5 % | 0.1 % | 0.0 % | 0.5 % | 0.4 % | 0.2 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038582-2 WG2038582
Analysis started at: 3/11/2025 7:54:04 AM
Rack 1
Vial 2
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0463 ppm | 1.8923 ppm | 0.1074 ppm | 0.8954 ppm | 1.8321 ppm | 0.0486 ppm | 9.3219 ppm |
| Concentration per Run 1 | 0.0462 ppm | 1.8844 ppm | 0.1067 ppm | 0.8902 ppm | 1.8292 ppm | 0.0486 ppm | 9.2625 ppm |
| Concentration per Run 2 | 0.0466 ppm | 1.8945 ppm | 0.1062 ppm | 0.8968 ppm | 1.8369 ppm | 0.0488 ppm | 9.3554 ppm |
| Concentration per Run 3 | 0.0461 ppm | 1.8980 ppm | 0.1094 ppm | 0.8992 ppm | 1.8300 ppm | 0.0485 ppm | 9.3477 ppm |
| Concentration RSD | 0.6 % | 0.4 % | 1.6 % | 0.5 % | 0.2 % | 0.3 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0485 ppm | 0.4675 ppm | 0.1849 ppm | 0.2319 ppm | 0.9797 ppm | 9.5963 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0487 ppm | 0.4682 ppm | 0.1847 ppm | 0.2344 ppm | 0.9738 ppm | 9.5921 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0483 ppm | 0.4678 ppm | 0.1844 ppm | 0.2314 ppm | 0.9854 ppm | 9.6037 ppm | 0.0010 ppm |
| Concentration per Run 3 | 0.0487 ppm | 0.4666 ppm | 0.1857 ppm | 0.2299 ppm | 0.9797 ppm | 9.5929 ppm | 0.0001 ppm |
| Concentration RSD | 0.4 % | 0.2 % | 0.4 % | 1.0 % | 0.6 % | 0.1 % | 147.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.0684 ppm | 0.4868 ppm | 0.9137 ppm | 9.6716 ppm | 0.4659 ppm | 0.4944 ppm | 0.4815 ppm |
| Concentration per Run 1 | 9.0912 ppm | 0.4851 ppm | 0.9120 ppm | 9.7026 ppm | 0.4667 ppm | 0.4919 ppm | 0.4828 ppm |
| Concentration per Run 2 | 9.0582 ppm | 0.4883 ppm | 0.9122 ppm | 9.6426 ppm | 0.4634 ppm | 0.4980 ppm | 0.4826 ppm |
| Concentration per Run 3 | 9.0560 ppm | 0.4871 ppm | 0.9168 ppm | 9.6695 ppm | 0.4677 ppm | 0.4932 ppm | 0.4792 ppm |
| Concentration RSD | 0.2 % | 0.3 % | 0.3 % | 0.3 % | 0.5 % | 0.6 % | 0.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1024 ppm | 1.0451 ppm | 0.9079 ppm | 0.9165 ppm | 0.9104 ppm | 0.1002 ppm | 0.4704 ppm |
| Concentration per Run 1 | 0.1027 ppm | 1.0456 ppm | 0.9102 ppm | 0.9136 ppm | 0.9088 ppm | 0.0996 ppm | 0.4720 ppm |
| Concentration per Run 2 | 0.1025 ppm | 1.0488 ppm | 0.9036 ppm | 0.9203 ppm | 0.9112 ppm | 0.1010 ppm | 0.4701 ppm |
| Concentration per Run 3 | 0.1021 ppm | 1.0410 ppm | 0.9100 ppm | 0.9156 ppm | 0.9112 ppm | 0.0999 ppm | 0.4690 ppm |
| Concentration RSD | 0.3 % | 0.4 % | 0.4 % | 0.4 % | 0.2 % | 0.8 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4716 ppm | 102.6533 % | 100.3632 % | 99.1113 % | 100.9318 % | 97.5040 % | 97.1461 % |
| Concentration per Run 1 | 0.4710 ppm | 103.4017 % | 100.0903 % | 98.8877 % | 101.9312 % | 97.0766 % | 97.1092 % |
| Concentration per Run 2 | 0.4694 ppm | 102.3030 % | 100.6349 % | 98.3047 % | 100.5782 % | 97.8266 % | 96.6579 % |
| Concentration per Run 3 | 0.4743 ppm | 102.2552 % | 100.3644 % | 100.1416 % | 100.2861 % | 97.6089 % | 97.6713 % |
| Concentration RSD | 0.5 % | 0.6 % | 0.3 % | 0.9 % | 0.9 % | 0.4 % | 0.5 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512432-01 WG2038582
Analysis started at: 3/11/2025 7:57:39 AM
Rack 1
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0742 ppm | 0.0003 ppm | 0.0252 ppm | 0.0713 ppm | 0.0001 ppm | 1.1518 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0788 ppm | 0.0003 ppm | 0.0250 ppm | 0.0711 ppm | 0.0001 ppm | 1.1513 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0751 ppm | -0.0009 ppm | 0.0242 ppm | 0.0710 ppm | 0.0001 ppm | 1.1510 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0687 ppm | 0.0016 ppm | 0.0264 ppm | 0.0718 ppm | 0.0001 ppm | 1.1529 ppm |
| Concentration RSD | 42.5 % | 6.9 % | 379.0 % | 4.5 % | 0.6 % | 5.5 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0033 ppm | 0.0009 ppm | 0.0026 ppm | 0.0040 ppm | 1.1396 ppm | 0.0061 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0031 ppm | 0.0010 ppm | 0.0022 ppm | 0.0064 ppm | 1.1597 ppm | 0.0066 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0028 ppm | 0.0007 ppm | 0.0031 ppm | 0.0035 ppm | 1.1171 ppm | 0.0068 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0041 ppm | 0.0009 ppm | 0.0025 ppm | 0.0022 ppm | 1.1422 ppm | 0.0050 ppm |
| Concentration RSD | 108.8 % | 19.3 % | 16.9 % | 17.6 % | 53.0 % | 1.9 % | 15.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.1539 ppm | 0.0021 ppm | 0.0024 ppm | 385.4222 ppm | 1.3131 ppm | -0.0009 ppm | 0.0028 ppm |
| Concentration per Run 1 | 4.1283 ppm | 0.0022 ppm | 0.0024 ppm | 383.5401 ppm | 1.3079 ppm | -0.0016 ppm | 0.0036 ppm |
| Concentration per Run 2 | 4.1736 ppm | 0.0021 ppm | 0.0028 ppm | 381.6839 ppm | 1.3125 ppm | -0.0016 ppm | 0.0029 ppm |
| Concentration per Run 3 | 4.1600 ppm | 0.0018 ppm | 0.0020 ppm | 391.0427 ppm | 1.3189 ppm | 0.0004 ppm | 0.0019 ppm |
| Concentration RSD | 0.6 % | 10.8 % | 16.5 % | 1.3 % | 0.4 % | 123.9 % | 31.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 0.8897 ppm | 0.0004 ppm | 0.0077 ppm | -0.0002 ppm | -0.0002 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.8856 ppm | 0.0010 ppm | 0.0077 ppm | -0.0001 ppm | 0.0002 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.8878 ppm | 0.0001 ppm | 0.0078 ppm | -0.0004 ppm | -0.0007 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0039 ppm | 0.8959 ppm | 0.0003 ppm | 0.0077 ppm | -0.0002 ppm | 0.0000 ppm | 0.0007 ppm |
| Concentration RSD | 118.6 % | 0.6 % | 102.5 % | 0.3 % | 74.9 % | 282.2 % | 181.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0457 ppm | 103.9338 % | 98.7473 % | 98.6989 % | 104.3250 % | 98.1463 % | 98.5262 % |
| Concentration per Run 1 | 0.0452 ppm | 104.4698 % | 99.1147 % | 98.5799 % | 105.0275 % | 98.4698 % | 98.5245 % |
| Concentration per Run 2 | 0.0460 ppm | 103.4746 % | 99.0261 % | 99.2902 % | 103.7919 % | 98.3332 % | 99.0210 % |
| Concentration per Run 3 | 0.0458 ppm | 103.8570 % | 98.1010 % | 98.2267 % | 104.1555 % | 97.6359 % | 98.0331 % |
| Concentration RSD | 0.9 % | 0.5 % | 0.6 % | 0.5 % | 0.6 % | 0.5 % | 0.5 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038582-3 WG2038582
Analysis started at: 3/11/2025 8:01:05 AM
Rack 1
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0490 ppm | 2.0188 ppm | 0.1109 ppm | 0.9228 ppm | 1.9759 ppm | 0.0500 ppm | 10.6160 ppm |
| Concentration per Run 1 | 0.0495 ppm | 2.0211 ppm | 0.1113 ppm | 0.9242 ppm | 1.9745 ppm | 0.0499 ppm | 10.6355 ppm |
| Concentration per Run 2 | 0.0482 ppm | 2.0189 ppm | 0.1099 ppm | 0.9204 ppm | 1.9793 ppm | 0.0500 ppm | 10.6265 ppm |
| Concentration per Run 3 | 0.0493 ppm | 2.0163 ppm | 0.1114 ppm | 0.9238 ppm | 1.9740 ppm | 0.0500 ppm | 10.5861 ppm |
| Concentration RSD | 1.5 % | 0.1 % | 0.7 % | 0.2 % | 0.1 % | 0.2 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0485 ppm | 0.4722 ppm | 0.1858 ppm | 0.2544 ppm | 1.0063 ppm | 11.3545 ppm | 0.0057 ppm |
| Concentration per Run 1 | 0.0485 ppm | 0.4726 ppm | 0.1857 ppm | 0.2561 ppm | 1.0063 ppm | 11.3122 ppm | 0.0058 ppm |
| Concentration per Run 2 | 0.0487 ppm | 0.4721 ppm | 0.1849 ppm | 0.2521 ppm | 1.0055 ppm | 11.3709 ppm | 0.0062 ppm |
| Concentration per Run 3 | 0.0484 ppm | 0.4719 ppm | 0.1868 ppm | 0.2551 ppm | 1.0071 ppm | 11.3805 ppm | 0.0052 ppm |
| Concentration RSD | 0.3 % | 0.1 % | 0.5 % | 0.8 % | 0.1 % | 0.3 % | 8.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 13.1020 ppm | 0.4802 ppm | 0.9282 ppm | 388.2792 ppm | 1.7744 ppm | 0.5048 ppm | 0.4856 ppm |
| Concentration per Run 1 | 13.1676 ppm | 0.4818 ppm | 0.9279 ppm | 387.6766 ppm | 1.7741 ppm | 0.5059 ppm | 0.4890 ppm |
| Concentration per Run 2 | 13.0487 ppm | 0.4798 ppm | 0.9271 ppm | 388.3281 ppm | 1.7698 ppm | 0.5050 ppm | 0.4863 ppm |
| Concentration per Run 3 | 13.0898 ppm | 0.4790 ppm | 0.9297 ppm | 388.8327 ppm | 1.7794 ppm | 0.5035 ppm | 0.4815 ppm |
| Concentration RSD | 0.5 % | 0.3 % | 0.1 % | 0.1 % | 0.3 % | 0.2 % | 0.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1080 ppm | 1.9693 ppm | 0.9179 ppm | 0.9516 ppm | 0.9310 ppm | 0.1079 ppm | 0.4818 ppm |
| Concentration per Run 1 | 0.1052 ppm | 1.9715 ppm | 0.9197 ppm | 0.9490 ppm | 0.9377 ppm | 0.1056 ppm | 0.4822 ppm |
| Concentration per Run 2 | 0.1081 ppm | 1.9650 ppm | 0.9170 ppm | 0.9531 ppm | 0.9241 ppm | 0.1092 ppm | 0.4820 ppm |
| Concentration per Run 3 | 0.1108 ppm | 1.9713 ppm | 0.9171 ppm | 0.9526 ppm | 0.9313 ppm | 0.1089 ppm | 0.4812 ppm |
| Concentration RSD | 2.6 % | 0.2 % | 0.2 % | 0.2 % | 0.7 % | 1.9 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5180 ppm | 103.2084 % | 99.3852 % | 98.9320 % | 103.8507 % | 98.6500 % | 97.9807 % |
| Concentration per Run 1 | 0.5174 ppm | 103.1456 % | 99.0367 % | 99.2036 % | 103.6481 % | 98.3613 % | 98.1043 % |
| Concentration per Run 2 | 0.5196 ppm | 103.0690 % | 99.5669 % | 98.7895 % | 103.8025 % | 98.8106 % | 97.9113 % |
| Concentration per Run 3 | 0.5171 ppm | 103.4106 % | 99.5520 % | 98.8028 % | 104.1014 % | 98.7780 % | 97.9265 % |
| Concentration RSD | 0.3 % | 0.2 % | 0.3 % | 0.2 % | 0.2 % | 0.3 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038582-4 WG2038582
Analysis started at: 3/11/2025 8:04:31 AM
Rack 1
Vial 5
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 0.0722 ppm | 0.0007 ppm | 0.0240 ppm | 0.0692 ppm | 0.0001 ppm | 1.0943 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0666 ppm | 0.0021 ppm | 0.0231 ppm | 0.0689 ppm | 0.0001 ppm | 1.0920 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0715 ppm | 0.0001 ppm | 0.0243 ppm | 0.0694 ppm | 0.0001 ppm | 1.0952 ppm |
| Concentration per Run 3 | 0.0020 ppm | 0.0786 ppm | 0.0000 ppm | 0.0247 ppm | 0.0693 ppm | 0.0001 ppm | 1.0957 ppm |
| Concentration RSD | 37.6 % | 8.3 % | 162.8 % | 3.5 % | 0.4 % | 1.2 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0032 ppm | 0.0005 ppm | 0.0020 ppm | 0.0051 ppm | 1.0901 ppm | 0.0057 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0037 ppm | -0.0001 ppm | 0.0026 ppm | 0.0048 ppm | 1.1096 ppm | 0.0060 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0026 ppm | 0.0010 ppm | 0.0020 ppm | 0.0048 ppm | 1.0843 ppm | 0.0060 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0031 ppm | 0.0005 ppm | 0.0015 ppm | 0.0058 ppm | 1.0766 ppm | 0.0050 ppm |
| Concentration RSD | 411.6 % | 17.4 % | 116.7 % | 26.2 % | 11.0 % | 1.6 % | 10.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.0373 ppm | 0.0013 ppm | 0.0027 ppm | 371.4894 ppm | 1.2820 ppm | -0.0013 ppm | 0.0044 ppm |
| Concentration per Run 1 | 4.0233 ppm | 0.0013 ppm | 0.0029 ppm | 367.8093 ppm | 1.2750 ppm | -0.0012 ppm | 0.0024 ppm |
| Concentration per Run 2 | 4.0470 ppm | 0.0013 ppm | 0.0031 ppm | 375.7227 ppm | 1.2883 ppm | -0.0023 ppm | 0.0036 ppm |
| Concentration per Run 3 | 4.0415 ppm | 0.0014 ppm | 0.0022 ppm | 370.9362 ppm | 1.2827 ppm | -0.0006 ppm | 0.0071 ppm |
| Concentration RSD | 0.3 % | 3.5 % | 17.8 % | 1.1 % | 0.5 % | 65.2 % | 55.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 0.8663 ppm | -0.0007 ppm | 0.0075 ppm | -0.0001 ppm | -0.0016 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0036 ppm | 0.8586 ppm | 0.0004 ppm | 0.0074 ppm | 0.0005 ppm | -0.0021 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0014 ppm | 0.8673 ppm | -0.0009 ppm | 0.0076 ppm | -0.0002 ppm | -0.0018 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.8729 ppm | -0.0017 ppm | 0.0075 ppm | -0.0007 ppm | -0.0009 ppm | -0.0005 ppm |
| Concentration RSD | 105.1 % | 0.8 % | 149.4 % | 0.9 % | 542.5 % | 40.3 % | 237.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0439 ppm | 104.3361 % | 99.5956 % | 98.7334 % | 104.9069 % | 98.7758 % | 98.6936 % |
| Concentration per Run 1 | 0.0440 ppm | 104.6344 % | 100.4063 % | 99.8606 % | 105.4088 % | 99.0421 % | 99.9486 % |
| Concentration per Run 2 | 0.0438 ppm | 103.9179 % | 98.5371 % | 98.2411 % | 104.4303 % | 98.2823 % | 97.9029 % |
| Concentration per Run 3 | 0.0437 ppm | 104.4559 % | 99.8435 % | 98.0984 % | 104.8815 % | 99.0032 % | 98.2292 % |
| Concentration RSD | 0.3 % | 0.4 % | 1.0 % | 1.0 % | 0.5 % | 0.4 % | 1.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038582-5 WG2038582
Analysis started at: 3/11/2025 8:07:57 AM
Rack 1
Vial 6
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0346 ppm | 1.9911 ppm | 0.1222 ppm | 0.9429 ppm | 1.9544 ppm | 0.0497 ppm | 10.9335 ppm |
| Concentration per Run 1 | 0.0365 ppm | 1.9927 ppm | 0.1224 ppm | 0.9423 ppm | 1.9493 ppm | 0.0494 ppm | 10.9458 ppm |
| Concentration per Run 2 | 0.0338 ppm | 1.9846 ppm | 0.1216 ppm | 0.9406 ppm | 1.9503 ppm | 0.0498 ppm | 10.9160 ppm |
| Concentration per Run 3 | 0.0335 ppm | 1.9959 ppm | 0.1224 ppm | 0.9457 ppm | 1.9635 ppm | 0.0500 ppm | 10.9386 ppm |
| Concentration RSD | 4.8 % | 0.3 % | 0.4 % | 0.3 % | 0.4 % | 0.5 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0489 ppm | 0.4686 ppm | 0.1851 ppm | 0.2508 ppm | 0.9913 ppm | 11.8294 ppm | 0.0061 ppm |
| Concentration per Run 1 | 0.0490 ppm | 0.4717 ppm | 0.1854 ppm | 0.2523 ppm | 0.9878 ppm | 11.8051 ppm | 0.0057 ppm |
| Concentration per Run 2 | 0.0489 ppm | 0.4649 ppm | 0.1851 ppm | 0.2506 ppm | 0.9932 ppm | 11.7852 ppm | 0.0067 ppm |
| Concentration per Run 3 | 0.0489 ppm | 0.4692 ppm | 0.1849 ppm | 0.2494 ppm | 0.9928 ppm | 11.8978 ppm | 0.0060 ppm |
| Concentration RSD | 0.1 % | 0.7 % | 0.1 % | 0.6 % | 0.3 % | 0.5 % | 8.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 13.4971 ppm | 0.4792 ppm | 0.9586 ppm | 398.6248 ppm | 1.7981 ppm | 0.5304 ppm | 0.4761 ppm |
| Concentration per Run 1 | 13.5200 ppm | 0.4781 ppm | 0.9560 ppm | 394.9553 ppm | 1.7969 ppm | 0.5329 ppm | 0.4710 ppm |
| Concentration per Run 2 | 13.4675 ppm | 0.4794 ppm | 0.9547 ppm | 398.4220 ppm | 1.8000 ppm | 0.5293 ppm | 0.4767 ppm |
| Concentration per Run 3 | 13.5038 ppm | 0.4801 ppm | 0.9650 ppm | 402.4970 ppm | 1.7974 ppm | 0.5291 ppm | 0.4807 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 0.6 % | 0.9 % | 0.1 % | 0.4 % | 1.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1182 ppm | 1.6201 ppm | 0.9443 ppm | 0.9816 ppm | 0.9613 ppm | 0.1172 ppm | 0.4788 ppm |
| Concentration per Run 1 | 0.1189 ppm | 1.6193 ppm | 0.9447 ppm | 0.9785 ppm | 0.9592 ppm | 0.1171 ppm | 0.4810 ppm |
| Concentration per Run 2 | 0.1156 ppm | 1.6181 ppm | 0.9421 ppm | 0.9824 ppm | 0.9621 ppm | 0.1161 ppm | 0.4779 ppm |
| Concentration per Run 3 | 0.1201 ppm | 1.6229 ppm | 0.9460 ppm | 0.9839 ppm | 0.9627 ppm | 0.1184 ppm | 0.4775 ppm |
| Concentration RSD | 2.0 % | 0.2 % | 0.2 % | 0.3 % | 0.2 % | 1.0 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5135 ppm | 103.7150 % | 99.6450 % | 99.0914 % | 104.5243 % | 98.9439 % | 98.4290 % |
| Concentration per Run 1 | 0.5153 ppm | 104.2608 % | 99.9163 % | 98.5775 % | 105.6001 % | 99.2791 % | 98.4440 % |
| Concentration per Run 2 | 0.5118 ppm | 104.4062 % | 99.6243 % | 99.5630 % | 104.9160 % | 98.2633 % | 98.6318 % |
| Concentration per Run 3 | 0.5134 ppm | 102.4781 % | 99.3944 % | 99.1338 % | 103.0567 % | 99.2894 % | 98.2112 % |
| Concentration RSD | 0.3 % | 1.0 % | 0.3 % | 0.5 % | 1.3 % | 0.6 % | 0.2 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038582-6D5 WG2038582
Analysis started at: 3/11/2025 8:11:24 AM
Rack 1
Vial 7
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0148 ppm | 0.0004 ppm | 0.0054 ppm | 0.0142 ppm | 0.0000 ppm | 0.2296 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0107 ppm | -0.0003 ppm | 0.0055 ppm | 0.0141 ppm | 0.0001 ppm | 0.2341 ppm |
| Concentration per Run 2 | 0.0013 ppm | 0.0132 ppm | 0.0009 ppm | 0.0058 ppm | 0.0144 ppm | 0.0000 ppm | 0.2283 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0205 ppm | 0.0007 ppm | 0.0048 ppm | 0.0142 ppm | 0.0001 ppm | 0.2264 ppm |
| Concentration RSD | 37.3 % | 34.5 % | 159.6 % | 9.1 % | 0.9 % | 30.0 % | 1.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0005 ppm | 0.0001 ppm | 0.0002 ppm | 0.0026 ppm | 0.2383 ppm | 0.0013 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0002 ppm | 0.0007 ppm | 0.0007 ppm | 0.0037 ppm | 0.2420 ppm | 0.0022 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0017 ppm | -0.0004 ppm | 0.0003 ppm | 0.0013 ppm | 0.2535 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0001 ppm | -0.0001 ppm | -0.0004 ppm | 0.0029 ppm | 0.2193 ppm | 0.0006 ppm |
| Concentration RSD | 227.1 % | 190.3 % | 765.6 % | 326.8 % | 44.7 % | 7.3 % | 63.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.8470 ppm | 0.0003 ppm | 0.0026 ppm | 80.2220 ppm | 0.2707 ppm | -0.0017 ppm | -0.0007 ppm |
| Concentration per Run 1 | 0.8486 ppm | 0.0004 ppm | 0.0031 ppm | 79.9275 ppm | 0.2735 ppm | -0.0020 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.8499 ppm | 0.0001 ppm | 0.0017 ppm | 79.5662 ppm | 0.2709 ppm | -0.0020 ppm | -0.0011 ppm |
| Concentration per Run 3 | 0.8425 ppm | 0.0004 ppm | 0.0030 ppm | 81.1722 ppm | 0.2677 ppm | -0.0012 ppm | -0.0011 ppm |
| Concentration RSD | 0.5 % | 56.4 % | 30.8 % | 1.1 % | 1.1 % | 27.1 % | 76.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0015 ppm | 0.1785 ppm | -0.0005 ppm | 0.0016 ppm | -0.0005 ppm | -0.0003 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.1792 ppm | -0.0001 ppm | 0.0015 ppm | -0.0003 ppm | -0.0002 ppm | -0.0003 ppm |
| Concentration per Run 2 | -0.0012 ppm | 0.1789 ppm | -0.0003 ppm | 0.0017 ppm | -0.0006 ppm | -0.0006 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0035 ppm | 0.1775 ppm | -0.0011 ppm | 0.0016 ppm | -0.0007 ppm | 0.0000 ppm | -0.0002 ppm |
| Concentration RSD | 117.4 % | 0.5 % | 108.0 % | 5.7 % | 37.1 % | 114.2 % | 132.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0097 ppm | 104.1017 % | 101.2865 % | 101.5465 % | 102.7727 % | 99.0157 % | 98.7448 % |
| Concentration per Run 1 | 0.0098 ppm | 104.4894 % | 102.3126 % | 101.6121 % | 102.8058 % | 100.4770 % | 98.7884 % |
| Concentration per Run 2 | 0.0098 ppm | 103.8076 % | 100.4298 % | 101.4648 % | 102.4465 % | 97.9648 % | 98.1514 % |
| Concentration per Run 3 | 0.0094 ppm | 104.0080 % | 101.1170 % | 101.5626 % | 103.0659 % | 98.6053 % | 99.2947 % |
| Concentration RSD | 2.7 % | 0.3 % | 0.9 % | 0.1 % | 0.3 % | 1.3 % | 0.6 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511830-04 WG2038582
Analysis started at: 3/11/2025 8:14:51 AM
Rack 1
Vial 8
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0510 ppm | 0.0040 ppm | 0.0040 ppm | 0.0126 ppm | 0.0000 ppm | 1.7641 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0546 ppm | 0.0040 ppm | 0.0024 ppm | 0.0127 ppm | 0.0000 ppm | 1.7594 ppm |
| Concentration per Run 2 | 0.0014 ppm | 0.0436 ppm | 0.0032 ppm | 0.0061 ppm | 0.0125 ppm | 0.0000 ppm | 1.7654 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0548 ppm | 0.0047 ppm | 0.0034 ppm | 0.0127 ppm | 0.0001 ppm | 1.7674 ppm |
| Concentration RSD | 38.9 % | 12.5 % | 18.0 % | 47.3 % | 1.0 % | 66.0 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 0.0002 ppm | 0.0007 ppm | 0.1346 ppm | 0.0102 ppm | 0.1237 ppm | 0.0017 ppm |
| Concentration per Run 1 | 0.0017 ppm | 0.0005 ppm | 0.0010 ppm | 0.1341 ppm | 0.0101 ppm | 0.1009 ppm | 0.0013 ppm |
| Concentration per Run 2 | 0.0018 ppm | 0.0004 ppm | 0.0005 ppm | 0.1355 ppm | 0.0116 ppm | 0.1354 ppm | 0.0016 ppm |
| Concentration per Run 3 | 0.0018 ppm | -0.0004 ppm | 0.0004 ppm | 0.1342 ppm | 0.0088 ppm | 0.1347 ppm | 0.0024 ppm |
| Concentration RSD | 2.0 % | 285.6 % | 50.0 % | 0.6 % | 13.5 % | 15.9 % | 32.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0807 ppm | 0.0111 ppm | 0.0006 ppm | 131.3506 ppm | 0.0030 ppm | 21.1148 ppm | 0.0485 ppm |
| Concentration per Run 1 | 0.0822 ppm | 0.0109 ppm | 0.0001 ppm | 130.5327 ppm | 0.0033 ppm | 21.0131 ppm | 0.0493 ppm |
| Concentration per Run 2 | 0.0811 ppm | 0.0113 ppm | 0.0008 ppm | 131.9351 ppm | 0.0035 ppm | 21.1893 ppm | 0.0471 ppm |
| Concentration per Run 3 | 0.0788 ppm | 0.0112 ppm | 0.0007 ppm | 131.5842 ppm | 0.0020 ppm | 21.1420 ppm | 0.0492 ppm |
| Concentration RSD | 2.1 % | 1.8 % | 66.6 % | 0.6 % | 27.2 % | 0.4 % | 2.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | 0.1244 ppm | 0.0002 ppm | 0.0056 ppm | 0.0000 ppm | -0.0029 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0005 ppm | 0.1237 ppm | -0.0003 ppm | 0.0055 ppm | 0.0000 ppm | -0.0029 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0038 ppm | 0.1254 ppm | 0.0011 ppm | 0.0057 ppm | -0.0002 ppm | -0.0018 ppm | -0.0007 ppm |
| Concentration per Run 3 | 0.0033 ppm | 0.1241 ppm | -0.0002 ppm | 0.0055 ppm | 0.0002 ppm | -0.0042 ppm | 0.0003 ppm |
| Concentration RSD | 105.4 % | 0.7 % | 375.8 % | 1.9 % | 8,260.1 % | 42.0 % | 562.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5248 ppm | 103.5582 % | 100.7250 % | 99.7080 % | 102.0661 % | 97.9143 % | 97.1855 % |
| Concentration per Run 1 | 0.5245 ppm | 103.5900 % | 100.3879 % | 99.4604 % | 102.2049 % | 97.3580 % | 96.5486 % |
| Concentration per Run 2 | 0.5249 ppm | 103.6189 % | 100.9482 % | 99.4667 % | 102.0988 % | 98.4261 % | 97.1065 % |
| Concentration per Run 3 | 0.5251 ppm | 103.4659 % | 100.8389 % | 100.1970 % | 101.8945 % | 97.9588 % | 97.9015 % |
| Concentration RSD | 0.1 % | 0.1 % | 0.3 % | 0.4 % | 0.2 % | 0.5 % | 0.7 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCV
Analysis started at: 3/11/2025 8:18:18 AM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4804 ppm | 0.4843 ppm | 0.5010 ppm | 0.4892 ppm | 0.4830 ppm | 0.5123 ppm | 0.4940 ppm |
| Concentration per Run 1 | 0.4807 ppm | 0.4841 ppm | 0.4958 ppm | 0.4934 ppm | 0.4823 ppm | 0.5117 ppm | 0.4910 ppm |
| Concentration per Run 2 | 0.4790 ppm | 0.4789 ppm | 0.5038 ppm | 0.4839 ppm | 0.4845 ppm | 0.5135 ppm | 0.4941 ppm |
| Concentration per Run 3 | 0.4815 ppm | 0.4900 ppm | 0.5034 ppm | 0.4903 ppm | 0.4823 ppm | 0.5116 ppm | 0.4970 ppm |
| Recovery Percentage 1 | 96.082 % | 96.862 % | 100.197 % | 97.838 % | 96.607 % | 102.455 % | 98.802 % |
| Concentration RSD | 0.3 % | 1.1 % | 0.9 % | 1.0 % | 0.3 % | 0.2 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4921 ppm | 0.5014 ppm | 0.4911 ppm | 0.4686 ppm | 0.5116 ppm | 5.1791 ppm | 0.5179 ppm |
| Concentration per Run 1 | 0.4953 ppm | 0.5047 ppm | 0.4930 ppm | 0.4699 ppm | 0.5076 ppm | 5.2030 ppm | 0.5167 ppm |
| Concentration per Run 2 | 0.4928 ppm | 0.5027 ppm | 0.4896 ppm | 0.4699 ppm | 0.5107 ppm | 5.1761 ppm | 0.5184 ppm |
| Concentration per Run 3 | 0.4884 ppm | 0.4967 ppm | 0.4907 ppm | 0.4661 ppm | 0.5165 ppm | 5.1582 ppm | 0.5185 ppm |
| Recovery Percentage 1 | 98.425 % | 100.275 % | 98.219 % | 93.727 % | 102.315 % | 103.582 % | 103.572 % |
| Concentration RSD | 0.7 % | 0.8 % | 0.4 % | 0.5 % | 0.9 % | 0.4 % | 0.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4862 ppm | 0.4901 ppm | 0.4900 ppm | 10.1533 ppm | 0.5040 ppm | 0.5064 ppm | 0.4988 ppm |
| Concentration per Run 1 | 0.4897 ppm | 0.4903 ppm | 0.4884 ppm | 10.1439 ppm | 0.5087 ppm | 0.5067 ppm | 0.4959 ppm |
| Concentration per Run 2 | 0.4850 ppm | 0.4911 ppm | 0.4928 ppm | 10.1459 ppm | 0.4995 ppm | 0.5043 ppm | 0.5002 ppm |
| Concentration per Run 3 | 0.4839 ppm | 0.4891 ppm | 0.4887 ppm | 10.1701 ppm | 0.5037 ppm | 0.5083 ppm | 0.5004 ppm |
| Recovery Percentage 1 | 97.243 % | 98.029 % | 97.997 % | 101.533 % | 100.794 % | 101.290 % | 99.763 % |
| Concentration RSD | 0.6 % | 0.2 % | 0.5 % | 0.1 % | 0.9 % | 0.4 % | 0.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5020 ppm | 5.5402 ppm | 0.5123 ppm | 0.5014 ppm | 0.4928 ppm | 0.4923 ppm | 0.4872 ppm |
| Concentration per Run 1 | 0.4994 ppm | 5.5460 ppm | 0.5126 ppm | 0.4996 ppm | 0.4942 ppm | 0.4941 ppm | 0.4889 ppm |
| Concentration per Run 2 | 0.5039 ppm | 5.5411 ppm | 0.5084 ppm | 0.5012 ppm | 0.4910 ppm | 0.4900 ppm | 0.4863 ppm |
| Concentration per Run 3 | 0.5026 ppm | 5.5334 ppm | 0.5160 ppm | 0.5032 ppm | 0.4931 ppm | 0.4927 ppm | 0.4863 ppm |
| Recovery Percentage 1 | 100.393 % | 105.527 % | 102.467 % | 100.271 % | 98.558 % | 98.456 % | 97.434 % |
| Concentration RSD | 0.5 % | 0.1 % | 0.7 % | 0.4 % | 0.3 % | 0.4 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5029 ppm | 103.9947 % | 102.0263 % | 101.0134 % | 102.6582 % | 99.0218 % | 98.4536 % |
| Concentration per Run 1 | 0.5051 ppm | 104.2431 % | 101.6515 % | 101.1332 % | 102.8565 % | 98.4507 % | 98.1968 % |
| Concentration per Run 2 | 0.5025 ppm | 103.8937 % | 102.3210 % | 100.8019 % | 102.6396 % | 99.3223 % | 98.2045 % |
| Concentration per Run 3 | 0.5010 ppm | 103.8474 % | 102.1062 % | 101.1051 % | 102.4785 % | 99.2925 % | 98.9595 % |
| Recovery Percentage 1 | 100.571 % | | | | | | |
| Concentration RSD | 0.4 % | 0.2 % | 0.3 % | 0.2 % | 0.2 % | 0.5 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCB
Analysis started at: 3/11/2025 8:21:46 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0023 ppm | -0.0002 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm | 0.0013 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0009 ppm | -0.0001 ppm | 0.0006 ppm | 0.0001 ppm | 0.0001 ppm | 0.0024 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0067 ppm | -0.0003 ppm | 0.0007 ppm | 0.0000 ppm | 0.0000 ppm | 0.0024 ppm |
| Concentration per Run 3 | 0.0005 ppm | -0.0009 ppm | -0.0003 ppm | -0.0009 ppm | 0.0000 ppm | 0.0000 ppm | -0.0009 ppm |
| Recovery Percentage 1 | 6.989 % | 2.257 % | -4.523 % | 0.394 % | 0.014 % | 0.784 % | 1.306 % |
| Concentration RSD | 3.9 % | 175.2 % | 47.9 % | 779.6 % | 3,274.5 % | 88.7 % | 145.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0001 ppm | 0.0002 ppm | 0.0002 ppm | 0.0002 ppm | 0.0112 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0005 ppm | 0.0001 ppm | 0.0001 ppm | -0.0005 ppm | -0.0080 ppm | 0.0007 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0003 ppm | 0.0010 ppm | 0.0276 ppm | 0.0007 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0002 ppm | 0.0005 ppm | 0.0003 ppm | 0.0001 ppm | 0.0140 ppm | -0.0002 ppm |
| Recovery Percentage 1 | -1.779 % | 0.635 % | 2.148 % | 2.455 % | 0.346 % | 0.449 % | 8.285 % |
| Concentration RSD | 21.0 % | 289.6 % | 118.1 % | 45.9 % | 429.8 % | 159.9 % | 135.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0032 ppm | -0.0002 ppm | 0.0024 ppm | 0.0259 ppm | -0.0006 ppm | -0.0007 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0023 ppm | -0.0002 ppm | 0.0026 ppm | 0.0263 ppm | -0.0007 ppm | -0.0007 ppm | 0.0012 ppm |
| Concentration per Run 2 | -0.0021 ppm | -0.0002 ppm | 0.0024 ppm | 0.0220 ppm | -0.0001 ppm | -0.0003 ppm | -0.0017 ppm |
| Concentration per Run 3 | -0.0052 ppm | -0.0001 ppm | 0.0022 ppm | 0.0293 ppm | -0.0010 ppm | -0.0010 ppm | 0.0010 ppm |
| Recovery Percentage 1 | -3.210 % | -1.504 % | 4.815 % | 1.294 % | -2.411 % | -6.767 % | 0.377 % |
| Concentration RSD | 54.8 % | 18.2 % | 9.0 % | 14.3 % | 79.2 % | 48.7 % | 875.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | -0.0044 ppm | -0.0004 ppm | 0.0001 ppm | 0.0003 ppm | 0.0012 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0005 ppm | -0.0055 ppm | 0.0004 ppm | 0.0001 ppm | 0.0003 ppm | 0.0015 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0010 ppm | -0.0042 ppm | -0.0021 ppm | 0.0001 ppm | 0.0007 ppm | 0.0016 ppm | -0.0005 ppm |
| Concentration per Run 3 | 0.0009 ppm | -0.0033 ppm | 0.0005 ppm | 0.0001 ppm | -0.0001 ppm | 0.0004 ppm | 0.0002 ppm |
| Recovery Percentage 1 | 4.644 % | -0.873 % | -0.759 % | 0.781 % | 3.118 % | 5.837 % | -1.151 % |
| Concentration RSD | 186.7 % | 25.6 % | 383.9 % | 31.2 % | 129.2 % | 57.8 % | 278.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 101.5865 % | 100.5672 % | 98.7159 % | 102.0026 % | 99.4365 % | 98.9166 % |
| Concentration per Run 1 | -0.0005 ppm | 102.1669 % | 100.5290 % | 98.8649 % | 102.5205 % | 99.3331 % | 99.3961 % |
| Concentration per Run 2 | -0.0007 ppm | 101.0041 % | 100.2629 % | 99.0390 % | 101.5528 % | 98.9837 % | 98.5861 % |
| Concentration per Run 3 | -0.0008 ppm | 101.5885 % | 100.9097 % | 98.2439 % | 101.9345 % | 99.9927 % | 98.7678 % |
| Recovery Percentage 1 | -13.359 % | | | | | | |
| Concentration RSD | 24.4 % | 0.6 % | 0.3 % | 0.4 % | 0.5 % | 0.5 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038730-1 WG2038730
Analysis started at: 3/11/2025 9:05:35 AM
Rack 1
Vial 9
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0088 ppm | 0.0007 ppm | 0.0006 ppm | 0.0000 ppm | 0.0000 ppm | 0.0120 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0049 ppm | -0.0002 ppm | 0.0019 ppm | -0.0001 ppm | 0.0000 ppm | 0.0108 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0126 ppm | 0.0012 ppm | -0.0003 ppm | 0.0000 ppm | 0.0001 ppm | 0.0133 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0090 ppm | 0.0013 ppm | 0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0119 ppm |
| Concentration RSD | 33.9 % | 43.7 % | 114.2 % | 176.3 % | 265.9 % | 75.3 % | 10.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0003 ppm | -0.0001 ppm | -0.0001 ppm | -0.0002 ppm | 0.0313 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0008 ppm | -0.0005 ppm | -0.0001 ppm | -0.0011 ppm | 0.0439 ppm | -0.0012 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0003 ppm | 0.0001 ppm | 0.0000 ppm | -0.0007 ppm | 0.0320 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0001 ppm | 0.0001 ppm | -0.0002 ppm | 0.0011 ppm | 0.0182 ppm | 0.0012 ppm |
| Concentration RSD | 71.6 % | 141.0 % | 297.2 % | 77.7 % | 499.4 % | 41.0 % | 5,841.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0016 ppm | 0.0002 ppm | 0.0000 ppm | 0.0128 ppm | -0.0009 ppm | -0.0018 ppm | -0.0024 ppm |
| Concentration per Run 1 | -0.0033 ppm | 0.0002 ppm | -0.0003 ppm | 0.0139 ppm | -0.0009 ppm | -0.0022 ppm | -0.0045 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0000 ppm | 0.0000 ppm | 0.0116 ppm | -0.0011 ppm | -0.0020 ppm | -0.0009 ppm |
| Concentration per Run 3 | -0.0025 ppm | 0.0003 ppm | 0.0003 ppm | 0.0130 ppm | -0.0009 ppm | -0.0011 ppm | -0.0019 ppm |
| Concentration RSD | 138.6 % | 75.6 % | 1,716.6 % | 8.9 % | 13.0 % | 32.4 % | 76.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0053 ppm | -0.0009 ppm | 0.0000 ppm | -0.0002 ppm | 0.0013 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0006 ppm | -0.0042 ppm | -0.0008 ppm | 0.0000 ppm | -0.0003 ppm | 0.0000 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0007 ppm | -0.0041 ppm | -0.0009 ppm | 0.0001 ppm | 0.0001 ppm | 0.0023 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0005 ppm | -0.0075 ppm | -0.0012 ppm | -0.0001 ppm | -0.0003 ppm | 0.0018 ppm | -0.0001 ppm |
| Concentration RSD | 542.1 % | 36.3 % | 19.7 % | 702.5 % | 165.3 % | 89.9 % | 299.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 102.5410 % | 101.9545 % | 99.1446 % | 103.0945 % | 100.7755 % | 99.6827 % |
| Concentration per Run 1 | 0.0008 ppm | 102.0024 % | 102.2978 % | 99.3109 % | 102.9648 % | 101.0751 % | 99.6655 % |
| Concentration per Run 2 | 0.0007 ppm | 102.6240 % | 101.6497 % | 100.2607 % | 103.1935 % | 100.4117 % | 100.2948 % |
| Concentration per Run 3 | 0.0006 ppm | 102.9967 % | 101.9161 % | 97.8620 % | 103.1252 % | 100.8397 % | 99.0879 % |
| Concentration RSD | 12.8 % | 0.5 % | 0.3 % | 1.2 % | 0.1 % | 0.3 % | 0.6 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038730-2 WG2038730
Analysis started at: 3/11/2025 9:09:09 AM
Rack 1
Vial 10
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0501 ppm | 2.0528 ppm | 0.1196 ppm | 0.9951 ppm | 1.9722 ppm | 0.0523 ppm | 10.1499 ppm |
| Concentration per Run 1 | 0.0497 ppm | 2.0453 ppm | 0.1195 ppm | 0.9961 ppm | 1.9742 ppm | 0.0523 ppm | 10.1658 ppm |
| Concentration per Run 2 | 0.0509 ppm | 2.0518 ppm | 0.1183 ppm | 0.9933 ppm | 1.9686 ppm | 0.0524 ppm | 10.1332 ppm |
| Concentration per Run 3 | 0.0498 ppm | 2.0615 ppm | 0.1211 ppm | 0.9960 ppm | 1.9739 ppm | 0.0523 ppm | 10.1509 ppm |
| Concentration RSD | 1.4 % | 0.4 % | 1.2 % | 0.2 % | 0.2 % | 0.1 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0526 ppm | 0.5006 ppm | 0.1991 ppm | 0.2438 ppm | 1.0419 ppm | 10.5790 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0527 ppm | 0.5004 ppm | 0.1991 ppm | 0.2431 ppm | 1.0401 ppm | 10.6064 ppm | -0.0005 ppm |
| Concentration per Run 2 | 0.0524 ppm | 0.4998 ppm | 0.1993 ppm | 0.2437 ppm | 1.0458 ppm | 10.5821 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0526 ppm | 0.5015 ppm | 0.1988 ppm | 0.2445 ppm | 1.0397 ppm | 10.5485 ppm | -0.0003 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 0.1 % | 0.3 % | 0.3 % | 0.3 % | 33.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.9901 ppm | 0.5072 ppm | 0.9924 ppm | 10.6197 ppm | 0.5040 ppm | 0.5460 ppm | 0.4386 ppm |
| Concentration per Run 1 | 9.9746 ppm | 0.5069 ppm | 0.9878 ppm | 10.6198 ppm | 0.5044 ppm | 0.5462 ppm | 0.4340 ppm |
| Concentration per Run 2 | 9.9868 ppm | 0.5066 ppm | 0.9925 ppm | 10.6282 ppm | 0.5076 ppm | 0.5476 ppm | 0.4366 ppm |
| Concentration per Run 3 | 10.0089 ppm | 0.5081 ppm | 0.9969 ppm | 10.6111 ppm | 0.5000 ppm | 0.5442 ppm | 0.4452 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 0.5 % | 0.1 % | 0.8 % | 0.3 % | 1.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1164 ppm | 1.0441 ppm | 0.9815 ppm | 1.0174 ppm | 1.0026 ppm | 0.1150 ppm | 0.5050 ppm |
| Concentration per Run 1 | 0.1163 ppm | 1.0428 ppm | 0.9788 ppm | 1.0188 ppm | 1.0037 ppm | 0.1131 ppm | 0.5038 ppm |
| Concentration per Run 2 | 0.1181 ppm | 1.0438 ppm | 0.9802 ppm | 1.0163 ppm | 1.0031 ppm | 0.1145 ppm | 0.5048 ppm |
| Concentration per Run 3 | 0.1148 ppm | 1.0458 ppm | 0.9856 ppm | 1.0172 ppm | 1.0011 ppm | 0.1172 ppm | 0.5065 ppm |
| Concentration RSD | 1.4 % | 0.1 % | 0.4 % | 0.1 % | 0.1 % | 1.8 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5100 ppm | 103.1249 % | 101.6034 % | 99.4822 % | 101.1895 % | 98.9944 % | 96.6044 % |
| Concentration per Run 1 | 0.5099 ppm | 103.0563 % | 101.5996 % | 98.7103 % | 101.0969 % | 99.1414 % | 95.9652 % |
| Concentration per Run 2 | 0.5089 ppm | 103.4247 % | 101.3488 % | 99.4409 % | 101.4611 % | 98.8050 % | 96.7187 % |
| Concentration per Run 3 | 0.5111 ppm | 102.8938 % | 101.8620 % | 100.2955 % | 101.0105 % | 99.0370 % | 97.1292 % |
| Concentration RSD | 0.2 % | 0.3 % | 0.3 % | 0.8 % | 0.2 % | 0.2 % | 0.6 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511724-01 WG2038730
Analysis started at: 3/11/2025 9:12:37 AM
Rack 1
Vial 16
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0125 ppm | 0.0001 ppm | 0.0233 ppm | 0.0843 ppm | 0.0000 ppm | 130.9863 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.0171 ppm | -0.0011 ppm | 0.0233 ppm | 0.0842 ppm | 0.0000 ppm | 130.9665 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0132 ppm | 0.0009 ppm | 0.0225 ppm | 0.0841 ppm | 0.0000 ppm | 131.1481 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0072 ppm | 0.0004 ppm | 0.0242 ppm | 0.0845 ppm | 0.0000 ppm | 130.8444 ppm |
| Concentration RSD | 50.7 % | 39.8 % | 1,698.9 % | 3.8 % | 0.2 % | 428.5 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 0.0004 ppm | 0.0003 ppm | 0.0127 ppm | 0.0037 ppm | 1.6598 ppm | 0.0050 ppm |
| Concentration per Run 1 | -0.0006 ppm | 0.0008 ppm | 0.0002 ppm | 0.0128 ppm | 0.0045 ppm | 1.6800 ppm | 0.0059 ppm |
| Concentration per Run 2 | -0.0005 ppm | 0.0004 ppm | 0.0004 ppm | 0.0127 ppm | 0.0039 ppm | 1.6589 ppm | 0.0046 ppm |
| Concentration per Run 3 | -0.0007 ppm | -0.0001 ppm | 0.0003 ppm | 0.0127 ppm | 0.0027 ppm | 1.6404 ppm | 0.0045 ppm |
| Concentration RSD | 18.6 % | 115.8 % | 32.9 % | 0.7 % | 25.1 % | 1.2 % | 15.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 20.4845 ppm | 0.0520 ppm | 0.0049 ppm | 103.6373 ppm | 0.0007 ppm | -0.0001 ppm | 0.0019 ppm |
| Concentration per Run 1 | 20.5303 ppm | 0.0525 ppm | 0.0050 ppm | 103.2854 ppm | 0.0016 ppm | -0.0013 ppm | 0.0042 ppm |
| Concentration per Run 2 | 20.5763 ppm | 0.0515 ppm | 0.0046 ppm | 103.6469 ppm | 0.0006 ppm | -0.0003 ppm | 0.0020 ppm |
| Concentration per Run 3 | 20.3470 ppm | 0.0521 ppm | 0.0051 ppm | 103.9796 ppm | 0.0000 ppm | 0.0013 ppm | -0.0004 ppm |
| Concentration RSD | 0.6 % | 1.0 % | 4.9 % | 0.3 % | 110.8 % | 1,504.9 % | 118.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 5.1474 ppm | 0.0049 ppm | 0.6451 ppm | 0.0009 ppm | 0.0016 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0013 ppm | 5.1693 ppm | 0.0054 ppm | 0.6449 ppm | 0.0005 ppm | 0.0013 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0012 ppm | 5.1552 ppm | 0.0055 ppm | 0.6443 ppm | 0.0007 ppm | 0.0020 ppm | 0.0006 ppm |
| Concentration per Run 3 | -0.0006 ppm | 5.1177 ppm | 0.0038 ppm | 0.6460 ppm | 0.0015 ppm | 0.0015 ppm | 0.0008 ppm |
| Concentration RSD | 164.5 % | 0.5 % | 19.9 % | 0.1 % | 56.0 % | 22.7 % | 23.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0105 ppm | 102.9511 % | 99.6802 % | 98.5077 % | 101.5363 % | 97.3948 % | 95.9717 % |
| Concentration per Run 1 | 0.0103 ppm | 102.4058 % | 100.2495 % | 99.5027 % | 101.2559 % | 97.7559 % | 96.3855 % |
| Concentration per Run 2 | 0.0110 ppm | 102.4867 % | 99.6556 % | 98.3323 % | 101.0106 % | 97.5164 % | 95.7970 % |
| Concentration per Run 3 | 0.0102 ppm | 103.9609 % | 99.1355 % | 97.6880 % | 102.3423 % | 96.9122 % | 95.7326 % |
| Concentration RSD | 4.2 % | 0.9 % | 0.6 % | 0.9 % | 0.7 % | 0.4 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511828-01 WG2038730
Analysis started at: 3/11/2025 9:16:03 AM
Rack 1
Vial 17
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3572 ppm | 3.8996 ppm | 0.0102 ppm | 0.4852 ppm | 0.0017 ppm | -0.0001 ppm | 1.9083 ppm |
| Concentration per Run 1 | 0.3574 ppm | 3.8887 ppm | 0.0101 ppm | 0.4844 ppm | 0.0017 ppm | 0.0000 ppm | 1.9088 ppm |
| Concentration per Run 2 | 0.3562 ppm | 3.9200 ppm | 0.0103 ppm | 0.4849 ppm | 0.0016 ppm | 0.0000 ppm | 1.9112 ppm |
| Concentration per Run 3 | 0.3581 ppm | 3.8899 ppm | 0.0103 ppm | 0.4862 ppm | 0.0017 ppm | -0.0001 ppm | 1.9049 ppm |
| Concentration RSD | 0.3 % | 0.5 % | 1.3 % | 0.2 % | 5.5 % | 46.9 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0048 ppm | 0.7335 ppm | 0.4149 ppm | 2.1732 ppm | 23.7668 ppm | 0.0261 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0047 ppm | 0.7313 ppm | 0.4048 ppm | 2.1693 ppm | 23.6344 ppm | 0.0266 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0048 ppm | 0.7336 ppm | 0.4194 ppm | 2.1756 ppm | 23.8206 ppm | 0.0265 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0050 ppm | 0.7357 ppm | 0.4204 ppm | 2.1746 ppm | 23.8453 ppm | 0.0253 ppm |
| Concentration RSD | 97.6 % | 3.1 % | 0.3 % | 2.1 % | 0.2 % | 0.5 % | 2.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.5698 ppm | 0.1419 ppm | 0.6603 ppm | 2,770.1880 [SIC 500] | 4.7566 ppm | -0.0011 ppm | 0.1326 ppm |
| Concentration per Run 1 | 3.5681 ppm | 0.1414 ppm | 0.6535 ppm | 2,801.7998 ppm | 4.7481 ppm | -0.0010 ppm | 0.1311 ppm |
| Concentration per Run 2 | 3.5784 ppm | 0.1421 ppm | 0.6619 ppm | 2,746.0800 ppm | 4.7578 ppm | 0.0009 ppm | 0.1347 ppm |
| Concentration per Run 3 | 3.5629 ppm | 0.1423 ppm | 0.6655 ppm | 2,762.6843 ppm | 4.7638 ppm | -0.0031 ppm | 0.1320 ppm |
| Concentration RSD | 0.2 % | 0.3 % | 0.9 % | 1.0 % | 0.2 % | 184.4 % | 1.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 10.2759 ppm | 0.0740 ppm | 0.0062 ppm | 1.6422 ppm | 0.0078 ppm | 0.3824 ppm |
| Concentration per Run 1 | -0.0009 ppm | 10.1531 ppm | 0.0710 ppm | 0.0063 ppm | 1.6432 ppm | 0.0082 ppm | 0.3808 ppm |
| Concentration per Run 2 | 0.0007 ppm | 10.3260 ppm | 0.0773 ppm | 0.0062 ppm | 1.6404 ppm | 0.0080 ppm | 0.3840 ppm |
| Concentration per Run 3 | 0.0025 ppm | 10.3487 ppm | 0.0738 ppm | 0.0061 ppm | 1.6431 ppm | 0.0072 ppm | 0.3825 ppm |
| Concentration RSD | 230.8 % | 1.0 % | 4.3 % | 2.0 % | 0.1 % | 6.8 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0429 ppm | 95.1620 % | 91.6553 % | 80.8945 % | 93.8473 % | 90.4481 % | 85.3000 % |
| Concentration per Run 1 | 0.0427 ppm | 95.4130 % | 91.6020 % | 81.0462 % | 93.8346 % | 90.2206 % | 85.5455 % |
| Concentration per Run 2 | 0.0432 ppm | 95.1389 % | 91.5314 % | 81.0560 % | 93.8300 % | 90.6701 % | 85.3732 % |
| Concentration per Run 3 | 0.0427 ppm | 94.9341 % | 91.8326 % | 80.5814 % | 93.8772 % | 90.4535 % | 84.9813 % |
| Concentration RSD | 0.6 % | 0.3 % | 0.2 % | 0.3 % | 0.0 % | 0.2 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511831-01 WG2038730
Analysis started at: 3/11/2025 9:19:29 AM
Rack 1
Vial 18
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.9110 ppm | 0.0134 ppm | 0.0890 ppm | 0.9006 ppm | 0.0001 ppm | 283.6297 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.9053 ppm | 0.0127 ppm | 0.0890 ppm | 0.9011 ppm | 0.0001 ppm | 282.9472 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.9113 ppm | 0.0142 ppm | 0.0901 ppm | 0.8993 ppm | 0.0001 ppm | 283.9219 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.9165 ppm | 0.0132 ppm | 0.0880 ppm | 0.9013 ppm | 0.0000 ppm | 284.0199 ppm |
| Concentration RSD | 76.5 % | 0.6 % | 6.0 % | 1.2 % | 0.1 % | 19.4 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0011 ppm | 0.0091 ppm | 0.0005 ppm | 0.0092 ppm | 20.2807 ppm | 74.7105 ppm | 0.1244 ppm |
| Concentration per Run 1 | -0.0013 ppm | 0.0090 ppm | 0.0005 ppm | 0.0090 ppm | 20.2181 ppm | 74.6361 ppm | 0.1253 ppm |
| Concentration per Run 2 | -0.0010 ppm | 0.0089 ppm | 0.0009 ppm | 0.0089 ppm | 20.3204 ppm | 74.5577 ppm | 0.1230 ppm |
| Concentration per Run 3 | -0.0011 ppm | 0.0094 ppm | 0.0001 ppm | 0.0097 ppm | 20.3035 ppm | 74.9377 ppm | 0.1250 ppm |
| Concentration RSD | 10.5 % | 3.2 % | 71.7 % | 4.6 % | 0.3 % | 0.3 % | 1.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 60.9238 ppm | 1.6745 ppm | 0.0036 ppm | 32.9324 ppm | 0.0624 ppm | 0.0004 ppm | 0.0017 ppm |
| Concentration per Run 1 | 61.0053 ppm | 1.6800 ppm | 0.0042 ppm | 32.9154 ppm | 0.0629 ppm | 0.0013 ppm | 0.0015 ppm |
| Concentration per Run 2 | 60.8505 ppm | 1.6763 ppm | 0.0034 ppm | 32.8662 ppm | 0.0620 ppm | 0.0002 ppm | 0.0021 ppm |
| Concentration per Run 3 | 60.9154 ppm | 1.6672 ppm | 0.0032 ppm | 33.0155 ppm | 0.0622 ppm | -0.0004 ppm | 0.0014 ppm |
| Concentration RSD | 0.1 % | 0.4 % | 15.1 % | 0.2 % | 0.8 % | 232.8 % | 22.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 16.1520 ppm | 0.0111 ppm | 2.2845 ppm | 0.0039 ppm | 0.0031 ppm | 0.0011 ppm |
| Concentration per Run 1 | -0.0013 ppm | 16.1636 ppm | 0.0107 ppm | 2.2833 ppm | 0.0042 ppm | 0.0042 ppm | 0.0013 ppm |
| Concentration per Run 2 | 0.0014 ppm | 16.1944 ppm | 0.0114 ppm | 2.2815 ppm | 0.0040 ppm | 0.0026 ppm | 0.0011 ppm |
| Concentration per Run 3 | -0.0014 ppm | 16.0980 ppm | 0.0113 ppm | 2.2886 ppm | 0.0035 ppm | 0.0025 ppm | 0.0011 ppm |
| Concentration RSD | 354.1 % | 0.3 % | 3.5 % | 0.2 % | 9.0 % | 31.5 % | 14.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0547 ppm | 101.8274 % | 98.6702 % | 94.3806 % | 100.1009 % | 96.6463 % | 93.6990 % |
| Concentration per Run 1 | 0.0551 ppm | 100.9368 % | 98.7983 % | 94.7493 % | 99.3108 % | 96.9464 % | 93.8825 % |
| Concentration per Run 2 | 0.0546 ppm | 102.3196 % | 98.4532 % | 94.3908 % | 100.5386 % | 96.2223 % | 93.9618 % |
| Concentration per Run 3 | 0.0545 ppm | 102.2259 % | 98.7590 % | 94.0018 % | 100.4532 % | 96.7702 % | 93.2529 % |
| Concentration RSD | 0.6 % | 0.8 % | 0.2 % | 0.4 % | 0.7 % | 0.4 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512325-02 WG2038730
Analysis started at: 3/11/2025 9:22:56 AM
Rack 1
Vial 11
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0066 ppm | 0.2697 ppm | 0.0006 ppm | 0.0936 ppm | 0.0143 ppm | 0.0001 ppm | 18.3235 ppm |
| Concentration per Run 1 | 0.0070 ppm | 0.2659 ppm | 0.0006 ppm | 0.0952 ppm | 0.0141 ppm | 0.0001 ppm | 18.2620 ppm |
| Concentration per Run 2 | 0.0064 ppm | 0.2708 ppm | 0.0020 ppm | 0.0936 ppm | 0.0143 ppm | 0.0000 ppm | 18.4278 ppm |
| Concentration per Run 3 | 0.0064 ppm | 0.2724 ppm | -0.0008 ppm | 0.0921 ppm | 0.0144 ppm | 0.0001 ppm | 18.2807 ppm |
| Concentration RSD | 5.2 % | 1.2 % | 223.2 % | 1.7 % | 1.1 % | 50.1 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0007 ppm | 0.0092 ppm | 0.0052 ppm | 0.2692 ppm | 1.5135 ppm | 0.0022 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0005 ppm | 0.0090 ppm | 0.0045 ppm | 0.2672 ppm | 1.5258 ppm | 0.0019 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0013 ppm | 0.0082 ppm | 0.0056 ppm | 0.2701 ppm | 1.5076 ppm | 0.0021 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0004 ppm | 0.0103 ppm | 0.0054 ppm | 0.2704 ppm | 1.5073 ppm | 0.0025 ppm |
| Concentration RSD | 66.0 % | 71.6 % | 11.8 % | 11.3 % | 0.6 % | 0.7 % | 15.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.7185 ppm | 0.0056 ppm | 0.0023 ppm | 13.8900 ppm | 0.0087 ppm | -0.0011 ppm | -0.0016 ppm |
| Concentration per Run 1 | 8.7010 ppm | 0.0057 ppm | 0.0026 ppm | 13.8832 ppm | 0.0084 ppm | -0.0009 ppm | -0.0046 ppm |
| Concentration per Run 2 | 8.7289 ppm | 0.0056 ppm | 0.0020 ppm | 13.8627 ppm | 0.0095 ppm | -0.0005 ppm | 0.0013 ppm |
| Concentration per Run 3 | 8.7257 ppm | 0.0057 ppm | 0.0023 ppm | 13.9239 ppm | 0.0081 ppm | -0.0019 ppm | -0.0016 ppm |
| Concentration RSD | 0.2 % | 1.0 % | 13.4 % | 0.2 % | 8.6 % | 66.7 % | 180.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | 10.5197 ppm | -0.0003 ppm | 0.0921 ppm | 0.0056 ppm | 0.0021 ppm | 0.0015 ppm |
| Concentration per Run 1 | -0.0003 ppm | 10.4725 ppm | -0.0006 ppm | 0.0921 ppm | 0.0060 ppm | 0.0017 ppm | 0.0016 ppm |
| Concentration per Run 2 | -0.0018 ppm | 10.5630 ppm | 0.0002 ppm | 0.0923 ppm | 0.0059 ppm | 0.0030 ppm | 0.0014 ppm |
| Concentration per Run 3 | -0.0004 ppm | 10.5237 ppm | -0.0006 ppm | 0.0920 ppm | 0.0047 ppm | 0.0017 ppm | 0.0017 ppm |
| Concentration RSD | 99.9 % | 0.4 % | 144.3 % | 0.1 % | 13.2 % | 35.7 % | 7.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0077 ppm | 103.4374 % | 101.8686 % | 99.1244 % | 102.4090 % | 99.8125 % | 98.1317 % |
| Concentration per Run 1 | 0.0075 ppm | 103.3092 % | 102.4896 % | 99.8566 % | 102.1040 % | 100.3645 % | 98.5318 % |
| Concentration per Run 2 | 0.0079 ppm | 103.7256 % | 101.3455 % | 99.1320 % | 102.8914 % | 99.2343 % | 98.3819 % |
| Concentration per Run 3 | 0.0077 ppm | 103.2774 % | 101.7709 % | 98.3845 % | 102.2315 % | 99.8386 % | 97.4814 % |
| Concentration RSD | 2.5 % | 0.2 % | 0.6 % | 0.7 % | 0.4 % | 0.6 % | 0.6 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038730-3 WG2038730
Analysis started at: 3/11/2025 9:26:24 AM
Rack 1
Vial 12
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0573 ppm | 2.4746 ppm | 0.1225 ppm | 1.1125 ppm | 2.0113 ppm | 0.0533 ppm | 27.8375 ppm |
| Concentration per Run 1 | 0.0574 ppm | 2.4620 ppm | 0.1203 ppm | 1.1054 ppm | 2.0067 ppm | 0.0533 ppm | 27.8161 ppm |
| Concentration per Run 2 | 0.0572 ppm | 2.4755 ppm | 0.1231 ppm | 1.1130 ppm | 2.0142 ppm | 0.0532 ppm | 27.8607 ppm |
| Concentration per Run 3 | 0.0572 ppm | 2.4863 ppm | 0.1242 ppm | 1.1190 ppm | 2.0129 ppm | 0.0533 ppm | 27.8357 ppm |
| Concentration RSD | 0.2 % | 0.5 % | 1.6 % | 0.6 % | 0.2 % | 0.2 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0527 ppm | 0.5032 ppm | 0.2089 ppm | 0.2561 ppm | 1.2678 ppm | 12.2936 ppm | 0.0024 ppm |
| Concentration per Run 1 | 0.0528 ppm | 0.5017 ppm | 0.2080 ppm | 0.2557 ppm | 1.2721 ppm | 12.2949 ppm | 0.0024 ppm |
| Concentration per Run 2 | 0.0528 ppm | 0.5023 ppm | 0.2087 ppm | 0.2558 ppm | 1.2670 ppm | 12.2861 ppm | 0.0019 ppm |
| Concentration per Run 3 | 0.0527 ppm | 0.5057 ppm | 0.2099 ppm | 0.2569 ppm | 1.2644 ppm | 12.2998 ppm | 0.0028 ppm |
| Concentration RSD | 0.1 % | 0.4 % | 0.5 % | 0.3 % | 0.3 % | 0.1 % | 17.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 18.4821 ppm | 0.5183 ppm | 0.9874 ppm | 24.3711 ppm | 0.5075 ppm | 0.5505 ppm | 0.4736 ppm |
| Concentration per Run 1 | 18.4485 ppm | 0.5202 ppm | 0.9797 ppm | 24.3681 ppm | 0.5064 ppm | 0.5505 ppm | 0.4700 ppm |
| Concentration per Run 2 | 18.4720 ppm | 0.5157 ppm | 0.9835 ppm | 24.3626 ppm | 0.5076 ppm | 0.5532 ppm | 0.4690 ppm |
| Concentration per Run 3 | 18.5258 ppm | 0.5190 ppm | 0.9989 ppm | 24.3825 ppm | 0.5086 ppm | 0.5478 ppm | 0.4817 ppm |
| Concentration RSD | 0.2 % | 0.4 % | 1.0 % | 0.0 % | 0.2 % | 0.5 % | 1.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1220 ppm | 11.5176 ppm | 0.9901 ppm | 1.1225 ppm | 1.0130 ppm | 0.1174 ppm | 0.5116 ppm |
| Concentration per Run 1 | 0.1201 ppm | 11.4780 ppm | 0.9872 ppm | 1.1196 ppm | 1.0095 ppm | 0.1139 ppm | 0.5108 ppm |
| Concentration per Run 2 | 0.1224 ppm | 11.4738 ppm | 0.9862 ppm | 1.1253 ppm | 1.0137 ppm | 0.1197 ppm | 0.5102 ppm |
| Concentration per Run 3 | 0.1235 ppm | 11.6011 ppm | 0.9970 ppm | 1.1227 ppm | 1.0158 ppm | 0.1187 ppm | 0.5138 ppm |
| Concentration RSD | 1.4 % | 0.6 % | 0.6 % | 0.3 % | 0.3 % | 2.7 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5167 ppm | 103.0744 % | 100.6849 % | 98.7783 % | 101.3066 % | 98.4343 % | 96.5459 % |
| Concentration per Run 1 | 0.5156 ppm | 103.6521 % | 100.7974 % | 99.1906 % | 101.5070 % | 98.4083 % | 96.5508 % |
| Concentration per Run 2 | 0.5165 ppm | 103.0306 % | 100.6189 % | 98.1303 % | 101.5368 % | 98.4105 % | 96.2804 % |
| Concentration per Run 3 | 0.5181 ppm | 102.5404 % | 100.6384 % | 99.0141 % | 100.8758 % | 98.4841 % | 96.8064 % |
| Concentration RSD | 0.2 % | 0.5 % | 0.1 % | 0.6 % | 0.4 % | 0.0 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038730-4 WG2038730
Analysis started at: 3/11/2025 9:29:52 AM
Rack 1
Vial 13
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0606 ppm | 2.5763 ppm | 0.1240 ppm | 1.1076 ppm | 1.9990 ppm | 0.0529 ppm | 28.0021 ppm |
| Concentration per Run 1 | 0.0607 ppm | 2.5693 ppm | 0.1226 ppm | 1.1159 ppm | 1.9867 ppm | 0.0526 ppm | 27.8981 ppm |
| Concentration per Run 2 | 0.0609 ppm | 2.5744 ppm | 0.1244 ppm | 1.1125 ppm | 2.0061 ppm | 0.0531 ppm | 27.9920 ppm |
| Concentration per Run 3 | 0.0603 ppm | 2.5852 ppm | 0.1249 ppm | 1.0943 ppm | 2.0041 ppm | 0.0529 ppm | 28.1163 ppm |
| Concentration RSD | 0.6 % | 0.3 % | 1.0 % | 1.0 % | 0.5 % | 0.5 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0526 ppm | 0.5010 ppm | 0.2095 ppm | 0.2587 ppm | 1.3157 ppm | 12.2928 ppm | 0.0026 ppm |
| Concentration per Run 1 | 0.0529 ppm | 0.5011 ppm | 0.2110 ppm | 0.2577 ppm | 1.3064 ppm | 12.2010 ppm | 0.0030 ppm |
| Concentration per Run 2 | 0.0524 ppm | 0.5019 ppm | 0.2091 ppm | 0.2575 ppm | 1.3184 ppm | 12.3467 ppm | 0.0019 ppm |
| Concentration per Run 3 | 0.0525 ppm | 0.5002 ppm | 0.2083 ppm | 0.2609 ppm | 1.3224 ppm | 12.3307 ppm | 0.0028 ppm |
| Concentration RSD | 0.5 % | 0.2 % | 0.7 % | 0.7 % | 0.6 % | 0.6 % | 24.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 18.6018 ppm | 0.5179 ppm | 0.9943 ppm | 24.3975 ppm | 0.5059 ppm | 0.5494 ppm | 0.4874 ppm |
| Concentration per Run 1 | 18.6475 ppm | 0.5162 ppm | 0.9911 ppm | 24.4095 ppm | 0.5111 ppm | 0.5491 ppm | 0.4866 ppm |
| Concentration per Run 2 | 18.6636 ppm | 0.5189 ppm | 0.9940 ppm | 24.4788 ppm | 0.5067 ppm | 0.5485 ppm | 0.4888 ppm |
| Concentration per Run 3 | 18.4943 ppm | 0.5187 ppm | 0.9980 ppm | 24.3041 ppm | 0.4999 ppm | 0.5506 ppm | 0.4869 ppm |
| Concentration RSD | 0.5 % | 0.3 % | 0.3 % | 0.4 % | 1.1 % | 0.2 % | 0.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1220 ppm | 11.8353 ppm | 0.9922 ppm | 1.1155 ppm | 1.0124 ppm | 0.1193 ppm | 0.5099 ppm |
| Concentration per Run 1 | 0.1210 ppm | 11.8383 ppm | 0.9959 ppm | 1.1088 ppm | 1.0142 ppm | 0.1176 ppm | 0.5099 ppm |
| Concentration per Run 2 | 0.1234 ppm | 11.8386 ppm | 0.9967 ppm | 1.1155 ppm | 1.0158 ppm | 0.1185 ppm | 0.5098 ppm |
| Concentration per Run 3 | 0.1215 ppm | 11.8290 ppm | 0.9839 ppm | 1.1220 ppm | 1.0072 ppm | 0.1217 ppm | 0.5101 ppm |
| Concentration RSD | 1.0 % | 0.0 % | 0.7 % | 0.6 % | 0.5 % | 1.8 % | 0.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5148 ppm | 102.8764 % | 100.5831 % | 97.8905 % | 101.3775 % | 98.2948 % | 95.9613 % |
| Concentration per Run 1 | 0.5183 ppm | 102.7989 % | 100.9398 % | 98.9020 % | 101.1796 % | 98.9367 % | 96.9548 % |
| Concentration per Run 2 | 0.5181 ppm | 102.2255 % | 101.0280 % | 96.9402 % | 100.7111 % | 98.8212 % | 94.9570 % |
| Concentration per Run 3 | 0.5078 ppm | 103.6048 % | 99.7816 % | 97.8294 % | 102.2420 % | 97.1266 % | 95.9719 % |
| Concentration RSD | 1.2 % | 0.7 % | 0.7 % | 1.0 % | 0.8 % | 1.0 % | 1.0 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038730-5 WG2038730
Analysis started at: 3/11/2025 9:33:17 AM
Rack 1
Vial 14
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0322 ppm | 2.2622 ppm | 0.1290 ppm | 1.0887 ppm | 1.9450 ppm | 0.0518 ppm | 27.6681 ppm |
| Concentration per Run 1 | 0.0355 ppm | 2.2734 ppm | 0.1328 ppm | 1.0854 ppm | 1.9360 ppm | 0.0518 ppm | 27.6879 ppm |
| Concentration per Run 2 | 0.0317 ppm | 2.2541 ppm | 0.1262 ppm | 1.0921 ppm | 1.9464 ppm | 0.0517 ppm | 27.5911 ppm |
| Concentration per Run 3 | 0.0294 ppm | 2.2592 ppm | 0.1281 ppm | 1.0886 ppm | 1.9525 ppm | 0.0519 ppm | 27.7253 ppm |
| Concentration RSD | 9.6 % | 0.4 % | 2.6 % | 0.3 % | 0.4 % | 0.2 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0518 ppm | 0.4901 ppm | 0.2037 ppm | 0.2493 ppm | 1.2851 ppm | 12.1756 ppm | 0.0023 ppm |
| Concentration per Run 1 | 0.0517 ppm | 0.4888 ppm | 0.2022 ppm | 0.2507 ppm | 1.2881 ppm | 12.1141 ppm | 0.0030 ppm |
| Concentration per Run 2 | 0.0518 ppm | 0.4887 ppm | 0.2055 ppm | 0.2484 ppm | 1.2785 ppm | 12.1889 ppm | 0.0024 ppm |
| Concentration per Run 3 | 0.0520 ppm | 0.4927 ppm | 0.2033 ppm | 0.2489 ppm | 1.2888 ppm | 12.2239 ppm | 0.0015 ppm |
| Concentration RSD | 0.3 % | 0.5 % | 0.8 % | 0.5 % | 0.4 % | 0.5 % | 32.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 18.3142 ppm | 0.5065 ppm | 0.9863 ppm | 24.0499 ppm | 0.4955 ppm | 0.5524 ppm | 0.3815 ppm |
| Concentration per Run 1 | 18.2251 ppm | 0.5077 ppm | 0.9763 ppm | 23.8465 ppm | 0.4926 ppm | 0.5482 ppm | 0.3725 ppm |
| Concentration per Run 2 | 18.3553 ppm | 0.5045 ppm | 0.9871 ppm | 24.0925 ppm | 0.4973 ppm | 0.5566 ppm | 0.3827 ppm |
| Concentration per Run 3 | 18.3623 ppm | 0.5073 ppm | 0.9954 ppm | 24.2107 ppm | 0.4967 ppm | 0.5523 ppm | 0.3893 ppm |
| Concentration RSD | 0.4 % | 0.3 % | 1.0 % | 0.8 % | 0.5 % | 0.8 % | 2.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1273 ppm | 11.0335 ppm | 0.9869 ppm | 1.1013 ppm | 0.9983 ppm | 0.1247 ppm | 0.4984 ppm |
| Concentration per Run 1 | 0.1252 ppm | 10.9861 ppm | 0.9788 ppm | 1.0960 ppm | 0.9968 ppm | 0.1250 ppm | 0.4982 ppm |
| Concentration per Run 2 | 0.1262 ppm | 11.0268 ppm | 0.9921 ppm | 1.1029 ppm | 1.0018 ppm | 0.1270 ppm | 0.4983 ppm |
| Concentration per Run 3 | 0.1303 ppm | 11.0875 ppm | 0.9897 ppm | 1.1049 ppm | 0.9962 ppm | 0.1222 ppm | 0.4988 ppm |
| Concentration RSD | 2.1 % | 0.5 % | 0.7 % | 0.4 % | 0.3 % | 1.9 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5048 ppm | 103.4822 % | 101.3044 % | 99.1700 % | 101.7710 % | 98.8527 % | 96.4979 % |
| Concentration per Run 1 | 0.5006 ppm | 103.8418 % | 101.0106 % | 99.3745 % | 102.2864 % | 98.4361 % | 96.6480 % |
| Concentration per Run 2 | 0.5069 ppm | 103.0065 % | 101.9382 % | 98.7834 % | 101.0485 % | 99.2410 % | 96.2989 % |
| Concentration per Run 3 | 0.5069 ppm | 103.5983 % | 100.9643 % | 99.3520 % | 101.9780 % | 98.8809 % | 96.5468 % |
| Concentration RSD | 0.7 % | 0.4 % | 0.5 % | 0.3 % | 0.6 % | 0.4 % | 0.2 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038730-6D5 WG2038730
Analysis started at: 3/11/2025 9:36:43 AM
Rack 1
Vial 15
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0020 ppm | 0.0632 ppm | 0.0015 ppm | 0.0195 ppm | 0.0028 ppm | 0.0001 ppm | 3.6279 ppm |
| Concentration per Run 1 | 0.0021 ppm | 0.0631 ppm | 0.0015 ppm | 0.0191 ppm | 0.0028 ppm | 0.0000 ppm | 3.6162 ppm |
| Concentration per Run 2 | 0.0020 ppm | 0.0688 ppm | 0.0016 ppm | 0.0195 ppm | 0.0029 ppm | 0.0001 ppm | 3.6256 ppm |
| Concentration per Run 3 | 0.0018 ppm | 0.0578 ppm | 0.0013 ppm | 0.0199 ppm | 0.0028 ppm | 0.0001 ppm | 3.6420 ppm |
| Concentration RSD | 7.9 % | 8.7 % | 11.6 % | 2.2 % | 1.0 % | 34.9 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0004 ppm | 0.0019 ppm | 0.0011 ppm | 0.0568 ppm | 0.3402 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0003 ppm | 0.0022 ppm | 0.0011 ppm | 0.0557 ppm | 0.3615 ppm | 0.0009 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0005 ppm | 0.0015 ppm | 0.0015 ppm | 0.0575 ppm | 0.3260 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0005 ppm | 0.0019 ppm | 0.0007 ppm | 0.0571 ppm | 0.3331 ppm | 0.0006 ppm |
| Concentration RSD | 718.4 % | 35.4 % | 17.1 % | 39.8 % | 1.6 % | 5.5 % | 35.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.7115 ppm | 0.0011 ppm | 0.0063 ppm | 2.8392 ppm | 0.0011 ppm | -0.0024 ppm | 0.0099 ppm |
| Concentration per Run 1 | 1.7199 ppm | 0.0010 ppm | 0.0075 ppm | 2.8101 ppm | 0.0004 ppm | -0.0021 ppm | 0.0090 ppm |
| Concentration per Run 2 | 1.7023 ppm | 0.0013 ppm | 0.0065 ppm | 2.8413 ppm | 0.0018 ppm | -0.0034 ppm | 0.0123 ppm |
| Concentration per Run 3 | 1.7123 ppm | 0.0011 ppm | 0.0050 ppm | 2.8664 ppm | 0.0012 ppm | -0.0016 ppm | 0.0084 ppm |
| Concentration RSD | 0.5 % | 12.2 % | 20.2 % | 1.0 % | 61.3 % | 38.9 % | 21.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 2.0288 ppm | 0.0174 ppm | 0.0182 ppm | 0.0012 ppm | 0.0007 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0010 ppm | 2.0280 ppm | 0.0192 ppm | 0.0181 ppm | 0.0013 ppm | 0.0002 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0007 ppm | 2.0214 ppm | 0.0157 ppm | 0.0181 ppm | 0.0010 ppm | 0.0005 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0021 ppm | 2.0370 ppm | 0.0173 ppm | 0.0183 ppm | 0.0013 ppm | 0.0015 ppm | -0.0003 ppm |
| Concentration RSD | 263.0 % | 0.4 % | 10.0 % | 0.5 % | 12.7 % | 94.1 % | 4,062.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 103.9435 % | 101.6520 % | 99.3128 % | 102.9296 % | 99.6932 % | 98.2349 % |
| Concentration per Run 1 | 0.0016 ppm | 103.7297 % | 102.9049 % | 98.9267 % | 102.5492 % | 100.7770 % | 98.3643 % |
| Concentration per Run 2 | 0.0014 ppm | 104.2266 % | 100.9870 % | 100.2030 % | 103.2566 % | 98.7435 % | 98.6057 % |
| Concentration per Run 3 | 0.0017 ppm | 103.8742 % | 101.0639 % | 98.8088 % | 102.9831 % | 99.5590 % | 97.7348 % |
| Concentration RSD | 9.9 % | 0.2 % | 1.1 % | 0.8 % | 0.3 % | 1.0 % | 0.5 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCV
Analysis started at: 3/11/2025 9:40:09 AM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4820 ppm | 0.4918 ppm | 0.5132 ppm | 0.4887 ppm | 0.4806 ppm | 0.5160 ppm | 0.4932 ppm |
| Concentration per Run 1 | 0.4805 ppm | 0.5031 ppm | 0.5122 ppm | 0.4904 ppm | 0.4786 ppm | 0.5137 ppm | 0.4950 ppm |
| Concentration per Run 2 | 0.4839 ppm | 0.4821 ppm | 0.5154 ppm | 0.4887 ppm | 0.4848 ppm | 0.5195 ppm | 0.4945 ppm |
| Concentration per Run 3 | 0.4815 ppm | 0.4904 ppm | 0.5120 ppm | 0.4869 ppm | 0.4786 ppm | 0.5148 ppm | 0.4900 ppm |
| Recovery Percentage 1 | 96.396 % | 98.370 % | 102.645 % | 97.734 % | 96.126 % | 103.199 % | 98.637 % |
| Concentration RSD | 0.4 % | 2.1 % | 0.4 % | 0.4 % | 0.7 % | 0.6 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4945 ppm | 0.5037 ppm | 0.4903 ppm | 0.4706 ppm | 0.5144 ppm | 5.2452 ppm | 0.5261 ppm |
| Concentration per Run 1 | 0.4918 ppm | 0.5015 ppm | 0.4915 ppm | 0.4672 ppm | 0.5136 ppm | 5.2187 ppm | 0.5227 ppm |
| Concentration per Run 2 | 0.4938 ppm | 0.5051 ppm | 0.4916 ppm | 0.4707 ppm | 0.5184 ppm | 5.2825 ppm | 0.5303 ppm |
| Concentration per Run 3 | 0.4980 ppm | 0.5045 ppm | 0.4880 ppm | 0.4740 ppm | 0.5113 ppm | 5.2343 ppm | 0.5254 ppm |
| Recovery Percentage 1 | 98.902 % | 100.737 % | 98.069 % | 94.123 % | 102.888 % | 104.903 % | 105.222 % |
| Concentration RSD | 0.6 % | 0.4 % | 0.4 % | 0.7 % | 0.7 % | 0.6 % | 0.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4820 ppm | 0.4923 ppm | 0.4937 ppm | 10.3481 ppm | 0.4971 ppm | 0.5086 ppm | 0.5056 ppm |
| Concentration per Run 1 | 0.4825 ppm | 0.4944 ppm | 0.4925 ppm | 10.2427 ppm | 0.4962 ppm | 0.5063 ppm | 0.4966 ppm |
| Concentration per Run 2 | 0.4811 ppm | 0.4910 ppm | 0.4927 ppm | 10.4984 ppm | 0.4984 ppm | 0.5094 ppm | 0.5092 ppm |
| Concentration per Run 3 | 0.4823 ppm | 0.4916 ppm | 0.4959 ppm | 10.3034 ppm | 0.4966 ppm | 0.5102 ppm | 0.5110 ppm |
| Recovery Percentage 1 | 96.396 % | 98.467 % | 98.744 % | 103.481 % | 99.416 % | 101.723 % | 101.120 % |
| Concentration RSD | 0.2 % | 0.4 % | 0.4 % | 1.3 % | 0.2 % | 0.4 % | 1.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5074 ppm | 5.5506 ppm | 0.5155 ppm | 0.5058 ppm | 0.4912 ppm | 0.5006 ppm | 0.4863 ppm |
| Concentration per Run 1 | 0.5041 ppm | 5.5181 ppm | 0.5176 ppm | 0.5045 ppm | 0.4907 ppm | 0.4954 ppm | 0.4854 ppm |
| Concentration per Run 2 | 0.5074 ppm | 5.5549 ppm | 0.5180 ppm | 0.5092 ppm | 0.4930 ppm | 0.4999 ppm | 0.4867 ppm |
| Concentration per Run 3 | 0.5108 ppm | 5.5788 ppm | 0.5109 ppm | 0.5037 ppm | 0.4899 ppm | 0.5064 ppm | 0.4867 ppm |
| Recovery Percentage 1 | 101.485 % | 105.725 % | 103.098 % | 101.156 % | 98.241 % | 100.113 % | 97.254 % |
| Concentration RSD | 0.7 % | 0.6 % | 0.8 % | 0.6 % | 0.3 % | 1.1 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4968 ppm | 103.7173 % | 100.8667 % | 99.3904 % | 102.1004 % | 98.7477 % | 97.1252 % |
| Concentration per Run 1 | 0.4983 ppm | 103.8489 % | 101.1704 % | 100.2613 % | 102.1536 % | 98.9652 % | 97.6034 % |
| Concentration per Run 2 | 0.4981 ppm | 103.6914 % | 99.6694 % | 99.0192 % | 101.6581 % | 97.8570 % | 96.7424 % |
| Concentration per Run 3 | 0.4941 ppm | 103.6117 % | 101.7602 % | 98.8908 % | 102.4894 % | 99.4209 % | 97.0299 % |
| Recovery Percentage 1 | 99.363 % | | | | | | |
| Concentration RSD | 0.5 % | 0.1 % | 1.1 % | 0.8 % | 0.4 % | 0.8 % | 0.5 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCB
Analysis started at: 3/11/2025 9:43:37 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.0084 ppm | 0.0015 ppm | 0.0013 ppm | -0.0001 ppm | 0.0001 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.0146 ppm | 0.0019 ppm | 0.0011 ppm | 0.0001 ppm | 0.0001 ppm | 0.0041 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0028 ppm | 0.0009 ppm | 0.0012 ppm | 0.0000 ppm | 0.0000 ppm | -0.0022 ppm |
| Concentration per Run 3 | 0.0012 ppm | 0.0079 ppm | 0.0017 ppm | 0.0017 ppm | -0.0002 ppm | 0.0000 ppm | -0.0016 ppm |
| Recovery Percentage 1 | 15.582 % | 8.443 % | 30.086 % | 4.497 % | -0.612 % | 1.423 % | 0.100 % |
| Concentration RSD | 18.8 % | 70.2 % | 35.5 % | 24.5 % | 209.1 % | 41.0 % | 3,495.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | -0.0006 ppm | 0.0002 ppm | 0.0024 ppm | 0.0408 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0003 ppm | -0.0005 ppm | 0.0001 ppm | 0.0049 ppm | 0.0470 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0005 ppm | -0.0008 ppm | 0.0005 ppm | 0.0013 ppm | 0.0210 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0001 ppm | -0.0004 ppm | 0.0000 ppm | 0.0011 ppm | 0.0543 ppm | 0.0009 ppm |
| Recovery Percentage 1 | 0.374 % | -0.573 % | -5.590 % | 1.963 % | 4.875 % | 1.631 % | 15.153 % |
| Concentration RSD | 90.4 % | 385.0 % | 34.0 % | 127.5 % | 88.0 % | 42.9 % | 24.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0038 ppm | -0.0003 ppm | 0.0026 ppm | 0.0731 ppm | -0.0005 ppm | -0.0018 ppm | 0.0022 ppm |
| Concentration per Run 1 | -0.0039 ppm | 0.0000 ppm | 0.0039 ppm | 0.0720 ppm | 0.0002 ppm | -0.0017 ppm | 0.0043 ppm |
| Concentration per Run 2 | -0.0039 ppm | -0.0005 ppm | 0.0023 ppm | 0.0694 ppm | -0.0005 ppm | -0.0028 ppm | 0.0016 ppm |
| Concentration per Run 3 | -0.0035 ppm | -0.0004 ppm | 0.0015 ppm | 0.0781 ppm | -0.0012 ppm | -0.0010 ppm | 0.0008 ppm |
| Recovery Percentage 1 | -3.777 % | -2.774 % | 5.134 % | 3.657 % | -1.838 % | -18.407 % | 4.489 % |
| Concentration RSD | 5.7 % | 82.3 % | 46.6 % | 6.2 % | 153.7 % | 49.1 % | 81.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | -0.0035 ppm | 0.0026 ppm | 0.0001 ppm | -0.0001 ppm | 0.0004 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0048 ppm | 0.0024 ppm | 0.0001 ppm | -0.0001 ppm | 0.0006 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0004 ppm | -0.0026 ppm | 0.0026 ppm | 0.0000 ppm | -0.0006 ppm | -0.0009 ppm | -0.0003 ppm |
| Concentration per Run 3 | -0.0039 ppm | -0.0032 ppm | 0.0028 ppm | 0.0001 ppm | 0.0004 ppm | 0.0014 ppm | -0.0002 ppm |
| Recovery Percentage 1 | -11.757 % | -0.705 % | 5.282 % | 0.677 % | -0.992 % | 1.892 % | -1.946 % |
| Concentration RSD | 197.8 % | 32.5 % | 7.4 % | 97.6 % | 477.9 % | 305.3 % | 68.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 101.0310 % | 99.4873 % | 97.2740 % | 101.8793 % | 99.5387 % | 97.8599 % |
| Concentration per Run 1 | -0.0008 ppm | 100.6223 % | 98.9611 % | 97.0889 % | 101.5882 % | 98.9950 % | 98.2031 % |
| Concentration per Run 2 | -0.0008 ppm | 101.6177 % | 100.0663 % | 97.4140 % | 102.8611 % | 100.0462 % | 97.7361 % |
| Concentration per Run 3 | -0.0002 ppm | 100.8531 % | 99.4346 % | 97.3191 % | 101.1885 % | 99.5749 % | 97.6404 % |
| Recovery Percentage 1 | -11.612 % | | | | | | |
| Concentration RSD | 60.6 % | 0.5 % | 0.6 % | 0.2 % | 0.9 % | 0.5 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038904-1 WG2038904
Analysis started at: 3/11/2025 11:34:20 AM
Rack 1
Vial 19
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0118 ppm | 0.0011 ppm | 0.0016 ppm | 0.0000 ppm | 0.0000 ppm | 0.0097 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.0124 ppm | 0.0019 ppm | 0.0021 ppm | -0.0001 ppm | 0.0000 ppm | 0.0102 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0113 ppm | 0.0007 ppm | 0.0015 ppm | 0.0000 ppm | 0.0000 ppm | 0.0091 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0118 ppm | 0.0006 ppm | 0.0012 ppm | 0.0000 ppm | 0.0000 ppm | 0.0097 ppm |
| Concentration RSD | 17.1 % | 4.6 % | 71.8 % | 28.0 % | 2,005.8 % | 911.5 % | 5.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | 0.0229 ppm | 0.0364 ppm | 0.0005 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0005 ppm | -0.0001 ppm | -0.0002 ppm | 0.0208 ppm | 0.0200 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0003 ppm | 0.0002 ppm | -0.0002 ppm | 0.0246 ppm | 0.0445 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0232 ppm | 0.0446 ppm | 0.0007 ppm |
| Concentration RSD | 2,087.6 % | 1,064.8 % | 419.3 % | 63.0 % | 8.3 % | 38.9 % | 39.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0052 ppm | -0.0003 ppm | 0.0490 ppm | -0.0018 ppm | -0.0016 ppm | -0.0026 ppm |
| Concentration per Run 1 | 0.0015 ppm | 0.0051 ppm | -0.0001 ppm | 0.0496 ppm | -0.0024 ppm | -0.0008 ppm | -0.0052 ppm |
| Concentration per Run 2 | -0.0006 ppm | 0.0053 ppm | -0.0004 ppm | 0.0455 ppm | -0.0015 ppm | -0.0020 ppm | -0.0017 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0051 ppm | -0.0005 ppm | 0.0520 ppm | -0.0016 ppm | -0.0020 ppm | -0.0009 ppm |
| Concentration RSD | 188.5 % | 2.0 % | 61.5 % | 6.7 % | 27.4 % | 44.2 % | 87.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0057 ppm | 0.0028 ppm | 0.0001 ppm | -0.0002 ppm | 0.0000 ppm | -0.0003 ppm |
| Concentration per Run 1 | -0.0017 ppm | 0.0059 ppm | 0.0028 ppm | 0.0002 ppm | -0.0002 ppm | -0.0010 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0014 ppm | 0.0070 ppm | 0.0022 ppm | 0.0000 ppm | 0.0000 ppm | 0.0006 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0016 ppm | 0.0043 ppm | 0.0034 ppm | 0.0001 ppm | -0.0004 ppm | 0.0003 ppm | -0.0003 ppm |
| Concentration RSD | 439.1 % | 24.0 % | 21.6 % | 116.4 % | 99.8 % | 2,863.6 % | 15.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 104.4054 % | 103.5486 % | 99.5980 % | 102.7184 % | 101.3332 % | 99.3406 % |
| Concentration per Run 1 | 0.0003 ppm | 103.7277 % | 103.2471 % | 99.1896 % | 102.0469 % | 100.9226 % | 98.7237 % |
| Concentration per Run 2 | 0.0002 ppm | 104.7193 % | 104.4286 % | 99.9950 % | 102.8788 % | 101.6144 % | 100.1079 % |
| Concentration per Run 3 | 0.0003 ppm | 104.7691 % | 102.9702 % | 99.6095 % | 103.2293 % | 101.4625 % | 99.1902 % |
| Concentration RSD | 11.5 % | 0.6 % | 0.7 % | 0.4 % | 0.6 % | 0.4 % | 0.7 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038904-2D2 WG2038904
Analysis started at: 3/11/2025 11:38:01 AM
Rack 1
Vial 20
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0499 ppm | 2.0308 ppm | 0.1209 ppm | 1.0154 ppm | 1.9528 ppm | 0.0524 ppm | 10.4315 ppm |
| Concentration per Run 1 | 0.0499 ppm | 2.0250 ppm | 0.1225 ppm | 1.0130 ppm | 1.9567 ppm | 0.0525 ppm | 10.4580 ppm |
| Concentration per Run 2 | 0.0500 ppm | 2.0373 ppm | 0.1203 ppm | 1.0161 ppm | 1.9526 ppm | 0.0523 ppm | 10.4771 ppm |
| Concentration per Run 3 | 0.0497 ppm | 2.0302 ppm | 0.1199 ppm | 1.0172 ppm | 1.9493 ppm | 0.0522 ppm | 10.3594 ppm |
| Concentration RSD | 0.3 % | 0.3 % | 1.1 % | 0.2 % | 0.2 % | 0.2 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0523 ppm | 0.5003 ppm | 0.1990 ppm | 0.2475 ppm | 1.0464 ppm | 10.8006 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0527 ppm | 0.5026 ppm | 0.1989 ppm | 0.2478 ppm | 1.0468 ppm | 10.8334 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0520 ppm | 0.4988 ppm | 0.1987 ppm | 0.2479 ppm | 1.0480 ppm | 10.7869 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0522 ppm | 0.4996 ppm | 0.1995 ppm | 0.2467 ppm | 1.0445 ppm | 10.7815 ppm | 0.0001 ppm |
| Concentration RSD | 0.7 % | 0.4 % | 0.2 % | 0.3 % | 0.2 % | 0.3 % | 69.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.2699 ppm | 0.5137 ppm | 1.0298 ppm | 10.8623 ppm | 0.5032 ppm | 0.5543 ppm | 0.4790 ppm |
| Concentration per Run 1 | 10.2898 ppm | 0.5134 ppm | 1.0260 ppm | 10.8604 ppm | 0.5027 ppm | 0.5558 ppm | 0.4830 ppm |
| Concentration per Run 2 | 10.2442 ppm | 0.5143 ppm | 1.0248 ppm | 10.8439 ppm | 0.5010 ppm | 0.5540 ppm | 0.4751 ppm |
| Concentration per Run 3 | 10.2757 ppm | 0.5133 ppm | 1.0385 ppm | 10.8826 ppm | 0.5059 ppm | 0.5532 ppm | 0.4788 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 0.7 % | 0.2 % | 0.5 % | 0.2 % | 0.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1178 ppm | 1.0364 ppm | 1.0310 ppm | 1.0321 ppm | 1.0256 ppm | 0.1172 ppm | 0.5045 ppm |
| Concentration per Run 1 | 0.1186 ppm | 1.0345 ppm | 1.0334 ppm | 1.0355 ppm | 1.0271 ppm | 0.1174 ppm | 0.5045 ppm |
| Concentration per Run 2 | 0.1185 ppm | 1.0363 ppm | 1.0250 ppm | 1.0311 ppm | 1.0198 ppm | 0.1175 ppm | 0.5036 ppm |
| Concentration per Run 3 | 0.1161 ppm | 1.0383 ppm | 1.0347 ppm | 1.0297 ppm | 1.0298 ppm | 0.1169 ppm | 0.5054 ppm |
| Concentration RSD | 1.2 % | 0.2 % | 0.5 % | 0.3 % | 0.5 % | 0.3 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5086 ppm | 102.9448 % | 101.0800 % | 99.9157 % | 101.5954 % | 98.5868 % | 97.5916 % |
| Concentration per Run 1 | 0.5067 ppm | 103.2725 % | 100.6360 % | 98.5873 % | 102.0176 % | 98.7096 % | 97.1699 % |
| Concentration per Run 2 | 0.5083 ppm | 102.7829 % | 100.8119 % | 100.9372 % | 101.0877 % | 98.2546 % | 98.2609 % |
| Concentration per Run 3 | 0.5108 ppm | 102.7790 % | 101.7922 % | 100.2226 % | 101.6810 % | 98.7962 % | 97.3440 % |
| Concentration RSD | 0.4 % | 0.3 % | 0.6 % | 1.2 % | 0.5 % | 0.3 % | 0.6 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2513340-03D2 WG2038904
Analysis started at: 3/11/2025 11:41:29 AM
Rack 1
Vial 26
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 122.7979 ppm | 0.0587 ppm | 0.0265 ppm | 0.9754 ppm | 0.0170 ppm | 148.0259 ppm |
| Concentration per Run 1 | -0.0003 ppm | 122.4629 ppm | 0.0592 ppm | 0.0263 ppm | 0.9707 ppm | 0.0169 ppm | 147.5676 ppm |
| Concentration per Run 2 | 0.0005 ppm | 122.8959 ppm | 0.0587 ppm | 0.0264 ppm | 0.9761 ppm | 0.0170 ppm | 148.0322 ppm |
| Concentration per Run 3 | 0.0002 ppm | 123.0349 ppm | 0.0584 ppm | 0.0267 ppm | 0.9793 ppm | 0.0170 ppm | 148.4777 ppm |
| Concentration RSD | 287.1 % | 0.2 % | 0.7 % | 0.9 % | 0.4 % | 0.3 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0028 ppm | 0.3444 ppm | 0.1238 ppm | 0.4806 ppm | 182.7209 ppm | 11.2665 ppm | 0.1565 ppm |
| Concentration per Run 1 | 0.0027 ppm | 0.3434 ppm | 0.1233 ppm | 0.4750 ppm | 182.9151 ppm | 11.1938 ppm | 0.1579 ppm |
| Concentration per Run 2 | 0.0028 ppm | 0.3455 ppm | 0.1248 ppm | 0.4831 ppm | 182.8399 ppm | 11.3092 ppm | 0.1555 ppm |
| Concentration per Run 3 | 0.0029 ppm | 0.3442 ppm | 0.1234 ppm | 0.4838 ppm | 182.4077 ppm | 11.2965 ppm | 0.1561 ppm |
| Concentration RSD | 3.4 % | 0.3 % | 0.7 % | 1.0 % | 0.1 % | 0.6 % | 0.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 51.0959 ppm | 3.7852 ppm | 0.0079 ppm | 0.7347 ppm | 0.2771 ppm | 0.4849 ppm | 0.0058 ppm |
| Concentration per Run 1 | 51.0192 ppm | 3.7671 ppm | 0.0078 ppm | 0.7456 ppm | 0.2757 ppm | 0.4835 ppm | 0.0054 ppm |
| Concentration per Run 2 | 51.2578 ppm | 3.7958 ppm | 0.0081 ppm | 0.7281 ppm | 0.2801 ppm | 0.4836 ppm | 0.0047 ppm |
| Concentration per Run 3 | 51.0108 ppm | 3.7928 ppm | 0.0078 ppm | 0.7305 ppm | 0.2754 ppm | 0.4877 ppm | 0.0074 ppm |
| Concentration RSD | 0.3 % | 0.4 % | 2.2 % | 1.3 % | 1.0 % | 0.5 % | 23.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0041 ppm | 71.8403 [SIC 100] | 0.0193 ppm | 0.2368 ppm | 1.9881 ppm | 0.0067 ppm | 0.1770 ppm |
| Concentration per Run 1 | 0.0043 ppm | 71.3079 ppm | 0.0194 ppm | 0.2367 ppm | 1.9610 ppm | 0.0068 ppm | 0.1762 ppm |
| Concentration per Run 2 | 0.0042 ppm | 72.0289 ppm | 0.0194 ppm | 0.2360 ppm | 1.9641 ppm | 0.0053 ppm | 0.1779 ppm |
| Concentration per Run 3 | 0.0038 ppm | 72.1841 ppm | 0.0190 ppm | 0.2377 ppm | 2.0392 ppm | 0.0079 ppm | 0.1769 ppm |
| Concentration RSD | 6.3 % | 0.7 % | 1.3 % | 0.4 % | 2.2 % | 19.4 % | 0.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.4915 ppm | 110.3889 % | 105.9191 % | 99.9842 % | 156.9773 % | 151.7421 % | 148.8035 % |
| Concentration per Run 1 | 1.4841 ppm | 110.5278 % | 105.4667 % | 99.5499 % | 156.2550 % | 150.6330 % | 147.6529 % |
| Concentration per Run 2 | 1.5079 ppm | 109.9176 % | 106.0904 % | 100.3459 % | 156.3258 % | 152.0752 % | 149.5830 % |
| Concentration per Run 3 | 1.4824 ppm | 110.7213 % | 106.2003 % | 100.0568 % | 158.3510 % | 152.5180 % | 149.1747 % |
| Concentration RSD | 1.0 % | 0.4 % | 0.4 % | 0.4 % | 0.8 % | 0.6 % | 0.7 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2513340-04D2 WG2038904
Analysis started at: 3/11/2025 11:44:54 AM
Rack 1
Vial 27
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 104.2211 ppm | 0.0339 ppm | 0.0253 ppm | 0.8936 ppm | 0.0086 ppm | 26.1062 ppm |
| Concentration per Run 1 | -0.0005 ppm | 105.4584 ppm | 0.0364 ppm | 0.0236 ppm | 0.9043 ppm | 0.0087 ppm | 26.4664 ppm |
| Concentration per Run 2 | -0.0007 ppm | 103.8937 ppm | 0.0341 ppm | 0.0251 ppm | 0.8889 ppm | 0.0085 ppm | 25.9385 ppm |
| Concentration per Run 3 | 0.0000 ppm | 103.3112 ppm | 0.0311 ppm | 0.0271 ppm | 0.8876 ppm | 0.0086 ppm | 25.9137 ppm |
| Concentration RSD | 91.2 % | 1.1 % | 7.9 % | 6.9 % | 1.0 % | 1.2 % | 1.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0038 ppm | 0.2291 ppm | 0.1194 ppm | 0.2308 ppm | 170.2860 ppm | 9.8069 ppm | 0.1589 ppm |
| Concentration per Run 1 | 0.0038 ppm | 0.2288 ppm | 0.1178 ppm | 0.2303 ppm | 172.3064 ppm | 9.9589 ppm | 0.1615 ppm |
| Concentration per Run 2 | 0.0037 ppm | 0.2302 ppm | 0.1215 ppm | 0.2319 ppm | 168.8682 ppm | 9.7822 ppm | 0.1578 ppm |
| Concentration per Run 3 | 0.0040 ppm | 0.2284 ppm | 0.1190 ppm | 0.2300 ppm | 169.6833 ppm | 9.6796 ppm | 0.1574 ppm |
| Concentration RSD | 3.9 % | 0.4 % | 1.6 % | 0.4 % | 1.1 % | 1.4 % | 1.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 27.8017 ppm | 4.6694 ppm | 0.0026 ppm | 0.6414 ppm | 0.1855 ppm | 0.4134 ppm | -0.0013 ppm |
| Concentration per Run 1 | 27.8949 ppm | 4.7187 ppm | 0.0028 ppm | 0.6579 ppm | 0.1856 ppm | 0.4144 ppm | -0.0031 ppm |
| Concentration per Run 2 | 27.7490 ppm | 4.6514 ppm | 0.0018 ppm | 0.6427 ppm | 0.1863 ppm | 0.4152 ppm | -0.0017 ppm |
| Concentration per Run 3 | 27.7612 ppm | 4.6382 ppm | 0.0033 ppm | 0.6235 ppm | 0.1845 ppm | 0.4105 ppm | 0.0009 ppm |
| Concentration RSD | 0.3 % | 0.9 % | 29.4 % | 2.7 % | 0.5 % | 0.6 % | 156.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | **55.6211 [SIC 100]** | 0.0084 ppm | 0.0773 ppm | 1.7388 ppm | 0.0062 ppm | 0.1574 ppm |
| Concentration per Run 1 | 0.0005 ppm | 55.9244 ppm | 0.0079 ppm | 0.0778 ppm | 1.7718 ppm | 0.0055 ppm | 0.1573 ppm |
| Concentration per Run 2 | 0.0011 ppm | 55.5317 ppm | 0.0083 ppm | 0.0770 ppm | 1.7030 ppm | 0.0045 ppm | 0.1577 ppm |
| Concentration per Run 3 | 0.0004 ppm | 55.4071 ppm | 0.0090 ppm | 0.0772 ppm | 1.7415 ppm | 0.0085 ppm | 0.1572 ppm |
| Concentration RSD | 56.0 % | 0.5 % | 6.4 % | 0.6 % | 2.0 % | 33.9 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.9308 ppm | 108.9526 % | 104.4555 % | 100.7571 % | **150.5690 %** | **145.3637 %** | 144.3224 % |
| Concentration per Run 1 | 0.9313 ppm | 109.3699 % | 103.1407 % | 101.1230 % | **150.6210 %** | 144.9768 % | 144.8595 % |
| Concentration per Run 2 | 0.9323 ppm | 108.3397 % | 105.1665 % | 100.8004 % | **149.6136 %** | **145.6951 %** | 143.7381 % |
| Concentration per Run 3 | 0.9287 ppm | 109.1481 % | 105.0592 % | 100.3479 % | **151.4724 %** | **145.4192 %** | 144.3695 % |
| Concentration RSD | 0.2 % | 0.5 % | 1.1 % | 0.4 % | **0.6 %** | **0.2 %** | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2513340-05D2 WG2038904
Analysis started at: 3/11/2025 11:48:20 AM
Rack 1
Vial 28
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 47.9952 ppm | 0.0222 ppm | 0.0144 ppm | 0.3295 ppm | 0.0036 ppm | 3.3664 ppm |
| Concentration per Run 1 | 0.0008 ppm | 47.9344 ppm | 0.0213 ppm | 0.0151 ppm | 0.3279 ppm | 0.0036 ppm | 3.3632 ppm |
| Concentration per Run 2 | 0.0006 ppm | 47.9827 ppm | 0.0215 ppm | 0.0138 ppm | 0.3307 ppm | 0.0036 ppm | 3.3773 ppm |
| Concentration per Run 3 | -0.0001 ppm | 48.0686 ppm | 0.0238 ppm | 0.0143 ppm | 0.3301 ppm | 0.0036 ppm | 3.3587 ppm |
| Concentration RSD | 111.9 % | 0.1 % | 6.3 % | 4.6 % | 0.4 % | 0.7 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0020 ppm | 0.0528 ppm | 0.0716 ppm | 0.1208 ppm | 125.8321 ppm | 6.2257 ppm | 0.0863 ppm |
| Concentration per Run 1 | 0.0021 ppm | 0.0532 ppm | 0.0715 ppm | 0.1249 ppm | 125.6122 ppm | 6.2040 ppm | 0.0867 ppm |
| Concentration per Run 2 | 0.0021 ppm | 0.0530 ppm | 0.0724 ppm | 0.1210 ppm | 125.8136 ppm | 6.2366 ppm | 0.0868 ppm |
| Concentration per Run 3 | 0.0020 ppm | 0.0520 ppm | 0.0710 ppm | 0.1164 ppm | 126.0705 ppm | 6.2366 ppm | 0.0854 ppm |
| Concentration RSD | 3.0 % | 1.2 % | 1.0 % | 3.5 % | 0.2 % | 0.3 % | 0.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 12.7301 ppm | 0.9170 ppm | 0.0006 ppm | 0.2887 ppm | 0.0995 ppm | 0.0958 ppm | 0.0009 ppm |
| Concentration per Run 1 | 12.7510 ppm | 0.9171 ppm | -0.0004 ppm | 0.2904 ppm | 0.1002 ppm | 0.0938 ppm | 0.0000 ppm |
| Concentration per Run 2 | 12.7494 ppm | 0.9200 ppm | 0.0010 ppm | 0.2837 ppm | 0.1000 ppm | 0.0979 ppm | 0.0017 ppm |
| Concentration per Run 3 | 12.6898 ppm | 0.9139 ppm | 0.0012 ppm | 0.2918 ppm | 0.0984 ppm | 0.0957 ppm | 0.0011 ppm |
| Concentration RSD | 0.3 % | 0.3 % | 137.6 % | 1.5 % | 1.0 % | 2.1 % | 93.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | **23.7050 [SIC 100]** | 0.0042 ppm | 0.0305 ppm | 1.0760 ppm | 0.0030 ppm | 0.0967 ppm |
| Concentration per Run 1 | -0.0015 ppm | 24.0239 ppm | 0.0045 ppm | 0.0302 ppm | 1.0832 ppm | 0.0036 ppm | 0.0967 ppm |
| Concentration per Run 2 | 0.0016 ppm | 23.6483 ppm | 0.0038 ppm | 0.0314 ppm | 1.0431 ppm | 0.0022 ppm | 0.0968 ppm |
| Concentration per Run 3 | 0.0000 ppm | 23.4428 ppm | 0.0044 ppm | 0.0300 ppm | 1.1018 ppm | 0.0031 ppm | 0.0967 ppm |
| Concentration RSD | 2,628.1 % | 1.2 % | 8.3 % | 2.5 % | 2.8 % | 24.3 % | 0.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3960 ppm | 106.9262 % | 103.6340 % | 100.0292 % | 119.1139 % | 114.5325 % | 113.4081 % |
| Concentration per Run 1 | 0.3958 ppm | 107.4386 % | 104.0337 % | 100.4181 % | 119.7964 % | 115.6941 % | 113.2554 % |
| Concentration per Run 2 | 0.3986 ppm | 106.6180 % | 103.5896 % | 100.3214 % | 118.0453 % | 114.4434 % | 113.6846 % |
| Concentration per Run 3 | 0.3935 ppm | 106.7219 % | 103.2788 % | 99.3481 % | 119.5001 % | 113.4599 % | 113.2843 % |
| Concentration RSD | 0.6 % | 0.4 % | 0.4 % | 0.6 % | 0.8 % | 1.0 % | 0.2 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2513340-02D2 WG2038904
Analysis started at: 3/11/2025 11:51:47 AM
Rack 1
Vial 21
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 146.4550 ppm | 0.0643 ppm | 0.0339 ppm | 1.1334 ppm | 0.0178 ppm | 2.2228 ppm |
| Concentration per Run 1 | 0.0005 ppm | 146.3459 ppm | 0.0668 ppm | 0.0348 ppm | 1.1309 ppm | 0.0177 ppm | 2.2277 ppm |
| Concentration per Run 2 | 0.0009 ppm | 146.3106 ppm | 0.0646 ppm | 0.0336 ppm | 1.1370 ppm | 0.0178 ppm | 2.2218 ppm |
| Concentration per Run 3 | 0.0008 ppm | 146.7085 ppm | 0.0614 ppm | 0.0332 ppm | 1.1322 ppm | 0.0178 ppm | 2.2189 ppm |
| Concentration RSD | 25.7 % | 0.2 % | 4.2 % | 2.4 % | 0.3 % | 0.2 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | 0.1210 ppm | 0.1465 ppm | 0.6250 ppm | 194.2534 ppm | 11.9380 ppm | 0.1670 ppm |
| Concentration per Run 1 | 0.0021 ppm | 0.1218 ppm | 0.1489 ppm | 0.6225 ppm | 194.2606 ppm | 11.9219 ppm | 0.1678 ppm |
| Concentration per Run 2 | 0.0021 ppm | 0.1208 ppm | 0.1448 ppm | 0.6271 ppm | 194.3188 ppm | 11.9725 ppm | 0.1674 ppm |
| Concentration per Run 3 | 0.0021 ppm | 0.1203 ppm | 0.1458 ppm | 0.6254 ppm | 194.1808 ppm | 11.9196 ppm | 0.1659 ppm |
| Concentration RSD | 2.3 % | 0.6 % | 1.5 % | 0.4 % | 0.0 % | 0.3 % | 0.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 17.0028 ppm | 0.9836 ppm | 0.0056 ppm | 0.7541 ppm | 0.2942 ppm | 0.4716 ppm | -0.0030 ppm |
| Concentration per Run 1 | 17.0107 ppm | 0.9862 ppm | 0.0053 ppm | 0.7564 ppm | 0.2939 ppm | 0.4837 ppm | -0.0015 ppm |
| Concentration per Run 2 | 16.9683 ppm | 0.9827 ppm | 0.0056 ppm | 0.7639 ppm | 0.2938 ppm | 0.4813 ppm | -0.0049 ppm |
| Concentration per Run 3 | 17.0293 ppm | 0.9817 ppm | 0.0058 ppm | 0.7419 ppm | 0.2948 ppm | 0.4497 ppm | -0.0027 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 4.8 % | 1.5 % | 0.2 % | 4.0 % | 57.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0046 ppm | **85.4124 [SIC 100]** | 0.0252 ppm | 0.0437 ppm | 2.4114 ppm | 0.0040 ppm | 0.2175 ppm |
| Concentration per Run 1 | 0.0036 ppm | 85.3934 ppm | 0.0239 ppm | 0.0446 ppm | 2.3346 ppm | 0.0021 ppm | 0.2171 ppm |
| Concentration per Run 2 | 0.0065 ppm | 85.0606 ppm | 0.0250 ppm | 0.0431 ppm | 2.4620 ppm | 0.0055 ppm | 0.2175 ppm |
| Concentration per Run 3 | 0.0038 ppm | 85.7831 ppm | 0.0266 ppm | 0.0433 ppm | 2.4376 ppm | 0.0044 ppm | 0.2179 ppm |
| Concentration RSD | 34.3 % | 0.4 % | 5.4 % | 1.9 % | 2.8 % | 42.9 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.6272 ppm | 111.0397 % | 107.1442 % | 104.6100 % | **153.9253 %** | **149.0330 %** | **149.6408 %** |
| Concentration per Run 1 | 1.6218 ppm | 111.4097 % | 107.5115 % | 101.5818 % | **154.6732 %** | **148.5706 %** | **146.4397 %** |
| Concentration per Run 2 | 1.6240 ppm | 110.1292 % | 106.6325 % | 103.0491 % | **152.5091 %** | **149.1288 %** | **149.1670 %** |
| Concentration per Run 3 | 1.6357 ppm | 111.5802 % | 107.2887 % | 109.1993 % | **154.5935 %** | **149.3995 %** | **153.3157 %** |
| Concentration RSD | 0.5 % | 0.7 % | 0.4 % | 3.9 % | **0.8 %** | **0.3 %** | **2.3 %** |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038904-3D2 WG2038904
Analysis started at: 3/11/2025 11:55:14 AM
Rack 1
Vial 22
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0452 ppm | 157.7347 ppm | 0.1521 ppm | 0.5951 ppm | 2.8605 ppm | 0.0641 ppm | 11.1516 ppm |
| Concentration per Run 1 | 0.0447 ppm | 157.6786 ppm | 0.1532 ppm | 0.5937 ppm | 2.8617 ppm | 0.0640 ppm | 11.0951 ppm |
| Concentration per Run 2 | 0.0455 ppm | 157.5827 ppm | 0.1493 ppm | 0.5934 ppm | 2.8572 ppm | 0.0641 ppm | 11.1711 ppm |
| Concentration per Run 3 | 0.0454 ppm | 157.9428 ppm | 0.1539 ppm | 0.5983 ppm | 2.8626 ppm | 0.0642 ppm | 11.1887 ppm |
| Concentration RSD | 1.0 % | 0.1 % | 1.6 % | 0.5 % | 0.1 % | 0.1 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0468 ppm | 0.5626 ppm | 0.3179 ppm | 0.8674 ppm | 170.6217 ppm | 21.4550 ppm | 0.1860 ppm |
| Concentration per Run 1 | 0.0467 ppm | 0.5604 ppm | 0.3174 ppm | 0.8607 ppm | 170.3439 ppm | 21.4855 ppm | 0.1879 ppm |
| Concentration per Run 2 | 0.0471 ppm | 0.5673 ppm | 0.3172 ppm | 0.8775 ppm | 170.4669 ppm | 21.4235 ppm | 0.1863 ppm |
| Concentration per Run 3 | 0.0466 ppm | 0.5602 ppm | 0.3189 ppm | 0.8640 ppm | 171.0543 ppm | 21.4558 ppm | 0.1839 ppm |
| Concentration RSD | 0.6 % | 0.7 % | 0.3 % | 1.0 % | 0.2 % | 0.1 % | 1.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 26.2425 ppm | 1.4371 ppm | 0.8436 ppm | 10.1884 ppm | 0.7553 ppm | 0.9538 ppm | 0.1823 ppm |
| Concentration per Run 1 | 26.3176 ppm | 1.4342 ppm | 0.8401 ppm | 10.1572 ppm | 0.7536 ppm | 0.9574 ppm | 0.1784 ppm |
| Concentration per Run 2 | 26.2267 ppm | 1.4328 ppm | 0.8449 ppm | 10.1914 ppm | 0.7544 ppm | 0.9504 ppm | 0.1809 ppm |
| Concentration per Run 3 | 26.1832 ppm | 1.4443 ppm | 0.8458 ppm | 10.2166 ppm | 0.7579 ppm | 0.9536 ppm | 0.1876 ppm |
| Concentration RSD | 0.3 % | 0.4 % | 0.4 % | 0.3 % | 0.3 % | 0.4 % | 2.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0897 ppm | 92.1994 [SIC 100] | 0.8271 ppm | 0.9341 ppm | 2.8974 ppm | 0.1055 ppm | 0.6502 ppm |
| Concentration per Run 1 | 0.0898 ppm | 92.4683 ppm | 0.8237 ppm | 0.9347 ppm | 2.9756 ppm | 0.1062 ppm | 0.6499 ppm |
| Concentration per Run 2 | 0.0880 ppm | 91.6504 ppm | 0.8268 ppm | 0.9320 ppm | 2.8976 ppm | 0.1051 ppm | 0.6512 ppm |
| Concentration per Run 3 | 0.0912 ppm | 92.4796 ppm | 0.8308 ppm | 0.9355 ppm | 2.8189 ppm | 0.1051 ppm | 0.6494 ppm |
| Concentration RSD | 1.8 % | 0.5 % | 0.4 % | 0.2 % | 2.7 % | 0.6 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.0584 ppm | 110.6289 % | 107.2062 % | 101.7326 % | 155.7488 % | 150.6612 % | 149.5449 % |
| Concentration per Run 1 | 2.0537 ppm | 110.9964 % | 107.6348 % | 101.3691 % | 156.2087 % | 151.4977 % | 148.6503 % |
| Concentration per Run 2 | 2.0547 ppm | 110.8112 % | 106.7258 % | 102.1012 % | 155.6294 % | 150.1292 % | 150.6118 % |
| Concentration per Run 3 | 2.0669 ppm | 110.0792 % | 107.2580 % | 101.7275 % | 155.4083 % | 150.3567 % | 149.3726 % |
| Concentration RSD | 0.4 % | 0.4 % | 0.4 % | 0.4 % | 0.3 % | 0.5 % | 0.7 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038904-4D2 WG2038904
Analysis started at: 3/11/2025 11:58:42 AM
Rack 1
Vial 23
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 127.9197 ppm | 0.0543 ppm | 0.0360 ppm | 0.9126 ppm | 0.0153 ppm | 2.1922 ppm |
| Concentration per Run 1 | 0.0007 ppm | 128.1607 ppm | 0.0532 ppm | 0.0393 ppm | 0.9127 ppm | 0.0154 ppm | 2.1970 ppm |
| Concentration per Run 2 | 0.0012 ppm | 127.7236 ppm | 0.0538 ppm | 0.0339 ppm | 0.9125 ppm | 0.0153 ppm | 2.1889 ppm |
| Concentration per Run 3 | 0.0014 ppm | 127.8748 ppm | 0.0559 ppm | 0.0350 ppm | 0.9126 ppm | 0.0153 ppm | 2.1908 ppm |
| Concentration RSD | 35.4 % | 0.2 % | 2.6 % | 7.9 % | 0.0 % | 0.3 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0018 ppm | 0.1062 ppm | 0.1280 ppm | 0.5448 ppm | 153.1503 ppm | 11.9958 ppm | 0.1488 ppm |
| Concentration per Run 1 | 0.0017 ppm | 0.1080 ppm | 0.1281 ppm | 0.5493 ppm | 152.9205 ppm | 12.0187 ppm | 0.1488 ppm |
| Concentration per Run 2 | 0.0018 ppm | 0.1057 ppm | 0.1282 ppm | 0.5369 ppm | 153.4314 ppm | 11.9833 ppm | 0.1487 ppm |
| Concentration per Run 3 | 0.0017 ppm | 0.1048 ppm | 0.1277 ppm | 0.5483 ppm | 153.0990 ppm | 11.9855 ppm | 0.1489 ppm |
| Concentration RSD | 4.3 % | 1.6 % | 0.2 % | 1.3 % | 0.2 % | 0.2 % | 0.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 14.6793 ppm | 0.8463 ppm | 0.0069 ppm | 0.7443 ppm | 0.2785 ppm | 0.4165 ppm | -0.0025 ppm |
| Concentration per Run 1 | 14.7610 ppm | 0.8480 ppm | 0.0066 ppm | 0.7757 ppm | 0.2786 ppm | 0.4162 ppm | -0.0002 ppm |
| Concentration per Run 2 | 14.6325 ppm | 0.8456 ppm | 0.0069 ppm | 0.7344 ppm | 0.2777 ppm | 0.4150 ppm | -0.0051 ppm |
| Concentration per Run 3 | 14.6444 ppm | 0.8452 ppm | 0.0071 ppm | 0.7228 ppm | 0.2792 ppm | 0.4183 ppm | -0.0022 ppm |
| Concentration RSD | 0.5 % | 0.2 % | 3.7 % | 3.7 % | 0.3 % | 0.4 % | 97.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0031 ppm | **92.7369 [SIC 100]** | 0.0247 ppm | 0.0443 ppm | 2.6578 ppm | 0.0028 ppm | 0.1854 ppm |
| Concentration per Run 1 | 0.0031 ppm | 92.9275 ppm | 0.0262 ppm | 0.0423 ppm | 2.6914 ppm | 0.0058 ppm | 0.1867 ppm |
| Concentration per Run 2 | 0.0047 ppm | 92.5829 ppm | 0.0236 ppm | 0.0461 ppm | 2.6177 ppm | 0.0026 ppm | 0.1846 ppm |
| Concentration per Run 3 | 0.0014 ppm | 92.7002 ppm | 0.0242 ppm | 0.0445 ppm | 2.6641 ppm | 0.0001 ppm | 0.1851 ppm |
| Concentration RSD | 54.0 % | 0.2 % | 5.6 % | 4.3 % | 1.4 % | 101.4 % | 0.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.3678 ppm | 110.4177 % | 106.2880 % | 101.5189 % | **150.8738 %** | **144.3121 %** | 143.2140 % |
| Concentration per Run 1 | 1.3819 ppm | 109.8642 % | 105.8379 % | 101.9176 % | **150.3056 %** | 143.6705 % | 143.5296 % |
| Concentration per Run 2 | 1.3550 ppm | 110.7619 % | 106.2265 % | 101.5074 % | **151.2752 %** | 144.1670 % | 143.4061 % |
| Concentration per Run 3 | 1.3665 ppm | 110.6269 % | 106.7994 % | 101.1317 % | **151.0405 %** | **145.0987 %** | 142.7063 % |
| Concentration RSD | 1.0 % | 0.4 % | 0.5 % | 0.4 % | **0.3 %** | **0.5 %** | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038904-5D2 WG2038904
Analysis started at: 3/11/2025 12:02:11 PM
Rack 1
Vial 24
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0181 ppm | 145.4915 ppm | 0.1858 ppm | 0.9320 ppm | 2.8908 ppm | 0.0650 ppm | 11.3984 ppm |
| Concentration per Run 1 | 0.0184 ppm | 145.4099 ppm | 0.1854 ppm | 0.9359 ppm | 2.8928 ppm | 0.0650 ppm | 11.3850 ppm |
| Concentration per Run 2 | 0.0181 ppm | 145.1339 ppm | 0.1878 ppm | 0.9331 ppm | 2.9011 ppm | 0.0653 ppm | 11.3524 ppm |
| Concentration per Run 3 | 0.0178 ppm | 145.9307 ppm | 0.1842 ppm | 0.9271 ppm | 2.8784 ppm | 0.0648 ppm | 11.4576 ppm |
| Concentration RSD | 1.7 % | 0.3 % | 1.0 % | 0.5 % | 0.4 % | 0.4 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0486 ppm | 0.5666 ppm | 0.3219 ppm | 0.8471 ppm | 190.5111 ppm | 22.1671 ppm | 0.1637 ppm |
| Concentration per Run 1 | 0.0489 ppm | 0.5682 ppm | 0.3235 ppm | 0.8567 ppm | 190.4291 ppm | 22.1678 ppm | 0.1645 ppm |
| Concentration per Run 2 | 0.0484 ppm | 0.5661 ppm | 0.3228 ppm | 0.8406 ppm | 191.1912 ppm | 22.2548 ppm | 0.1640 ppm |
| Concentration per Run 3 | 0.0484 ppm | 0.5655 ppm | 0.3194 ppm | 0.8440 ppm | 189.9131 ppm | 22.0788 ppm | 0.1624 ppm |
| Concentration RSD | 0.7 % | 0.3 % | 0.7 % | 1.0 % | 0.3 % | 0.4 % | 0.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 25.6283 ppm | 1.4261 ppm | 0.9135 ppm | 10.6063 ppm | 0.7364 ppm | 0.9829 ppm | 0.4185 ppm |
| Concentration per Run 1 | 25.6532 ppm | 1.4284 ppm | 0.9154 ppm | 10.6317 ppm | 0.7369 ppm | 0.9913 ppm | 0.4234 ppm |
| Concentration per Run 2 | 25.6658 ppm | 1.4213 ppm | 0.9135 ppm | 10.6324 ppm | 0.7373 ppm | 0.9766 ppm | 0.4129 ppm |
| Concentration per Run 3 | 25.5659 ppm | 1.4284 ppm | 0.9118 ppm | 10.5546 ppm | 0.7349 ppm | 0.9808 ppm | 0.4193 ppm |
| Concentration RSD | 0.2 % | 0.3 % | 0.2 % | 0.4 % | 0.2 % | 0.8 % | 1.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1225 ppm | 87.8436 [SIC 100] | 0.9189 ppm | 0.9667 ppm | 3.3519 ppm | 0.1218 ppm | 0.6691 ppm |
| Concentration per Run 1 | 0.1231 ppm | 89.3897 ppm | 0.9176 ppm | 0.9665 ppm | 3.3995 ppm | 0.1241 ppm | 0.6721 ppm |
| Concentration per Run 2 | 0.1191 ppm | 87.3004 ppm | 0.9229 ppm | 0.9685 ppm | 3.3496 ppm | 0.1206 ppm | 0.6678 ppm |
| Concentration per Run 3 | 0.1254 ppm | 86.8407 ppm | 0.9163 ppm | 0.9652 ppm | 3.3065 ppm | 0.1207 ppm | 0.6676 ppm |
| Concentration RSD | 2.6 % | 1.5 % | 0.4 % | 0.2 % | 1.4 % | 1.6 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.0295 ppm | 110.0722 % | 105.8586 % | 101.5083 % | 152.3735 % | 146.5697 % | 145.8600 % |
| Concentration per Run 1 | 2.0328 ppm | 109.9545 % | 106.3125 % | 101.3722 % | 152.4920 % | 147.3057 % | 145.1947 % |
| Concentration per Run 2 | 2.0372 ppm | 109.2473 % | 105.6373 % | 100.8800 % | 151.2367 % | 144.3281 % | 144.1854 % |
| Concentration per Run 3 | 2.0185 ppm | 111.0148 % | 105.6259 % | 102.2727 % | 153.3918 % | 148.0753 % | 148.1999 % |
| Concentration RSD | 0.5 % | 0.8 % | 0.4 % | 0.7 % | 0.7 % | 1.4 % | 1.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038904-6D10 WG2038904
Analysis started at: 3/11/2025 12:05:39 PM
Rack 1
Vial 25
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 31.0717 ppm | 0.0127 ppm | 0.0066 ppm | 0.2404 ppm | 0.0038 ppm | 0.4879 ppm |
| Concentration per Run 1 | 0.0011 ppm | 30.9822 ppm | 0.0123 ppm | 0.0058 ppm | 0.2406 ppm | 0.0038 ppm | 0.4890 ppm |
| Concentration per Run 2 | 0.0010 ppm | 31.0694 ppm | 0.0117 ppm | 0.0076 ppm | 0.2404 ppm | 0.0038 ppm | 0.4890 ppm |
| Concentration per Run 3 | 0.0007 ppm | 31.1636 ppm | 0.0141 ppm | 0.0064 ppm | 0.2403 ppm | 0.0037 ppm | 0.4857 ppm |
| Concentration RSD | 24.8 % | 0.3 % | 10.0 % | 13.4 % | 0.1 % | 0.8 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0263 ppm | 0.0319 ppm | 0.1267 ppm | 43.4992 ppm | 2.4422 ppm | 0.0350 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0260 ppm | 0.0303 ppm | 0.1272 ppm | 43.6049 ppm | 2.4295 ppm | 0.0340 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0261 ppm | 0.0314 ppm | 0.1253 ppm | 43.3319 ppm | 2.4499 ppm | 0.0355 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0267 ppm | 0.0341 ppm | 0.1275 ppm | 43.5607 ppm | 2.4473 ppm | 0.0356 ppm |
| Concentration RSD | 32.7 % | 1.4 % | 6.2 % | 0.9 % | 0.3 % | 0.5 % | 2.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.6279 ppm | 0.2104 ppm | 0.0039 ppm | 0.1659 ppm | 0.0629 ppm | 0.1014 ppm | 0.0012 ppm |
| Concentration per Run 1 | 3.6408 ppm | 0.2108 ppm | 0.0038 ppm | 0.1721 ppm | 0.0630 ppm | 0.0997 ppm | 0.0020 ppm |
| Concentration per Run 2 | 3.6237 ppm | 0.2103 ppm | 0.0034 ppm | 0.1633 ppm | 0.0624 ppm | 0.1031 ppm | 0.0021 ppm |
| Concentration per Run 3 | 3.6193 ppm | 0.2103 ppm | 0.0046 ppm | 0.1622 ppm | 0.0632 ppm | 0.1015 ppm | -0.0004 ppm |
| Concentration RSD | 0.3 % | 0.1 % | 14.9 % | 3.3 % | 0.7 % | 1.7 % | 118.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 16.9664 ppm | 0.0059 ppm | 0.0101 ppm | 0.4629 ppm | 0.0019 ppm | 0.0458 ppm |
| Concentration per Run 1 | 0.0002 ppm | 16.8260 ppm | 0.0061 ppm | 0.0099 ppm | 0.4539 ppm | 0.0017 ppm | 0.0459 ppm |
| Concentration per Run 2 | 0.0011 ppm | 16.9928 ppm | 0.0063 ppm | 0.0094 ppm | 0.4605 ppm | 0.0023 ppm | 0.0455 ppm |
| Concentration per Run 3 | 0.0019 ppm | 17.0804 ppm | 0.0052 ppm | 0.0110 ppm | 0.4744 ppm | 0.0016 ppm | 0.0462 ppm |
| Concentration RSD | 79.2 % | 0.8 % | 10.6 % | 7.7 % | 2.3 % | 22.5 % | 0.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3520 ppm | 105.2908 % | 101.8168 % | 99.2297 % | 113.0942 % | 108.5509 % | 107.8136 % |
| Concentration per Run 1 | 0.3508 ppm | 105.7653 % | 101.4147 % | 100.1225 % | 113.7910 % | 108.1792 % | 107.9927 % |
| Concentration per Run 2 | 0.3538 ppm | 105.2276 % | 101.7934 % | 98.9527 % | 112.8229 % | 108.4270 % | 107.8595 % |
| Concentration per Run 3 | 0.3513 ppm | 104.8793 % | 102.2424 % | 98.6138 % | 112.6688 % | 109.0466 % | 107.5886 % |
| Concentration RSD | 0.5 % | 0.4 % | 0.4 % | 0.8 % | 0.5 % | 0.4 % | 0.2 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCV
Analysis started at: 3/11/2025 12:09:05 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4861 ppm | 0.5044 ppm | 0.5125 ppm | 0.4924 ppm | 0.4791 ppm | 0.5160 ppm | 0.4958 ppm |
| Concentration per Run 1 | 0.4876 ppm | 0.5010 ppm | 0.5130 ppm | 0.4955 ppm | 0.4797 ppm | 0.5184 ppm | 0.4971 ppm |
| Concentration per Run 2 | 0.4869 ppm | 0.5053 ppm | 0.5155 ppm | 0.4935 ppm | 0.4801 ppm | 0.5128 ppm | 0.4962 ppm |
| Concentration per Run 3 | 0.4839 ppm | 0.5069 ppm | 0.5089 ppm | 0.4882 ppm | 0.4777 ppm | 0.5169 ppm | 0.4942 ppm |
| Recovery Percentage 1 | 97.225 % | 100.882 % | 102.493 % | 98.483 % | 95.828 % | 103.205 % | 99.162 % |
| Concentration RSD | 0.4 % | 0.6 % | 0.6 % | 0.8 % | 0.3 % | 0.6 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4943 ppm | 0.5058 ppm | 0.4965 ppm | 0.4715 ppm | 0.5181 ppm | 5.2315 ppm | 0.5273 ppm |
| Concentration per Run 1 | 0.4951 ppm | 0.5045 ppm | 0.4980 ppm | 0.4706 ppm | 0.5194 ppm | 5.2524 ppm | 0.5262 ppm |
| Concentration per Run 2 | 0.4956 ppm | 0.5097 ppm | 0.4989 ppm | 0.4747 ppm | 0.5212 ppm | 5.2166 ppm | 0.5288 ppm |
| Concentration per Run 3 | 0.4922 ppm | 0.5031 ppm | 0.4925 ppm | 0.4692 ppm | 0.5138 ppm | 5.2253 ppm | 0.5270 ppm |
| Recovery Percentage 1 | 98.860 % | 101.160 % | 99.300 % | 94.304 % | 103.624 % | 104.629 % | 105.467 % |
| Concentration RSD | 0.4 % | 0.7 % | 0.7 % | 0.6 % | 0.7 % | 0.4 % | 0.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4821 ppm | 0.4980 ppm | 0.4979 ppm | 10.3412 ppm | 0.5050 ppm | 0.5080 ppm | 0.5071 ppm |
| Concentration per Run 1 | 0.4867 ppm | 0.4995 ppm | 0.4971 ppm | 10.3321 ppm | 0.5108 ppm | 0.5086 ppm | 0.5060 ppm |
| Concentration per Run 2 | 0.4795 ppm | 0.4981 ppm | 0.5006 ppm | 10.4675 ppm | 0.5048 ppm | 0.5073 ppm | 0.5107 ppm |
| Concentration per Run 3 | 0.4803 ppm | 0.4966 ppm | 0.4962 ppm | 10.2241 ppm | 0.4995 ppm | 0.5081 ppm | 0.5047 ppm |
| Recovery Percentage 1 | 96.429 % | 99.609 % | 99.588 % | 103.412 % | 101.005 % | 101.601 % | 101.429 % |
| Concentration RSD | 0.8 % | 0.3 % | 0.5 % | 1.2 % | 1.1 % | 0.1 % | 0.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5069 ppm | 5.6117 ppm | 0.5179 ppm | 0.5027 ppm | 0.4945 ppm | 0.4955 ppm | 0.4892 ppm |
| Concentration per Run 1 | 0.5071 ppm | 5.6333 ppm | 0.5252 ppm | 0.5029 ppm | 0.4968 ppm | 0.4953 ppm | 0.4890 ppm |
| Concentration per Run 2 | 0.5055 ppm | 5.6165 ppm | 0.5149 ppm | 0.5034 ppm | 0.4949 ppm | 0.4951 ppm | 0.4900 ppm |
| Concentration per Run 3 | 0.5080 ppm | 5.5853 ppm | 0.5137 ppm | 0.5018 ppm | 0.4919 ppm | 0.4960 ppm | 0.4885 ppm |
| Recovery Percentage 1 | 101.372 % | 106.889 % | 103.586 % | 100.539 % | 98.906 % | 99.097 % | 97.831 % |
| Concentration RSD | 0.3 % | 0.4 % | 1.2 % | 0.2 % | 0.5 % | 0.1 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5039 ppm | 103.1893 % | 100.1270 % | 99.1791 % | 101.3221 % | 98.0437 % | 96.9307 % |
| Concentration per Run 1 | 0.5082 ppm | 102.8185 % | 99.6761 % | 99.7134 % | 101.0873 % | 97.4981 % | 97.4790 % |
| Concentration per Run 2 | 0.5027 ppm | 102.8441 % | 99.7224 % | 99.0391 % | 101.4381 % | 98.5097 % | 96.6081 % |
| Concentration per Run 3 | 0.5006 ppm | 103.9052 % | 100.9824 % | 98.7848 % | 101.4408 % | 98.1234 % | 96.7050 % |
| Recovery Percentage 1 | 100.770 % | | | | | | |
| Concentration RSD | 0.8 % | 0.6 % | 0.7 % | 0.5 % | 0.2 % | 0.5 % | 0.5 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCB
Analysis started at: 3/11/2025 12:12:33 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.0126 ppm | 0.0001 ppm | 0.0012 ppm | 0.0001 ppm | 0.0001 ppm | 0.0036 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.0144 ppm | -0.0001 ppm | 0.0015 ppm | 0.0001 ppm | 0.0000 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0109 ppm | -0.0004 ppm | 0.0004 ppm | 0.0000 ppm | 0.0001 ppm | 0.0071 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0125 ppm | 0.0008 ppm | 0.0017 ppm | 0.0001 ppm | 0.0001 ppm | 0.0025 ppm |
| Recovery Percentage 1 | 15.534 % | 12.569 % | 1.690 % | 3.911 % | 0.806 % | 1.820 % | 3.567 % |
| Concentration RSD | 13.3 % | 13.9 % | 740.6 % | 60.2 % | 68.9 % | 65.3 % | 88.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | -0.0003 ppm | -0.0002 ppm | 0.0040 ppm | 0.0338 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0002 ppm | 0.0001 ppm | -0.0004 ppm | 0.0032 ppm | 0.0192 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0006 ppm | -0.0006 ppm | -0.0001 ppm | 0.0046 ppm | 0.0319 ppm | 0.0009 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0001 ppm | -0.0003 ppm | 0.0000 ppm | 0.0041 ppm | 0.0503 ppm | 0.0003 ppm |
| Recovery Percentage 1 | 0.418 % | 0.402 % | -2.648 % | -1.645 % | 7.944 % | 1.352 % | 15.864 % |
| Concentration RSD | 539.3 % | 544.9 % | 137.9 % | 142.8 % | 18.1 % | 46.3 % | 54.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0047 ppm | 0.0000 ppm | 0.0017 ppm | 0.0179 ppm | -0.0008 ppm | -0.0009 ppm | 0.0024 ppm |
| Concentration per Run 1 | -0.0024 ppm | 0.0000 ppm | 0.0012 ppm | 0.0184 ppm | -0.0008 ppm | -0.0003 ppm | 0.0049 ppm |
| Concentration per Run 2 | -0.0058 ppm | -0.0002 ppm | 0.0018 ppm | 0.0191 ppm | -0.0004 ppm | -0.0009 ppm | 0.0008 ppm |
| Concentration per Run 3 | -0.0060 ppm | 0.0001 ppm | 0.0020 ppm | 0.0160 ppm | -0.0011 ppm | -0.0015 ppm | 0.0015 ppm |
| Recovery Percentage 1 | -4.728 % | -0.431 % | 3.352 % | 0.893 % | -3.026 % | -8.987 % | 4.775 % |
| Concentration RSD | 43.3 % | 356.3 % | 23.2 % | 9.0 % | 50.3 % | 63.7 % | 91.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0023 ppm | -0.0002 ppm | 0.0000 ppm | -0.0002 ppm | 0.0017 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0019 ppm | 0.0070 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm | 0.0022 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0003 ppm | -0.0003 ppm | -0.0015 ppm | 0.0001 ppm | 0.0002 ppm | 0.0010 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0017 ppm | 0.0003 ppm | 0.0006 ppm | 0.0000 ppm | -0.0007 ppm | 0.0017 ppm | 0.0002 ppm |
| Recovery Percentage 1 | 1.782 % | 0.464 % | -0.361 % | 0.313 % | -1.654 % | 8.272 % | 0.540 % |
| Concentration RSD | 1,000.9 % | 175.5 % | 624.6 % | 210.1 % | 279.4 % | 36.7 % | 246.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 101.0354 % | 99.2696 % | 96.7813 % | 101.6750 % | 98.9251 % | 96.9519 % |
| Concentration per Run 1 | -0.0003 ppm | 101.1116 % | 99.5458 % | 96.7044 % | 102.2171 % | 99.2420 % | 96.9828 % |
| Concentration per Run 2 | -0.0007 ppm | 100.9580 % | 99.1910 % | 97.4064 % | 101.3368 % | 98.5391 % | 97.5299 % |
| Concentration per Run 3 | -0.0006 ppm | 101.0365 % | 99.0720 % | 96.2330 % | 101.4711 % | 98.9941 % | 96.3431 % |
| Recovery Percentage 1 | -10.829 % | | | | | | |
| Concentration RSD | 40.5 % | 0.1 % | 0.2 % | 0.6 % | 0.5 % | 0.4 % | 0.6 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2513340-06D2 WG2038904
Analysis started at: 3/11/2025 12:20:48 PM
Rack 1
Vial 29
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 133.3562 ppm | 0.0687 ppm | 0.0192 ppm | 1.0500 ppm | 0.0218 ppm | 9.6134 ppm |
| Concentration per Run 1 | 0.0009 ppm | 132.7440 ppm | 0.0655 ppm | 0.0203 ppm | 1.0488 ppm | 0.0218 ppm | 9.6137 ppm |
| Concentration per Run 2 | 0.0009 ppm | 133.9938 ppm | 0.0705 ppm | 0.0183 ppm | 1.0526 ppm | 0.0219 ppm | 9.6598 ppm |
| Concentration per Run 3 | 0.0001 ppm | 133.3308 ppm | 0.0701 ppm | 0.0190 ppm | 1.0486 ppm | 0.0218 ppm | 9.5666 ppm |
| Concentration RSD | 70.9 % | 0.5 % | 4.0 % | 5.2 % | 0.2 % | 0.3 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0041 ppm | 0.3123 ppm | 0.1374 ppm | 0.7564 ppm | 200.0979 [SIC 700] | 8.6256 ppm | 0.1625 ppm |
| Concentration per Run 1 | 0.0042 ppm | 0.3148 ppm | 0.1384 ppm | 0.7635 ppm | 200.2450 ppm | 8.6727 ppm | 0.1639 ppm |
| Concentration per Run 2 | 0.0040 ppm | 0.3106 ppm | 0.1369 ppm | 0.7514 ppm | 200.8302 ppm | 8.6021 ppm | 0.1614 ppm |
| Concentration per Run 3 | 0.0041 ppm | 0.3116 ppm | 0.1371 ppm | 0.7543 ppm | 199.2184 ppm | 8.6020 ppm | 0.1622 ppm |
| Concentration RSD | 2.5 % | 0.7 % | 0.6 % | 0.8 % | 0.4 % | 0.5 % | 0.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 18.4381 ppm | 3.4816 ppm | 0.0055 ppm | 0.4882 ppm | 0.4661 ppm | 0.5200 ppm | -0.0027 ppm |
| Concentration per Run 1 | 18.4741 ppm | 3.4867 ppm | 0.0054 ppm | 0.4889 ppm | 0.4712 ppm | 0.5216 ppm | -0.0020 ppm |
| Concentration per Run 2 | 18.3907 ppm | 3.4974 ppm | 0.0058 ppm | 0.4873 ppm | 0.4609 ppm | 0.5168 ppm | -0.0020 ppm |
| Concentration per Run 3 | 18.4495 ppm | 3.4606 ppm | 0.0053 ppm | 0.4884 ppm | 0.4661 ppm | 0.5217 ppm | -0.0042 ppm |
| Concentration RSD | 0.2 % | 0.5 % | 4.4 % | 0.2 % | 1.1 % | 0.5 % | 46.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0058 ppm | 46.1155 [SIC 100] | 0.0215 ppm | 0.0654 ppm | 1.4759 ppm | 0.0066 ppm | 0.1865 ppm |
| Concentration per Run 1 | 0.0079 ppm | 46.2454 ppm | 0.0192 ppm | 0.0660 ppm | 1.4657 ppm | 0.0070 ppm | 0.1873 ppm |
| Concentration per Run 2 | 0.0051 ppm | 46.2500 ppm | 0.0215 ppm | 0.0656 ppm | 1.4600 ppm | 0.0067 ppm | 0.1851 ppm |
| Concentration per Run 3 | 0.0044 ppm | 45.8510 ppm | 0.0239 ppm | 0.0646 ppm | 1.5022 ppm | 0.0061 ppm | 0.1871 ppm |
| Concentration RSD | 32.4 % | 0.5 % | 10.9 % | 1.1 % | 1.6 % | 7.2 % | 0.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.2878 ppm | 111.2425 % | 107.7549 % | 102.4549 % | 167.9939 % | 163.2310 % | 161.3295 % |
| Concentration per Run 1 | 2.3003 ppm | 110.9695 % | 107.4493 % | 102.1428 % | 167.9407 % | 162.4012 % | 161.1144 % |
| Concentration per Run 2 | 2.2705 ppm | 111.5679 % | 107.3350 % | 103.1955 % | 167.8789 % | 162.6990 % | 161.9878 % |
| Concentration per Run 3 | 2.2927 ppm | 111.1903 % | 108.4803 % | 102.0265 % | 168.1620 % | 164.5927 % | 160.8864 % |
| Concentration RSD | 0.7 % | 0.3 % | 0.6 % | 0.6 % | 0.1 % | 0.7 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2513340-07D2 WG2038904
Analysis started at: 3/11/2025 12:24:20 PM
Rack 1
Vial 30
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 109.6403 ppm | 0.0442 ppm | 0.0213 ppm | 0.9853 ppm | 0.0136 ppm | 10.3840 ppm |
| Concentration per Run 1 | -0.0003 ppm | 109.6294 ppm | 0.0432 ppm | 0.0219 ppm | 0.9869 ppm | 0.0136 ppm | 10.3462 ppm |
| Concentration per Run 2 | 0.0011 ppm | 109.5675 ppm | 0.0451 ppm | 0.0218 ppm | 0.9846 ppm | 0.0135 ppm | 10.3947 ppm |
| Concentration per Run 3 | 0.0005 ppm | 109.7239 ppm | 0.0441 ppm | 0.0202 ppm | 0.9843 ppm | 0.0136 ppm | 10.4111 ppm |
| Concentration RSD | 154.7 % | 0.1 % | 2.1 % | 4.4 % | 0.1 % | 0.5 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0027 ppm | 0.1774 ppm | 0.1175 ppm | 0.4302 ppm | 156.9139 ppm | 8.4511 ppm | 0.1377 ppm |
| Concentration per Run 1 | 0.0027 ppm | 0.1768 ppm | 0.1169 ppm | 0.4256 ppm | 155.9604 ppm | 8.4619 ppm | 0.1388 ppm |
| Concentration per Run 2 | 0.0027 ppm | 0.1777 ppm | 0.1173 ppm | 0.4352 ppm | 157.5192 ppm | 8.4582 ppm | 0.1373 ppm |
| Concentration per Run 3 | 0.0026 ppm | 0.1778 ppm | 0.1182 ppm | 0.4300 ppm | 157.2620 ppm | 8.4332 ppm | 0.1370 ppm |
| Concentration RSD | 0.7 % | 0.3 % | 0.6 % | 1.1 % | 0.5 % | 0.2 % | 0.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 17.7988 ppm | 1.5376 ppm | 0.0049 ppm | 0.5610 ppm | 0.2432 ppm | 0.5092 ppm | -0.0036 ppm |
| Concentration per Run 1 | 17.7438 ppm | 1.5345 ppm | 0.0044 ppm | 0.5770 ppm | 0.2431 ppm | 0.5095 ppm | -0.0107 ppm |
| Concentration per Run 2 | 17.8697 ppm | 1.5368 ppm | 0.0055 ppm | 0.5468 ppm | 0.2434 ppm | 0.5116 ppm | 0.0024 ppm |
| Concentration per Run 3 | 17.7829 ppm | 1.5416 ppm | 0.0049 ppm | 0.5591 ppm | 0.2432 ppm | 0.5063 ppm | -0.0025 ppm |
| Concentration RSD | 0.4 % | 0.2 % | 10.8 % | 2.7 % | 0.1 % | 0.5 % | 183.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | **48.9142 [SIC 100]** | 0.0172 ppm | 0.0642 ppm | 1.5762 ppm | 0.0042 ppm | 0.1583 ppm |
| Concentration per Run 1 | 0.0037 ppm | 48.7699 ppm | 0.0186 ppm | 0.0646 ppm | 1.5689 ppm | 0.0036 ppm | 0.1575 ppm |
| Concentration per Run 2 | 0.0030 ppm | 49.2251 ppm | 0.0178 ppm | 0.0641 ppm | 1.5335 ppm | 0.0039 ppm | 0.1591 ppm |
| Concentration per Run 3 | -0.0015 ppm | 48.7475 ppm | 0.0153 ppm | 0.0638 ppm | 1.6261 ppm | 0.0051 ppm | 0.1582 ppm |
| Concentration RSD | 165.3 % | 0.6 % | 10.1 % | 0.6 % | 3.0 % | 19.0 % | 0.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.2086 ppm | 108.7690 % | 104.8693 % | 100.5680 % | **147.6434 %** | 142.8343 % | 141.2721 % |
| Concentration per Run 1 | 1.2051 ppm | 109.0173 % | 105.2849 % | 101.0868 % | **147.9938 %** | 143.9532 % | 141.7701 % |
| Concentration per Run 2 | 1.2165 ppm | 107.7982 % | 104.5287 % | 100.3404 % | **146.4989 %** | 142.1607 % | 141.5005 % |
| Concentration per Run 3 | 1.2042 ppm | 109.4916 % | 104.7944 % | 100.2768 % | **148.4375 %** | 142.3889 % | 140.5459 % |
| Concentration RSD | 0.6 % | 0.8 % | 0.4 % | 0.4 % | **0.7 %** | 0.7 % | 0.5 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCV
Analysis started at: 3/11/2025 12:27:48 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4848 ppm | 0.5031 ppm | 0.5106 ppm | 0.4927 ppm | 0.4794 ppm | 0.5157 ppm | 0.4955 ppm |
| Concentration per Run 1 | 0.4852 ppm | 0.5053 ppm | 0.5133 ppm | 0.4937 ppm | 0.4807 ppm | 0.5174 ppm | 0.4934 ppm |
| Concentration per Run 2 | 0.4868 ppm | 0.5031 ppm | 0.5103 ppm | 0.4940 ppm | 0.4791 ppm | 0.5161 ppm | 0.4957 ppm |
| Concentration per Run 3 | 0.4823 ppm | 0.5009 ppm | 0.5084 ppm | 0.4903 ppm | 0.4783 ppm | 0.5137 ppm | 0.4975 ppm |
| Recovery Percentage 1 | 96.959 % | 100.617 % | 102.130 % | 98.539 % | 95.871 % | 103.140 % | 99.105 % |
| Concentration RSD | 0.5 % | 0.4 % | 0.5 % | 0.4 % | 0.3 % | 0.4 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4912 ppm | 0.5032 ppm | 0.4945 ppm | 0.4739 ppm | 0.5208 ppm | 5.2306 ppm | 0.5269 ppm |
| Concentration per Run 1 | 0.4915 ppm | 0.5038 ppm | 0.4945 ppm | 0.4714 ppm | 0.5194 ppm | 5.2683 ppm | 0.5268 ppm |
| Concentration per Run 2 | 0.4921 ppm | 0.5045 ppm | 0.4973 ppm | 0.4751 ppm | 0.5156 ppm | 5.2142 ppm | 0.5247 ppm |
| Concentration per Run 3 | 0.4898 ppm | 0.5013 ppm | 0.4917 ppm | 0.4750 ppm | 0.5275 ppm | 5.2094 ppm | 0.5293 ppm |
| Recovery Percentage 1 | 98.235 % | 100.634 % | 98.900 % | 94.772 % | 104.159 % | 104.613 % | 105.386 % |
| Concentration RSD | 0.2 % | 0.3 % | 0.6 % | 0.5 % | 1.2 % | 0.6 % | 0.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4814 ppm | 0.4965 ppm | 0.4945 ppm | 10.3656 ppm | 0.5056 ppm | 0.5064 ppm | 0.5016 ppm |
| Concentration per Run 1 | 0.4824 ppm | 0.4972 ppm | 0.4925 ppm | 10.3369 ppm | 0.5062 ppm | 0.5048 ppm | 0.5032 ppm |
| Concentration per Run 2 | 0.4803 ppm | 0.4957 ppm | 0.4962 ppm | 10.4030 ppm | 0.5060 ppm | 0.5063 ppm | 0.5011 ppm |
| Concentration per Run 3 | 0.4814 ppm | 0.4967 ppm | 0.4948 ppm | 10.3570 ppm | 0.5047 ppm | 0.5082 ppm | 0.5005 ppm |
| Recovery Percentage 1 | 96.271 % | 99.302 % | 98.898 % | 103.656 % | 101.128 % | 101.285 % | 100.323 % |
| Concentration RSD | 0.2 % | 0.2 % | 0.4 % | 0.3 % | 0.2 % | 0.3 % | 0.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5097 ppm | 5.5725 ppm | 0.5150 ppm | 0.5021 ppm | 0.4915 ppm | 0.4998 ppm | 0.4868 ppm |
| Concentration per Run 1 | 0.5087 ppm | 5.5480 ppm | 0.5155 ppm | 0.5033 ppm | 0.4920 ppm | 0.4976 ppm | 0.4866 ppm |
| Concentration per Run 2 | 0.5104 ppm | 5.5968 ppm | 0.5156 ppm | 0.5014 ppm | 0.4921 ppm | 0.4985 ppm | 0.4877 ppm |
| Concentration per Run 3 | 0.5098 ppm | 5.5727 ppm | 0.5138 ppm | 0.5017 ppm | 0.4906 ppm | 0.5031 ppm | 0.4860 ppm |
| Recovery Percentage 1 | 101.932 % | 106.142 % | 102.996 % | 100.427 % | 98.310 % | 99.953 % | 97.356 % |
| Concentration RSD | 0.2 % | 0.4 % | 0.2 % | 0.2 % | 0.2 % | 0.6 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5029 ppm | 103.1206 % | 99.6879 % | 98.7097 % | 101.6829 % | 97.2096 % | 96.7366 % |
| Concentration per Run 1 | 0.5049 ppm | 102.8618 % | 99.5459 % | 98.4397 % | 101.4359 % | 97.0171 % | 96.5791 % |
| Concentration per Run 2 | 0.5030 ppm | 103.1007 % | 99.5119 % | 98.9141 % | 101.6999 % | 96.9845 % | 96.8387 % |
| Concentration per Run 3 | 0.5006 ppm | 103.3994 % | 100.0060 % | 98.7752 % | 101.9128 % | 97.6271 % | 96.7919 % |
| Recovery Percentage 1 | 100.572 % | | | | | | |
| Concentration RSD | 0.4 % | 0.3 % | 0.3 % | 0.2 % | 0.2 % | 0.4 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCB
Analysis started at: 3/11/2025 12:31:16 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 0.0096 ppm | -0.0001 ppm | 0.0006 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0056 ppm | -0.0011 ppm | 0.0003 ppm | 0.0002 ppm | 0.0000 ppm | -0.0024 ppm |
| Concentration per Run 2 | 0.0015 ppm | 0.0154 ppm | 0.0007 ppm | 0.0011 ppm | 0.0001 ppm | 0.0000 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0013 ppm | 0.0078 ppm | 0.0000 ppm | 0.0003 ppm | -0.0001 ppm | 0.0001 ppm | 0.0022 ppm |
| Recovery Percentage 1 | 17.724 % | 9.607 % | -2.051 % | 1.858 % | 0.904 % | 1.057 % | -0.032 % |
| Concentration RSD | 21.0 % | 53.1 % | 900.1 % | 87.7 % | 164.6 % | 50.1 % | 7,111.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0005 ppm | 0.0000 ppm | 0.0002 ppm | 0.0036 ppm | 0.0323 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0011 ppm | -0.0001 ppm | 0.0003 ppm | 0.0043 ppm | 0.0196 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0003 ppm | -0.0001 ppm | -0.0001 ppm | 0.0025 ppm | 0.0354 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0001 ppm | 0.0001 ppm | 0.0005 ppm | 0.0041 ppm | 0.0420 ppm | 0.0010 ppm |
| Recovery Percentage 1 | 1.283 % | 2.637 % | -0.202 % | 2.229 % | 7.247 % | 1.294 % | 19.587 % |
| Concentration RSD | 74.4 % | 99.8 % | 410.3 % | 118.3 % | 26.8 % | 35.7 % | 15.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0037 ppm | -0.0001 ppm | 0.0021 ppm | 0.0155 ppm | -0.0011 ppm | -0.0028 ppm | 0.0019 ppm |
| Concentration per Run 1 | -0.0028 ppm | -0.0003 ppm | 0.0021 ppm | 0.0164 ppm | -0.0023 ppm | -0.0025 ppm | 0.0048 ppm |
| Concentration per Run 2 | -0.0015 ppm | -0.0001 ppm | 0.0021 ppm | 0.0140 ppm | -0.0015 ppm | -0.0031 ppm | -0.0010 ppm |
| Concentration per Run 3 | -0.0066 ppm | 0.0001 ppm | 0.0020 ppm | 0.0160 ppm | 0.0004 ppm | -0.0027 ppm | 0.0018 ppm |
| Recovery Percentage 1 | -3.657 % | -0.852 % | 4.165 % | 0.773 % | -4.577 % | -27.731 % | 3.779 % |
| Concentration RSD | 72.6 % | 192.1 % | 2.6 % | 8.2 % | 120.5 % | 10.3 % | 153.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | 0.0012 ppm | -0.0012 ppm | 0.0001 ppm | -0.0003 ppm | 0.0011 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0022 ppm | -0.0018 ppm | 0.0002 ppm | -0.0003 ppm | 0.0022 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0014 ppm | -0.0014 ppm | -0.0005 ppm | 0.0001 ppm | -0.0003 ppm | 0.0008 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0013 ppm | 0.0027 ppm | -0.0014 ppm | 0.0001 ppm | -0.0004 ppm | 0.0004 ppm | 0.0001 ppm |
| Recovery Percentage 1 | -8.863 % | 0.233 % | -2.452 % | 1.487 % | -3.173 % | 5.590 % | -0.058 % |
| Concentration RSD | 87.3 % | 192.2 % | 52.4 % | 32.7 % | 19.6 % | 88.5 % | 1,276.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 100.8510 % | 99.1114 % | 96.6908 % | 101.4318 % | 98.4329 % | 96.9263 % |
| Concentration per Run 1 | -0.0006 ppm | 100.9280 % | 99.1756 % | 96.8458 % | 101.6437 % | 98.5482 % | 97.2192 % |
| Concentration per Run 2 | -0.0006 ppm | 100.6460 % | 99.5157 % | 96.9382 % | 100.9907 % | 98.4087 % | 97.0695 % |
| Concentration per Run 3 | -0.0002 ppm | 100.9789 % | 98.6430 % | 96.2886 % | 101.6610 % | 98.3420 % | 96.4902 % |
| Recovery Percentage 1 | -9.396 % | | | | | | |
| Concentration RSD | 46.6 % | 0.2 % | 0.4 % | 0.4 % | 0.4 % | 0.1 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2037772-1 WG2037772
Analysis started at: 3/11/2025 12:55:07 PM
Rack 1
Vial 31
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0170 ppm | 0.0009 ppm | -0.0003 ppm | -0.0001 ppm | 0.0000 ppm | 0.0265 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0152 ppm | 0.0004 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm | 0.0279 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0166 ppm | 0.0006 ppm | -0.0010 ppm | -0.0001 ppm | 0.0000 ppm | 0.0251 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0191 ppm | 0.0017 ppm | -0.0002 ppm | -0.0001 ppm | 0.0000 ppm | 0.0265 ppm |
| Concentration RSD | 9.2 % | 11.5 % | 74.6 % | 204.0 % | 69.8 % | 50.4 % | 5.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0005 ppm | 0.0000 ppm | 0.0004 ppm | 0.0046 ppm | 0.0371 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0002 ppm | 0.0002 ppm | 0.0002 ppm | 0.0063 ppm | 0.0369 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0016 ppm | -0.0007 ppm | 0.0006 ppm | 0.0040 ppm | 0.0350 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0003 ppm | 0.0005 ppm | 0.0005 ppm | 0.0035 ppm | 0.0393 ppm | -0.0002 ppm |
| Concentration RSD | 261.6 % | 186.1 % | 2,661.2 % | 55.9 % | 32.2 % | 5.8 % | 212.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 0.0001 ppm | -0.0001 ppm | 0.0211 ppm | -0.0010 ppm | -0.0010 ppm | 0.0016 ppm |
| Concentration per Run 1 | -0.0012 ppm | 0.0001 ppm | -0.0007 ppm | 0.0224 ppm | -0.0017 ppm | -0.0006 ppm | 0.0022 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0000 ppm | 0.0002 ppm | 0.0181 ppm | -0.0006 ppm | -0.0015 ppm | 0.0056 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0002 ppm | 0.0003 ppm | 0.0228 ppm | -0.0006 ppm | -0.0010 ppm | -0.0032 ppm |
| Concentration RSD | 136.5 % | 71.9 % | 1,049.0 % | 12.3 % | 62.9 % | 41.1 % | 284.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | -0.0008 ppm | 0.0001 ppm | -0.0003 ppm | 0.0016 ppm | -0.0002 ppm |
| Concentration per Run 1 | -0.0010 ppm | 0.0000 ppm | -0.0005 ppm | 0.0001 ppm | -0.0002 ppm | 0.0015 ppm | -0.0005 ppm |
| Concentration per Run 2 | 0.0013 ppm | 0.0002 ppm | -0.0006 ppm | 0.0001 ppm | -0.0005 ppm | 0.0015 ppm | -0.0003 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0005 ppm | -0.0015 ppm | 0.0000 ppm | -0.0002 ppm | 0.0019 ppm | 0.0001 ppm |
| Concentration RSD | 3,517.8 % | 335.9 % | 65.4 % | 61.9 % | 66.3 % | 12.2 % | 141.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 101.9924 % | 99.4538 % | 97.8428 % | 101.8819 % | 98.3428 % | 97.8455 % |
| Concentration per Run 1 | 0.0002 ppm | 102.1806 % | 99.2329 % | 97.8680 % | 102.4637 % | 98.1430 % | 98.2143 % |
| Concentration per Run 2 | 0.0006 ppm | 101.7847 % | 99.5112 % | 97.5457 % | 101.2417 % | 98.2695 % | 97.4825 % |
| Concentration per Run 3 | 0.0004 ppm | 102.0120 % | 99.6172 % | 98.1146 % | 101.9403 % | 98.6161 % | 97.8398 % |
| Concentration RSD | 56.8 % | 0.2 % | 0.2 % | 0.3 % | 0.6 % | 0.2 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2037772-2 WG2037772
Analysis started at: 3/11/2025 12:58:49 PM
Rack 1
Vial 32
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0509 ppm | 2.0383 ppm | 0.1201 ppm | 0.9985 ppm | 1.9572 ppm | 0.0523 ppm | 10.0927 ppm |
| Concentration per Run 1 | 0.0504 ppm | 2.0371 ppm | 0.1209 ppm | 0.9984 ppm | 1.9420 ppm | 0.0522 ppm | 10.0757 ppm |
| Concentration per Run 2 | 0.0510 ppm | 2.0473 ppm | 0.1193 ppm | 0.9980 ppm | 1.9594 ppm | 0.0523 ppm | 10.1297 ppm |
| Concentration per Run 3 | 0.0512 ppm | 2.0305 ppm | 0.1200 ppm | 0.9992 ppm | 1.9703 ppm | 0.0524 ppm | 10.0728 ppm |
| Concentration RSD | 0.8 % | 0.4 % | 0.7 % | 0.1 % | 0.7 % | 0.2 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0528 ppm | 0.4997 ppm | 0.1987 ppm | 0.2445 ppm | 1.0452 ppm | 10.7260 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0526 ppm | 0.4976 ppm | 0.1992 ppm | 0.2445 ppm | 1.0400 ppm | 10.6425 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0529 ppm | 0.5002 ppm | 0.1993 ppm | 0.2436 ppm | 1.0481 ppm | 10.7194 ppm | -0.0006 ppm |
| Concentration per Run 3 | 0.0529 ppm | 0.5012 ppm | 0.1977 ppm | 0.2454 ppm | 1.0475 ppm | 10.8160 ppm | 0.0013 ppm |
| Concentration RSD | 0.4 % | 0.4 % | 0.5 % | 0.4 % | 0.4 % | 0.8 % | 283.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.9692 ppm | 0.5129 ppm | 0.9985 ppm | 10.7014 ppm | 0.5050 ppm | 0.5423 ppm | 0.4500 ppm |
| Concentration per Run 1 | 9.9342 ppm | 0.5109 ppm | 0.9936 ppm | 10.6526 ppm | 0.5050 ppm | 0.5411 ppm | 0.4417 ppm |
| Concentration per Run 2 | 10.0054 ppm | 0.5141 ppm | 0.9982 ppm | 10.7978 ppm | 0.5039 ppm | 0.5408 ppm | 0.4498 ppm |
| Concentration per Run 3 | 9.9681 ppm | 0.5138 ppm | 1.0037 ppm | 10.6540 ppm | 0.5060 ppm | 0.5448 ppm | 0.4586 ppm |
| Concentration RSD | 0.4 % | 0.3 % | 0.5 % | 0.8 % | 0.2 % | 0.4 % | 1.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1181 ppm | 0.8862 ppm | 0.9862 ppm | 1.0121 ppm | 0.9989 ppm | 0.1130 ppm | 0.5035 ppm |
| Concentration per Run 1 | 0.1182 ppm | 0.8837 ppm | 0.9821 ppm | 1.0061 ppm | 0.9991 ppm | 0.1140 ppm | 0.5024 ppm |
| Concentration per Run 2 | 0.1175 ppm | 0.8858 ppm | 0.9847 ppm | 1.0122 ppm | 0.9980 ppm | 0.1115 ppm | 0.5040 ppm |
| Concentration per Run 3 | 0.1186 ppm | 0.8892 ppm | 0.9917 ppm | 1.0180 ppm | 0.9995 ppm | 0.1135 ppm | 0.5040 ppm |
| Concentration RSD | 0.5 % | 0.3 % | 0.5 % | 0.6 % | 0.1 % | 1.2 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5101 ppm | 102.9080 % | 99.9444 % | 98.5127 % | 101.1044 % | 97.5534 % | 95.7397 % |
| Concentration per Run 1 | 0.5065 ppm | 103.4806 % | 100.3331 % | 98.1674 % | 101.4400 % | 97.9615 % | 95.2065 % |
| Concentration per Run 2 | 0.5117 ppm | 102.9199 % | 99.7088 % | 98.8716 % | 101.1601 % | 97.8386 % | 96.0024 % |
| Concentration per Run 3 | 0.5120 ppm | 102.3236 % | 99.7912 % | 98.4990 % | 100.7131 % | 96.8603 % | 96.0104 % |
| Concentration RSD | 0.6 % | 0.6 % | 0.3 % | 0.4 % | 0.4 % | 0.6 % | 0.5 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511747-02 WG2037772
Analysis started at: 3/11/2025 1:02:17 PM
Rack 1
Vial 38
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.0102 ppm | 0.0013 ppm | 0.0102 ppm | 0.0029 ppm | 0.0000 ppm | 0.8960 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.0136 ppm | 0.0021 ppm | 0.0113 ppm | 0.0030 ppm | 0.0000 ppm | 0.8960 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0048 ppm | 0.0014 ppm | 0.0088 ppm | 0.0029 ppm | 0.0000 ppm | 0.8935 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0124 ppm | 0.0006 ppm | 0.0104 ppm | 0.0029 ppm | 0.0000 ppm | 0.8985 ppm |
| Concentration RSD | 4.6 % | 46.5 % | 54.9 % | 12.3 % | 2.1 % | 95.8 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0001 ppm | -0.0001 ppm | 0.0010 ppm | 0.0022 ppm | 0.6110 ppm | 0.0012 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0005 ppm | -0.0002 ppm | 0.0013 ppm | 0.0040 ppm | 0.6226 ppm | 0.0008 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0006 ppm | -0.0003 ppm | 0.0009 ppm | 0.0028 ppm | 0.6192 ppm | 0.0011 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0003 ppm | 0.0000 ppm | 0.0008 ppm | -0.0001 ppm | 0.5911 ppm | 0.0016 ppm |
| Concentration RSD | 24.4 % | 402.4 % | 124.2 % | 28.4 % | 95.4 % | 2.8 % | 33.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.1246 ppm | 0.0001 ppm | 0.0044 ppm | 2.7267 ppm | -0.0004 ppm | -0.0018 ppm | 0.0037 ppm |
| Concentration per Run 1 | 1.1330 ppm | 0.0001 ppm | 0.0046 ppm | 2.7157 ppm | -0.0004 ppm | -0.0039 ppm | 0.0019 ppm |
| Concentration per Run 2 | 1.1182 ppm | 0.0000 ppm | 0.0043 ppm | 2.7304 ppm | -0.0004 ppm | -0.0013 ppm | 0.0040 ppm |
| Concentration per Run 3 | 1.1225 ppm | 0.0000 ppm | 0.0044 ppm | 2.7339 ppm | -0.0003 ppm | -0.0001 ppm | 0.0053 ppm |
| Concentration RSD | 0.7 % | 75.1 % | 4.1 % | 0.4 % | 19.1 % | 111.9 % | 45.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 0.3671 ppm | 0.0039 ppm | 0.0020 ppm | -0.0002 ppm | 0.0023 ppm | -0.0002 ppm |
| Concentration per Run 1 | -0.0006 ppm | 0.3648 ppm | 0.0036 ppm | 0.0018 ppm | -0.0001 ppm | 0.0006 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0020 ppm | 0.3644 ppm | 0.0049 ppm | 0.0020 ppm | -0.0002 ppm | 0.0051 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.3722 ppm | 0.0033 ppm | 0.0020 ppm | -0.0003 ppm | 0.0012 ppm | -0.0002 ppm |
| Concentration RSD | 235.8 % | 1.2 % | 22.1 % | 5.9 % | 48.9 % | 105.9 % | 52.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 105.8252 % | 105.4578 % | 104.5665 % | 104.8803 % | 103.2366 % | 103.8501 % |
| Concentration per Run 1 | 0.0007 ppm | 105.6663 % | 105.5473 % | 101.9114 % | 105.0775 % | 103.1861 % | 101.2275 % |
| Concentration per Run 2 | 0.0007 ppm | 105.9568 % | 105.4612 % | 100.7492 % | 105.4167 % | 103.5291 % | 100.1104 % |
| Concentration per Run 3 | 0.0008 ppm | 105.8525 % | 105.3648 % | 111.0389 % | 104.1468 % | 102.9944 % | 110.2124 % |
| Concentration RSD | 7.2 % | 0.1 % | 0.1 % | 5.4 % | 0.6 % | 0.3 % | 5.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511752-01 WG2037772
Analysis started at: 3/11/2025 1:05:43 PM
Rack 1
Vial 39
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0133 ppm | -0.0005 ppm | 0.0224 ppm | 0.0037 ppm | 0.0000 ppm | 18.8564 ppm |
| Concentration per Run 1 | 0.0015 ppm | 0.0099 ppm | -0.0024 ppm | 0.0216 ppm | 0.0035 ppm | 0.0001 ppm | 18.9037 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0211 ppm | -0.0007 ppm | 0.0235 ppm | 0.0038 ppm | 0.0000 ppm | 18.7375 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0090 ppm | 0.0015 ppm | 0.0220 ppm | 0.0039 ppm | 0.0000 ppm | 18.9282 ppm |
| Concentration RSD | 43.8 % | 50.4 % | 361.2 % | 4.6 % | 5.8 % | 140.0 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0001 ppm | 0.0001 ppm | 0.0578 ppm | 0.0583 ppm | 2.1549 ppm | 0.0107 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0011 ppm | 0.0004 ppm | 0.0572 ppm | 0.0591 ppm | 2.1814 ppm | 0.0104 ppm |
| Concentration per Run 2 | -0.0003 ppm | -0.0005 ppm | 0.0003 ppm | 0.0582 ppm | 0.0586 ppm | 2.1400 ppm | 0.0110 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0010 ppm | -0.0003 ppm | 0.0581 ppm | 0.0573 ppm | 2.1433 ppm | 0.0108 ppm |
| Concentration RSD | 50.4 % | 1,097.0 % | 282.8 % | 1.0 % | 1.6 % | 1.1 % | 3.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.1714 ppm | 0.0020 ppm | 0.0057 ppm | 8.2917 ppm | 0.0014 ppm | 0.0237 ppm | 0.0037 ppm |
| Concentration per Run 1 | 2.1765 ppm | 0.0020 ppm | 0.0055 ppm | 8.3690 ppm | 0.0014 ppm | 0.0217 ppm | 0.0067 ppm |
| Concentration per Run 2 | 2.1749 ppm | 0.0021 ppm | 0.0056 ppm | 8.3033 ppm | 0.0012 ppm | 0.0248 ppm | 0.0023 ppm |
| Concentration per Run 3 | 2.1630 ppm | 0.0019 ppm | 0.0060 ppm | 8.2027 ppm | 0.0017 ppm | 0.0246 ppm | 0.0020 ppm |
| Concentration RSD | 0.3 % | 6.2 % | 4.0 % | 1.0 % | 17.3 % | 7.4 % | 71.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 9.3036 ppm | 0.0011 ppm | 0.0462 ppm | -0.0002 ppm | 0.0013 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0009 ppm | 9.3102 ppm | 0.0002 ppm | 0.0466 ppm | -0.0003 ppm | 0.0018 ppm | 0.0009 ppm |
| Concentration per Run 2 | -0.0015 ppm | 9.3158 ppm | 0.0010 ppm | 0.0460 ppm | 0.0001 ppm | 0.0013 ppm | 0.0007 ppm |
| Concentration per Run 3 | -0.0016 ppm | 9.2848 ppm | 0.0021 ppm | 0.0461 ppm | -0.0005 ppm | 0.0008 ppm | 0.0008 ppm |
| Concentration RSD | 197.5 % | 0.2 % | 88.8 % | 0.7 % | 123.0 % | 38.7 % | 11.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2250 ppm | 103.7482 % | 99.8570 % | 98.6871 % | 102.6571 % | 97.5971 % | 97.2841 % |
| Concentration per Run 1 | 0.2265 ppm | 103.5451 % | 99.5690 % | 98.3805 % | 102.7141 % | 97.7809 % | 97.1873 % |
| Concentration per Run 2 | 0.2254 ppm | 103.5663 % | 100.4471 % | 98.7541 % | 102.5504 % | 98.2181 % | 97.1408 % |
| Concentration per Run 3 | 0.2232 ppm | 104.1333 % | 99.5549 % | 98.9266 % | 102.7068 % | 96.7924 % | 97.5244 % |
| Concentration RSD | 0.7 % | 0.3 % | 0.5 % | 0.3 % | 0.1 % | 0.7 % | 0.2 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511752-02 WG2037772
Analysis started at: 3/11/2025 1:09:09 PM
Rack 1
Vial 40
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0080 ppm | -0.0002 ppm | 0.0231 ppm | 0.0036 ppm | 0.0000 ppm | 18.3518 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.0091 ppm | -0.0014 ppm | 0.0242 ppm | 0.0035 ppm | 0.0000 ppm | 18.4242 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0072 ppm | -0.0008 ppm | 0.0226 ppm | 0.0036 ppm | 0.0000 ppm | 18.3396 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0077 ppm | 0.0017 ppm | 0.0224 ppm | 0.0036 ppm | 0.0000 ppm | 18.2915 ppm |
| Concentration RSD | 24.3 % | 12.3 % | 930.7 % | 4.1 % | 1.1 % | 38.9 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0002 ppm | 0.0006 ppm | 0.0441 ppm | 0.0394 ppm | 2.1174 ppm | 0.0104 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0001 ppm | 0.0006 ppm | 0.0443 ppm | 0.0403 ppm | 2.1583 ppm | 0.0097 ppm |
| Concentration per Run 2 | -0.0003 ppm | -0.0007 ppm | -0.0001 ppm | 0.0439 ppm | 0.0373 ppm | 2.1120 ppm | 0.0109 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0002 ppm | 0.0012 ppm | 0.0440 ppm | 0.0404 ppm | 2.0818 ppm | 0.0105 ppm |
| Concentration RSD | 114.0 % | 230.6 % | 113.9 % | 0.6 % | 4.5 % | 1.8 % | 6.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.1308 ppm | 0.0017 ppm | 0.0051 ppm | 8.1931 ppm | -0.0012 ppm | -0.0017 ppm | -0.0013 ppm |
| Concentration per Run 1 | 2.1367 ppm | 0.0016 ppm | 0.0054 ppm | 8.2117 ppm | -0.0015 ppm | -0.0024 ppm | -0.0039 ppm |
| Concentration per Run 2 | 2.1239 ppm | 0.0019 ppm | 0.0055 ppm | 8.1811 ppm | -0.0004 ppm | -0.0005 ppm | -0.0010 ppm |
| Concentration per Run 3 | 2.1318 ppm | 0.0015 ppm | 0.0043 ppm | 8.1864 ppm | -0.0018 ppm | -0.0023 ppm | 0.0010 ppm |
| Concentration RSD | 0.3 % | 11.0 % | 13.5 % | 0.2 % | 57.6 % | 61.8 % | 191.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 9.0966 ppm | -0.0001 ppm | 0.0452 ppm | -0.0005 ppm | 0.0015 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0014 ppm | 9.1109 ppm | -0.0006 ppm | 0.0453 ppm | -0.0003 ppm | 0.0014 ppm | 0.0005 ppm |
| Concentration per Run 2 | -0.0007 ppm | 9.1009 ppm | 0.0007 ppm | 0.0452 ppm | -0.0002 ppm | 0.0014 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0003 ppm | 9.0780 ppm | -0.0003 ppm | 0.0453 ppm | -0.0008 ppm | 0.0017 ppm | 0.0006 ppm |
| Concentration RSD | 304.7 % | 0.2 % | 1,229.9 % | 0.1 % | 74.0 % | 12.9 % | 6.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0154 ppm | 103.1895 % | 100.4981 % | 98.3560 % | 101.9858 % | 98.5870 % | 96.9297 % |
| Concentration per Run 1 | 0.0153 ppm | 102.4200 % | 99.5022 % | 98.5483 % | 101.9264 % | 97.7503 % | 97.1135 % |
| Concentration per Run 2 | 0.0154 ppm | 104.0166 % | 100.8503 % | 98.3529 % | 102.5493 % | 98.5866 % | 97.0700 % |
| Concentration per Run 3 | 0.0155 ppm | 103.1318 % | 101.1419 % | 98.1668 % | 101.4817 % | 99.4241 % | 96.6055 % |
| Concentration RSD | 0.6 % | 0.8 % | 0.9 % | 0.2 % | 0.5 % | 0.8 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511747-01 WG2037772
Analysis started at: 3/11/2025 1:12:36 PM
Rack 1
Vial 33
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0146 ppm | 0.0000 ppm | 0.0166 ppm | 0.0112 ppm | 0.0000 ppm | 38.0918 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0163 ppm | 0.0005 ppm | 0.0171 ppm | 0.0111 ppm | 0.0000 ppm | 38.1125 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0165 ppm | -0.0002 ppm | 0.0172 ppm | 0.0114 ppm | 0.0000 ppm | 37.8460 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0111 ppm | -0.0003 ppm | 0.0154 ppm | 0.0110 ppm | 0.0000 ppm | 38.3170 ppm |
| Concentration RSD | 45.2 % | 20.9 % | 3,789.4 % | 6.0 % | 1.7 % | 997.9 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0007 ppm | 0.0002 ppm | 0.0418 ppm | 0.0185 ppm | 3.3394 ppm | 0.0082 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0009 ppm | 0.0004 ppm | 0.0420 ppm | 0.0164 ppm | 3.3507 ppm | 0.0083 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0002 ppm | -0.0004 ppm | 0.0413 ppm | 0.0201 ppm | 3.3402 ppm | 0.0080 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0008 ppm | 0.0008 ppm | 0.0423 ppm | 0.0192 ppm | 3.3272 ppm | 0.0084 ppm |
| Concentration RSD | 8.0 % | 59.2 % | 252.2 % | 1.2 % | 10.5 % | 0.4 % | 2.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.1920 ppm | 0.0002 ppm | 0.0023 ppm | 13.7772 ppm | -0.0009 ppm | -0.0017 ppm | -0.0012 ppm |
| Concentration per Run 1 | 4.1977 ppm | 0.0002 ppm | 0.0019 ppm | 13.7621 ppm | -0.0007 ppm | -0.0032 ppm | -0.0044 ppm |
| Concentration per Run 2 | 4.1874 ppm | 0.0002 ppm | 0.0025 ppm | 13.8269 ppm | -0.0010 ppm | -0.0010 ppm | -0.0006 ppm |
| Concentration per Run 3 | 4.1908 ppm | 0.0002 ppm | 0.0026 ppm | 13.7427 ppm | -0.0012 ppm | -0.0009 ppm | 0.0015 ppm |
| Concentration RSD | 0.1 % | 29.2 % | 17.1 % | 0.3 % | 26.5 % | 75.8 % | 250.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0013 ppm | 8.4211 ppm | 0.0005 ppm | 0.1666 ppm | 0.0000 ppm | -0.0007 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0006 ppm | 8.4693 ppm | 0.0018 ppm | 0.1664 ppm | 0.0006 ppm | 0.0006 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0001 ppm | 8.3922 ppm | 0.0003 ppm | 0.1672 ppm | -0.0002 ppm | -0.0018 ppm | 0.0005 ppm |
| Concentration per Run 3 | -0.0033 ppm | 8.4018 ppm | -0.0004 ppm | 0.1663 ppm | -0.0005 ppm | -0.0009 ppm | 0.0009 ppm |
| Concentration RSD | 142.0 % | 0.5 % | 207.2 % | 0.3 % | 1,461.2 % | 179.4 % | 54.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0960 ppm | 103.4039 % | 99.5031 % | 97.8272 % | 102.1849 % | 97.1267 % | 95.9845 % |
| Concentration per Run 1 | 0.0967 ppm | 103.2997 % | 99.6034 % | 97.2136 % | 102.3489 % | 97.1795 % | 95.4963 % |
| Concentration per Run 2 | 0.0956 ppm | 103.6699 % | 99.3282 % | 98.6698 % | 102.3740 % | 97.2284 % | 96.4645 % |
| Concentration per Run 3 | 0.0957 ppm | 103.2420 % | 99.5778 % | 97.5981 % | 101.8317 % | 96.9723 % | 95.9928 % |
| Concentration RSD | 0.6 % | 0.2 % | 0.2 % | 0.8 % | 0.3 % | 0.1 % | 0.5 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2037772-3 WG2037772
Analysis started at: 3/11/2025 1:16:04 PM
Rack 1
Vial 34
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0499 ppm | 2.0014 ppm | 0.1178 ppm | 0.9923 ppm | 1.9410 ppm | 0.0514 ppm | 46.7253 ppm |
| Concentration per Run 1 | 0.0502 ppm | 1.9945 ppm | 0.1181 ppm | 0.9847 ppm | 1.9375 ppm | 0.0512 ppm | 46.6575 ppm |
| Concentration per Run 2 | 0.0496 ppm | 2.0171 ppm | 0.1185 ppm | 0.9975 ppm | 1.9359 ppm | 0.0515 ppm | 46.8775 ppm |
| Concentration per Run 3 | 0.0498 ppm | 1.9927 ppm | 0.1169 ppm | 0.9947 ppm | 1.9496 ppm | 0.0516 ppm | 46.6410 ppm |
| Concentration RSD | 0.6 % | 0.7 % | 0.7 % | 0.7 % | 0.4 % | 0.4 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0504 ppm | 0.4815 ppm | 0.1945 ppm | 0.2838 ppm | 1.0427 ppm | 13.7613 ppm | 0.0082 ppm |
| Concentration per Run 1 | 0.0505 ppm | 0.4825 ppm | 0.1937 ppm | 0.2840 ppm | 1.0397 ppm | 13.7557 ppm | 0.0093 ppm |
| Concentration per Run 2 | 0.0506 ppm | 0.4826 ppm | 0.1952 ppm | 0.2840 ppm | 1.0447 ppm | 13.7694 ppm | 0.0078 ppm |
| Concentration per Run 3 | 0.0500 ppm | 0.4794 ppm | 0.1945 ppm | 0.2834 ppm | 1.0437 ppm | 13.7588 ppm | 0.0076 ppm |
| Concentration RSD | 0.6 % | 0.4 % | 0.4 % | 0.1 % | 0.3 % | 0.1 % | 11.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 13.6133 ppm | 0.5010 ppm | 0.9490 ppm | 23.7506 ppm | 0.4862 ppm | 0.5219 ppm | 0.4085 ppm |
| Concentration per Run 1 | 13.6310 ppm | 0.5004 ppm | 0.9464 ppm | 23.6675 ppm | 0.4836 ppm | 0.5241 ppm | 0.4127 ppm |
| Concentration per Run 2 | 13.6227 ppm | 0.5018 ppm | 0.9487 ppm | 23.7737 ppm | 0.4869 ppm | 0.5240 ppm | 0.4024 ppm |
| Concentration per Run 3 | 13.5862 ppm | 0.5008 ppm | 0.9517 ppm | 23.8105 ppm | 0.4882 ppm | 0.5177 ppm | 0.4105 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 0.3 % | 0.3 % | 0.5 % | 0.7 % | 1.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1173 ppm | 9.2288 ppm | 0.9411 ppm | 1.1409 ppm | 0.9636 ppm | 0.1143 ppm | 0.4937 ppm |
| Concentration per Run 1 | 0.1173 ppm | 9.2413 ppm | 0.9405 ppm | 1.1390 ppm | 0.9656 ppm | 0.1157 ppm | 0.4942 ppm |
| Concentration per Run 2 | 0.1171 ppm | 9.2392 ppm | 0.9420 ppm | 1.1396 ppm | 0.9614 ppm | 0.1139 ppm | 0.4953 ppm |
| Concentration per Run 3 | 0.1175 ppm | 9.2058 ppm | 0.9409 ppm | 1.1442 ppm | 0.9639 ppm | 0.1134 ppm | 0.4916 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 0.1 % | 0.2 % | 0.2 % | 1.0 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5864 ppm | 102.9847 % | 98.3286 % | 98.0283 % | 100.9157 % | 95.6042 % | 94.7426 % |
| Concentration per Run 1 | 0.5858 ppm | 103.3053 % | 98.3872 % | 97.5475 % | 101.3661 % | 95.6198 % | 94.6457 % |
| Concentration per Run 2 | 0.5885 ppm | 102.4875 % | 97.7630 % | 97.8124 % | 100.8971 % | 94.9322 % | 94.8539 % |
| Concentration per Run 3 | 0.5849 ppm | 103.1613 % | 98.8357 % | 98.7249 % | 100.4838 % | 96.2607 % | 94.7281 % |
| Concentration RSD | 0.3 % | 0.4 % | 0.5 % | 0.6 % | 0.4 % | 0.7 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2037772-4 WG2037772
Analysis started at: 3/11/2025 1:19:32 PM
Rack 1
Vial 35
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0085 ppm | 0.0005 ppm | 0.0154 ppm | 0.0112 ppm | 0.0000 ppm | 37.2881 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.0110 ppm | -0.0010 ppm | 0.0167 ppm | 0.0113 ppm | 0.0000 ppm | 37.0411 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0099 ppm | 0.0019 ppm | 0.0135 ppm | 0.0110 ppm | 0.0000 ppm | 37.3337 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0047 ppm | 0.0007 ppm | 0.0161 ppm | 0.0113 ppm | 0.0000 ppm | 37.4895 ppm |
| Concentration RSD | 49.3 % | 39.6 % | 292.5 % | 10.9 % | 1.5 % | 99.0 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0002 ppm | 0.0003 ppm | 0.0408 ppm | 0.0167 ppm | 3.2703 ppm | 0.0069 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0003 ppm | 0.0003 ppm | 0.0408 ppm | 0.0160 ppm | 3.2425 ppm | 0.0067 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0004 ppm | -0.0001 ppm | 0.0405 ppm | 0.0169 ppm | 3.2741 ppm | 0.0079 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0002 ppm | 0.0007 ppm | 0.0412 ppm | 0.0173 ppm | 3.2944 ppm | 0.0062 ppm |
| Concentration RSD | 62.9 % | 184.1 % | 131.6 % | 0.8 % | 4.0 % | 0.8 % | 12.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.1591 ppm | 0.0003 ppm | 0.0071 ppm | 13.6063 ppm | 0.0003 ppm | -0.0015 ppm | 0.0049 ppm |
| Concentration per Run 1 | 4.1837 ppm | 0.0003 ppm | 0.0078 ppm | 13.5543 ppm | 0.0002 ppm | -0.0009 ppm | 0.0010 ppm |
| Concentration per Run 2 | 4.1493 ppm | 0.0005 ppm | 0.0063 ppm | 13.5662 ppm | 0.0000 ppm | -0.0004 ppm | 0.0078 ppm |
| Concentration per Run 3 | 4.1442 ppm | 0.0002 ppm | 0.0073 ppm | 13.6984 ppm | 0.0006 ppm | -0.0032 ppm | 0.0058 ppm |
| Concentration RSD | 0.5 % | 34.6 % | 10.4 % | 0.6 % | 105.8 % | 97.7 % | 71.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 8.3006 ppm | 0.0061 ppm | 0.1636 ppm | 0.0000 ppm | 0.0028 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0001 ppm | 8.3422 ppm | 0.0073 ppm | 0.1631 ppm | -0.0003 ppm | 0.0050 ppm | 0.0010 ppm |
| Concentration per Run 2 | 0.0018 ppm | 8.2242 ppm | 0.0054 ppm | 0.1636 ppm | -0.0001 ppm | 0.0005 ppm | 0.0008 ppm |
| Concentration per Run 3 | -0.0011 ppm | 8.3355 ppm | 0.0057 ppm | 0.1641 ppm | 0.0005 ppm | 0.0029 ppm | 0.0005 ppm |
| Concentration RSD | 577.3 % | 0.8 % | 16.7 % | 0.3 % | 1,080.7 % | 79.7 % | 27.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0948 ppm | 102.7113 % | 99.7301 % | 97.5326 % | 101.5843 % | 97.6941 % | 96.1095 % |
| Concentration per Run 1 | 0.0952 ppm | 102.5707 % | 100.3785 % | 97.8158 % | 101.6410 % | 98.2559 % | 96.2948 % |
| Concentration per Run 2 | 0.0947 ppm | 102.3340 % | 100.1872 % | 97.0079 % | 101.5642 % | 98.2620 % | 95.6257 % |
| Concentration per Run 3 | 0.0945 ppm | 103.2292 % | 98.6245 % | 97.7740 % | 101.5477 % | 96.5644 % | 96.4079 % |
| Concentration RSD | 0.4 % | 0.5 % | 1.0 % | 0.5 % | 0.0 % | 1.0 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2037772-5 WG2037772
Analysis started at: 3/11/2025 1:23:00 PM
Rack 1
Vial 36
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0257 ppm | 2.0132 ppm | 0.1300 ppm | 1.0250 ppm | 1.9487 ppm | 0.0519 ppm | 46.5493 ppm |
| Concentration per Run 1 | 0.0301 ppm | 2.0222 ppm | 0.1295 ppm | 1.0212 ppm | 1.9443 ppm | 0.0519 ppm | 46.3662 ppm |
| Concentration per Run 2 | 0.0231 ppm | 2.0156 ppm | 0.1313 ppm | 1.0281 ppm | 1.9487 ppm | 0.0518 ppm | 46.5607 ppm |
| Concentration per Run 3 | 0.0240 ppm | 2.0019 ppm | 0.1292 ppm | 1.0257 ppm | 1.9531 ppm | 0.0519 ppm | 46.7209 ppm |
| Concentration RSD | 14.8 % | 0.5 % | 0.9 % | 0.3 % | 0.2 % | 0.1 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0515 ppm | 0.4886 ppm | 0.1974 ppm | 0.2843 ppm | 1.0474 ppm | 14.1076 ppm | 0.0074 ppm |
| Concentration per Run 1 | 0.0520 ppm | 0.4885 ppm | 0.1971 ppm | 0.2855 ppm | 1.0449 ppm | 14.1023 ppm | 0.0075 ppm |
| Concentration per Run 2 | 0.0508 ppm | 0.4876 ppm | 0.1959 ppm | 0.2861 ppm | 1.0508 ppm | 14.1040 ppm | 0.0061 ppm |
| Concentration per Run 3 | 0.0516 ppm | 0.4897 ppm | 0.1992 ppm | 0.2815 ppm | 1.0464 ppm | 14.1164 ppm | 0.0086 ppm |
| Concentration RSD | 1.1 % | 0.2 % | 0.8 % | 0.9 % | 0.3 % | 0.1 % | 16.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 13.8736 ppm | 0.5062 ppm | 0.9791 ppm | 23.9829 ppm | 0.4929 ppm | 0.5456 ppm | 0.3391 ppm |
| Concentration per Run 1 | 13.9423 ppm | 0.5043 ppm | 0.9715 ppm | 24.0238 ppm | 0.4941 ppm | 0.5454 ppm | 0.3283 ppm |
| Concentration per Run 2 | 13.7596 ppm | 0.5058 ppm | 0.9759 ppm | 23.9246 ppm | 0.4910 ppm | 0.5461 ppm | 0.3332 ppm |
| Concentration per Run 3 | 13.9188 ppm | 0.5086 ppm | 0.9899 ppm | 24.0002 ppm | 0.4936 ppm | 0.5454 ppm | 0.3557 ppm |
| Concentration RSD | 0.7 % | 0.4 % | 1.0 % | 0.2 % | 0.3 % | 0.1 % | 4.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1281 ppm | 9.0511 ppm | 0.9837 ppm | 1.1720 ppm | 0.9910 ppm | 0.1237 ppm | 0.4984 ppm |
| Concentration per Run 1 | 0.1263 ppm | 9.0322 ppm | 0.9841 ppm | 1.1684 ppm | 0.9934 ppm | 0.1222 ppm | 0.4991 ppm |
| Concentration per Run 2 | 0.1307 ppm | 9.0300 ppm | 0.9821 ppm | 1.1732 ppm | 0.9877 ppm | 0.1265 ppm | 0.4971 ppm |
| Concentration per Run 3 | 0.1275 ppm | 9.0911 ppm | 0.9849 ppm | 1.1744 ppm | 0.9918 ppm | 0.1223 ppm | 0.4989 ppm |
| Concentration RSD | 1.8 % | 0.4 % | 0.1 % | 0.3 % | 0.3 % | 2.0 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5965 ppm | 102.7242 % | 99.2705 % | 98.1153 % | 100.6847 % | 96.6759 % | 94.9166 % |
| Concentration per Run 1 | 0.5991 ppm | 102.7829 % | 99.5587 % | 98.5612 % | 100.9560 % | 97.4185 % | 95.0834 % |
| Concentration per Run 2 | 0.5917 ppm | 102.8509 % | 99.4472 % | 97.4327 % | 101.0621 % | 96.3745 % | 94.3251 % |
| Concentration per Run 3 | 0.5986 ppm | 102.5387 % | 98.8057 % | 98.3521 % | 100.0360 % | 96.2347 % | 95.3414 % |
| Concentration RSD | 0.7 % | 0.2 % | 0.4 % | 0.6 % | 0.6 % | 0.7 % | 0.6 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2037772-6D5 WG2037772
Analysis started at: 3/11/2025 1:26:29 PM
Rack 1
Vial 37
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0101 ppm | 0.0000 ppm | 0.0040 ppm | 0.0024 ppm | 0.0001 ppm | 7.6675 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0100 ppm | 0.0002 ppm | 0.0049 ppm | 0.0024 ppm | 0.0000 ppm | 7.6914 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0112 ppm | 0.0002 ppm | 0.0034 ppm | 0.0025 ppm | 0.0001 ppm | 7.6501 ppm |
| Concentration per Run 3 | 0.0012 ppm | 0.0090 ppm | -0.0003 ppm | 0.0036 ppm | 0.0023 ppm | 0.0000 ppm | 7.6611 ppm |
| Concentration RSD | 37.6 % | 10.9 % | 1,160.1 % | 20.6 % | 4.1 % | 12.5 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0002 ppm | -0.0001 ppm | 0.0082 ppm | 0.0059 ppm | 0.6958 ppm | 0.0020 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0001 ppm | -0.0004 ppm | 0.0081 ppm | 0.0047 ppm | 0.7006 ppm | 0.0020 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0002 ppm | 0.0001 ppm | 0.0082 ppm | 0.0057 ppm | 0.6866 ppm | 0.0022 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0003 ppm | 0.0000 ppm | 0.0083 ppm | 0.0073 ppm | 0.7003 ppm | 0.0018 ppm |
| Concentration RSD | 58.7 % | 60.0 % | 240.5 % | 1.6 % | 22.2 % | 1.1 % | 10.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.8426 ppm | 0.0000 ppm | 0.0056 ppm | 2.7739 ppm | 0.0002 ppm | -0.0013 ppm | 0.0183 ppm |
| Concentration per Run 1 | 0.8426 ppm | -0.0002 ppm | 0.0060 ppm | 2.7775 ppm | -0.0005 ppm | -0.0013 ppm | 0.0167 ppm |
| Concentration per Run 2 | 0.8434 ppm | 0.0000 ppm | 0.0048 ppm | 2.7681 ppm | 0.0005 ppm | -0.0018 ppm | 0.0199 ppm |
| Concentration per Run 3 | 0.8417 ppm | 0.0003 ppm | 0.0059 ppm | 2.7762 ppm | 0.0006 ppm | -0.0007 ppm | 0.0184 ppm |
| Concentration RSD | 0.1 % | 666.2 % | 11.4 % | 0.2 % | 325.4 % | 43.1 % | 8.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0023 ppm | 1.6502 ppm | 0.0159 ppm | 0.0331 ppm | 0.0000 ppm | 0.0013 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0025 ppm | 1.6484 ppm | 0.0179 ppm | 0.0331 ppm | 0.0003 ppm | 0.0019 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0019 ppm | 1.6569 ppm | 0.0144 ppm | 0.0332 ppm | -0.0004 ppm | 0.0012 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0023 ppm | 1.6452 ppm | 0.0154 ppm | 0.0331 ppm | -0.0001 ppm | 0.0009 ppm | 0.0004 ppm |
| Concentration RSD | 13.9 % | 0.4 % | 11.4 % | 0.1 % | 950.7 % | 37.4 % | 99.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0193 ppm | 103.1823 % | 100.2076 % | 98.1799 % | 101.5189 % | 97.7166 % | 97.0674 % |
| Concentration per Run 1 | 0.0193 ppm | 103.4325 % | 100.3005 % | 98.7180 % | 102.2005 % | 98.1334 % | 97.3578 % |
| Concentration per Run 2 | 0.0194 ppm | 103.4075 % | 100.5562 % | 97.2767 % | 101.6697 % | 97.7611 % | 96.8107 % |
| Concentration per Run 3 | 0.0192 ppm | 102.7070 % | 99.7661 % | 98.5449 % | 100.6866 % | 97.2552 % | 97.0337 % |
| Concentration RSD | 0.3 % | 0.4 % | 0.4 % | 0.8 % | 0.8 % | 0.5 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCV
Analysis started at: 3/11/2025 1:29:56 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4823 ppm | 0.4935 ppm | 0.5102 ppm | 0.4927 ppm | 0.4799 ppm | 0.5126 ppm | 0.4945 ppm |
| Concentration per Run 1 | 0.4813 ppm | 0.4870 ppm | 0.5080 ppm | 0.4897 ppm | 0.4816 ppm | 0.5145 ppm | 0.4972 ppm |
| Concentration per Run 2 | 0.4824 ppm | 0.4959 ppm | 0.5084 ppm | 0.4926 ppm | 0.4799 ppm | 0.5120 ppm | 0.4912 ppm |
| Concentration per Run 3 | 0.4831 ppm | 0.4977 ppm | 0.5143 ppm | 0.4958 ppm | 0.4781 ppm | 0.5114 ppm | 0.4952 ppm |
| Recovery Percentage 1 | 96.462 % | 98.705 % | 102.045 % | 98.538 % | 95.971 % | 102.525 % | 98.909 % |
| Concentration RSD | 0.2 % | 1.2 % | 0.7 % | 0.6 % | 0.4 % | 0.3 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4905 ppm | 0.5007 ppm | 0.4933 ppm | 0.4710 ppm | 0.5137 ppm | 5.2331 ppm | 0.5253 ppm |
| Concentration per Run 1 | 0.4897 ppm | 0.5004 ppm | 0.4922 ppm | 0.4720 ppm | 0.5182 ppm | 5.2392 ppm | 0.5285 ppm |
| Concentration per Run 2 | 0.4910 ppm | 0.5016 ppm | 0.4940 ppm | 0.4709 ppm | 0.5110 ppm | 5.2415 ppm | 0.5240 ppm |
| Concentration per Run 3 | 0.4908 ppm | 0.5001 ppm | 0.4935 ppm | 0.4701 ppm | 0.5118 ppm | 5.2187 ppm | 0.5234 ppm |
| Recovery Percentage 1 | 98.107 % | 100.141 % | 98.650 % | 94.206 % | 102.735 % | 104.663 % | 105.062 % |
| Concentration RSD | 0.1 % | 0.2 % | 0.2 % | 0.2 % | 0.8 % | 0.2 % | 0.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4800 ppm | 0.4964 ppm | 0.4961 ppm | 10.2591 ppm | 0.5037 ppm | 0.5045 ppm | 0.5103 ppm |
| Concentration per Run 1 | 0.4815 ppm | 0.4970 ppm | 0.4954 ppm | 10.1863 ppm | 0.5046 ppm | 0.5039 ppm | 0.5129 ppm |
| Concentration per Run 2 | 0.4793 ppm | 0.4969 ppm | 0.4966 ppm | 10.3443 ppm | 0.5031 ppm | 0.5037 ppm | 0.5041 ppm |
| Concentration per Run 3 | 0.4791 ppm | 0.4954 ppm | 0.4963 ppm | 10.2469 ppm | 0.5033 ppm | 0.5059 ppm | 0.5139 ppm |
| Recovery Percentage 1 | 95.996 % | 99.285 % | 99.222 % | 102.591 % | 100.732 % | 100.901 % | 102.060 % |
| Concentration RSD | 0.3 % | 0.2 % | 0.1 % | 0.8 % | 0.2 % | 0.2 % | 1.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5057 ppm | 5.5578 ppm | 0.5170 ppm | 0.5017 ppm | 0.4894 ppm | 0.4947 ppm | 0.4865 ppm |
| Concentration per Run 1 | 0.5035 ppm | 5.5687 ppm | 0.5151 ppm | 0.5032 ppm | 0.4895 ppm | 0.4919 ppm | 0.4871 ppm |
| Concentration per Run 2 | 0.5056 ppm | 5.5482 ppm | 0.5153 ppm | 0.5018 ppm | 0.4898 ppm | 0.4946 ppm | 0.4855 ppm |
| Concentration per Run 3 | 0.5080 ppm | 5.5564 ppm | 0.5207 ppm | 0.5002 ppm | 0.4888 ppm | 0.4975 ppm | 0.4869 ppm |
| Recovery Percentage 1 | 101.139 % | 105.862 % | 103.402 % | 100.347 % | 97.875 % | 98.936 % | 97.306 % |
| Concentration RSD | 0.4 % | 0.2 % | 0.6 % | 0.3 % | 0.1 % | 0.6 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5026 ppm | 103.0002 % | 100.1417 % | 98.7838 % | 101.2191 % | 97.5791 % | 96.6021 % |
| Concentration per Run 1 | 0.5022 ppm | 103.0079 % | 99.9292 % | 99.2361 % | 101.5612 % | 97.4916 % | 96.7931 % |
| Concentration per Run 2 | 0.5029 ppm | 102.8102 % | 99.9314 % | 98.9932 % | 100.9710 % | 97.3505 % | 97.2162 % |
| Concentration per Run 3 | 0.5026 ppm | 103.1824 % | 100.5646 % | 98.1221 % | 101.1250 % | 97.8953 % | 95.7970 % |
| Recovery Percentage 1 | 100.517 % | | | | | | |
| Concentration RSD | 0.1 % | 0.2 % | 0.4 % | 0.6 % | 0.3 % | 0.3 % | 0.8 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCB
Analysis started at: 3/11/2025 1:33:23 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.0103 ppm | 0.0006 ppm | 0.0012 ppm | -0.0001 ppm | 0.0001 ppm | 0.0025 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.0183 ppm | 0.0002 ppm | 0.0016 ppm | -0.0002 ppm | 0.0001 ppm | 0.0033 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0086 ppm | 0.0002 ppm | 0.0022 ppm | 0.0000 ppm | 0.0001 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0039 ppm | 0.0015 ppm | -0.0002 ppm | -0.0002 ppm | 0.0000 ppm | 0.0033 ppm |
| Recovery Percentage 1 | 15.479 % | 10.264 % | 12.928 % | 3.991 % | -1.434 % | 1.370 % | 2.491 % |
| Concentration RSD | 15.8 % | 71.5 % | 118.3 % | 104.3 % | 82.5 % | 41.1 % | 59.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0001 ppm | -0.0004 ppm | 0.0005 ppm | 0.0002 ppm | 0.0149 ppm | 0.0009 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0001 ppm | -0.0008 ppm | 0.0004 ppm | 0.0011 ppm | 0.0186 ppm | 0.0012 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0000 ppm | -0.0003 ppm | 0.0010 ppm | -0.0019 ppm | 0.0084 ppm | 0.0013 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | -0.0001 ppm | 0.0001 ppm | 0.0013 ppm | 0.0178 ppm | 0.0003 ppm |
| Recovery Percentage 1 | 2.018 % | 0.344 % | -3.942 % | 5.129 % | 0.424 % | 0.597 % | 18.158 % |
| Concentration RSD | 79.5 % | 77.7 % | 93.9 % | 91.9 % | 845.2 % | 38.1 % | 62.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0025 ppm | -0.0001 ppm | 0.0019 ppm | 0.0184 ppm | -0.0007 ppm | -0.0017 ppm | 0.0042 ppm |
| Concentration per Run 1 | -0.0022 ppm | 0.0000 ppm | 0.0025 ppm | 0.0209 ppm | -0.0003 ppm | -0.0018 ppm | 0.0059 ppm |
| Concentration per Run 2 | -0.0033 ppm | -0.0002 ppm | 0.0012 ppm | 0.0157 ppm | -0.0006 ppm | -0.0014 ppm | 0.0058 ppm |
| Concentration per Run 3 | -0.0019 ppm | 0.0000 ppm | 0.0020 ppm | 0.0186 ppm | -0.0014 ppm | -0.0019 ppm | 0.0008 ppm |
| Recovery Percentage 1 | -2.464 % | -0.627 % | 3.759 % | 0.920 % | -2.967 % | -17.036 % | 8.323 % |
| Concentration RSD | 28.4 % | 199.8 % | 34.3 % | 14.2 % | 78.4 % | 16.3 % | 70.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | -0.0037 ppm | 0.0019 ppm | 0.0000 ppm | -0.0005 ppm | 0.0005 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0039 ppm | -0.0017 ppm | 0.0022 ppm | 0.0001 ppm | 0.0000 ppm | -0.0011 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0019 ppm | -0.0060 ppm | 0.0024 ppm | 0.0000 ppm | -0.0010 ppm | 0.0018 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0004 ppm | -0.0033 ppm | 0.0012 ppm | -0.0001 ppm | -0.0006 ppm | 0.0009 ppm | -0.0002 ppm |
| Recovery Percentage 1 | -5.301 % | -0.741 % | 3.862 % | 0.023 % | -5.270 % | 2.603 % | -0.076 % |
| Concentration RSD | 569.6 % | 58.7 % | 35.4 % | 3,281.8 % | 97.6 % | 284.0 % | 2,745.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 100.8712 % | 98.2981 % | 96.8689 % | 101.4741 % | 97.4473 % | 96.8870 % |
| Concentration per Run 1 | -0.0006 ppm | 101.5225 % | 98.4381 % | 96.5988 % | 101.9978 % | 97.5409 % | 96.6283 % |
| Concentration per Run 2 | -0.0008 ppm | 100.4240 % | 97.3971 % | 96.6363 % | 101.4994 % | 96.4537 % | 96.8585 % |
| Concentration per Run 3 | -0.0006 ppm | 100.6670 % | 99.0591 % | 97.3717 % | 100.9250 % | 98.3475 % | 97.1743 % |
| Recovery Percentage 1 | -12.681 % | | | | | | |
| Concentration RSD | 18.4 % | 0.6 % | 0.9 % | 0.4 % | 0.5 % | 1.0 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511834-01 WG2037772
Analysis started at: 3/11/2025 2:01:22 PM
Rack 1
Vial 41
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0104 ppm | 0.0009 ppm | 0.0198 ppm | 0.3208 ppm | 0.0000 ppm | 70.4044 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.0079 ppm | 0.0006 ppm | 0.0206 ppm | 0.3200 ppm | 0.0000 ppm | 70.0815 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0118 ppm | 0.0011 ppm | 0.0189 ppm | 0.3221 ppm | 0.0000 ppm | 70.3682 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0116 ppm | 0.0011 ppm | 0.0198 ppm | 0.3204 ppm | 0.0000 ppm | 70.7635 ppm |
| Concentration RSD | 45.4 % | 20.9 % | 30.1 % | 4.3 % | 0.3 % | 2,479.0 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | -0.0001 ppm | 0.0003 ppm | 0.0100 ppm | 0.0534 ppm | 1.5751 ppm | 0.0043 ppm |
| Concentration per Run 1 | -0.0005 ppm | 0.0004 ppm | -0.0003 ppm | 0.0106 ppm | 0.0527 ppm | 1.5712 ppm | 0.0045 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0003 ppm | 0.0005 ppm | 0.0099 ppm | 0.0535 ppm | 1.5970 ppm | 0.0045 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0004 ppm | 0.0008 ppm | 0.0097 ppm | 0.0541 ppm | 1.5570 ppm | 0.0039 ppm |
| Concentration RSD | 48.6 % | 544.5 % | 162.0 % | 4.6 % | 1.3 % | 1.3 % | 8.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 18.8457 ppm | 0.1019 ppm | 0.0003 ppm | 103.1751 ppm | -0.0002 ppm | 0.0008 ppm | -0.0003 ppm |
| Concentration per Run 1 | 18.9095 ppm | 0.1017 ppm | 0.0003 ppm | 102.9278 ppm | -0.0005 ppm | 0.0002 ppm | 0.0016 ppm |
| Concentration per Run 2 | 18.8232 ppm | 0.1021 ppm | -0.0002 ppm | 104.0202 ppm | -0.0002 ppm | 0.0014 ppm | -0.0007 ppm |
| Concentration per Run 3 | 18.8044 ppm | 0.1019 ppm | 0.0008 ppm | 102.5773 ppm | 0.0000 ppm | 0.0008 ppm | -0.0019 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 187.8 % | 0.7 % | 118.9 % | 69.1 % | 565.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 5.5612 ppm | -0.0012 ppm | 0.2615 ppm | 0.0000 ppm | 0.0021 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0006 ppm | 5.5803 ppm | -0.0014 ppm | 0.2612 ppm | -0.0005 ppm | 0.0017 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0013 ppm | 5.5454 ppm | -0.0003 ppm | 0.2625 ppm | 0.0003 ppm | 0.0031 ppm | 0.0007 ppm |
| Concentration per Run 3 | -0.0003 ppm | 5.5579 ppm | -0.0018 ppm | 0.2610 ppm | 0.0002 ppm | 0.0014 ppm | 0.0001 ppm |
| Concentration RSD | 157.1 % | 0.3 % | 66.8 % | 0.3 % | 15,459.2 % | 43.7 % | 174.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 104.8406 % | 99.4531 % | 99.5003 % | 103.5878 % | 96.8351 % | 96.7101 % |
| Concentration per Run 1 | 0.0006 ppm | 104.7148 % | 100.0391 % | 99.4840 % | 103.4596 % | 97.1721 % | 97.0002 % |
| Concentration per Run 2 | 0.0002 ppm | 105.0664 % | 99.0884 % | 99.9995 % | 104.1168 % | 96.7238 % | 97.0478 % |
| Concentration per Run 3 | 0.0007 ppm | 104.7407 % | 99.2317 % | 99.0174 % | 103.1871 % | 96.6093 % | 96.0823 % |
| Concentration RSD | 55.5 % | 0.2 % | 0.5 % | 0.5 % | 0.5 % | 0.3 % | 0.6 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511834-02 WG2037772
Analysis started at: 3/11/2025 2:04:55 PM
Rack 1
Vial 42
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0164 ppm | 0.0008 ppm | 0.0219 ppm | 1.3626 ppm | 0.0000 ppm | 70.9813 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0174 ppm | 0.0021 ppm | 0.0220 ppm | 1.3531 ppm | 0.0000 ppm | 70.7734 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0170 ppm | 0.0013 ppm | 0.0211 ppm | 1.3636 ppm | 0.0000 ppm | 70.9139 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0147 ppm | -0.0009 ppm | 0.0225 ppm | 1.3712 ppm | 0.0000 ppm | 71.2565 ppm |
| Concentration RSD | 38.4 % | 8.9 % | 183.7 % | 3.2 % | 0.7 % | 68.2 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0005 ppm | -0.0006 ppm | 0.0020 ppm | 0.1210 ppm | 2.8647 ppm | 0.0369 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0006 ppm | -0.0003 ppm | 0.0021 ppm | 0.1203 ppm | 2.8761 ppm | 0.0361 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0003 ppm | -0.0006 ppm | 0.0023 ppm | 0.1206 ppm | 2.8621 ppm | 0.0379 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0007 ppm | -0.0009 ppm | 0.0017 ppm | 0.1221 ppm | 2.8560 ppm | 0.0369 ppm |
| Concentration RSD | 7.9 % | 40.5 % | 58.8 % | 14.3 % | 0.8 % | 0.4 % | 2.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 15.7364 ppm | 0.2333 ppm | 0.0003 ppm | 153.2637 ppm | -0.0006 ppm | -0.0009 ppm | 0.0026 ppm |
| Concentration per Run 1 | 15.7592 ppm | 0.2327 ppm | 0.0001 ppm | 152.1705 ppm | -0.0012 ppm | -0.0017 ppm | 0.0058 ppm |
| Concentration per Run 2 | 15.7439 ppm | 0.2326 ppm | 0.0000 ppm | 152.7638 ppm | -0.0007 ppm | -0.0003 ppm | 0.0036 ppm |
| Concentration per Run 3 | 15.7060 ppm | 0.2346 ppm | 0.0006 ppm | 154.8568 ppm | 0.0000 ppm | -0.0008 ppm | -0.0016 ppm |
| Concentration RSD | 0.2 % | 0.5 % | 134.8 % | 0.9 % | 89.4 % | 77.8 % | 144.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 5.7388 ppm | -0.0010 ppm | 1.7020 ppm | 0.0003 ppm | 0.0014 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0021 ppm | 5.7393 ppm | -0.0019 ppm | 1.6921 ppm | 0.0001 ppm | 0.0024 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0025 ppm | 5.7483 ppm | -0.0003 ppm | 1.7011 ppm | 0.0005 ppm | 0.0032 ppm | 0.0005 ppm |
| Concentration per Run 3 | -0.0006 ppm | 5.7287 ppm | -0.0007 ppm | 1.7128 ppm | 0.0002 ppm | -0.0013 ppm | 0.0002 ppm |
| Concentration RSD | 3,313.3 % | 0.2 % | 86.6 % | 0.6 % | 81.3 % | 165.0 % | 80.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0031 ppm | 104.6046 % | 101.5620 % | 100.6114 % | 103.1542 % | 98.8099 % | 97.4484 % |
| Concentration per Run 1 | 0.0032 ppm | 104.3446 % | 102.0469 % | 98.3419 % | 102.8113 % | 99.4267 % | 96.1155 % |
| Concentration per Run 2 | 0.0030 ppm | 104.9453 % | 101.6029 % | 98.3843 % | 103.6693 % | 98.5545 % | 95.6274 % |
| Concentration per Run 3 | 0.0030 ppm | 104.5238 % | 101.0362 % | 105.1080 % | 102.9820 % | 98.4486 % | 100.6022 % |
| Concentration RSD | 2.9 % | 0.3 % | 0.5 % | 3.9 % | 0.4 % | 0.5 % | 2.8 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511834-03 WG2037772
Analysis started at: 3/11/2025 2:08:22 PM
Rack 1
Vial 43
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0111 ppm | 0.0015 ppm | 0.0174 ppm | 0.2683 ppm | 0.0000 ppm | 63.6386 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0085 ppm | 0.0018 ppm | 0.0185 ppm | 0.2681 ppm | 0.0000 ppm | 63.7867 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0116 ppm | 0.0014 ppm | 0.0152 ppm | 0.2691 ppm | 0.0000 ppm | 63.5441 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0131 ppm | 0.0013 ppm | 0.0183 ppm | 0.2677 ppm | 0.0000 ppm | 63.5851 ppm |
| Concentration RSD | 25.9 % | 21.1 % | 15.7 % | 10.7 % | 0.3 % | 107.5 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | -0.0004 ppm | 0.0006 ppm | 0.0124 ppm | 0.0370 ppm | 1.4820 ppm | 0.0055 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0011 ppm | 0.0003 ppm | 0.0124 ppm | 0.0380 ppm | 1.5041 ppm | 0.0055 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0000 ppm | 0.0003 ppm | 0.0123 ppm | 0.0372 ppm | 1.4673 ppm | 0.0058 ppm |
| Concentration per Run 3 | -0.0003 ppm | -0.0002 ppm | 0.0011 ppm | 0.0125 ppm | 0.0357 ppm | 1.4746 ppm | 0.0052 ppm |
| Concentration RSD | 23.7 % | 137.0 % | 72.4 % | 0.9 % | 3.1 % | 1.3 % | 5.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 19.3799 ppm | 0.0294 ppm | 0.0004 ppm | 64.9826 ppm | -0.0011 ppm | -0.0016 ppm | -0.0004 ppm |
| Concentration per Run 1 | 19.3743 ppm | 0.0294 ppm | 0.0003 ppm | 64.8501 ppm | -0.0011 ppm | -0.0016 ppm | 0.0017 ppm |
| Concentration per Run 2 | 19.3294 ppm | 0.0294 ppm | 0.0004 ppm | 65.1405 ppm | -0.0009 ppm | -0.0033 ppm | -0.0015 ppm |
| Concentration per Run 3 | 19.4361 ppm | 0.0293 ppm | 0.0006 ppm | 64.9573 ppm | -0.0012 ppm | 0.0001 ppm | -0.0014 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 41.0 % | 0.2 % | 15.0 % | 108.1 % | 413.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 5.6033 ppm | -0.0009 ppm | 0.2242 ppm | -0.0004 ppm | 0.0024 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0001 ppm | 5.5972 ppm | -0.0021 ppm | 0.2242 ppm | -0.0007 ppm | 0.0037 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0019 ppm | 5.5915 ppm | -0.0016 ppm | 0.2247 ppm | -0.0004 ppm | 0.0013 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0002 ppm | 5.6212 ppm | 0.0010 ppm | 0.2237 ppm | -0.0001 ppm | 0.0022 ppm | 0.0004 ppm |
| Concentration RSD | 147.1 % | 0.3 % | 186.7 % | 0.2 % | 79.5 % | 50.3 % | 675.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0024 ppm | 103.7134 % | 99.5081 % | 98.9169 % | 101.9905 % | 96.7204 % | 96.3363 % |
| Concentration per Run 1 | 0.0024 ppm | 104.2399 % | 99.2249 % | 98.2653 % | 102.5580 % | 96.5052 % | 95.9430 % |
| Concentration per Run 2 | 0.0024 ppm | 103.8788 % | 99.5156 % | 99.0924 % | 101.4960 % | 96.6215 % | 96.4588 % |
| Concentration per Run 3 | 0.0023 ppm | 103.0215 % | 99.7839 % | 99.3931 % | 101.9175 % | 97.0345 % | 96.6071 % |
| Concentration RSD | 1.6 % | 0.6 % | 0.3 % | 0.6 % | 0.5 % | 0.3 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCV
Analysis started at: 3/11/2025 2:11:50 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4789 ppm | 0.4911 ppm | 0.4998 ppm | 0.4878 ppm | 0.4779 ppm | 0.5118 ppm | 0.4919 ppm |
| Concentration per Run 1 | 0.4820 ppm | 0.4924 ppm | 0.5012 ppm | 0.4924 ppm | 0.4765 ppm | 0.5105 ppm | 0.4914 ppm |
| Concentration per Run 2 | 0.4740 ppm | 0.4971 ppm | 0.5050 ppm | 0.4815 ppm | 0.4775 ppm | 0.5112 ppm | 0.4932 ppm |
| Concentration per Run 3 | 0.4806 ppm | 0.4839 ppm | 0.4933 ppm | 0.4894 ppm | 0.4797 ppm | 0.5138 ppm | 0.4911 ppm |
| Recovery Percentage 1 | 95.777 % | 98.221 % | 99.964 % | 97.553 % | 95.578 % | 102.369 % | 98.379 % |
| Concentration RSD | 0.9 % | 1.4 % | 1.2 % | 1.2 % | 0.3 % | 0.3 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4859 ppm | 0.4971 ppm | 0.4898 ppm | 0.4689 ppm | 0.5141 ppm | 5.2352 ppm | 0.5229 ppm |
| Concentration per Run 1 | 0.4889 ppm | 0.5022 ppm | 0.4940 ppm | 0.4691 ppm | 0.5162 ppm | 5.2364 ppm | 0.5202 ppm |
| Concentration per Run 2 | 0.4825 ppm | 0.4923 ppm | 0.4845 ppm | 0.4639 ppm | 0.5129 ppm | 5.2211 ppm | 0.5219 ppm |
| Concentration per Run 3 | 0.4863 ppm | 0.4968 ppm | 0.4911 ppm | 0.4737 ppm | 0.5131 ppm | 5.2481 ppm | 0.5267 ppm |
| Recovery Percentage 1 | 97.176 % | 99.419 % | 97.968 % | 93.778 % | 102.815 % | 104.704 % | 104.584 % |
| Concentration RSD | 0.7 % | 1.0 % | 1.0 % | 1.0 % | 0.4 % | 0.3 % | 0.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4774 ppm | 0.4932 ppm | 0.4896 ppm | 10.2727 ppm | 0.4994 ppm | 0.4985 ppm | 0.4987 ppm |
| Concentration per Run 1 | 0.4843 ppm | 0.4925 ppm | 0.4924 ppm | 10.2371 ppm | 0.5043 ppm | 0.4989 ppm | 0.5073 ppm |
| Concentration per Run 2 | 0.4727 ppm | 0.4937 ppm | 0.4842 ppm | 10.2512 ppm | 0.4933 ppm | 0.4978 ppm | 0.4910 ppm |
| Concentration per Run 3 | 0.4753 ppm | 0.4935 ppm | 0.4922 ppm | 10.3298 ppm | 0.5008 ppm | 0.4988 ppm | 0.4977 ppm |
| Recovery Percentage 1 | 95.485 % | 98.645 % | 97.922 % | 102.727 % | 99.886 % | 99.692 % | 99.731 % |
| Concentration RSD | 1.3 % | 0.1 % | 1.0 % | 0.5 % | 1.1 % | 0.1 % | 1.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4984 ppm | 5.5181 ppm | 0.5068 ppm | 0.4984 ppm | 0.4865 ppm | 0.4844 ppm | 0.4829 ppm |
| Concentration per Run 1 | 0.4984 ppm | 5.5429 ppm | 0.5108 ppm | 0.4973 ppm | 0.4889 ppm | 0.4845 ppm | 0.4857 ppm |
| Concentration per Run 2 | 0.5022 ppm | 5.4822 ppm | 0.5022 ppm | 0.4980 ppm | 0.4816 ppm | 0.4866 ppm | 0.4795 ppm |
| Concentration per Run 3 | 0.4945 ppm | 5.5291 ppm | 0.5075 ppm | 0.5000 ppm | 0.4891 ppm | 0.4820 ppm | 0.4836 ppm |
| Recovery Percentage 1 | 99.672 % | 105.106 % | 101.365 % | 99.686 % | 97.305 % | 96.879 % | 96.589 % |
| Concentration RSD | 0.8 % | 0.6 % | 0.9 % | 0.3 % | 0.9 % | 0.5 % | 0.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4977 ppm | 104.1050 % | 99.9257 % | 100.0405 % | 102.6490 % | 97.4978 % | 97.3079 % |
| Concentration per Run 1 | 0.5022 ppm | 103.0102 % | 100.4269 % | 100.0807 % | 101.9001 % | 97.7720 % | 97.4458 % |
| Concentration per Run 2 | 0.4924 ppm | 105.2186 % | 99.2983 % | 99.5327 % | 103.7117 % | 97.2609 % | 97.0217 % |
| Concentration per Run 3 | 0.4985 ppm | 104.0861 % | 100.0519 % | 100.5081 % | 102.3350 % | 97.4605 % | 97.4561 % |
| Recovery Percentage 1 | 99.533 % | | | | | | |
| Concentration RSD | 1.0 % | 1.1 % | 0.6 % | 0.5 % | 0.9 % | 0.3 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCB
Analysis started at: 3/11/2025 2:15:18 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0132 ppm | 0.0007 ppm | 0.0001 ppm | -0.0001 ppm | 0.0001 ppm | 0.0020 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0154 ppm | 0.0005 ppm | 0.0008 ppm | -0.0001 ppm | 0.0000 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0170 ppm | 0.0015 ppm | -0.0002 ppm | -0.0001 ppm | 0.0001 ppm | 0.0037 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0072 ppm | 0.0003 ppm | -0.0003 ppm | 0.0000 ppm | 0.0001 ppm | 0.0010 ppm |
| Recovery Percentage 1 | 14.394 % | 13.223 % | 14.942 % | 0.283 % | -0.754 % | 1.456 % | 1.952 % |
| Concentration RSD | 11.8 % | 39.8 % | 90.4 % | 723.3 % | 86.9 % | 24.7 % | 77.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0002 ppm | -0.0003 ppm | 0.0003 ppm | 0.0016 ppm | 0.0377 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0005 ppm | -0.0006 ppm | 0.0003 ppm | 0.0025 ppm | 0.0339 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0003 ppm | -0.0002 ppm | 0.0006 ppm | 0.0004 ppm | 0.0322 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0004 ppm | 0.0000 ppm | -0.0001 ppm | 0.0020 ppm | 0.0470 ppm | 0.0003 ppm |
| Recovery Percentage 1 | 2.618 % | 1.015 % | -2.885 % | 2.638 % | 3.300 % | 1.508 % | 8.485 % |
| Concentration RSD | 57.0 % | 222.2 % | 114.9 % | 136.4 % | 64.7 % | 21.5 % | 153.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0037 ppm | -0.0002 ppm | 0.0021 ppm | 0.0202 ppm | -0.0005 ppm | -0.0004 ppm | 0.0024 ppm |
| Concentration per Run 1 | -0.0024 ppm | -0.0003 ppm | 0.0022 ppm | 0.0247 ppm | -0.0003 ppm | -0.0001 ppm | -0.0012 ppm |
| Concentration per Run 2 | -0.0023 ppm | -0.0001 ppm | 0.0021 ppm | 0.0201 ppm | -0.0007 ppm | -0.0018 ppm | 0.0012 ppm |
| Concentration per Run 3 | -0.0063 ppm | -0.0002 ppm | 0.0020 ppm | 0.0157 ppm | -0.0005 ppm | 0.0006 ppm | 0.0070 ppm |
| Recovery Percentage 1 | -3.678 % | -1.923 % | 4.176 % | 1.008 % | -2.067 % | -4.250 % | 4.700 % |
| Concentration RSD | 61.3 % | 47.6 % | 5.5 % | 22.2 % | 45.6 % | 281.2 % | 179.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | -0.0015 ppm | -0.0003 ppm | 0.0000 ppm | -0.0004 ppm | 0.0012 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0013 ppm | -0.0002 ppm | 0.0001 ppm | -0.0001 ppm | -0.0006 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0013 ppm | -0.0028 ppm | -0.0011 ppm | 0.0000 ppm | -0.0003 ppm | 0.0021 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0007 ppm | -0.0005 ppm | 0.0003 ppm | 0.0000 ppm | -0.0008 ppm | 0.0022 ppm | -0.0003 ppm |
| Recovery Percentage 1 | -6.794 % | -0.306 % | -0.657 % | 0.428 % | -4.137 % | 6.186 % | 0.399 % |
| Concentration RSD | 95.8 % | 76.2 % | 208.5 % | 141.3 % | 91.3 % | 125.9 % | 849.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 101.1637 % | 98.6950 % | 96.9733 % | 101.5923 % | 98.2290 % | 97.3089 % |
| Concentration per Run 1 | -0.0008 ppm | 101.3809 % | 98.8561 % | 96.8830 % | 101.6981 % | 98.4481 % | 97.1435 % |
| Concentration per Run 2 | -0.0007 ppm | 101.0944 % | 98.3286 % | 96.5013 % | 101.5483 % | 97.9396 % | 97.1931 % |
| Concentration per Run 3 | -0.0002 ppm | 101.0158 % | 98.9003 % | 97.5356 % | 101.5303 % | 98.2993 % | 97.5901 % |
| Recovery Percentage 1 | -11.030 % | | | | | | |
| Concentration RSD | 58.9 % | 0.2 % | 0.3 % | 0.5 % | 0.1 % | 0.3 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512315-01d2 WG2038509
Analysis started at: 3/11/2025 2:23:21 PM
Rack 1
Vial 44
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0044 ppm | 74.4789 ppm | 0.2596 ppm | 0.0450 ppm | 15.0960 ppm | 0.0102 ppm | 363.8894 ppm |
| Concentration per Run 1 | 0.0045 ppm | 74.3905 ppm | 0.2622 ppm | 0.0448 ppm | 15.0576 ppm | 0.0102 ppm | 364.0442 ppm |
| Concentration per Run 2 | 0.0045 ppm | 74.5224 ppm | 0.2584 ppm | 0.0448 ppm | 15.0982 ppm | 0.0102 ppm | 364.6989 ppm |
| Concentration per Run 3 | 0.0043 ppm | 74.5239 ppm | 0.2582 ppm | 0.0453 ppm | 15.1322 ppm | 0.0103 ppm | 362.9252 ppm |
| Concentration RSD | 2.4 % | 0.1 % | 0.9 % | 0.7 % | 0.2 % | 0.5 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0054 ppm | 0.0643 ppm | 0.1676 ppm | 2.7014 ppm | 133.4077 ppm | 6.9784 ppm | 0.1129 ppm |
| Concentration per Run 1 | 0.0057 ppm | 0.0641 ppm | 0.1678 ppm | 2.6866 ppm | 133.3943 ppm | 6.9821 ppm | 0.1125 ppm |
| Concentration per Run 2 | 0.0052 ppm | 0.0645 ppm | 0.1675 ppm | 2.7120 ppm | 133.3426 ppm | 6.9799 ppm | 0.1129 ppm |
| Concentration per Run 3 | 0.0054 ppm | 0.0642 ppm | 0.1675 ppm | 2.7057 ppm | 133.4861 ppm | 6.9731 ppm | 0.1134 ppm |
| Concentration RSD | 4.8 % | 0.4 % | 0.1 % | 0.5 % | 0.1 % | 0.1 % | 0.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 19.6470 ppm | 1.8296 ppm | 0.0111 ppm | 5.9276 ppm | 0.1216 ppm | 12.0161 ppm | 0.0085 ppm |
| Concentration per Run 1 | 19.6483 ppm | 1.8298 ppm | 0.0113 ppm | 5.9057 ppm | 0.1219 ppm | 12.0774 ppm | 0.0102 ppm |
| Concentration per Run 2 | 19.5937 ppm | 1.8279 ppm | 0.0106 ppm | 5.9286 ppm | 0.1211 ppm | 12.0165 ppm | 0.0107 ppm |
| Concentration per Run 3 | 19.6990 ppm | 1.8312 ppm | 0.0114 ppm | 5.9486 ppm | 0.1218 ppm | 11.9544 ppm | 0.0045 ppm |
| Concentration RSD | 0.3 % | 0.1 % | 3.8 % | 0.4 % | 0.3 % | 0.5 % | 41.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0083 ppm | 4.6208 ppm | 0.2459 ppm | 1.4157 ppm | 2.1166 ppm | 0.0054 ppm | 0.2002 ppm |
| Concentration per Run 1 | 0.0091 ppm | 4.6510 ppm | 0.2466 ppm | 1.4131 ppm | 2.1214 ppm | 0.0055 ppm | 0.2005 ppm |
| Concentration per Run 2 | 0.0085 ppm | 4.6140 ppm | 0.2438 ppm | 1.4150 ppm | 2.1058 ppm | 0.0051 ppm | 0.1999 ppm |
| Concentration per Run 3 | 0.0072 ppm | 4.5974 ppm | 0.2472 ppm | 1.4191 ppm | 2.1225 ppm | 0.0058 ppm | 0.2001 ppm |
| Concentration RSD | 11.8 % | 0.6 % | 0.7 % | 0.2 % | 0.4 % | 6.0 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.9146 ppm | 104.9025 % | 100.2457 % | 93.7977 % | 123.4055 % | 118.1705 % | 114.2454 % |
| Concentration per Run 1 | 2.9135 ppm | 104.6348 % | 100.2241 % | 93.8028 % | 122.7368 % | 118.0790 % | 114.8329 % |
| Concentration per Run 2 | 2.9080 ppm | 105.0294 % | 99.8676 % | 93.3338 % | 123.5536 % | 117.6917 % | 113.3383 % |
| Concentration per Run 3 | 2.9221 ppm | 105.0433 % | 100.6456 % | 94.2567 % | 123.9260 % | 118.7406 % | 114.5649 % |
| Concentration RSD | 0.2 % | 0.2 % | 0.4 % | 0.5 % | 0.5 % | 0.4 % | 0.7 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512340-01d2 WG2038509
Analysis started at: 3/11/2025 2:26:43 PM
Rack 1
Vial 45
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 14.6702 ppm | 0.0056 ppm | 0.0010 ppm | 0.0764 ppm | 0.0021 ppm | 1.7301 ppm |
| Concentration per Run 1 | 0.0003 ppm | 14.7178 ppm | 0.0046 ppm | -0.0012 ppm | 0.0763 ppm | 0.0021 ppm | 1.7346 ppm |
| Concentration per Run 2 | 0.0008 ppm | 14.6541 ppm | 0.0065 ppm | 0.0026 ppm | 0.0768 ppm | 0.0021 ppm | 1.7256 ppm |
| Concentration per Run 3 | -0.0003 ppm | 14.6389 ppm | 0.0057 ppm | 0.0016 ppm | 0.0761 ppm | 0.0021 ppm | 1.7301 ppm |
| Concentration RSD | 218.3 % | 0.3 % | 16.8 % | 206.8 % | 0.5 % | 0.2 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0089 ppm | 0.0259 ppm | 0.0167 ppm | 29.8314 ppm | 2.9444 ppm | 0.0290 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0096 ppm | 0.0260 ppm | 0.0164 ppm | 29.9421 ppm | 2.9611 ppm | 0.0286 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0086 ppm | 0.0262 ppm | 0.0171 ppm | 29.8325 ppm | 2.9381 ppm | 0.0294 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0084 ppm | 0.0254 ppm | 0.0166 ppm | 29.7197 ppm | 2.9341 ppm | 0.0292 ppm |
| Concentration RSD | 71.3 % | 6.9 % | 1.6 % | 2.0 % | 0.4 % | 0.5 % | 1.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.7513 ppm | 1.0321 ppm | 0.0023 ppm | 0.2642 ppm | 0.0161 ppm | 0.0249 ppm | 0.0029 ppm |
| Concentration per Run 1 | 5.7629 ppm | 1.0339 ppm | 0.0019 ppm | 0.2606 ppm | 0.0164 ppm | 0.0262 ppm | 0.0027 ppm |
| Concentration per Run 2 | 5.7465 ppm | 1.0365 ppm | 0.0028 ppm | 0.2624 ppm | 0.0151 ppm | 0.0241 ppm | 0.0028 ppm |
| Concentration per Run 3 | 5.7445 ppm | 1.0261 ppm | 0.0022 ppm | 0.2698 ppm | 0.0169 ppm | 0.0245 ppm | 0.0032 ppm |
| Concentration RSD | 0.2 % | 0.5 % | 18.3 % | 1.9 % | 5.6 % | 4.5 % | 8.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 2.1061 ppm | 0.0040 ppm | 0.0113 ppm | 0.9435 ppm | 0.0019 ppm | 0.0263 ppm |
| Concentration per Run 1 | 0.0005 ppm | 2.1021 ppm | 0.0035 ppm | 0.0114 ppm | 0.9448 ppm | 0.0024 ppm | 0.0266 ppm |
| Concentration per Run 2 | -0.0001 ppm | 2.1140 ppm | 0.0041 ppm | 0.0114 ppm | 0.9432 ppm | 0.0023 ppm | 0.0262 ppm |
| Concentration per Run 3 | -0.0007 ppm | 2.1021 ppm | 0.0044 ppm | 0.0113 ppm | 0.9426 ppm | 0.0010 ppm | 0.0263 ppm |
| Concentration RSD | 549.7 % | 0.3 % | 11.3 % | 0.2 % | 0.1 % | 40.6 % | 0.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1056 ppm | 104.5371 % | 100.5298 % | 99.6680 % | 126.6023 % | 121.4043 % | 121.0226 % |
| Concentration per Run 1 | 0.1063 ppm | 104.5708 % | 100.1006 % | 98.8115 % | 127.0424 % | 120.8069 % | 121.0658 % |
| Concentration per Run 2 | 0.1049 ppm | 104.5293 % | 100.7410 % | 100.3161 % | 126.4062 % | 121.7385 % | 121.2594 % |
| Concentration per Run 3 | 0.1055 ppm | 104.5113 % | 100.7478 % | 99.8764 % | 126.3583 % | 121.6674 % | 120.7425 % |
| Concentration RSD | 0.6 % | 0.0 % | 0.4 % | 0.8 % | 0.3 % | 0.4 % | 0.2 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512345-01d2 WG2038509
Analysis started at: 3/11/2025 2:30:11 PM
Rack 1
Vial 46
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 86.3527 ppm | 0.0378 ppm | 0.0005 ppm | 0.2593 ppm | 0.0035 ppm | 12.0923 ppm |
| Concentration per Run 1 | 0.0000 ppm | 86.2332 ppm | 0.0387 ppm | 0.0004 ppm | 0.2594 ppm | 0.0035 ppm | 12.1207 ppm |
| Concentration per Run 2 | -0.0002 ppm | 86.3300 ppm | 0.0387 ppm | -0.0004 ppm | 0.2597 ppm | 0.0035 ppm | 12.0818 ppm |
| Concentration per Run 3 | -0.0001 ppm | 86.4950 ppm | 0.0361 ppm | 0.0016 ppm | 0.2588 ppm | 0.0035 ppm | 12.0745 ppm |
| Concentration RSD | 92.7 % | 0.2 % | 4.0 % | 185.2 % | 0.2 % | 0.4 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 0.0723 ppm | 0.1064 ppm | 0.1570 ppm | 142.9099 ppm | 3.6700 ppm | 0.0805 ppm |
| Concentration per Run 1 | 0.0014 ppm | 0.0727 ppm | 0.1069 ppm | 0.1562 ppm | 142.9799 ppm | 3.6782 ppm | 0.0810 ppm |
| Concentration per Run 2 | 0.0015 ppm | 0.0719 ppm | 0.1064 ppm | 0.1575 ppm | 142.9836 ppm | 3.6495 ppm | 0.0794 ppm |
| Concentration per Run 3 | 0.0016 ppm | 0.0723 ppm | 0.1059 ppm | 0.1571 ppm | 142.7661 ppm | 3.6822 ppm | 0.0809 ppm |
| Concentration RSD | 3.9 % | 0.5 % | 0.5 % | 0.4 % | 0.1 % | 0.5 % | 1.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 26.6109 ppm | 2.4490 ppm | 0.0014 ppm | 0.4132 ppm | 0.0940 ppm | 0.1379 ppm | -0.0074 ppm |
| Concentration per Run 1 | 26.5902 ppm | 2.4458 ppm | 0.0016 ppm | 0.4097 ppm | 0.0932 ppm | 0.1384 ppm | -0.0082 ppm |
| Concentration per Run 2 | 26.7150 ppm | 2.4505 ppm | 0.0011 ppm | 0.4185 ppm | 0.0951 ppm | 0.1378 ppm | -0.0080 ppm |
| Concentration per Run 3 | 26.5276 ppm | 2.4508 ppm | 0.0015 ppm | 0.4114 ppm | 0.0937 ppm | 0.1374 ppm | -0.0061 ppm |
| Concentration RSD | 0.4 % | 0.1 % | 18.3 % | 1.1 % | 1.1 % | 0.3 % | 15.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0023 ppm | 4.0053 ppm | 0.0063 ppm | 0.0491 ppm | 4.0853 ppm | 0.0018 ppm | 0.2475 ppm |
| Concentration per Run 1 | 0.0048 ppm | 4.0194 ppm | 0.0059 ppm | 0.0492 ppm | 4.0829 ppm | 0.0008 ppm | 0.2479 ppm |
| Concentration per Run 2 | 0.0011 ppm | 4.0018 ppm | 0.0068 ppm | 0.0492 ppm | 4.0968 ppm | 0.0026 ppm | 0.2477 ppm |
| Concentration per Run 3 | 0.0010 ppm | 3.9947 ppm | 0.0063 ppm | 0.0491 ppm | 4.0763 ppm | 0.0020 ppm | 0.2469 ppm |
| Concentration RSD | 95.3 % | 0.3 % | 7.5 % | 0.1 % | 0.3 % | 51.9 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2820 ppm | 108.2353 % | 103.1107 % | 102.7432 % | 123.7695 % | 117.7095 % | 116.3817 % |
| Concentration per Run 1 | 0.2816 ppm | 108.3759 % | 103.1674 % | 102.3607 % | 123.6981 % | 117.7895 % | 116.0379 % |
| Concentration per Run 2 | 0.2820 ppm | 108.4259 % | 102.8325 % | 103.1090 % | 124.0670 % | 117.5233 % | 116.3591 % |
| Concentration per Run 3 | 0.2823 ppm | 107.9040 % | 103.3322 % | 102.7598 % | 123.5434 % | 117.8156 % | 116.7480 % |
| Concentration RSD | 0.1 % | 0.3 % | 0.2 % | 0.4 % | 0.2 % | 0.1 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512345-02d2 WG2038509
Analysis started at: 3/11/2025 2:33:40 PM
Rack 1
Vial 47
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 72.9432 ppm | 0.0362 ppm | 0.0008 ppm | 0.2038 ppm | 0.0029 ppm | 9.7033 ppm |
| Concentration per Run 1 | -0.0002 ppm | 72.9814 ppm | 0.0371 ppm | 0.0016 ppm | 0.2033 ppm | 0.0029 ppm | 9.7590 ppm |
| Concentration per Run 2 | -0.0003 ppm | 73.0284 ppm | 0.0351 ppm | -0.0010 ppm | 0.2043 ppm | 0.0029 ppm | 9.6646 ppm |
| Concentration per Run 3 | -0.0005 ppm | 72.8197 ppm | 0.0364 ppm | 0.0017 ppm | 0.2039 ppm | 0.0028 ppm | 9.6862 ppm |
| Concentration RSD | 39.6 % | 0.2 % | 2.9 % | 202.6 % | 0.2 % | 1.2 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 0.0583 ppm | 0.0932 ppm | 0.1481 ppm | 114.3564 ppm | 2.7144 ppm | 0.0702 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0577 ppm | 0.0925 ppm | 0.1465 ppm | 114.8424 ppm | 2.7320 ppm | 0.0701 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0581 ppm | 0.0937 ppm | 0.1477 ppm | 114.1749 ppm | 2.6962 ppm | 0.0699 ppm |
| Concentration per Run 3 | 0.0014 ppm | 0.0591 ppm | 0.0933 ppm | 0.1501 ppm | 114.0519 ppm | 2.7151 ppm | 0.0707 ppm |
| Concentration RSD | 17.7 % | 1.2 % | 0.7 % | 1.2 % | 0.4 % | 0.7 % | 0.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 21.5937 ppm | 2.4263 ppm | 0.0012 ppm | 0.3067 ppm | 0.0835 ppm | 0.1670 ppm | 0.0018 ppm |
| Concentration per Run 1 | 21.6641 ppm | 2.4314 ppm | 0.0011 ppm | 0.3068 ppm | 0.0834 ppm | 0.1666 ppm | 0.0008 ppm |
| Concentration per Run 2 | 21.5587 ppm | 2.4179 ppm | 0.0013 ppm | 0.3053 ppm | 0.0844 ppm | 0.1664 ppm | 0.0049 ppm |
| Concentration per Run 3 | 21.5582 ppm | 2.4295 ppm | 0.0012 ppm | 0.3079 ppm | 0.0828 ppm | 0.1681 ppm | -0.0003 ppm |
| Concentration RSD | 0.3 % | 0.3 % | 4.7 % | 0.4 % | 0.9 % | 0.6 % | 152.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 1.9844 ppm | 0.0285 ppm | 0.0409 ppm | 3.0818 ppm | 0.0032 ppm | 0.1936 ppm |
| Concentration per Run 1 | -0.0001 ppm | 1.9769 ppm | 0.0299 ppm | 0.0410 ppm | 3.0824 ppm | 0.0038 ppm | 0.1937 ppm |
| Concentration per Run 2 | 0.0004 ppm | 2.0028 ppm | 0.0282 ppm | 0.0410 ppm | 3.0843 ppm | 0.0042 ppm | 0.1933 ppm |
| Concentration per Run 3 | 0.0008 ppm | 1.9733 ppm | 0.0275 ppm | 0.0408 ppm | 3.0788 ppm | 0.0018 ppm | 0.1938 ppm |
| Concentration RSD | 118.9 % | 0.8 % | 4.3 % | 0.3 % | 0.1 % | 39.7 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2379 ppm | 106.5539 % | 102.6624 % | 102.6653 % | 120.1778 % | 114.7700 % | 114.7474 % |
| Concentration per Run 1 | 0.2376 ppm | 106.9609 % | 101.6860 % | 102.6285 % | 120.9634 % | 113.7864 % | 114.4601 % |
| Concentration per Run 2 | 0.2395 ppm | 106.6524 % | 103.4782 % | 102.4379 % | 119.8551 % | 115.7668 % | 114.6788 % |
| Concentration per Run 3 | 0.2366 ppm | 106.0484 % | 102.8231 % | 102.9296 % | 119.7151 % | 114.7570 % | 115.1034 % |
| Concentration RSD | 0.6 % | 0.4 % | 0.9 % | 0.2 % | 0.6 % | 0.9 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512345-03d2 WG2038509
Analysis started at: 3/11/2025 2:37:08 PM
Rack 1
Vial 48
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 82.3908 ppm | 0.0371 ppm | 0.0006 ppm | 0.1423 ppm | 0.0031 ppm | 7.1566 ppm |
| Concentration per Run 1 | -0.0001 ppm | 82.1505 ppm | 0.0399 ppm | 0.0022 ppm | 0.1424 ppm | 0.0030 ppm | 7.1383 ppm |
| Concentration per Run 2 | 0.0002 ppm | 82.4353 ppm | 0.0364 ppm | 0.0002 ppm | 0.1420 ppm | 0.0031 ppm | 7.1311 ppm |
| Concentration per Run 3 | 0.0003 ppm | 82.5866 ppm | 0.0351 ppm | -0.0007 ppm | 0.1424 ppm | 0.0031 ppm | 7.2004 ppm |
| Concentration RSD | 187.4 % | 0.3 % | 6.6 % | 264.4 % | 0.2 % | 0.4 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 0.0404 ppm | 0.0933 ppm | 0.0976 ppm | 103.4030 ppm | 3.1192 ppm | 0.0693 ppm |
| Concentration per Run 1 | 0.0018 ppm | 0.0401 ppm | 0.0934 ppm | 0.0985 ppm | 103.1028 ppm | 3.1203 ppm | 0.0694 ppm |
| Concentration per Run 2 | 0.0014 ppm | 0.0402 ppm | 0.0936 ppm | 0.0972 ppm | 103.3086 ppm | 3.1180 ppm | 0.0696 ppm |
| Concentration per Run 3 | 0.0014 ppm | 0.0408 ppm | 0.0929 ppm | 0.0970 ppm | 103.7977 ppm | 3.1192 ppm | 0.0690 ppm |
| Concentration RSD | 16.8 % | 0.9 % | 0.4 % | 0.8 % | 0.3 % | 0.0 % | 0.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 18.9334 ppm | 1.7844 ppm | 0.0019 ppm | 0.9748 ppm | 0.0727 ppm | 0.1172 ppm | -0.0035 ppm |
| Concentration per Run 1 | 19.0223 ppm | 1.7811 ppm | 0.0012 ppm | 0.9742 ppm | 0.0732 ppm | 0.1178 ppm | -0.0035 ppm |
| Concentration per Run 2 | 18.8249 ppm | 1.7796 ppm | 0.0017 ppm | 0.9809 ppm | 0.0727 ppm | 0.1191 ppm | -0.0023 ppm |
| Concentration per Run 3 | 18.9531 ppm | 1.7926 ppm | 0.0028 ppm | 0.9695 ppm | 0.0722 ppm | 0.1147 ppm | -0.0046 ppm |
| Concentration RSD | 0.5 % | 0.4 % | 44.1 % | 0.6 % | 0.6 % | 1.9 % | 33.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 3.3858 ppm | 0.0070 ppm | 0.0409 ppm | 4.1898 ppm | -0.0009 ppm | 0.1617 ppm |
| Concentration per Run 1 | 0.0008 ppm | 3.4026 ppm | 0.0068 ppm | 0.0408 ppm | 4.1990 ppm | -0.0026 ppm | 0.1624 ppm |
| Concentration per Run 2 | 0.0003 ppm | 3.3688 ppm | 0.0068 ppm | 0.0409 ppm | 4.1786 ppm | 0.0007 ppm | 0.1613 ppm |
| Concentration per Run 3 | 0.0030 ppm | 3.3858 ppm | 0.0073 ppm | 0.0410 ppm | 4.1918 ppm | -0.0007 ppm | 0.1613 ppm |
| Concentration RSD | 106.3 % | 0.5 % | 4.1 % | 0.3 % | 0.2 % | 184.4 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2001 ppm | 106.1468 % | 101.2720 % | 103.0309 % | 120.9011 % | 114.4025 % | 114.6775 % |
| Concentration per Run 1 | 0.2004 ppm | 105.1500 % | 101.1929 % | 103.0837 % | 119.0639 % | 114.0439 % | 114.9468 % |
| Concentration per Run 2 | 0.2005 ppm | 106.4929 % | 101.5236 % | 102.4855 % | 121.4244 % | 115.2949 % | 114.7507 % |
| Concentration per Run 3 | 0.1995 ppm | 106.7975 % | 101.0996 % | 103.5234 % | 122.2150 % | 113.8685 % | 114.3351 % |
| Concentration RSD | 0.3 % | 0.8 % | 0.2 % | 0.5 % | 1.4 % | 0.7 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512345-04d2 WG2038509
Analysis started at: 3/11/2025 2:40:37 PM
Rack 1
Vial 49
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 59.4845 ppm | 0.0182 ppm | 0.0001 ppm | 0.1657 ppm | 0.0024 ppm | 7.8767 ppm |
| Concentration per Run 1 | -0.0002 ppm | 59.3117 ppm | 0.0183 ppm | 0.0002 ppm | 0.1658 ppm | 0.0024 ppm | 7.8381 ppm |
| Concentration per Run 2 | -0.0005 ppm | 59.4835 ppm | 0.0186 ppm | 0.0000 ppm | 0.1661 ppm | 0.0023 ppm | 7.8724 ppm |
| Concentration per Run 3 | 0.0002 ppm | 59.6584 ppm | 0.0176 ppm | 0.0002 ppm | 0.1653 ppm | 0.0025 ppm | 7.9197 ppm |
| Concentration RSD | 199.7 % | 0.3 % | 2.6 % | 119.3 % | 0.2 % | 2.8 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0574 ppm | 0.0667 ppm | 0.1138 ppm | 92.3287 ppm | 3.1569 ppm | 0.0609 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0576 ppm | 0.0664 ppm | 0.1129 ppm | 92.2286 ppm | 3.1805 ppm | 0.0621 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0570 ppm | 0.0669 ppm | 0.1138 ppm | 91.8844 ppm | 3.1477 ppm | 0.0602 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0576 ppm | 0.0668 ppm | 0.1147 ppm | 92.8730 ppm | 3.1424 ppm | 0.0604 ppm |
| Concentration RSD | 8.4 % | 0.6 % | 0.4 % | 0.8 % | 0.5 % | 0.7 % | 1.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 17.4539 ppm | 2.3676 ppm | 0.0008 ppm | 0.8248 ppm | 0.0659 ppm | 0.0570 ppm | -0.0036 ppm |
| Concentration per Run 1 | 17.4801 ppm | 2.3696 ppm | 0.0009 ppm | 0.8258 ppm | 0.0660 ppm | 0.0582 ppm | -0.0021 ppm |
| Concentration per Run 2 | 17.4653 ppm | 2.3670 ppm | 0.0003 ppm | 0.8242 ppm | 0.0665 ppm | 0.0567 ppm | -0.0045 ppm |
| Concentration per Run 3 | 17.4163 ppm | 2.3663 ppm | 0.0011 ppm | 0.8245 ppm | 0.0651 ppm | 0.0560 ppm | -0.0041 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 52.6 % | 0.1 % | 1.0 % | 2.0 % | 35.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 2.9534 ppm | 0.0036 ppm | 0.0378 ppm | 2.7200 ppm | 0.0023 ppm | 0.1407 ppm |
| Concentration per Run 1 | 0.0015 ppm | 2.9671 ppm | 0.0028 ppm | 0.0379 ppm | 2.7267 ppm | 0.0023 ppm | 0.1408 ppm |
| Concentration per Run 2 | 0.0015 ppm | 2.9645 ppm | 0.0035 ppm | 0.0379 ppm | 2.7177 ppm | 0.0019 ppm | 0.1403 ppm |
| Concentration per Run 3 | 0.0002 ppm | 2.9286 ppm | 0.0043 ppm | 0.0377 ppm | 2.7155 ppm | 0.0028 ppm | 0.1411 ppm |
| Concentration RSD | 73.5 % | 0.7 % | 21.7 % | 0.2 % | 0.2 % | 21.0 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1816 ppm | 106.8159 % | 101.9619 % | 102.3243 % | 116.5479 % | 110.9546 % | 110.9202 % |
| Concentration per Run 1 | 0.1815 ppm | 106.8243 % | 102.0738 % | 102.3794 % | 116.7942 % | 110.8665 % | 110.8889 % |
| Concentration per Run 2 | 0.1814 ppm | 107.2568 % | 102.2748 % | 102.2466 % | 116.9103 % | 111.0508 % | 110.8674 % |
| Concentration per Run 3 | 0.1820 ppm | 106.3667 % | 101.5370 % | 102.3470 % | 115.9394 % | 110.9464 % | 111.0044 % |
| Concentration RSD | 0.2 % | 0.4 % | 0.4 % | 0.1 % | 0.5 % | 0.1 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCV
Analysis started at: 3/11/2025 2:44:04 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4781 ppm | 0.4917 ppm | 0.4972 ppm | 0.4856 ppm | 0.4714 ppm | 0.5084 ppm | 0.4877 ppm |
| Concentration per Run 1 | 0.4788 ppm | 0.4938 ppm | 0.4998 ppm | 0.4889 ppm | 0.4703 ppm | 0.5065 ppm | 0.4897 ppm |
| Concentration per Run 2 | 0.4785 ppm | 0.4941 ppm | 0.4946 ppm | 0.4818 ppm | 0.4724 ppm | 0.5087 ppm | 0.4837 ppm |
| Concentration per Run 3 | 0.4769 ppm | 0.4871 ppm | 0.4971 ppm | 0.4862 ppm | 0.4716 ppm | 0.5100 ppm | 0.4897 ppm |
| Recovery Percentage 1 | 95.620 % | 98.333 % | 99.433 % | 97.124 % | 94.284 % | 101.679 % | 97.543 % |
| Concentration RSD | 0.2 % | 0.8 % | 0.5 % | 0.7 % | 0.2 % | 0.4 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4836 ppm | 0.4930 ppm | 0.4866 ppm | 0.4653 ppm | 0.5115 ppm | 5.2164 ppm | 0.5194 ppm |
| Concentration per Run 1 | 0.4846 ppm | 0.4954 ppm | 0.4864 ppm | 0.4655 ppm | 0.5100 ppm | 5.2105 ppm | 0.5182 ppm |
| Concentration per Run 2 | 0.4853 ppm | 0.4934 ppm | 0.4873 ppm | 0.4675 ppm | 0.5109 ppm | 5.2283 ppm | 0.5204 ppm |
| Concentration per Run 3 | 0.4810 ppm | 0.4901 ppm | 0.4860 ppm | 0.4629 ppm | 0.5135 ppm | 5.2104 ppm | 0.5195 ppm |
| Recovery Percentage 1 | 96.725 % | 98.597 % | 97.310 % | 93.060 % | 102.291 % | 104.328 % | 103.870 % |
| Concentration RSD | 0.5 % | 0.5 % | 0.1 % | 0.5 % | 0.4 % | 0.2 % | 0.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4727 ppm | 0.4921 ppm | 0.4859 ppm | 10.1623 ppm | 0.4958 ppm | 0.4959 ppm | 0.4924 ppm |
| Concentration per Run 1 | 0.4756 ppm | 0.4907 ppm | 0.4866 ppm | 10.1260 ppm | 0.4985 ppm | 0.4984 ppm | 0.4906 ppm |
| Concentration per Run 2 | 0.4721 ppm | 0.4918 ppm | 0.4860 ppm | 10.1066 ppm | 0.4922 ppm | 0.4955 ppm | 0.4906 ppm |
| Concentration per Run 3 | 0.4703 ppm | 0.4937 ppm | 0.4850 ppm | 10.2541 ppm | 0.4966 ppm | 0.4939 ppm | 0.4959 ppm |
| Recovery Percentage 1 | 94.533 % | 98.413 % | 97.170 % | 101.623 % | 99.153 % | 99.183 % | 98.480 % |
| Concentration RSD | 0.6 % | 0.3 % | 0.2 % | 0.8 % | 0.7 % | 0.5 % | 0.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4920 ppm | 5.4705 ppm | 0.5061 ppm | 0.4947 ppm | 0.4856 ppm | 0.4838 ppm | 0.4790 ppm |
| Concentration per Run 1 | 0.4953 ppm | 5.4817 ppm | 0.5100 ppm | 0.4934 ppm | 0.4864 ppm | 0.4832 ppm | 0.4805 ppm |
| Concentration per Run 2 | 0.4903 ppm | 5.4549 ppm | 0.5019 ppm | 0.4956 ppm | 0.4855 ppm | 0.4846 ppm | 0.4782 ppm |
| Concentration per Run 3 | 0.4904 ppm | 5.4748 ppm | 0.5065 ppm | 0.4950 ppm | 0.4849 ppm | 0.4835 ppm | 0.4781 ppm |
| Recovery Percentage 1 | 98.399 % | 104.199 % | 101.226 % | 98.937 % | 97.118 % | 96.754 % | 95.792 % |
| Concentration RSD | 0.6 % | 0.3 % | 0.8 % | 0.2 % | 0.2 % | 0.2 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4936 ppm | 104.1247 % | 100.2324 % | 99.9177 % | 102.8675 % | 98.2551 % | 97.6240 % |
| Concentration per Run 1 | 0.4964 ppm | 103.6857 % | 99.9634 % | 99.4310 % | 102.6895 % | 97.7086 % | 97.6454 % |
| Concentration per Run 2 | 0.4918 ppm | 104.4625 % | 100.6679 % | 100.4110 % | 103.1805 % | 98.5876 % | 97.8522 % |
| Concentration per Run 3 | 0.4924 ppm | 104.2259 % | 100.0659 % | 99.9111 % | 102.7327 % | 98.4690 % | 97.3743 % |
| Recovery Percentage 1 | 98.711 % | | | | | | |
| Concentration RSD | 0.5 % | 0.4 % | 0.4 % | 0.5 % | 0.3 % | 0.5 % | 0.2 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCB
Analysis started at: 3/11/2025 2:47:32 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0108 ppm | 0.0015 ppm | -0.0002 ppm | -0.0001 ppm | 0.0001 ppm | 0.0035 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0153 ppm | 0.0017 ppm | 0.0001 ppm | -0.0001 ppm | 0.0001 ppm | 0.0014 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0081 ppm | 0.0008 ppm | -0.0015 ppm | -0.0001 ppm | 0.0000 ppm | 0.0064 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0090 ppm | 0.0019 ppm | 0.0009 ppm | -0.0002 ppm | 0.0001 ppm | 0.0027 ppm |
| Recovery Percentage 1 | 9.600 % | 10.795 % | 29.448 % | -0.663 % | -1.135 % | 1.539 % | 3.515 % |
| Concentration RSD | 31.9 % | 36.4 % | 40.7 % | 624.2 % | 41.0 % | 38.3 % | 73.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0002 ppm | -0.0002 ppm | 0.0002 ppm | 0.0032 ppm | 0.0213 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0006 ppm | 0.0001 ppm | 0.0006 ppm | 0.0049 ppm | 0.0287 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0007 ppm | -0.0002 ppm | -0.0002 ppm | 0.0025 ppm | 0.0051 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0005 ppm | -0.0004 ppm | 0.0001 ppm | 0.0021 ppm | 0.0301 ppm | -0.0003 ppm |
| Recovery Percentage 1 | 0.680 % | -1.090 % | -1.582 % | 1.837 % | 6.378 % | 0.851 % | 5.348 % |
| Concentration RSD | 149.7 % | 325.6 % | 152.6 % | 213.0 % | 47.8 % | 65.9 % | 272.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0029 ppm | 0.0000 ppm | 0.0020 ppm | 0.0125 ppm | -0.0002 ppm | -0.0008 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0012 ppm | 0.0000 ppm | 0.0019 ppm | 0.0125 ppm | -0.0009 ppm | -0.0013 ppm | 0.0008 ppm |
| Concentration per Run 2 | -0.0029 ppm | -0.0001 ppm | 0.0016 ppm | 0.0145 ppm | -0.0011 ppm | -0.0005 ppm | 0.0028 ppm |
| Concentration per Run 3 | -0.0046 ppm | 0.0001 ppm | 0.0026 ppm | 0.0103 ppm | 0.0014 ppm | -0.0007 ppm | -0.0023 ppm |
| Recovery Percentage 1 | -2.878 % | 0.137 % | 4.067 % | 0.623 % | -0.737 % | -8.295 % | 0.890 % |
| Concentration RSD | 59.2 % | 888.7 % | 24.2 % | 16.9 % | 749.5 % | 53.0 % | 584.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | -0.0023 ppm | 0.0000 ppm | 0.0000 ppm | -0.0003 ppm | 0.0024 ppm | -0.0002 ppm |
| Concentration per Run 1 | -0.0009 ppm | -0.0019 ppm | -0.0006 ppm | 0.0001 ppm | 0.0001 ppm | 0.0018 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0009 ppm | -0.0037 ppm | -0.0004 ppm | 0.0001 ppm | -0.0008 ppm | 0.0042 ppm | -0.0003 ppm |
| Concentration per Run 3 | -0.0005 ppm | -0.0012 ppm | 0.0011 ppm | 0.0000 ppm | -0.0003 ppm | 0.0012 ppm | -0.0004 ppm |
| Recovery Percentage 1 | -7.566 % | -0.454 % | 0.077 % | 0.490 % | -3.239 % | 12.013 % | -1.554 % |
| Concentration RSD | 31.4 % | 57.9 % | 2,294.9 % | 110.0 % | 139.8 % | 66.9 % | 210.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 101.0749 % | 98.0207 % | 96.4616 % | 101.6710 % | 97.7913 % | 96.3326 % |
| Concentration per Run 1 | -0.0006 ppm | 101.1308 % | 97.6794 % | 96.6025 % | 101.7491 % | 97.5161 % | 96.1961 % |
| Concentration per Run 2 | -0.0006 ppm | 101.4860 % | 98.2118 % | 96.4601 % | 102.1143 % | 98.0394 % | 96.4753 % |
| Concentration per Run 3 | -0.0007 ppm | 100.6077 % | 98.1707 % | 96.3222 % | 101.1496 % | 97.8183 % | 96.3265 % |
| Recovery Percentage 1 | -12.224 % | | | | | | |
| Concentration RSD | 9.7 % | 0.4 % | 0.3 % | 0.1 % | 0.5 % | 0.3 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCV
Analysis started at: 3/11/2025 3:41:17 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4718 ppm | 0.4839 ppm | 0.4961 ppm | 0.4795 ppm | 0.4717 ppm | 0.5083 ppm | 0.4878 ppm |
| Concentration per Run 1 | 0.4683 ppm | 0.4826 ppm | 0.4947 ppm | 0.4755 ppm | 0.4718 ppm | 0.5080 ppm | 0.4880 ppm |
| Concentration per Run 2 | 0.4741 ppm | 0.4878 ppm | 0.4950 ppm | 0.4798 ppm | 0.4723 ppm | 0.5089 ppm | 0.4871 ppm |
| Concentration per Run 3 | 0.4731 ppm | 0.4813 ppm | 0.4986 ppm | 0.4831 ppm | 0.4711 ppm | 0.5079 ppm | 0.4885 ppm |
| Recovery Percentage 1 | 94.364 % | 96.780 % | 99.222 % | 95.895 % | 94.348 % | 101.651 % | 97.568 % |
| Concentration RSD | 0.7 % | 0.7 % | 0.4 % | 0.8 % | 0.1 % | 0.1 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4802 ppm | 0.4914 ppm | 0.4816 ppm | 0.4617 ppm | 0.5085 ppm | 5.1743 ppm | 0.5191 ppm |
| Concentration per Run 1 | 0.4782 ppm | 0.4891 ppm | 0.4781 ppm | 0.4586 ppm | 0.5141 ppm | 5.1341 ppm | 0.5200 ppm |
| Concentration per Run 2 | 0.4829 ppm | 0.4935 ppm | 0.4846 ppm | 0.4646 ppm | 0.5080 ppm | 5.1885 ppm | 0.5203 ppm |
| Concentration per Run 3 | 0.4796 ppm | 0.4915 ppm | 0.4823 ppm | 0.4621 ppm | 0.5034 ppm | 5.2003 ppm | 0.5170 ppm |
| Recovery Percentage 1 | 96.044 % | 98.273 % | 96.329 % | 92.349 % | 101.700 % | 103.486 % | 103.819 % |
| Concentration RSD | 0.5 % | 0.5 % | 0.7 % | 0.7 % | 1.1 % | 0.7 % | 0.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4718 ppm | 0.4893 ppm | 0.4831 ppm | 10.1731 ppm | 0.4930 ppm | 0.4972 ppm | 0.4931 ppm |
| Concentration per Run 1 | 0.4704 ppm | 0.4860 ppm | 0.4820 ppm | 10.1935 ppm | 0.4913 ppm | 0.4976 ppm | 0.4889 ppm |
| Concentration per Run 2 | 0.4718 ppm | 0.4907 ppm | 0.4831 ppm | 10.1945 ppm | 0.4913 ppm | 0.4995 ppm | 0.4950 ppm |
| Concentration per Run 3 | 0.4732 ppm | 0.4913 ppm | 0.4842 ppm | 10.1312 ppm | 0.4962 ppm | 0.4945 ppm | 0.4955 ppm |
| Recovery Percentage 1 | 94.358 % | 97.863 % | 96.616 % | 101.731 % | 98.592 % | 99.439 % | 98.629 % |
| Concentration RSD | 0.3 % | 0.6 % | 0.2 % | 0.4 % | 0.6 % | 0.5 % | 0.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4944 ppm | 5.4337 ppm | 0.5020 ppm | 0.4926 ppm | 0.4797 ppm | 0.4847 ppm | 0.4767 ppm |
| Concentration per Run 1 | 0.4958 ppm | 5.4053 ppm | 0.4986 ppm | 0.4902 ppm | 0.4777 ppm | 0.4827 ppm | 0.4753 ppm |
| Concentration per Run 2 | 0.4944 ppm | 5.4518 ppm | 0.5065 ppm | 0.4944 ppm | 0.4804 ppm | 0.4878 ppm | 0.4778 ppm |
| Concentration per Run 3 | 0.4932 ppm | 5.4438 ppm | 0.5009 ppm | 0.4933 ppm | 0.4811 ppm | 0.4835 ppm | 0.4770 ppm |
| Recovery Percentage 1 | 98.887 % | 103.498 % | 100.401 % | 98.525 % | 95.942 % | 96.939 % | 95.342 % |
| Concentration RSD | 0.3 % | 0.5 % | 0.8 % | 0.4 % | 0.4 % | 0.6 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4895 ppm | 104.5183 % | 100.0361 % | 100.2923 % | 102.8132 % | 96.8244 % | 97.6335 % |
| Concentration per Run 1 | 0.4872 ppm | 104.8656 % | 99.8129 % | 100.3199 % | 103.3095 % | 96.5053 % | 97.5090 % |
| Concentration per Run 2 | 0.4920 ppm | 104.4333 % | 100.0684 % | 100.3829 % | 103.0973 % | 97.2449 % | 97.6903 % |
| Concentration per Run 3 | 0.4893 ppm | 104.2559 % | 100.2270 % | 100.1743 % | 102.0330 % | 96.7230 % | 97.7013 % |
| Recovery Percentage 1 | 97.897 % | | | | | | |
| Concentration RSD | 0.5 % | 0.3 % | 0.2 % | 0.1 % | 0.7 % | 0.4 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCB
Analysis started at: 3/11/2025 3:44:51 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.0096 ppm | 0.0008 ppm | 0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0046 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.0072 ppm | -0.0001 ppm | -0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0065 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0087 ppm | 0.0016 ppm | 0.0003 ppm | 0.0000 ppm | 0.0001 ppm | 0.0042 ppm |
| Concentration per Run 3 | 0.0013 ppm | 0.0129 ppm | 0.0010 ppm | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | 0.0030 ppm |
| Recovery Percentage 1 | 15.447 % | 9.597 % | 16.517 % | 0.299 % | 0.572 % | 1.042 % | 4.558 % |
| Concentration RSD | 26.5 % | 30.6 % | 106.8 % | 240.4 % | 172.4 % | 43.3 % | 38.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0005 ppm | -0.0002 ppm | 0.0001 ppm | 0.0018 ppm | 0.0234 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0003 ppm | -0.0002 ppm | 0.0000 ppm | 0.0022 ppm | 0.0261 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0007 ppm | 0.0001 ppm | 0.0005 ppm | 0.0003 ppm | 0.0115 ppm | 0.0006 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0004 ppm | -0.0005 ppm | -0.0002 ppm | 0.0028 ppm | 0.0325 ppm | 0.0004 ppm |
| Recovery Percentage 1 | -1.052 % | 2.314 % | -1.710 % | 1.094 % | 3.550 % | 0.934 % | 12.118 % |
| Concentration RSD | 90.6 % | 38.0 % | 174.0 % | 328.6 % | 72.2 % | 46.1 % | 28.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0025 ppm | 0.0000 ppm | 0.0019 ppm | 0.0141 ppm | -0.0009 ppm | -0.0025 ppm | 0.0019 ppm |
| Concentration per Run 1 | -0.0035 ppm | 0.0001 ppm | 0.0026 ppm | 0.0156 ppm | -0.0003 ppm | -0.0005 ppm | 0.0022 ppm |
| Concentration per Run 2 | -0.0030 ppm | 0.0000 ppm | 0.0017 ppm | 0.0076 ppm | -0.0005 ppm | -0.0022 ppm | 0.0018 ppm |
| Concentration per Run 3 | -0.0009 ppm | -0.0001 ppm | 0.0014 ppm | 0.0192 ppm | -0.0019 ppm | -0.0047 ppm | 0.0016 ppm |
| Recovery Percentage 1 | -2.470 % | -0.293 % | 3.783 % | 0.707 % | -3.625 % | -24.574 % | 3.715 % |
| Concentration RSD | 55.2 % | 320.4 % | 32.8 % | 41.7 % | 98.3 % | 84.7 % | 15.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | -0.0018 ppm | -0.0013 ppm | 0.0000 ppm | -0.0003 ppm | 0.0029 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0035 ppm | -0.0051 ppm | -0.0023 ppm | 0.0000 ppm | -0.0007 ppm | 0.0033 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0022 ppm | -0.0003 ppm | 0.0000 ppm | -0.0005 ppm | 0.0027 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0009 ppm | -0.0026 ppm | -0.0015 ppm | 0.0000 ppm | 0.0002 ppm | 0.0026 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 13.610 % | -0.368 % | -2.699 % | 0.034 % | -3.070 % | 14.323 % | 1.336 % |
| Concentration RSD | 144.6 % | 200.8 % | 73.6 % | 699.7 % | 154.4 % | 12.3 % | 80.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 101.5635 % | 98.1605 % | 98.1254 % | 101.7180 % | 97.2408 % | 97.4851 % |
| Concentration per Run 1 | -0.0003 ppm | 102.2551 % | 98.8819 % | 98.3946 % | 101.8463 % | 97.8950 % | 98.0332 % |
| Concentration per Run 2 | -0.0005 ppm | 101.8274 % | 97.3180 % | 97.8534 % | 101.9766 % | 96.7093 % | 97.0389 % |
| Concentration per Run 3 | -0.0005 ppm | 100.6080 % | 98.2815 % | 98.1282 % | 101.3312 % | 97.1180 % | 97.3831 % |
| Recovery Percentage 1 | -8.679 % | | | | | | |
| Concentration RSD | 27.7 % | 0.8 % | 0.8 % | 0.3 % | 0.3 % | 0.6 % | 0.5 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038695-1 WG2038695
Analysis started at: 3/11/2025 3:50:00 PM
Rack 1
Vial 50
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0114 ppm | 0.0009 ppm | 0.0005 ppm | -0.0001 ppm | 0.0000 ppm | 0.0122 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0192 ppm | 0.0004 ppm | 0.0007 ppm | 0.0000 ppm | 0.0000 ppm | 0.0146 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0068 ppm | 0.0009 ppm | 0.0005 ppm | -0.0001 ppm | 0.0000 ppm | 0.0109 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0082 ppm | 0.0013 ppm | 0.0002 ppm | -0.0001 ppm | 0.0000 ppm | 0.0111 ppm |
| Recovery Percentage 1 | 13.007 % | 11.434 % | 17.186 % | 1.623 % | -0.899 % | 0.356 % | 12.203 % |
| Concentration RSD | 26.8 % | 59.2 % | 49.9 % | 46.2 % | 100.2 % | 95.3 % | 16.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0002 ppm | 0.0001 ppm | 0.0004 ppm | 0.0042 ppm | 0.0253 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0005 ppm | -0.0003 ppm | 0.0004 ppm | 0.0052 ppm | 0.0105 ppm | -0.0004 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0000 ppm | 0.0005 ppm | 0.0001 ppm | 0.0039 ppm | 0.0296 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0002 ppm | 0.0001 ppm | 0.0007 ppm | 0.0035 ppm | 0.0359 ppm | 0.0005 ppm |
| Recovery Percentage 1 | -2.230 % | -1.135 % | 0.824 % | 3.866 % | 8.434 % | 1.014 % | 4.118 % |
| Concentration RSD | 186.1 % | 107.3 % | 494.5 % | 78.5 % | 20.5 % | 52.2 % | 271.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0020 ppm | 0.0001 ppm | 0.0005 ppm | 0.0143 ppm | -0.0006 ppm | -0.0022 ppm | -0.0002 ppm |
| Concentration per Run 1 | -0.0033 ppm | 0.0002 ppm | 0.0003 ppm | 0.0172 ppm | -0.0008 ppm | -0.0008 ppm | -0.0010 ppm |
| Concentration per Run 2 | -0.0008 ppm | 0.0000 ppm | 0.0007 ppm | 0.0118 ppm | -0.0003 ppm | -0.0023 ppm | -0.0019 ppm |
| Concentration per Run 3 | -0.0018 ppm | 0.0002 ppm | 0.0004 ppm | 0.0140 ppm | -0.0007 ppm | -0.0034 ppm | 0.0023 ppm |
| Recovery Percentage 1 | -1.976 % | 1.424 % | 0.929 % | 0.717 % | -2.369 % | -21.895 % | -0.407 % |
| Concentration RSD | 64.6 % | 63.6 % | 37.0 % | 18.8 % | 44.6 % | 58.9 % | 1,078.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | -0.0042 ppm | -0.0012 ppm | 0.0001 ppm | -0.0006 ppm | 0.0033 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0036 ppm | -0.0031 ppm | -0.0015 ppm | 0.0001 ppm | -0.0009 ppm | 0.0025 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0032 ppm | -0.0056 ppm | -0.0014 ppm | 0.0001 ppm | -0.0008 ppm | 0.0038 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0014 ppm | -0.0037 ppm | -0.0008 ppm | 0.0000 ppm | -0.0001 ppm | 0.0036 ppm | 0.0002 ppm |
| Recovery Percentage 1 | 5.980 % | -0.833 % | -2.483 % | 0.553 % | -6.197 % | 16.515 % | -0.339 % |
| Concentration RSD | 583.9 % | 31.7 % | 29.3 % | 50.3 % | 71.6 % | 20.5 % | 764.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 102.8672 % | 99.4332 % | 99.0454 % | 102.9610 % | 98.0218 % | 99.1214 % |
| Concentration per Run 1 | 0.0011 ppm | 103.1940 % | 99.3219 % | 99.1857 % | 103.4592 % | 97.7030 % | 99.2464 % |
| Concentration per Run 2 | 0.0012 ppm | 103.0558 % | 99.4839 % | 99.1881 % | 103.0190 % | 98.1160 % | 99.3106 % |
| Concentration per Run 3 | 0.0014 ppm | 102.3516 % | 99.4939 % | 98.7624 % | 102.4046 % | 98.2463 % | 98.8072 % |
| Recovery Percentage 1 | 24.640 % | | | | | | |
| Concentration RSD | 10.6 % | 0.4 % | 0.1 % | 0.2 % | 0.5 % | 0.3 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: zWG2038695-2 WG2038695
Analysis started at: 3/11/2025 3:53:28 PM
Rack 1
Vial 51
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0499 ppm | 2.0380 ppm | 0.1180 ppm | 0.9901 ppm | 1.9491 ppm | 0.0521 ppm | 10.1564 ppm |
| Concentration per Run 1 | 0.0501 ppm | 2.0410 ppm | 0.1174 ppm | 0.9850 ppm | 1.9504 ppm | 0.0521 ppm | 10.1547 ppm |
| Concentration per Run 2 | 0.0501 ppm | 2.0429 ppm | 0.1159 ppm | 0.9907 ppm | 1.9471 ppm | 0.0521 ppm | 10.1671 ppm |
| Concentration per Run 3 | 0.0494 ppm | 2.0301 ppm | 0.1207 ppm | 0.9945 ppm | 1.9497 ppm | 0.0521 ppm | 10.1473 ppm |
| Concentration RSD | 0.8 % | 0.3 % | 2.1 % | 0.5 % | 0.1 % | 0.0 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0519 ppm | 0.4944 ppm | 0.1968 ppm | 0.2423 ppm | 1.0432 ppm | 10.7204 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0519 ppm | 0.4945 ppm | 0.1966 ppm | 0.2404 ppm | 1.0455 ppm | 10.7372 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0519 ppm | 0.4929 ppm | 0.1973 ppm | 0.2416 ppm | 1.0431 ppm | 10.7407 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0520 ppm | 0.4959 ppm | 0.1965 ppm | 0.2449 ppm | 1.0409 ppm | 10.6835 ppm | -0.0001 ppm |
| Concentration RSD | 0.1 % | 0.3 % | 0.2 % | 1.0 % | 0.2 % | 0.3 % | 132.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.8142 ppm | 0.5131 ppm | 0.9855 ppm | 10.7015 ppm | 0.4979 ppm | 0.5383 ppm | 0.4194 ppm |
| Concentration per Run 1 | 9.8521 ppm | 0.5121 ppm | 0.9818 ppm | 10.7422 ppm | 0.4990 ppm | 0.5380 ppm | 0.4130 ppm |
| Concentration per Run 2 | 9.8284 ppm | 0.5145 ppm | 0.9820 ppm | 10.7203 ppm | 0.4970 ppm | 0.5338 ppm | 0.4177 ppm |
| Concentration per Run 3 | 9.7622 ppm | 0.5127 ppm | 0.9926 ppm | 10.6419 ppm | 0.4978 ppm | 0.5430 ppm | 0.4276 ppm |
| Concentration RSD | 0.5 % | 0.2 % | 0.6 % | 0.5 % | 0.2 % | 0.9 % | 1.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1156 ppm | 1.0310 ppm | 0.9740 ppm | 1.0060 ppm | 0.9895 ppm | 0.1138 ppm | 0.4997 ppm |
| Concentration per Run 1 | 0.1155 ppm | 1.0240 ppm | 0.9697 ppm | 1.0078 ppm | 0.9912 ppm | 0.1145 ppm | 0.4985 ppm |
| Concentration per Run 2 | 0.1172 ppm | 1.0364 ppm | 0.9763 ppm | 1.0057 ppm | 0.9899 ppm | 0.1128 ppm | 0.4994 ppm |
| Concentration per Run 3 | 0.1140 ppm | 1.0326 ppm | 0.9761 ppm | 1.0045 ppm | 0.9875 ppm | 0.1142 ppm | 0.5012 ppm |
| Concentration RSD | 1.4 % | 0.6 % | 0.4 % | 0.2 % | 0.2 % | 0.8 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5059 ppm | 103.5562 % | 99.1887 % | 99.3893 % | 101.5640 % | 96.4556 % | 96.3366 % |
| Concentration per Run 1 | 0.5074 ppm | 103.5078 % | 99.2036 % | 98.2786 % | 101.3619 % | 96.7330 % | 95.3361 % |
| Concentration per Run 2 | 0.5054 ppm | 103.5939 % | 99.0101 % | 99.9226 % | 101.7363 % | 96.4104 % | 96.7503 % |
| Concentration per Run 3 | 0.5047 ppm | 103.5669 % | 99.3524 % | 99.9665 % | 101.5939 % | 96.2233 % | 96.9233 % |
| Concentration RSD | 0.3 % | 0.0 % | 0.2 % | 1.0 % | 0.2 % | 0.3 % | 0.9 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511902-01 WG2038695
Analysis started at: 3/11/2025 3:59:00 PM
Rack 2
Vial 2
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.1359 ppm | 0.0015 ppm | 0.0607 ppm | 0.0383 ppm | 0.0000 ppm | 69.5861 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.1413 ppm | 0.0029 ppm | 0.0630 ppm | 0.0383 ppm | 0.0000 ppm | 69.8090 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.1292 ppm | 0.0002 ppm | 0.0603 ppm | 0.0385 ppm | 0.0000 ppm | 69.6406 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.1372 ppm | 0.0015 ppm | 0.0588 ppm | 0.0382 ppm | 0.0000 ppm | 69.3086 ppm |
| Concentration RSD | 19.6 % | 4.5 % | 86.9 % | 3.5 % | 0.4 % | 40.1 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | -0.0001 ppm | 0.0032 ppm | 0.0026 ppm | 0.1416 ppm | 4.0878 ppm | 0.0564 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0004 ppm | 0.0036 ppm | 0.0028 ppm | 0.1418 ppm | 4.0687 ppm | 0.0570 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0005 ppm | 0.0029 ppm | 0.0030 ppm | 0.1431 ppm | 4.0844 ppm | 0.0560 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0000 ppm | 0.0031 ppm | 0.0021 ppm | 0.1399 ppm | 4.1101 ppm | 0.0562 ppm |
| Concentration RSD | 38.9 % | 743.0 % | 11.3 % | 17.6 % | 1.2 % | 0.5 % | 0.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 19.5660 ppm | 0.1147 ppm | 0.0043 ppm | 22.7863 ppm | -0.0002 ppm | -0.0009 ppm | 0.0059 ppm |
| Concentration per Run 1 | 19.6155 ppm | 0.1148 ppm | 0.0046 ppm | 22.6867 ppm | 0.0006 ppm | 0.0010 ppm | 0.0046 ppm |
| Concentration per Run 2 | 19.5860 ppm | 0.1146 ppm | 0.0045 ppm | 22.8599 ppm | -0.0004 ppm | -0.0025 ppm | 0.0076 ppm |
| Concentration per Run 3 | 19.4967 ppm | 0.1148 ppm | 0.0038 ppm | 22.8124 ppm | -0.0006 ppm | -0.0012 ppm | 0.0057 ppm |
| Concentration RSD | 0.3 % | 0.1 % | 10.5 % | 0.4 % | 377.3 % | 200.1 % | 25.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 4.3445 ppm | 0.0022 ppm | 0.3425 ppm | 0.0037 ppm | 0.0028 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0021 ppm | 4.3199 ppm | 0.0017 ppm | 0.3420 ppm | 0.0039 ppm | 0.0018 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0018 ppm | 4.3646 ppm | 0.0039 ppm | 0.3428 ppm | 0.0037 ppm | 0.0035 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0006 ppm | 4.3490 ppm | 0.0011 ppm | 0.3426 ppm | 0.0035 ppm | 0.0031 ppm | 0.0002 ppm |
| Concentration RSD | 613.7 % | 0.5 % | 63.8 % | 0.1 % | 4.9 % | 31.6 % | 24.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0155 ppm | 104.0752 % | 98.8108 % | 98.7711 % | 101.3047 % | 96.5197 % | 96.0661 % |
| Concentration per Run 1 | 0.0157 ppm | 103.7012 % | 98.9632 % | 98.7619 % | 100.9650 % | 96.8429 % | 96.2187 % |
| Concentration per Run 2 | 0.0153 ppm | 104.4131 % | 98.2842 % | 99.0084 % | 101.3633 % | 95.9878 % | 96.0336 % |
| Concentration per Run 3 | 0.0156 ppm | 104.1112 % | 99.1852 % | 98.5431 % | 101.5859 % | 96.7285 % | 95.9460 % |
| Concentration RSD | 1.2 % | 0.3 % | 0.5 % | 0.2 % | 0.3 % | 0.5 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511902-02 WG2038695
Analysis started at: 3/11/2025 4:02:40 PM
Rack 2
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.1011 ppm | 0.0012 ppm | 0.0359 ppm | 0.0377 ppm | 0.0000 ppm | 73.2955 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.1039 ppm | 0.0019 ppm | 0.0358 ppm | 0.0379 ppm | 0.0000 ppm | 73.1682 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0956 ppm | 0.0025 ppm | 0.0356 ppm | 0.0375 ppm | 0.0000 ppm | 73.2839 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.1037 ppm | -0.0008 ppm | 0.0364 ppm | 0.0376 ppm | 0.0000 ppm | 73.4345 ppm |
| Concentration RSD | 25.6 % | 4.7 % | 149.6 % | 1.2 % | 0.5 % | 18.0 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 0.0002 ppm | 0.0050 ppm | 0.0030 ppm | 0.1041 ppm | 2.8986 ppm | 0.0040 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0009 ppm | 0.0049 ppm | 0.0034 ppm | 0.1044 ppm | 2.8990 ppm | 0.0042 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0000 ppm | 0.0048 ppm | 0.0030 ppm | 0.1028 ppm | 2.8877 ppm | 0.0044 ppm |
| Concentration per Run 3 | -0.0006 ppm | -0.0004 ppm | 0.0053 ppm | 0.0025 ppm | 0.1052 ppm | 2.9091 ppm | 0.0034 ppm |
| Concentration RSD | 49.7 % | 337.4 % | 4.7 % | 14.6 % | 1.2 % | 0.4 % | 12.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 25.4243 ppm | 0.0614 ppm | 0.0019 ppm | 16.7484 ppm | -0.0001 ppm | -0.0019 ppm | 0.0030 ppm |
| Concentration per Run 1 | 25.4273 ppm | 0.0608 ppm | 0.0025 ppm | 16.5628 ppm | -0.0003 ppm | -0.0023 ppm | 0.0027 ppm |
| Concentration per Run 2 | 25.4850 ppm | 0.0614 ppm | 0.0015 ppm | 16.8144 ppm | -0.0002 ppm | -0.0023 ppm | 0.0073 ppm |
| Concentration per Run 3 | 25.3607 ppm | 0.0619 ppm | 0.0018 ppm | 16.8679 ppm | 0.0002 ppm | -0.0012 ppm | -0.0009 ppm |
| Concentration RSD | 0.2 % | 0.9 % | 28.9 % | 1.0 % | 239.6 % | 31.3 % | 136.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0024 ppm | 4.2019 ppm | 0.0002 ppm | 0.3935 ppm | 0.0032 ppm | 0.0008 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0048 ppm | 4.1799 ppm | 0.0012 ppm | 0.3914 ppm | 0.0030 ppm | 0.0021 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0022 ppm | 4.2176 ppm | -0.0008 ppm | 0.3934 ppm | 0.0035 ppm | -0.0021 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0002 ppm | 4.2082 ppm | 0.0001 ppm | 0.3957 ppm | 0.0031 ppm | 0.0023 ppm | -0.0002 ppm |
| Concentration RSD | 95.7 % | 0.5 % | 562.2 % | 0.5 % | 8.5 % | 320.8 % | 363.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0379 ppm | 103.7537 % | 98.8739 % | 98.5230 % | 102.0680 % | 96.8921 % | 95.9500 % |
| Concentration per Run 1 | 0.0375 ppm | 103.5106 % | 99.6949 % | 98.3010 % | 102.4042 % | 97.3522 % | 96.0333 % |
| Concentration per Run 2 | 0.0386 ppm | 103.7163 % | 98.6328 % | 98.5748 % | 101.9149 % | 96.6524 % | 96.2040 % |
| Concentration per Run 3 | 0.0375 ppm | 104.0343 % | 98.2939 % | 98.6934 % | 101.8849 % | 96.6717 % | 95.6126 % |
| Concentration RSD | 1.6 % | 0.3 % | 0.7 % | 0.2 % | 0.3 % | 0.4 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511919-04 WG2038695
Analysis started at: 3/11/2025 4:06:08 PM
Rack 2
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0116 ppm | -0.0009 ppm | 0.0246 ppm | 0.0247 ppm | 0.0000 ppm | 27.6713 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0081 ppm | 0.0017 ppm | 0.0231 ppm | 0.0247 ppm | 0.0000 ppm | 27.6421 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0143 ppm | -0.0030 ppm | 0.0250 ppm | 0.0246 ppm | 0.0000 ppm | 27.6058 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0123 ppm | -0.0014 ppm | 0.0257 ppm | 0.0247 ppm | 0.0000 ppm | 27.7659 ppm |
| Concentration RSD | 16.8 % | 27.4 % | 260.3 % | 5.5 % | 0.0 % | 83.9 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0003 ppm | -0.0002 ppm | 0.0009 ppm | 0.0105 ppm | 1.8808 ppm | 0.0005 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0002 ppm | -0.0001 ppm | 0.0008 ppm | 0.0104 ppm | 1.8892 ppm | 0.0004 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0002 ppm | -0.0003 ppm | 0.0011 ppm | 0.0107 ppm | 1.8593 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0009 ppm | -0.0002 ppm | 0.0009 ppm | 0.0103 ppm | 1.8938 ppm | 0.0009 ppm |
| Concentration RSD | 22.6 % | 179.1 % | 45.5 % | 19.4 % | 1.6 % | 1.0 % | 60.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.3980 ppm | 0.0065 ppm | 0.0004 ppm | 10.4135 ppm | 0.0001 ppm | -0.0003 ppm | 0.0020 ppm |
| Concentration per Run 1 | 5.3978 ppm | 0.0067 ppm | 0.0002 ppm | 10.4018 ppm | -0.0002 ppm | -0.0006 ppm | 0.0005 ppm |
| Concentration per Run 2 | 5.3974 ppm | 0.0065 ppm | 0.0010 ppm | 10.3466 ppm | 0.0009 ppm | -0.0006 ppm | 0.0016 ppm |
| Concentration per Run 3 | 5.3989 ppm | 0.0064 ppm | 0.0001 ppm | 10.4921 ppm | -0.0004 ppm | 0.0002 ppm | 0.0040 ppm |
| Concentration RSD | 0.0 % | 2.3 % | 118.5 % | 0.7 % | 974.3 % | 148.8 % | 88.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 3.3926 ppm | -0.0011 ppm | 0.0784 ppm | -0.0002 ppm | 0.0017 ppm | 0.0009 ppm |
| Concentration per Run 1 | 0.0005 ppm | 3.3846 ppm | -0.0009 ppm | 0.0786 ppm | 0.0000 ppm | 0.0001 ppm | 0.0008 ppm |
| Concentration per Run 2 | -0.0004 ppm | 3.4047 ppm | -0.0002 ppm | 0.0783 ppm | -0.0001 ppm | 0.0034 ppm | 0.0012 ppm |
| Concentration per Run 3 | -0.0020 ppm | 3.3886 ppm | -0.0021 ppm | 0.0783 ppm | -0.0005 ppm | 0.0016 ppm | 0.0007 ppm |
| Concentration RSD | 196.9 % | 0.3 % | 92.1 % | 0.3 % | 113.0 % | 99.1 % | 31.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0143 ppm | 104.4107 % | 99.6192 % | 99.7961 % | 102.8263 % | 97.4572 % | 98.5739 % |
| Concentration per Run 1 | 0.0140 ppm | 104.7797 % | 99.9852 % | 99.1821 % | 103.4485 % | 97.6877 % | 98.1652 % |
| Concentration per Run 2 | 0.0143 ppm | 104.4940 % | 99.9309 % | 99.8676 % | 102.7856 % | 97.4138 % | 98.8981 % |
| Concentration per Run 3 | 0.0145 ppm | 103.9583 % | 98.9415 % | 100.3387 % | 102.2449 % | 97.2702 % | 98.6584 % |
| Concentration RSD | 1.6 % | 0.4 % | 0.6 % | 0.6 % | 0.6 % | 0.2 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511919-01 WG2038695
Analysis started at: 3/11/2025 4:09:36 PM
Rack 1
Vial 52
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0678 ppm | -0.0004 ppm | 0.0201 ppm | 0.0210 ppm | 0.0000 ppm | 25.0249 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0710 ppm | 0.0005 ppm | 0.0208 ppm | 0.0210 ppm | 0.0000 ppm | 25.0052 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0742 ppm | -0.0010 ppm | 0.0207 ppm | 0.0209 ppm | 0.0000 ppm | 25.0392 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0584 ppm | -0.0007 ppm | 0.0188 ppm | 0.0210 ppm | 0.0000 ppm | 25.0304 ppm |
| Concentration RSD | 50.2 % | 12.3 % | 199.4 % | 5.5 % | 0.5 % | 21.7 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0004 ppm | 0.0002 ppm | 0.0008 ppm | 0.0921 ppm | 2.1671 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0004 ppm | 0.0007 ppm | 0.0010 ppm | 0.0920 ppm | 2.1956 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0006 ppm | 0.0001 ppm | 0.0009 ppm | 0.0911 ppm | 2.1367 ppm | -0.0004 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0001 ppm | -0.0001 ppm | 0.0005 ppm | 0.0932 ppm | 2.1689 ppm | -0.0003 ppm |
| Concentration RSD | 44.7 % | 67.4 % | 172.6 % | 29.8 % | 1.2 % | 1.4 % | 292.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.4067 ppm | 0.0109 ppm | 0.0005 ppm | 9.8314 ppm | -0.0001 ppm | -0.0013 ppm | 0.0004 ppm |
| Concentration per Run 1 | 4.4098 ppm | 0.0108 ppm | 0.0001 ppm | 9.8276 ppm | 0.0003 ppm | -0.0019 ppm | 0.0009 ppm |
| Concentration per Run 2 | 4.3900 ppm | 0.0109 ppm | 0.0002 ppm | 9.8590 ppm | -0.0008 ppm | 0.0003 ppm | 0.0025 ppm |
| Concentration per Run 3 | 4.4202 ppm | 0.0110 ppm | 0.0012 ppm | 9.8075 ppm | 0.0002 ppm | -0.0023 ppm | -0.0022 ppm |
| Concentration RSD | 0.3 % | 1.2 % | 122.9 % | 0.3 % | 658.7 % | 109.3 % | 618.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 2.2097 ppm | -0.0008 ppm | 0.0645 ppm | 0.0021 ppm | 0.0006 ppm | 0.0011 ppm |
| Concentration per Run 1 | -0.0030 ppm | 2.2102 ppm | -0.0007 ppm | 0.0643 ppm | 0.0023 ppm | 0.0006 ppm | 0.0008 ppm |
| Concentration per Run 2 | -0.0004 ppm | 2.2092 ppm | -0.0013 ppm | 0.0645 ppm | 0.0019 ppm | 0.0006 ppm | 0.0013 ppm |
| Concentration per Run 3 | 0.0019 ppm | 2.2097 ppm | -0.0005 ppm | 0.0647 ppm | 0.0021 ppm | 0.0006 ppm | 0.0013 ppm |
| Concentration RSD | 500.7 % | 0.0 % | 46.0 % | 0.3 % | 9.0 % | 5.1 % | 21.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0147 ppm | 104.2538 % | 99.3321 % | 100.0184 % | 102.9189 % | 97.1205 % | 98.2296 % |
| Concentration per Run 1 | 0.0147 ppm | 103.9494 % | 99.2114 % | 100.5795 % | 103.0842 % | 96.7905 % | 98.6713 % |
| Concentration per Run 2 | 0.0148 ppm | 104.8602 % | 99.4390 % | 100.0727 % | 103.4674 % | 97.1108 % | 98.1892 % |
| Concentration per Run 3 | 0.0145 ppm | 103.9518 % | 99.3460 % | 99.4032 % | 102.2050 % | 97.4601 % | 97.8281 % |
| Concentration RSD | 1.2 % | 0.5 % | 0.1 % | 0.6 % | 0.6 % | 0.3 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038695-3 WG2038695
Analysis started at: 3/11/2025 4:13:04 PM
Rack 1
Vial 53
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0502 ppm | 2.0827 ppm | 0.1194 ppm | 0.9996 ppm | 1.9696 ppm | 0.0522 ppm | 34.5564 ppm |
| Concentration per Run 1 | 0.0504 ppm | 2.0869 ppm | 0.1200 ppm | 0.9949 ppm | 1.9613 ppm | 0.0524 ppm | 34.6212 ppm |
| Concentration per Run 2 | 0.0503 ppm | 2.0695 ppm | 0.1198 ppm | 0.9960 ppm | 1.9719 ppm | 0.0522 ppm | 34.5502 ppm |
| Concentration per Run 3 | 0.0501 ppm | 2.0917 ppm | 0.1184 ppm | 1.0080 ppm | 1.9756 ppm | 0.0521 ppm | 34.4978 ppm |
| Concentration RSD | 0.3 % | 0.6 % | 0.7 % | 0.7 % | 0.4 % | 0.2 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0510 ppm | 0.4865 ppm | 0.1959 ppm | 0.2446 ppm | 1.1291 ppm | 12.8564 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.0510 ppm | 0.4859 ppm | 0.1945 ppm | 0.2447 ppm | 1.1324 ppm | 12.8107 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0509 ppm | 0.4862 ppm | 0.1965 ppm | 0.2432 ppm | 1.1202 ppm | 12.8943 ppm | 0.0010 ppm |
| Concentration per Run 3 | 0.0512 ppm | 0.4874 ppm | 0.1968 ppm | 0.2458 ppm | 1.1348 ppm | 12.8643 ppm | 0.0013 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 0.6 % | 0.5 % | 0.7 % | 0.3 % | 38.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 14.0326 ppm | 0.5179 ppm | 0.9641 ppm | 20.1577 ppm | 0.4916 ppm | 0.5302 ppm | 0.4324 ppm |
| Concentration per Run 1 | 14.0422 ppm | 0.5187 ppm | 0.9574 ppm | 20.0177 ppm | 0.4879 ppm | 0.5286 ppm | 0.4302 ppm |
| Concentration per Run 2 | 14.0307 ppm | 0.5206 ppm | 0.9630 ppm | 20.2713 ppm | 0.4931 ppm | 0.5253 ppm | 0.4276 ppm |
| Concentration per Run 3 | 14.0250 ppm | 0.5144 ppm | 0.9719 ppm | 20.1840 ppm | 0.4937 ppm | 0.5367 ppm | 0.4394 ppm |
| Concentration RSD | 0.1 % | 0.6 % | 0.8 % | 0.6 % | 0.7 % | 1.1 % | 1.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1182 ppm | 3.2681 ppm | 0.9533 ppm | 1.0581 ppm | 0.9866 ppm | 0.1151 ppm | 0.4990 ppm |
| Concentration per Run 1 | 0.1179 ppm | 3.2674 ppm | 0.9465 ppm | 1.0561 ppm | 0.9848 ppm | 0.1146 ppm | 0.4998 ppm |
| Concentration per Run 2 | 0.1173 ppm | 3.2725 ppm | 0.9509 ppm | 1.0587 ppm | 0.9872 ppm | 0.1139 ppm | 0.4981 ppm |
| Concentration per Run 3 | 0.1194 ppm | 3.2644 ppm | 0.9623 ppm | 1.0596 ppm | 0.9878 ppm | 0.1170 ppm | 0.4992 ppm |
| Concentration RSD | 0.9 % | 0.1 % | 0.9 % | 0.2 % | 0.2 % | 1.4 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5113 ppm | 103.8044 % | 98.7816 % | 99.4715 % | 101.9417 % | 95.8622 % | 96.3197 % |
| Concentration per Run 1 | 0.5092 ppm | 104.2756 % | 98.8127 % | 99.6563 % | 102.4129 % | 95.8920 % | 96.6562 % |
| Concentration per Run 2 | 0.5100 ppm | 103.9636 % | 98.9360 % | 99.7946 % | 101.9159 % | 95.9468 % | 95.9478 % |
| Concentration per Run 3 | 0.5146 ppm | 103.1738 % | 98.5960 % | 98.9636 % | 101.4961 % | 95.7479 % | 96.3549 % |
| Concentration RSD | 0.6 % | 0.5 % | 0.2 % | 0.4 % | 0.5 % | 0.1 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038695-4 WG2038695
Analysis started at: 3/11/2025 4:16:31 PM
Rack 1
Vial 54
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0652 ppm | 0.0007 ppm | 0.0196 ppm | 0.0213 ppm | 0.0000 ppm | 25.4343 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0652 ppm | -0.0009 ppm | 0.0209 ppm | 0.0214 ppm | 0.0000 ppm | 25.4242 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0723 ppm | 0.0023 ppm | 0.0195 ppm | 0.0214 ppm | 0.0000 ppm | 25.4877 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0580 ppm | 0.0008 ppm | 0.0185 ppm | 0.0213 ppm | 0.0000 ppm | 25.3909 ppm |
| Concentration RSD | 29.2 % | 11.0 % | 223.3 % | 6.1 % | 0.3 % | 202.8 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0004 ppm | 0.0006 ppm | 0.0006 ppm | 0.0929 ppm | 2.1946 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0006 ppm | 0.0009 ppm | 0.0015 ppm | 0.0940 ppm | 2.2001 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0004 ppm | 0.0005 ppm | 0.0002 ppm | 0.0933 ppm | 2.1923 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0003 ppm | 0.0004 ppm | 0.0002 ppm | 0.0916 ppm | 2.1914 ppm | 0.0011 ppm |
| Concentration RSD | 65.8 % | 39.1 % | 42.7 % | 124.5 % | 1.3 % | 0.2 % | 186.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.3841 ppm | 0.0113 ppm | 0.0053 ppm | 9.9183 ppm | 0.0002 ppm | -0.0008 ppm | 0.0031 ppm |
| Concentration per Run 1 | 4.5421 ppm | 0.0114 ppm | 0.0056 ppm | 9.9118 ppm | -0.0005 ppm | -0.0021 ppm | 0.0021 ppm |
| Concentration per Run 2 | 4.5342 ppm | 0.0112 ppm | 0.0047 ppm | 9.8674 ppm | 0.0006 ppm | -0.0005 ppm | 0.0022 ppm |
| Concentration per Run 3 | 4.0761 ppm | 0.0112 ppm | 0.0057 ppm | 9.9757 ppm | 0.0006 ppm | 0.0001 ppm | 0.0049 ppm |
| Concentration RSD | 6.1 % | 0.8 % | 9.6 % | 0.5 % | 303.1 % | 139.8 % | 51.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 2.1983 ppm | 0.0049 ppm | 0.0655 ppm | 0.0022 ppm | 0.0011 ppm | 0.0009 ppm |
| Concentration per Run 1 | -0.0001 ppm | 2.2815 ppm | 0.0058 ppm | 0.0655 ppm | 0.0026 ppm | 0.0007 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0003 ppm | 2.2687 ppm | 0.0052 ppm | 0.0654 ppm | 0.0021 ppm | -0.0007 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0002 ppm | 2.0446 ppm | 0.0038 ppm | 0.0657 ppm | 0.0020 ppm | 0.0032 ppm | 0.0010 ppm |
| Concentration RSD | 130.0 % | 6.1 % | 21.0 % | 0.2 % | 12.4 % | 184.3 % | 14.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0154 ppm | 107.3635 % | 100.9475 % | 98.4618 % | 107.9646 % | 98.1412 % | 97.1774 % |
| Concentration per Run 1 | 0.0158 ppm | 103.6903 % | 101.5451 % | 95.9924 % | 102.8523 % | 98.8366 % | 94.8422 % |
| Concentration per Run 2 | 0.0160 ppm | 104.3800 % | 100.4522 % | 99.8009 % | 102.6624 % | 97.4916 % | 98.2727 % |
| Concentration per Run 3 | 0.0143 ppm | 114.0203 % | 100.8454 % | 99.5921 % | 118.3791 % | 98.0954 % | 98.4173 % |
| Concentration RSD | 6.1 % | 5.4 % | 0.5 % | 2.2 % | 8.4 % | 0.7 % | 2.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038695-5 WG2038695
Analysis started at: 3/11/2025 4:19:58 PM
Rack 1
Vial 55
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0207 ppm | 2.0493 ppm | 0.1257 ppm | 1.0048 ppm | 1.9482 ppm | 0.0517 ppm | 34.5237 ppm |
| Concentration per Run 1 | 0.0209 ppm | 2.0434 ppm | 0.1255 ppm | 1.0074 ppm | 1.9413 ppm | 0.0515 ppm | 34.3575 ppm |
| Concentration per Run 2 | 0.0206 ppm | 2.0467 ppm | 0.1244 ppm | 1.0030 ppm | 1.9582 ppm | 0.0519 ppm | 34.6236 ppm |
| Concentration per Run 3 | 0.0208 ppm | 2.0578 ppm | 0.1271 ppm | 1.0041 ppm | 1.9451 ppm | 0.0516 ppm | 34.5900 ppm |
| Concentration RSD | 0.9 % | 0.4 % | 1.1 % | 0.2 % | 0.5 % | 0.4 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0510 ppm | 0.4835 ppm | 0.1946 ppm | 0.2421 ppm | 1.1163 ppm | 13.0121 ppm | 0.0011 ppm |
| Concentration per Run 1 | 0.0510 ppm | 0.4840 ppm | 0.1952 ppm | 0.2427 ppm | 1.1115 ppm | 12.9957 ppm | 0.0017 ppm |
| Concentration per Run 2 | 0.0509 ppm | 0.4824 ppm | 0.1942 ppm | 0.2399 ppm | 1.1222 ppm | 13.0458 ppm | 0.0017 ppm |
| Concentration per Run 3 | 0.0510 ppm | 0.4841 ppm | 0.1943 ppm | 0.2438 ppm | 1.1153 ppm | 12.9948 ppm | -0.0001 ppm |
| Concentration RSD | 0.1 % | 0.2 % | 0.3 % | 0.8 % | 0.5 % | 0.2 % | 98.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 14.0474 ppm | 0.5159 ppm | 0.9695 ppm | 20.3160 ppm | 0.4890 ppm | 0.5401 ppm | 0.3457 ppm |
| Concentration per Run 1 | 14.0776 ppm | 0.5134 ppm | 0.9664 ppm | 20.1626 ppm | 0.4918 ppm | 0.5394 ppm | 0.3373 ppm |
| Concentration per Run 2 | 13.9947 ppm | 0.5188 ppm | 0.9687 ppm | 20.4831 ppm | 0.4866 ppm | 0.5386 ppm | 0.3466 ppm |
| Concentration per Run 3 | 14.0700 ppm | 0.5156 ppm | 0.9735 ppm | 20.3023 ppm | 0.4885 ppm | 0.5424 ppm | 0.3533 ppm |
| Concentration RSD | 0.3 % | 0.5 % | 0.4 % | 0.8 % | 0.5 % | 0.4 % | 2.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1270 ppm | 2.9461 ppm | 0.9652 ppm | 1.0644 ppm | 0.9881 ppm | 0.1220 ppm | 0.4945 ppm |
| Concentration per Run 1 | 0.1270 ppm | 2.9474 ppm | 0.9645 ppm | 1.0622 ppm | 0.9886 ppm | 0.1213 ppm | 0.4946 ppm |
| Concentration per Run 2 | 0.1281 ppm | 2.9408 ppm | 0.9624 ppm | 1.0689 ppm | 0.9841 ppm | 0.1235 ppm | 0.4928 ppm |
| Concentration per Run 3 | 0.1257 ppm | 2.9503 ppm | 0.9686 ppm | 1.0621 ppm | 0.9915 ppm | 0.1213 ppm | 0.4960 ppm |
| Concentration RSD | 0.9 % | 0.2 % | 0.3 % | 0.4 % | 0.4 % | 1.0 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5096 ppm | 102.7269 % | 98.3210 % | 98.3825 % | 100.9710 % | 95.4849 % | 95.3258 % |
| Concentration per Run 1 | 0.5110 ppm | 102.7829 % | 99.2046 % | 98.5393 % | 101.2547 % | 96.2011 % | 95.2256 % |
| Concentration per Run 2 | 0.5079 ppm | 102.6459 % | 97.3670 % | 98.8223 % | 100.8272 % | 94.8901 % | 95.5242 % |
| Concentration per Run 3 | 0.5099 ppm | 102.7520 % | 98.3916 % | 97.7860 % | 100.8310 % | 95.3635 % | 95.2275 % |
| Concentration RSD | 0.3 % | 0.1 % | 0.9 % | 0.5 % | 0.2 % | 0.7 % | 0.2 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038695-6d5 WG2038695
Analysis started at: 3/11/2025 4:23:26 PM
Rack 1
Vial 56
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0260 ppm | 0.0013 ppm | 0.0038 ppm | 0.0043 ppm | 0.0000 ppm | 5.0485 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0247 ppm | 0.0014 ppm | 0.0047 ppm | 0.0043 ppm | 0.0000 ppm | 5.0392 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0266 ppm | 0.0010 ppm | 0.0046 ppm | 0.0042 ppm | 0.0000 ppm | 5.0517 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0268 ppm | 0.0015 ppm | 0.0021 ppm | 0.0043 ppm | 0.0000 ppm | 5.0548 ppm |
| Concentration RSD | 40.9 % | 4.4 % | 21.4 % | 38.4 % | 2.0 % | 60.6 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0002 ppm | 0.0002 ppm | 0.0001 ppm | 0.0204 ppm | 0.4625 ppm | 0.0013 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0002 ppm | 0.0007 ppm | 0.0000 ppm | 0.0210 ppm | 0.4543 ppm | 0.0016 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0004 ppm | -0.0001 ppm | 0.0000 ppm | 0.0186 ppm | 0.4507 ppm | 0.0010 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0001 ppm | 0.0001 ppm | 0.0003 ppm | 0.0215 ppm | 0.4825 ppm | 0.0013 ppm |
| Concentration RSD | 49.0 % | 75.5 % | 187.7 % | 197.6 % | 7.7 % | 3.8 % | 23.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.8791 ppm | 0.0024 ppm | 0.0052 ppm | 1.9849 ppm | -0.0002 ppm | -0.0016 ppm | 0.0152 ppm |
| Concentration per Run 1 | 0.8836 ppm | 0.0024 ppm | 0.0049 ppm | 1.9806 ppm | -0.0011 ppm | -0.0019 ppm | 0.0142 ppm |
| Concentration per Run 2 | 0.8763 ppm | 0.0023 ppm | 0.0053 ppm | 2.0002 ppm | 0.0000 ppm | 0.0001 ppm | 0.0156 ppm |
| Concentration per Run 3 | 0.8774 ppm | 0.0024 ppm | 0.0053 ppm | 1.9738 ppm | 0.0006 ppm | -0.0031 ppm | 0.0157 ppm |
| Concentration RSD | 0.4 % | 2.4 % | 5.0 % | 0.7 % | 503.8 % | 99.1 % | 5.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.4369 ppm | 0.0130 ppm | 0.0129 ppm | 0.0004 ppm | 0.0022 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0010 ppm | 0.4375 ppm | 0.0147 ppm | 0.0127 ppm | 0.0001 ppm | 0.0023 ppm | -0.0005 ppm |
| Concentration per Run 2 | -0.0013 ppm | 0.4359 ppm | 0.0120 ppm | 0.0130 ppm | 0.0003 ppm | 0.0008 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0023 ppm | 0.4374 ppm | 0.0124 ppm | 0.0130 ppm | 0.0007 ppm | 0.0034 ppm | 0.0003 ppm |
| Concentration RSD | 57,147.0 % | 0.2 % | 11.0 % | 1.3 % | 77.4 % | 59.6 % | 706.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0031 ppm | 103.4339 % | 99.2168 % | 98.4904 % | 102.0356 % | 96.4473 % | 97.5168 % |
| Concentration per Run 1 | 0.0031 ppm | 102.7863 % | 98.8891 % | 97.7806 % | 101.8707 % | 96.1070 % | 97.2800 % |
| Concentration per Run 2 | 0.0031 ppm | 104.4440 % | 99.1043 % | 98.1878 % | 102.7609 % | 96.4452 % | 97.4963 % |
| Concentration per Run 3 | 0.0031 ppm | 103.0712 % | 99.6569 % | 99.5028 % | 101.4752 % | 96.7898 % | 97.7740 % |
| Concentration RSD | 1.0 % | 0.9 % | 0.4 % | 0.9 % | 0.6 % | 0.4 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCV
Analysis started at: 3/11/2025 4:26:55 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4772 ppm | 0.4923 ppm | 0.4956 ppm | 0.4856 ppm | 0.4823 ppm | 0.5114 ppm | 0.4894 ppm |
| Concentration per Run 1 | 0.4776 ppm | 0.4902 ppm | 0.4969 ppm | 0.4859 ppm | 0.4795 ppm | 0.5112 ppm | 0.4898 ppm |
| Concentration per Run 2 | 0.4758 ppm | 0.4933 ppm | 0.4941 ppm | 0.4858 ppm | 0.4810 ppm | 0.5098 ppm | 0.4903 ppm |
| Concentration per Run 3 | 0.4781 ppm | 0.4933 ppm | 0.4959 ppm | 0.4851 ppm | 0.4865 ppm | 0.5130 ppm | 0.4879 ppm |
| Recovery Percentage 1 | 95.438 % | 98.454 % | 99.129 % | 97.120 % | 96.463 % | 102.272 % | 97.871 % |
| Concentration RSD | 0.3 % | 0.4 % | 0.3 % | 0.1 % | 0.8 % | 0.3 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4805 ppm | 0.4924 ppm | 0.4873 ppm | 0.4665 ppm | 0.5079 ppm | 5.2532 ppm | 0.5245 ppm |
| Concentration per Run 1 | 0.4822 ppm | 0.4937 ppm | 0.4871 ppm | 0.4656 ppm | 0.5081 ppm | 5.2701 ppm | 0.5220 ppm |
| Concentration per Run 2 | 0.4793 ppm | 0.4915 ppm | 0.4878 ppm | 0.4677 ppm | 0.5120 ppm | 5.2500 ppm | 0.5224 ppm |
| Concentration per Run 3 | 0.4801 ppm | 0.4920 ppm | 0.4871 ppm | 0.4662 ppm | 0.5037 ppm | 5.2396 ppm | 0.5291 ppm |
| Recovery Percentage 1 | 96.109 % | 98.479 % | 97.464 % | 93.303 % | 101.585 % | 105.065 % | 104.899 % |
| Concentration RSD | 0.3 % | 0.2 % | 0.1 % | 0.2 % | 0.8 % | 0.3 % | 0.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4720 ppm | 0.4962 ppm | 0.4843 ppm | 10.3123 ppm | 0.4989 ppm | 0.4935 ppm | 0.5032 ppm |
| Concentration per Run 1 | 0.4746 ppm | 0.4958 ppm | 0.4858 ppm | 10.2833 ppm | 0.5000 ppm | 0.4917 ppm | 0.5055 ppm |
| Concentration per Run 2 | 0.4688 ppm | 0.4958 ppm | 0.4834 ppm | 10.2359 ppm | 0.4971 ppm | 0.4927 ppm | 0.5043 ppm |
| Concentration per Run 3 | 0.4726 ppm | 0.4969 ppm | 0.4837 ppm | 10.4177 ppm | 0.4996 ppm | 0.4962 ppm | 0.4998 ppm |
| Recovery Percentage 1 | 94.395 % | 99.231 % | 96.860 % | 103.123 % | 99.779 % | 98.700 % | 100.643 % |
| Concentration RSD | 0.6 % | 0.1 % | 0.3 % | 0.9 % | 0.3 % | 0.5 % | 0.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4982 ppm | 5.4674 ppm | 0.5112 ppm | 0.4952 ppm | 0.4861 ppm | 0.4816 ppm | 0.4807 ppm |
| Concentration per Run 1 | 0.4988 ppm | 5.4590 ppm | 0.5111 ppm | 0.4942 ppm | 0.4872 ppm | 0.4766 ppm | 0.4814 ppm |
| Concentration per Run 2 | 0.4979 ppm | 5.4723 ppm | 0.5132 ppm | 0.4942 ppm | 0.4850 ppm | 0.4847 ppm | 0.4807 ppm |
| Concentration per Run 3 | 0.4978 ppm | 5.4708 ppm | 0.5093 ppm | 0.4973 ppm | 0.4860 ppm | 0.4834 ppm | 0.4801 ppm |
| Recovery Percentage 1 | 99.635 % | 104.141 % | 102.241 % | 99.047 % | 97.212 % | 96.317 % | 96.143 % |
| Concentration RSD | 0.1 % | 0.1 % | 0.4 % | 0.4 % | 0.2 % | 0.9 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4948 ppm | 102.8711 % | 98.8517 % | 98.9006 % | 101.0383 % | 95.7600 % | 96.1952 % |
| Concentration per Run 1 | 0.4950 ppm | 103.1324 % | 98.8065 % | 98.9897 % | 101.2350 % | 95.3992 % | 96.3349 % |
| Concentration per Run 2 | 0.4937 ppm | 103.0596 % | 98.8192 % | 98.8097 % | 101.1760 % | 95.5674 % | 96.2895 % |
| Concentration per Run 3 | 0.4957 ppm | 102.4213 % | 98.9295 % | 98.9026 % | 100.7038 % | 96.3133 % | 95.9611 % |
| Recovery Percentage 1 | 98.957 % | | | | | | |
| Concentration RSD | 0.2 % | 0.4 % | 0.1 % | 0.1 % | 0.3 % | 0.5 % | 0.2 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCB
Analysis started at: 3/11/2025 4:30:23 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0010 ppm | 0.0006 ppm | 0.0001 ppm | 0.0000 ppm | 0.0001 ppm | 0.0017 ppm |
| Concentration per Run 1 | 0.0007 ppm | -0.0072 ppm | 0.0005 ppm | 0.0001 ppm | 0.0000 ppm | 0.0001 ppm | 0.0012 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0081 ppm | 0.0021 ppm | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0014 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0021 ppm | -0.0009 ppm | 0.0002 ppm | -0.0001 ppm | 0.0000 ppm | 0.0026 ppm |
| Recovery Percentage 1 | 10.346 % | 1.010 % | 11.888 % | 0.364 % | -0.180 % | 1.404 % | 1.747 % |
| Concentration RSD | 2.9 % | 760.9 % | 250.8 % | 85.9 % | 282.0 % | 34.6 % | 44.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0000 ppm | 0.0004 ppm | 0.0004 ppm | 0.0006 ppm | 0.0225 ppm | 0.0009 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0003 ppm | 0.0006 ppm | 0.0005 ppm | 0.0000 ppm | 0.0208 ppm | -0.0004 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0001 ppm | 0.0004 ppm | 0.0004 ppm | 0.0008 ppm | 0.0367 ppm | 0.0021 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0002 ppm | 0.0001 ppm | 0.0002 ppm | 0.0009 ppm | 0.0100 ppm | 0.0011 ppm |
| Recovery Percentage 1 | 1.315 % | -0.121 % | 3.642 % | 3.703 % | 1.109 % | 0.900 % | 18.263 % |
| Concentration RSD | 289.1 % | 1,022.5 % | 68.6 % | 45.0 % | 89.0 % | 59.6 % | 139.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0026 ppm | -0.0001 ppm | 0.0023 ppm | 0.0113 ppm | 0.0001 ppm | -0.0021 ppm | 0.0061 ppm |
| Concentration per Run 1 | -0.0026 ppm | -0.0001 ppm | 0.0016 ppm | 0.0097 ppm | 0.0007 ppm | -0.0031 ppm | 0.0042 ppm |
| Concentration per Run 2 | -0.0026 ppm | -0.0002 ppm | 0.0027 ppm | 0.0111 ppm | -0.0006 ppm | -0.0007 ppm | 0.0059 ppm |
| Concentration per Run 3 | -0.0026 ppm | -0.0001 ppm | 0.0026 ppm | 0.0130 ppm | 0.0001 ppm | -0.0025 ppm | 0.0081 ppm |
| Recovery Percentage 1 | -2.611 % | -1.074 % | 4.625 % | 0.563 % | 0.207 % | -21.028 % | 12.104 % |
| Concentration RSD | 1.4 % | 85.0 % | 27.2 % | 14.8 % | 1,190.1 % | 57.2 % | 31.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | -0.0035 ppm | 0.0010 ppm | 0.0001 ppm | -0.0006 ppm | 0.0024 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0021 ppm | -0.0023 ppm | 0.0013 ppm | 0.0001 ppm | -0.0007 ppm | 0.0023 ppm | -0.0002 ppm |
| Concentration per Run 2 | -0.0016 ppm | -0.0037 ppm | -0.0006 ppm | 0.0000 ppm | -0.0004 ppm | 0.0010 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0024 ppm | -0.0045 ppm | 0.0025 ppm | 0.0001 ppm | -0.0009 ppm | 0.0040 ppm | 0.0002 ppm |
| Recovery Percentage 1 | -4.068 % | -0.694 % | 2.098 % | 0.589 % | -6.420 % | 12.242 % | 1.782 % |
| Concentration RSD | 608.4 % | 32.8 % | 145.9 % | 89.6 % | 40.0 % | 60.4 % | 221.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 100.7663 % | 98.0346 % | 97.3068 % | 101.4709 % | 96.8978 % | 97.3208 % |
| Concentration per Run 1 | -0.0007 ppm | 100.6765 % | 98.2303 % | 98.1501 % | 101.4099 % | 96.8645 % | 97.7621 % |
| Concentration per Run 2 | -0.0006 ppm | 101.1986 % | 97.9933 % | 97.5906 % | 101.7627 % | 96.9840 % | 97.6157 % |
| Concentration per Run 3 | -0.0008 ppm | 100.4239 % | 97.8802 % | 96.1797 % | 101.2401 % | 96.8448 % | 96.5846 % |
| Recovery Percentage 1 | -13.752 % | | | | | | |
| Concentration RSD | 15.8 % | 0.4 % | 0.2 % | 1.0 % | 0.3 % | 0.1 % | 0.7 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511919-05 WG2038695
Analysis started at: 3/11/2025 4:37:47 PM
Rack 2
Vial 5
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0749 ppm | -0.0006 ppm | 0.0253 ppm | 0.0221 ppm | 0.0000 ppm | 27.2773 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0771 ppm | -0.0026 ppm | 0.0242 ppm | 0.0221 ppm | 0.0000 ppm | 27.2984 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0758 ppm | 0.0004 ppm | 0.0263 ppm | 0.0220 ppm | 0.0000 ppm | 27.2901 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0718 ppm | 0.0003 ppm | 0.0254 ppm | 0.0223 ppm | 0.0000 ppm | 27.2435 ppm |
| Concentration RSD | 27.4 % | 3.7 % | 268.7 % | 4.2 % | 0.7 % | 83.0 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0005 ppm | 0.0007 ppm | 0.0010 ppm | 0.1097 ppm | 1.7028 ppm | 0.0016 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0002 ppm | 0.0006 ppm | 0.0010 ppm | 0.1109 ppm | 1.7017 ppm | 0.0022 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0012 ppm | 0.0005 ppm | 0.0012 ppm | 0.1098 ppm | 1.6902 ppm | 0.0013 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0005 ppm | 0.0011 ppm | 0.0010 ppm | 0.1084 ppm | 1.7165 ppm | 0.0012 ppm |
| Concentration RSD | 106.9 % | 140.9 % | 45.5 % | 13.3 % | 1.1 % | 0.8 % | 36.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.9422 ppm | 0.0101 ppm | 0.0002 ppm | 10.7152 ppm | 0.0002 ppm | -0.0015 ppm | -0.0012 ppm |
| Concentration per Run 1 | 5.9392 ppm | 0.0103 ppm | 0.0003 ppm | 10.6184 ppm | 0.0008 ppm | -0.0018 ppm | -0.0022 ppm |
| Concentration per Run 2 | 5.9454 ppm | 0.0101 ppm | 0.0003 ppm | 10.7037 ppm | -0.0006 ppm | -0.0007 ppm | -0.0025 ppm |
| Concentration per Run 3 | 5.9420 ppm | 0.0100 ppm | 0.0001 ppm | 10.8234 ppm | 0.0005 ppm | -0.0021 ppm | 0.0011 ppm |
| Concentration RSD | 0.1 % | 1.5 % | 67.2 % | 1.0 % | 303.8 % | 49.3 % | 170.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0013 ppm | 3.6024 ppm | -0.0015 ppm | 0.0771 ppm | 0.0037 ppm | 0.0008 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0028 ppm | 3.6086 ppm | -0.0014 ppm | 0.0771 ppm | 0.0036 ppm | 0.0001 ppm | 0.0006 ppm |
| Concentration per Run 2 | -0.0011 ppm | 3.6021 ppm | -0.0012 ppm | 0.0772 ppm | 0.0041 ppm | 0.0023 ppm | 0.0008 ppm |
| Concentration per Run 3 | -0.0002 ppm | 3.5964 ppm | -0.0018 ppm | 0.0772 ppm | 0.0033 ppm | 0.0000 ppm | 0.0003 ppm |
| Concentration RSD | 99.3 % | 0.2 % | 17.8 % | 0.1 % | 11.4 % | 159.9 % | 43.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0155 ppm | 103.8901 % | 99.4158 % | 98.3591 % | 102.5225 % | 96.4267 % | 96.4476 % |
| Concentration per Run 1 | 0.0154 ppm | 104.0355 % | 99.2484 % | 98.0626 % | 102.4183 % | 96.0565 % | 96.2462 % |
| Concentration per Run 2 | 0.0153 ppm | 104.0895 % | 99.3841 % | 98.5429 % | 103.0290 % | 96.6054 % | 96.7868 % |
| Concentration per Run 3 | 0.0158 ppm | 103.5453 % | 99.6148 % | 98.4718 % | 102.1204 % | 96.6181 % | 96.3099 % |
| Concentration RSD | 1.7 % | 0.3 % | 0.2 % | 0.3 % | 0.5 % | 0.3 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511919-07 WG2038695
Analysis started at: 3/11/2025 4:41:21 PM
Rack 2
Vial 6
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0323 ppm | 0.0011 ppm | 0.0155 ppm | 0.0163 ppm | 0.0000 ppm | 27.0186 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.0269 ppm | 0.0022 ppm | 0.0146 ppm | 0.0164 ppm | 0.0000 ppm | 27.1855 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0331 ppm | 0.0000 ppm | 0.0166 ppm | 0.0163 ppm | 0.0000 ppm | 26.8686 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0368 ppm | 0.0011 ppm | 0.0153 ppm | 0.0163 ppm | 0.0000 ppm | 27.0016 ppm |
| Concentration RSD | 83.4 % | 15.4 % | 97.5 % | 6.5 % | 0.3 % | 277.2 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0002 ppm | 0.0020 ppm | 0.0008 ppm | 0.7954 ppm | 2.2070 ppm | 0.0012 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0002 ppm | 0.0019 ppm | 0.0009 ppm | 0.8014 ppm | 2.2320 ppm | 0.0011 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0007 ppm | 0.0023 ppm | 0.0011 ppm | 0.7934 ppm | 2.1941 ppm | 0.0018 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0001 ppm | 0.0018 ppm | 0.0005 ppm | 0.7915 ppm | 2.1949 ppm | 0.0009 ppm |
| Concentration RSD | 67.6 % | 207.4 % | 15.1 % | 32.2 % | 0.7 % | 1.0 % | 36.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.3209 ppm | 0.0195 ppm | 0.0011 ppm | 10.1155 ppm | -0.0003 ppm | -0.0024 ppm | 0.0014 ppm |
| Concentration per Run 1 | 5.3194 ppm | 0.0197 ppm | 0.0010 ppm | 10.1028 ppm | -0.0003 ppm | -0.0041 ppm | 0.0016 ppm |
| Concentration per Run 2 | 5.3103 ppm | 0.0192 ppm | 0.0013 ppm | 10.0760 ppm | -0.0009 ppm | 0.0000 ppm | -0.0002 ppm |
| Concentration per Run 3 | 5.3330 ppm | 0.0195 ppm | 0.0009 ppm | 10.1677 ppm | 0.0004 ppm | -0.0030 ppm | 0.0027 ppm |
| Concentration RSD | 0.2 % | 1.1 % | 22.3 % | 0.5 % | 233.7 % | 89.1 % | 108.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 1.8479 ppm | -0.0011 ppm | 0.0791 ppm | 0.0004 ppm | 0.0009 ppm | 0.0013 ppm |
| Concentration per Run 1 | -0.0005 ppm | 1.8424 ppm | -0.0007 ppm | 0.0789 ppm | 0.0005 ppm | 0.0014 ppm | 0.0014 ppm |
| Concentration per Run 2 | 0.0009 ppm | 1.8497 ppm | -0.0014 ppm | 0.0792 ppm | 0.0001 ppm | 0.0015 ppm | 0.0013 ppm |
| Concentration per Run 3 | 0.0001 ppm | 1.8515 ppm | -0.0013 ppm | 0.0792 ppm | 0.0006 ppm | -0.0003 ppm | 0.0012 ppm |
| Concentration RSD | 385.8 % | 0.3 % | 32.4 % | 0.2 % | 64.7 % | 113.1 % | 7.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0142 ppm | 102.9218 % | 98.7046 % | 98.0838 % | 101.7608 % | 95.6916 % | 95.8121 % |
| Concentration per Run 1 | 0.0143 ppm | 103.1863 % | 97.6964 % | 98.5801 % | 102.0422 % | 95.0007 % | 96.3068 % |
| Concentration per Run 2 | 0.0141 ppm | 103.0417 % | 99.3887 % | 96.9641 % | 102.3114 % | 96.1227 % | 94.8439 % |
| Concentration per Run 3 | 0.0143 ppm | 102.5375 % | 99.0288 % | 98.7071 % | 100.9286 % | 95.9514 % | 96.2857 % |
| Concentration RSD | 0.7 % | 0.3 % | 0.9 % | 1.0 % | 0.7 % | 0.6 % | 0.9 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511919-08 WG2038695
Analysis started at: 3/11/2025 4:44:50 PM
Rack 2
Vial 7
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.1379 ppm | 0.0001 ppm | 0.0193 ppm | 0.0197 ppm | 0.0000 ppm | 20.3463 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.1334 ppm | 0.0005 ppm | 0.0202 ppm | 0.0196 ppm | 0.0000 ppm | 20.2751 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.1412 ppm | 0.0011 ppm | 0.0186 ppm | 0.0196 ppm | 0.0000 ppm | 20.4576 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.1389 ppm | -0.0013 ppm | 0.0191 ppm | 0.0198 ppm | 0.0000 ppm | 20.3063 ppm |
| Concentration RSD | 50.8 % | 2.9 % | 1,259.5 % | 4.1 % | 0.6 % | 178.3 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0001 ppm | 0.0142 ppm | 0.0006 ppm | 0.2459 ppm | 1.0538 ppm | 0.0018 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0001 ppm | 0.0139 ppm | 0.0004 ppm | 0.2446 ppm | 1.0675 ppm | 0.0020 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0000 ppm | 0.0147 ppm | 0.0007 ppm | 0.2488 ppm | 1.0571 ppm | 0.0012 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0004 ppm | 0.0140 ppm | 0.0006 ppm | 0.2443 ppm | 1.0367 ppm | 0.0021 ppm |
| Concentration RSD | 33.9 % | 226.9 % | 3.0 % | 30.8 % | 1.0 % | 1.5 % | 26.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.4170 ppm | 0.0126 ppm | 0.0005 ppm | 10.5029 ppm | 0.0309 ppm | -0.0010 ppm | 0.0011 ppm |
| Concentration per Run 1 | 5.4314 ppm | 0.0125 ppm | 0.0007 ppm | 10.4222 ppm | 0.0312 ppm | -0.0010 ppm | 0.0030 ppm |
| Concentration per Run 2 | 5.3850 ppm | 0.0125 ppm | 0.0005 ppm | 10.5323 ppm | 0.0298 ppm | -0.0010 ppm | -0.0021 ppm |
| Concentration per Run 3 | 5.4347 ppm | 0.0128 ppm | 0.0001 ppm | 10.5541 ppm | 0.0317 ppm | -0.0010 ppm | 0.0023 ppm |
| Concentration RSD | 0.5 % | 1.5 % | 68.4 % | 0.7 % | 3.3 % | 0.4 % | 259.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 2.1965 ppm | -0.0007 ppm | 0.0487 ppm | 0.0053 ppm | 0.0010 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0000 ppm | 2.2031 ppm | 0.0008 ppm | 0.0486 ppm | 0.0055 ppm | 0.0020 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0007 ppm | 2.1942 ppm | -0.0011 ppm | 0.0487 ppm | 0.0053 ppm | 0.0009 ppm | 0.0002 ppm |
| Concentration per Run 3 | -0.0005 ppm | 2.1922 ppm | -0.0019 ppm | 0.0488 ppm | 0.0051 ppm | 0.0002 ppm | 0.0003 ppm |
| Concentration RSD | 84.7 % | 0.3 % | 189.1 % | 0.2 % | 3.5 % | 86.8 % | 28.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0310 ppm | 102.6153 % | 98.6727 % | 97.6616 % | 101.3691 % | 95.9067 % | 95.8869 % |
| Concentration per Run 1 | 0.0311 ppm | 103.4556 % | 99.0589 % | 97.5562 % | 101.9441 % | 96.2134 % | 95.8969 % |
| Concentration per Run 2 | 0.0308 ppm | 102.3211 % | 98.2708 % | 98.6591 % | 101.1144 % | 95.3190 % | 96.3993 % |
| Concentration per Run 3 | 0.0311 ppm | 102.0690 % | 98.6885 % | 96.7695 % | 101.0487 % | 96.1877 % | 95.3645 % |
| Concentration RSD | 0.5 % | 0.7 % | 0.4 % | 1.0 % | 0.5 % | 0.5 % | 0.5 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511986-01 WG2038695
Analysis started at: 3/11/2025 4:48:18 PM
Rack 2
Vial 8
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.0103 ppm | -0.0006 ppm | 0.0102 ppm | 0.0211 ppm | 0.0000 ppm | 20.6521 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0093 ppm | 0.0011 ppm | 0.0098 ppm | 0.0210 ppm | 0.0000 ppm | 20.4099 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0058 ppm | -0.0016 ppm | 0.0099 ppm | 0.0207 ppm | 0.0000 ppm | 20.5341 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0156 ppm | -0.0014 ppm | 0.0110 ppm | 0.0216 ppm | 0.0000 ppm | 21.0124 ppm |
| Concentration RSD | 16.7 % | 48.4 % | 237.1 % | 6.7 % | 2.1 % | 130.8 % | 1.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0004 ppm | 0.0010 ppm | 0.1121 ppm | 0.0398 ppm | 22.9512 ppm | 0.0016 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.1115 ppm | 0.0395 ppm | 22.7016 ppm | 0.0019 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0013 ppm | 0.1117 ppm | 0.0389 ppm | 22.7200 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0011 ppm | 0.0016 ppm | 0.1130 ppm | 0.0410 ppm | 23.4321 ppm | 0.0018 ppm |
| Concentration RSD | 172.6 % | 161.3 % | 86.3 % | 0.7 % | 2.7 % | 1.8 % | 26.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.9487 ppm | 0.0059 ppm | 0.0000 ppm | 41.8535 ppm | -0.0001 ppm | -0.0017 ppm | -0.0001 ppm |
| Concentration per Run 1 | 3.9504 ppm | 0.0058 ppm | -0.0007 ppm | 41.5954 ppm | 0.0009 ppm | -0.0016 ppm | -0.0012 ppm |
| Concentration per Run 2 | 3.9469 ppm | 0.0058 ppm | 0.0006 ppm | 41.3413 ppm | -0.0016 ppm | -0.0012 ppm | -0.0012 ppm |
| Concentration per Run 3 | 3.9486 ppm | 0.0061 ppm | 0.0001 ppm | 42.6238 ppm | 0.0003 ppm | -0.0023 ppm | 0.0020 ppm |
| Concentration RSD | 0.0 % | 2.8 % | 2,170.6 % | 1.6 % | 960.9 % | 34.9 % | 1,287.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 5.1897 ppm | 0.0004 ppm | 0.1132 ppm | -0.0006 ppm | 0.0010 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0015 ppm | 5.1710 ppm | 0.0001 ppm | 0.1125 ppm | -0.0004 ppm | 0.0012 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0005 ppm | 5.2015 ppm | 0.0003 ppm | 0.1115 ppm | -0.0006 ppm | 0.0015 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0011 ppm | 5.1966 ppm | 0.0008 ppm | 0.1157 ppm | -0.0006 ppm | 0.0003 ppm | 0.0006 ppm |
| Concentration RSD | 154.2 % | 0.3 % | 101.9 % | 1.9 % | 18.5 % | 62.3 % | 73.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2148 ppm | 103.2175 % | 97.2630 % | 98.2591 % | 101.8395 % | 93.9886 % | 95.4304 % |
| Concentration per Run 1 | 0.2144 ppm | 103.5816 % | 97.6746 % | 98.1992 % | 102.4280 % | 94.6469 % | 95.9148 % |
| Concentration per Run 2 | 0.2147 ppm | 103.1103 % | 97.9406 % | 97.7152 % | 101.6411 % | 94.6586 % | 94.9730 % |
| Concentration per Run 3 | 0.2151 ppm | 102.9606 % | 96.1740 % | 98.8628 % | 101.4495 % | 92.6602 % | 95.4033 % |
| Concentration RSD | 0.2 % | 0.3 % | 1.0 % | 0.6 % | 0.5 % | 1.2 % | 0.5 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511986-02 WG2038695
Analysis started at: 3/11/2025 4:51:46 PM
Rack 2
Vial 9
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0125 ppm | 0.0010 ppm | 0.0018 ppm | 0.0001 ppm | 0.0000 ppm | 0.0134 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.0043 ppm | 0.0005 ppm | 0.0021 ppm | 0.0003 ppm | 0.0001 ppm | 0.0094 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0158 ppm | 0.0017 ppm | 0.0019 ppm | 0.0000 ppm | 0.0000 ppm | 0.0188 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0174 ppm | 0.0006 ppm | 0.0014 ppm | 0.0000 ppm | 0.0000 ppm | 0.0119 ppm |
| Concentration RSD | 38.4 % | 57.2 % | 71.6 % | 21.8 % | 116.7 % | 85.0 % | 36.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0004 ppm | 0.0008 ppm | 0.0009 ppm | 0.0108 ppm | 0.0418 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0002 ppm | 0.0005 ppm | 0.0012 ppm | 0.0100 ppm | 0.0370 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0004 ppm | 0.0010 ppm | 0.0006 ppm | 0.0123 ppm | 0.0616 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0005 ppm | 0.0008 ppm | 0.0010 ppm | 0.0101 ppm | 0.0268 ppm | 0.0007 ppm |
| Concentration RSD | 9.8 % | 35.0 % | 28.7 % | 33.8 % | 11.9 % | 42.8 % | 98.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 0.0003 ppm | 0.0001 ppm | 0.0154 ppm | -0.0003 ppm | -0.0001 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0023 ppm | 0.0003 ppm | -0.0004 ppm | 0.0150 ppm | -0.0011 ppm | -0.0026 ppm | -0.0037 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0003 ppm | 0.0001 ppm | 0.0150 ppm | 0.0000 ppm | 0.0024 ppm | 0.0025 ppm |
| Concentration per Run 3 | 0.0013 ppm | 0.0002 ppm | 0.0006 ppm | 0.0162 ppm | 0.0003 ppm | -0.0001 ppm | 0.0027 ppm |
| Concentration RSD | 38.5 % | 11.4 % | 622.0 % | 4.5 % | 256.8 % | 2,708.0 % | 709.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0046 ppm | -0.0015 ppm | 0.0002 ppm | -0.0008 ppm | 0.0012 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0005 ppm | -0.0062 ppm | -0.0018 ppm | 0.0002 ppm | -0.0009 ppm | 0.0013 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0034 ppm | -0.0010 ppm | 0.0002 ppm | -0.0010 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0010 ppm | -0.0042 ppm | -0.0016 ppm | 0.0002 ppm | -0.0004 ppm | 0.0023 ppm | -0.0003 ppm |
| Concentration RSD | 543.4 % | 31.3 % | 30.4 % | 6.1 % | 44.1 % | 98.8 % | 576.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 101.9393 % | 98.8479 % | 97.5805 % | 101.7006 % | 96.4874 % | 96.9945 % |
| Concentration per Run 1 | 0.0007 ppm | 101.9730 % | 98.5860 % | 97.4082 % | 101.9299 % | 96.4523 % | 97.1918 % |
| Concentration per Run 2 | 0.0009 ppm | 102.4666 % | 98.9140 % | 97.2767 % | 102.0924 % | 96.6089 % | 97.0029 % |
| Concentration per Run 3 | 0.0009 ppm | 101.3784 % | 99.0436 % | 98.0566 % | 101.0795 % | 96.4009 % | 96.7889 % |
| Concentration RSD | 12.1 % | 0.5 % | 0.2 % | 0.4 % | 0.5 % | 0.1 % | 0.2 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512156-01 WG2038695
Analysis started at: 3/11/2025 4:55:14 PM
Rack 1
Vial 57
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.4859 ppm | 0.0007 ppm | 0.0056 ppm | 0.0067 ppm | 0.0000 ppm | 26.9044 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.4901 ppm | 0.0015 ppm | 0.0057 ppm | 0.0067 ppm | 0.0000 ppm | 26.7992 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.4780 ppm | 0.0002 ppm | 0.0052 ppm | 0.0067 ppm | 0.0000 ppm | 26.7861 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.4897 ppm | 0.0005 ppm | 0.0059 ppm | 0.0067 ppm | 0.0000 ppm | 27.1278 ppm |
| Concentration RSD | 21.4 % | 1.4 % | 96.4 % | 6.8 % | 0.1 % | 41.7 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0002 ppm | 0.0009 ppm | 0.0049 ppm | 0.6659 ppm | 0.4195 ppm | 0.0019 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0003 ppm | 0.0010 ppm | 0.0054 ppm | 0.6710 ppm | 0.4317 ppm | 0.0025 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0006 ppm | 0.0010 ppm | 0.0043 ppm | 0.6628 ppm | 0.4168 ppm | 0.0016 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0003 ppm | 0.0006 ppm | 0.0051 ppm | 0.6641 ppm | 0.4101 ppm | 0.0016 ppm |
| Concentration RSD | 98.7 % | 235.8 % | 25.5 % | 11.5 % | 0.7 % | 2.6 % | 27.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.8779 ppm | 0.0298 ppm | 0.0003 ppm | 38.3666 ppm | 0.0009 ppm | 0.0001 ppm | 0.0001 ppm |
| Concentration per Run 1 | 1.8784 ppm | 0.0298 ppm | 0.0009 ppm | 38.1124 ppm | -0.0002 ppm | -0.0016 ppm | -0.0029 ppm |
| Concentration per Run 2 | 1.8755 ppm | 0.0296 ppm | -0.0006 ppm | 38.7707 ppm | 0.0014 ppm | 0.0017 ppm | 0.0010 ppm |
| Concentration per Run 3 | 1.8798 ppm | 0.0299 ppm | 0.0005 ppm | 38.2167 ppm | 0.0014 ppm | 0.0002 ppm | 0.0024 ppm |
| Concentration RSD | 0.1 % | 0.5 % | 262.0 % | 0.9 % | 102.4 % | 1,529.7 % | 1,982.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 0.7955 ppm | 0.0000 ppm | 0.1365 ppm | 0.0064 ppm | 0.0012 ppm | 0.0037 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.8002 ppm | 0.0000 ppm | 0.1365 ppm | 0.0058 ppm | 0.0025 ppm | 0.0036 ppm |
| Concentration per Run 2 | -0.0024 ppm | 0.7832 ppm | -0.0006 ppm | 0.1366 ppm | 0.0066 ppm | 0.0003 ppm | 0.0036 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.8032 ppm | 0.0005 ppm | 0.1363 ppm | 0.0067 ppm | 0.0008 ppm | 0.0038 ppm |
| Concentration RSD | 225.0 % | 1.4 % | 1,357.5 % | 0.1 % | 7.4 % | 92.5 % | 4.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0409 ppm | 104.1639 % | 99.4563 % | 99.4128 % | 102.8932 % | 96.7016 % | 97.1792 % |
| Concentration per Run 1 | 0.0406 ppm | 104.2380 % | 99.2732 % | 99.4473 % | 103.3895 % | 96.1440 % | 97.1436 % |
| Concentration per Run 2 | 0.0408 ppm | 104.5984 % | 99.9569 % | 99.1053 % | 103.1134 % | 97.3632 % | 97.1665 % |
| Concentration per Run 3 | 0.0411 ppm | 103.6554 % | 99.1388 % | 99.6858 % | 102.1767 % | 96.5974 % | 97.2274 % |
| Concentration RSD | 0.6 % | 0.5 % | 0.4 % | 0.3 % | 0.6 % | 0.6 % | 0.0 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038695-7 WG2038695
Analysis started at: 3/11/2025 4:58:43 PM
Rack 1
Vial 58
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0502 ppm | 2.5457 ppm | 0.1175 ppm | 0.9934 ppm | 1.9577 ppm | 0.0523 ppm | 36.4769 ppm |
| Concentration per Run 1 | 0.0507 ppm | 2.5562 ppm | 0.1179 ppm | 0.9935 ppm | 1.9503 ppm | 0.0522 ppm | 36.6307 ppm |
| Concentration per Run 2 | 0.0498 ppm | 2.5424 ppm | 0.1158 ppm | 0.9958 ppm | 1.9586 ppm | 0.0522 ppm | 36.3913 ppm |
| Concentration per Run 3 | 0.0501 ppm | 2.5386 ppm | 0.1187 ppm | 0.9910 ppm | 1.9643 ppm | 0.0525 ppm | 36.4087 ppm |
| Concentration RSD | 0.9 % | 0.4 % | 1.3 % | 0.2 % | 0.4 % | 0.3 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0506 ppm | 0.4875 ppm | 0.1960 ppm | 0.2524 ppm | 1.6750 ppm | 11.1483 ppm | 0.0019 ppm |
| Concentration per Run 1 | 0.0506 ppm | 0.4886 ppm | 0.1949 ppm | 0.2523 ppm | 1.6729 ppm | 11.1209 ppm | 0.0016 ppm |
| Concentration per Run 2 | 0.0507 ppm | 0.4873 ppm | 0.1968 ppm | 0.2550 ppm | 1.6730 ppm | 11.1468 ppm | 0.0020 ppm |
| Concentration per Run 3 | 0.0506 ppm | 0.4866 ppm | 0.1964 ppm | 0.2499 ppm | 1.6792 ppm | 11.1771 ppm | 0.0022 ppm |
| Concentration RSD | 0.1 % | 0.2 % | 0.5 % | 1.0 % | 0.2 % | 0.3 % | 15.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 11.5661 ppm | 0.5363 ppm | 0.9600 ppm | 48.4275 ppm | 0.4982 ppm | 0.5297 ppm | 0.4379 ppm |
| Concentration per Run 1 | 11.5516 ppm | 0.5371 ppm | 0.9514 ppm | 48.3802 ppm | 0.5003 ppm | 0.5308 ppm | 0.4340 ppm |
| Concentration per Run 2 | 11.5662 ppm | 0.5343 ppm | 0.9649 ppm | 48.3795 ppm | 0.4973 ppm | 0.5298 ppm | 0.4403 ppm |
| Concentration per Run 3 | 11.5806 ppm | 0.5375 ppm | 0.9635 ppm | 48.5227 ppm | 0.4971 ppm | 0.5285 ppm | 0.4393 ppm |
| Concentration RSD | 0.1 % | 0.3 % | 0.8 % | 0.2 % | 0.4 % | 0.2 % | 0.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1181 ppm | 1.9508 ppm | 0.9306 ppm | 1.1277 ppm | 0.9856 ppm | 0.1144 ppm | 0.5011 ppm |
| Concentration per Run 1 | 0.1188 ppm | 1.9553 ppm | 0.9317 ppm | 1.1234 ppm | 0.9835 ppm | 0.1117 ppm | 0.5013 ppm |
| Concentration per Run 2 | 0.1172 ppm | 1.9515 ppm | 0.9321 ppm | 1.1303 ppm | 0.9842 ppm | 0.1133 ppm | 0.5025 ppm |
| Concentration per Run 3 | 0.1184 ppm | 1.9456 ppm | 0.9282 ppm | 1.1295 ppm | 0.9892 ppm | 0.1183 ppm | 0.4996 ppm |
| Concentration RSD | 0.7 % | 0.2 % | 0.2 % | 0.3 % | 0.3 % | 3.0 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5404 ppm | 103.3845 % | 98.1364 % | 99.2214 % | 101.7474 % | 94.9188 % | 95.4315 % |
| Concentration per Run 1 | 0.5409 ppm | 103.2067 % | 97.9309 % | 99.0213 % | 101.3995 % | 95.0999 % | 95.1433 % |
| Concentration per Run 2 | 0.5416 ppm | 103.1677 % | 98.6795 % | 99.6281 % | 101.5202 % | 95.1178 % | 95.9334 % |
| Concentration per Run 3 | 0.5387 ppm | 103.7791 % | 97.7989 % | 99.0148 % | 102.3226 % | 94.5385 % | 95.2178 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.5 % | 0.4 % | 0.5 % | 0.3 % | 0.5 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038695-8 WG2038695
Analysis started at: 3/11/2025 5:02:11 PM
Rack 1
Vial 59
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.5079 ppm | 0.0009 ppm | 0.0068 ppm | 0.0068 ppm | 0.0001 ppm | 27.1295 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.5092 ppm | 0.0004 ppm | 0.0070 ppm | 0.0068 ppm | 0.0001 ppm | 27.0822 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.5170 ppm | 0.0005 ppm | 0.0070 ppm | 0.0066 ppm | 0.0001 ppm | 27.0718 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.4976 ppm | 0.0019 ppm | 0.0065 ppm | 0.0068 ppm | 0.0000 ppm | 27.2345 ppm |
| Concentration RSD | 14.2 % | 1.9 % | 87.1 % | 3.8 % | 2.1 % | 31.7 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0003 ppm | 0.0010 ppm | 0.0050 ppm | 0.6733 ppm | 0.4300 ppm | 0.0017 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0006 ppm | 0.0013 ppm | 0.0046 ppm | 0.6772 ppm | 0.4342 ppm | 0.0020 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0003 ppm | 0.0009 ppm | 0.0054 ppm | 0.6694 ppm | 0.4372 ppm | 0.0012 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0000 ppm | 0.0008 ppm | 0.0050 ppm | 0.6733 ppm | 0.4186 ppm | 0.0018 ppm |
| Concentration RSD | 39.6 % | 110.4 % | 29.3 % | 8.2 % | 0.6 % | 2.3 % | 23.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.8974 ppm | 0.0292 ppm | 0.0048 ppm | 38.3568 ppm | 0.0014 ppm | 0.0005 ppm | 0.0050 ppm |
| Concentration per Run 1 | 1.8966 ppm | 0.0289 ppm | 0.0052 ppm | 38.2491 ppm | 0.0013 ppm | -0.0005 ppm | 0.0049 ppm |
| Concentration per Run 2 | 1.8974 ppm | 0.0297 ppm | 0.0044 ppm | 38.3804 ppm | 0.0025 ppm | 0.0010 ppm | 0.0030 ppm |
| Concentration per Run 3 | 1.8982 ppm | 0.0291 ppm | 0.0048 ppm | 38.4408 ppm | 0.0005 ppm | 0.0010 ppm | 0.0072 ppm |
| Concentration RSD | 0.0 % | 1.3 % | 8.7 % | 0.3 % | 67.8 % | 183.4 % | 41.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.8324 ppm | 0.0055 ppm | 0.1372 ppm | 0.0072 ppm | 0.0017 ppm | 0.0036 ppm |
| Concentration per Run 1 | 0.0031 ppm | 0.8192 ppm | 0.0059 ppm | 0.1369 ppm | 0.0079 ppm | -0.0001 ppm | 0.0038 ppm |
| Concentration per Run 2 | -0.0009 ppm | 0.8514 ppm | 0.0056 ppm | 0.1373 ppm | 0.0070 ppm | 0.0035 ppm | 0.0035 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.8266 ppm | 0.0049 ppm | 0.1374 ppm | 0.0068 ppm | 0.0019 ppm | 0.0036 ppm |
| Concentration RSD | 189.6 % | 2.0 % | 9.1 % | 0.2 % | 7.8 % | 101.2 % | 4.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0417 ppm | 103.4259 % | 99.1461 % | 98.0974 % | 102.4105 % | 96.3482 % | 96.1169 % |
| Concentration per Run 1 | 0.0417 ppm | 103.7573 % | 99.4037 % | 98.3730 % | 102.5600 % | 96.3684 % | 96.3973 % |
| Concentration per Run 2 | 0.0417 ppm | 102.7332 % | 99.3462 % | 97.4903 % | 101.8689 % | 96.6475 % | 95.3990 % |
| Concentration per Run 3 | 0.0418 ppm | 103.7872 % | 98.6885 % | 98.4288 % | 102.8027 % | 96.0289 % | 96.5544 % |
| Concentration RSD | 0.2 % | 0.6 % | 0.4 % | 0.5 % | 0.5 % | 0.3 % | 0.7 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038695-9 WG2038695
Analysis started at: 3/11/2025 5:05:40 PM
Rack 1
Vial 60
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0401 ppm | 2.4675 ppm | 0.1234 ppm | 0.9746 ppm | 1.9057 ppm | 0.0512 ppm | 36.0963 ppm |
| Concentration per Run 1 | 0.0491 ppm | 2.4811 ppm | 0.1230 ppm | 0.9818 ppm | 1.9068 ppm | 0.0513 ppm | 36.1734 ppm |
| Concentration per Run 2 | 0.0340 ppm | 2.4630 ppm | 0.1238 ppm | 0.9743 ppm | 1.9072 ppm | 0.0513 ppm | 36.1236 ppm |
| Concentration per Run 3 | 0.0371 ppm | 2.4585 ppm | 0.1234 ppm | 0.9676 ppm | 1.9030 ppm | 0.0511 ppm | 35.9919 ppm |
| Concentration RSD | 19.9 % | 0.5 % | 0.3 % | 0.7 % | 0.1 % | 0.3 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0500 ppm | 0.4810 ppm | 0.1915 ppm | 0.2486 ppm | 1.6592 ppm | 11.1342 ppm | 0.0019 ppm |
| Concentration per Run 1 | 0.0500 ppm | 0.4821 ppm | 0.1926 ppm | 0.2499 ppm | 1.6674 ppm | 11.1858 ppm | 0.0014 ppm |
| Concentration per Run 2 | 0.0504 ppm | 0.4810 ppm | 0.1923 ppm | 0.2481 ppm | 1.6554 ppm | 11.1280 ppm | 0.0022 ppm |
| Concentration per Run 3 | 0.0497 ppm | 0.4801 ppm | 0.1896 ppm | 0.2479 ppm | 1.6549 ppm | 11.0889 ppm | 0.0021 ppm |
| Concentration RSD | 0.7 % | 0.2 % | 0.9 % | 0.4 % | 0.4 % | 0.4 % | 23.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 11.5059 ppm | 0.5233 ppm | 0.9629 ppm | 48.1575 ppm | 0.4857 ppm | 0.5383 ppm | 0.3427 ppm |
| Concentration per Run 1 | 11.4941 ppm | 0.5259 ppm | 0.9554 ppm | 48.2392 ppm | 0.4880 ppm | 0.5418 ppm | 0.3296 ppm |
| Concentration per Run 2 | 11.5555 ppm | 0.5240 ppm | 0.9691 ppm | 48.2870 ppm | 0.4860 ppm | 0.5376 ppm | 0.3407 ppm |
| Concentration per Run 3 | 11.4680 ppm | 0.5199 ppm | 0.9641 ppm | 47.9462 ppm | 0.4830 ppm | 0.5357 ppm | 0.3578 ppm |
| Concentration RSD | 0.4 % | 0.6 % | 0.7 % | 0.4 % | 0.5 % | 0.6 % | 4.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1256 ppm | 1.5403 ppm | 0.9511 ppm | 1.1212 ppm | 0.9868 ppm | 0.1236 ppm | 0.4931 ppm |
| Concentration per Run 1 | 0.1270 ppm | 1.5466 ppm | 0.9547 ppm | 1.1225 ppm | 0.9897 ppm | 0.1241 ppm | 0.4932 ppm |
| Concentration per Run 2 | 0.1243 ppm | 1.5469 ppm | 0.9561 ppm | 1.1218 ppm | 0.9903 ppm | 0.1242 ppm | 0.4943 ppm |
| Concentration per Run 3 | 0.1256 ppm | 1.5274 ppm | 0.9423 ppm | 1.1194 ppm | 0.9806 ppm | 0.1225 ppm | 0.4919 ppm |
| Concentration RSD | 1.1 % | 0.7 % | 0.8 % | 0.1 % | 0.6 % | 0.8 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5264 ppm | 103.7945 % | 98.3769 % | 98.9688 % | 102.0856 % | 95.7029 % | 95.3006 % |
| Concentration per Run 1 | 0.5287 ppm | 103.4361 % | 98.2347 % | 98.8431 % | 101.9647 % | 95.7970 % | 95.5610 % |
| Concentration per Run 2 | 0.5309 ppm | 103.2903 % | 98.2374 % | 99.2213 % | 101.5873 % | 95.4025 % | 95.4733 % |
| Concentration per Run 3 | 0.5197 ppm | 104.6572 % | 98.6585 % | 98.8421 % | 102.7048 % | 95.9090 % | 94.8673 % |
| Concentration RSD | 1.1 % | 0.7 % | 0.2 % | 0.2 % | 0.6 % | 0.3 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038695-10d5 WG2038695
Analysis started at: 3/11/2025 5:09:10 PM
Rack 2
Vial 1
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.1056 ppm | 0.0017 ppm | 0.0022 ppm | 0.0014 ppm | 0.0000 ppm | 5.4456 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.1110 ppm | 0.0010 ppm | 0.0014 ppm | 0.0015 ppm | 0.0000 ppm | 5.4338 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.1112 ppm | 0.0020 ppm | 0.0022 ppm | 0.0013 ppm | 0.0000 ppm | 5.4633 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0945 ppm | 0.0022 ppm | 0.0031 ppm | 0.0014 ppm | 0.0000 ppm | 5.4396 ppm |
| Concentration RSD | 54.6 % | 9.1 % | 34.7 % | 37.4 % | 5.0 % | 7,417.4 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0004 ppm | 0.0004 ppm | 0.0012 ppm | 0.1387 ppm | 0.1020 ppm | 0.0014 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0002 ppm | 0.0006 ppm | 0.0012 ppm | 0.1392 ppm | 0.1098 ppm | 0.0019 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0004 ppm | 0.0004 ppm | 0.0012 ppm | 0.1395 ppm | 0.0896 ppm | 0.0011 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0007 ppm | 0.0002 ppm | 0.0011 ppm | 0.1374 ppm | 0.1067 ppm | 0.0012 ppm |
| Concentration RSD | 93.5 % | 62.2 % | 63.9 % | 7.9 % | 0.8 % | 10.7 % | 28.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3819 ppm | 0.0062 ppm | 0.0055 ppm | 7.7770 ppm | 0.0003 ppm | -0.0022 ppm | 0.0159 ppm |
| Concentration per Run 1 | 0.3848 ppm | 0.0062 ppm | 0.0059 ppm | 7.7732 ppm | 0.0001 ppm | -0.0020 ppm | 0.0187 ppm |
| Concentration per Run 2 | 0.3799 ppm | 0.0062 ppm | 0.0055 ppm | 7.7490 ppm | 0.0002 ppm | -0.0019 ppm | 0.0154 ppm |
| Concentration per Run 3 | 0.3810 ppm | 0.0062 ppm | 0.0052 ppm | 7.8086 ppm | 0.0007 ppm | -0.0026 ppm | 0.0137 ppm |
| Concentration RSD | 0.7 % | 0.3 % | 6.0 % | 0.4 % | 96.2 % | 16.2 % | 16.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.1589 ppm | 0.0127 ppm | 0.0276 ppm | 0.0016 ppm | 0.0016 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.1595 ppm | 0.0134 ppm | 0.0275 ppm | 0.0013 ppm | -0.0011 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.1596 ppm | 0.0129 ppm | 0.0276 ppm | 0.0017 ppm | 0.0022 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.1575 ppm | 0.0119 ppm | 0.0276 ppm | 0.0018 ppm | 0.0036 ppm | 0.0008 ppm |
| Concentration RSD | 30.7 % | 0.8 % | 6.3 % | 0.3 % | 15.6 % | 156.5 % | 120.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0086 ppm | 103.6151 % | 100.0693 % | 98.4133 % | 102.0558 % | 97.4294 % | 97.0034 % |
| Concentration per Run 1 | 0.0084 ppm | 103.8352 % | 100.0384 % | 97.6470 % | 102.1298 % | 97.2451 % | 96.1603 % |
| Concentration per Run 2 | 0.0085 ppm | 103.5101 % | 100.1100 % | 99.0515 % | 102.0466 % | 97.3713 % | 97.4478 % |
| Concentration per Run 3 | 0.0089 ppm | 103.5000 % | 100.0595 % | 98.5414 % | 101.9908 % | 97.6720 % | 97.4021 % |
| Concentration RSD | 3.5 % | 0.2 % | 0.0 % | 0.7 % | 0.1 % | 0.2 % | 0.8 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCV
Analysis started at: 3/11/2025 5:12:38 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4737 ppm | 0.4900 ppm | 0.5013 ppm | 0.4829 ppm | 0.4762 ppm | 0.5105 ppm | 0.4849 ppm |
| Concentration per Run 1 | 0.4751 ppm | 0.4853 ppm | 0.5035 ppm | 0.4863 ppm | 0.4765 ppm | 0.5118 ppm | 0.4898 ppm |
| Concentration per Run 2 | 0.4740 ppm | 0.4962 ppm | 0.4978 ppm | 0.4823 ppm | 0.4780 ppm | 0.5108 ppm | 0.4807 ppm |
| Concentration per Run 3 | 0.4719 ppm | 0.4885 ppm | 0.5024 ppm | 0.4801 ppm | 0.4740 ppm | 0.5089 ppm | 0.4843 ppm |
| Recovery Percentage 1 | 94.730 % | 98.003 % | 100.251 % | 96.581 % | 95.233 % | 102.098 % | 96.978 % |
| Concentration RSD | 0.3 % | 1.1 % | 0.6 % | 0.7 % | 0.4 % | 0.3 % | 0.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4805 ppm | 0.4935 ppm | 0.4844 ppm | 0.4637 ppm | 0.5055 ppm | 5.2282 ppm | 0.5225 ppm |
| Concentration per Run 1 | 0.4805 ppm | 0.4949 ppm | 0.4864 ppm | 0.4626 ppm | 0.5056 ppm | 5.2626 ppm | 0.5237 ppm |
| Concentration per Run 2 | 0.4835 ppm | 0.4947 ppm | 0.4845 ppm | 0.4646 ppm | 0.5067 ppm | 5.2336 ppm | 0.5257 ppm |
| Concentration per Run 3 | 0.4776 ppm | 0.4910 ppm | 0.4822 ppm | 0.4640 ppm | 0.5043 ppm | 5.1884 ppm | 0.5182 ppm |
| Recovery Percentage 1 | 96.107 % | 98.708 % | 96.872 % | 92.749 % | 101.107 % | 104.564 % | 104.503 % |
| Concentration RSD | 0.6 % | 0.4 % | 0.4 % | 0.2 % | 0.2 % | 0.7 % | 0.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4699 ppm | 0.4930 ppm | 0.4844 ppm | 10.2399 ppm | 0.4936 ppm | 0.4982 ppm | 0.5009 ppm |
| Concentration per Run 1 | 0.4702 ppm | 0.4934 ppm | 0.4853 ppm | 10.2500 ppm | 0.4955 ppm | 0.4982 ppm | 0.5001 ppm |
| Concentration per Run 2 | 0.4686 ppm | 0.4936 ppm | 0.4855 ppm | 10.2936 ppm | 0.4928 ppm | 0.4997 ppm | 0.5042 ppm |
| Concentration per Run 3 | 0.4707 ppm | 0.4920 ppm | 0.4824 ppm | 10.1762 ppm | 0.4925 ppm | 0.4967 ppm | 0.4983 ppm |
| Recovery Percentage 1 | 93.970 % | 98.599 % | 96.882 % | 102.399 % | 98.719 % | 99.638 % | 100.176 % |
| Concentration RSD | 0.2 % | 0.2 % | 0.4 % | 0.6 % | 0.3 % | 0.3 % | 0.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5009 ppm | 5.4637 ppm | 0.5054 ppm | 0.4947 ppm | 0.4820 ppm | 0.4857 ppm | 0.4784 ppm |
| Concentration per Run 1 | 0.5042 ppm | 5.4671 ppm | 0.5052 ppm | 0.4953 ppm | 0.4834 ppm | 0.4896 ppm | 0.4773 ppm |
| Concentration per Run 2 | 0.4983 ppm | 5.4754 ppm | 0.5071 ppm | 0.4965 ppm | 0.4827 ppm | 0.4862 ppm | 0.4783 ppm |
| Concentration per Run 3 | 0.5002 ppm | 5.4487 ppm | 0.5040 ppm | 0.4923 ppm | 0.4800 ppm | 0.4813 ppm | 0.4794 ppm |
| Recovery Percentage 1 | 100.179 % | 104.071 % | 101.086 % | 98.942 % | 96.402 % | 97.141 % | 95.674 % |
| Concentration RSD | 0.6 % | 0.3 % | 0.3 % | 0.4 % | 0.4 % | 0.9 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4896 ppm | 104.2877 % | 99.5229 % | 98.8090 % | 102.6355 % | 96.8161 % | 96.3105 % |
| Concentration per Run 1 | 0.4918 ppm | 103.6227 % | 99.8579 % | 98.5154 % | 101.8262 % | 97.2039 % | 96.3167 % |
| Concentration per Run 2 | 0.4893 ppm | 104.1391 % | 98.5696 % | 99.1067 % | 102.5899 % | 96.0902 % | 96.5094 % |
| Concentration per Run 3 | 0.4878 ppm | 105.1012 % | 100.1413 % | 98.8048 % | 103.4904 % | 97.1541 % | 96.1054 % |
| Recovery Percentage 1 | 97.929 % | | | | | | |
| Concentration RSD | 0.4 % | 0.7 % | 0.8 % | 0.3 % | 0.8 % | 0.6 % | 0.2 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCB
Analysis started at: 3/11/2025 5:16:06 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0101 ppm | 0.0005 ppm | 0.0005 ppm | 0.0001 ppm | 0.0000 ppm | 0.0031 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0088 ppm | 0.0005 ppm | 0.0022 ppm | 0.0002 ppm | 0.0001 ppm | 0.0051 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0162 ppm | 0.0002 ppm | -0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0052 ppm | 0.0009 ppm | -0.0006 ppm | 0.0000 ppm | 0.0000 ppm | 0.0037 ppm |
| Recovery Percentage 1 | 8.906 % | 10.084 % | 10.541 % | 1.634 % | 1.040 % | 1.165 % | 3.124 % |
| Concentration RSD | 69.6 % | 55.5 % | 60.7 % | 300.7 % | 77.5 % | 26.5 % | 74.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0001 ppm | 0.0020 ppm | 0.0316 ppm | 0.0011 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0001 ppm | 0.0003 ppm | -0.0003 ppm | 0.0023 ppm | 0.0334 ppm | 0.0010 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0004 ppm | -0.0006 ppm | 0.0006 ppm | 0.0030 ppm | 0.0211 ppm | 0.0011 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0002 ppm | 0.0003 ppm | -0.0001 ppm | 0.0007 ppm | 0.0403 ppm | 0.0013 ppm |
| Recovery Percentage 1 | -1.652 % | 0.520 % | -0.065 % | 0.561 % | 3.985 % | 1.264 % | 22.741 % |
| Concentration RSD | 23.3 % | 253.3 % | 8,300.7 % | 840.2 % | 60.2 % | 30.9 % | 14.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0030 ppm | -0.0002 ppm | 0.0021 ppm | 0.0103 ppm | 0.0001 ppm | -0.0020 ppm | 0.0035 ppm |
| Concentration per Run 1 | -0.0031 ppm | -0.0002 ppm | 0.0024 ppm | 0.0129 ppm | 0.0003 ppm | -0.0021 ppm | 0.0041 ppm |
| Concentration per Run 2 | -0.0034 ppm | -0.0002 ppm | 0.0019 ppm | 0.0098 ppm | -0.0001 ppm | -0.0023 ppm | 0.0027 ppm |
| Concentration per Run 3 | -0.0024 ppm | -0.0001 ppm | 0.0021 ppm | 0.0081 ppm | 0.0001 ppm | -0.0017 ppm | 0.0039 ppm |
| Recovery Percentage 1 | -2.966 % | -1.560 % | 4.263 % | 0.513 % | 0.383 % | -20.307 % | 7.096 % |
| Concentration RSD | 16.4 % | 7.3 % | 12.8 % | 24.0 % | 174.3 % | 15.9 % | 21.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | -0.0035 ppm | 0.0018 ppm | 0.0000 ppm | -0.0005 ppm | 0.0016 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0011 ppm | -0.0040 ppm | 0.0026 ppm | 0.0000 ppm | -0.0009 ppm | 0.0008 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0012 ppm | -0.0019 ppm | 0.0019 ppm | 0.0000 ppm | 0.0003 ppm | 0.0037 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0017 ppm | -0.0046 ppm | 0.0010 ppm | 0.0000 ppm | -0.0007 ppm | 0.0003 ppm | 0.0002 ppm |
| Recovery Percentage 1 | -5.345 % | -0.702 % | 3.621 % | 0.195 % | -4.560 % | 7.892 % | 1.529 % |
| Concentration RSD | 283.0 % | 40.1 % | 45.2 % | 128.0 % | 135.6 % | 115.5 % | 200.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 101.5157 % | 98.1675 % | 97.3943 % | 101.9265 % | 97.2605 % | 97.6053 % |
| Concentration per Run 1 | -0.0007 ppm | 101.8615 % | 98.2533 % | 97.3074 % | 102.0956 % | 97.7597 % | 97.9028 % |
| Concentration per Run 2 | -0.0007 ppm | 101.7390 % | 98.3467 % | 97.4082 % | 102.2428 % | 97.1021 % | 97.0978 % |
| Concentration per Run 3 | -0.0003 ppm | 100.9467 % | 97.9026 % | 97.4673 % | 101.4411 % | 96.9197 % | 97.8151 % |
| Recovery Percentage 1 | -11.663 % | | | | | | |
| Concentration RSD | 40.2 % | 0.5 % | 0.2 % | 0.1 % | 0.4 % | 0.5 % | 0.5 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: zL2511828-01 WG2038695
Analysis started at: 3/11/2025 5:19:43 PM
Rack 2
Vial 13
Comment 5x prep dilution Ag

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0358 ppm | 0.4048 ppm | 0.0014 ppm | 0.0572 ppm | 0.0002 ppm | 0.0000 ppm | 0.2122 ppm |
| Concentration per Run 1 | 0.0355 ppm | 0.4120 ppm | 0.0000 ppm | 0.0567 ppm | 0.0002 ppm | 0.0000 ppm | 0.2122 ppm |
| Concentration per Run 2 | 0.0360 ppm | 0.4069 ppm | 0.0031 ppm | 0.0578 ppm | 0.0002 ppm | 0.0000 ppm | 0.2133 ppm |
| Concentration per Run 3 | 0.0359 ppm | 0.3957 ppm | 0.0010 ppm | 0.0572 ppm | 0.0003 ppm | 0.0000 ppm | 0.2111 ppm |
| Concentration RSD | 0.7 % | 2.1 % | 114.7 % | 0.9 % | 16.5 % | 42.8 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0011 ppm | 0.0798 ppm | 0.0425 ppm | 0.2369 ppm | 2.1712 ppm | 0.0029 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0013 ppm | 0.0797 ppm | 0.0420 ppm | 0.2384 ppm | 2.1797 ppm | 0.0030 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0007 ppm | 0.0802 ppm | 0.0425 ppm | 0.2377 ppm | 2.1740 ppm | 0.0031 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0014 ppm | 0.0796 ppm | 0.0429 ppm | 0.2346 ppm | 2.1599 ppm | 0.0027 ppm |
| Concentration RSD | 145.8 % | 34.6 % | 0.4 % | 1.1 % | 0.9 % | 0.5 % | 6.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4257 ppm | 0.0154 ppm | 0.0709 ppm | 806.1133 [SIC 500] | 0.5483 ppm | -0.0020 ppm | 0.0174 ppm |
| Concentration per Run 1 | 0.4232 ppm | 0.0156 ppm | 0.0698 ppm | 803.5377 ppm | 0.5476 ppm | -0.0017 ppm | 0.0164 ppm |
| Concentration per Run 2 | 0.4260 ppm | 0.0153 ppm | 0.0710 ppm | 806.7786 ppm | 0.5499 ppm | -0.0018 ppm | 0.0183 ppm |
| Concentration per Run 3 | 0.4278 ppm | 0.0153 ppm | 0.0720 ppm | 808.0236 ppm | 0.5475 ppm | -0.0026 ppm | 0.0175 ppm |
| Concentration RSD | 0.5 % | 1.0 % | 1.5 % | 0.3 % | 0.2 % | 25.0 % | 5.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | 0.9488 ppm | 0.0090 ppm | 0.0006 ppm | 0.1742 ppm | 0.0047 ppm | 0.0411 ppm |
| Concentration per Run 1 | -0.0010 ppm | 0.9444 ppm | 0.0100 ppm | 0.0006 ppm | 0.1737 ppm | 0.0075 ppm | 0.0417 ppm |
| Concentration per Run 2 | -0.0008 ppm | 0.9491 ppm | 0.0077 ppm | 0.0006 ppm | 0.1748 ppm | 0.0030 ppm | 0.0410 ppm |
| Concentration per Run 3 | -0.0018 ppm | 0.9527 ppm | 0.0093 ppm | 0.0007 ppm | 0.1741 ppm | 0.0037 ppm | 0.0407 ppm |
| Concentration RSD | 42.0 % | 0.4 % | 13.3 % | 5.6 % | 0.3 % | 51.5 % | 1.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0047 ppm | 103.6318 % | 96.0997 % | 97.9318 % | 102.2295 % | 93.6923 % | 95.4356 % |
| Concentration per Run 1 | 0.0045 ppm | 103.8001 % | 96.5448 % | 98.5448 % | 102.2711 % | 94.0526 % | 95.6132 % |
| Concentration per Run 2 | 0.0048 ppm | 103.6363 % | 95.6777 % | 97.7672 % | 102.4902 % | 93.3992 % | 95.7743 % |
| Concentration per Run 3 | 0.0048 ppm | 103.4589 % | 96.0765 % | 97.4836 % | 101.9270 % | 93.6249 % | 94.9192 % |
| Concentration RSD | 4.3 % | 0.2 % | 0.5 % | 0.6 % | 0.3 % | 0.4 % | 0.5 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511828-01 WG2038695
Analysis started at: 3/11/2025 5:23:12 PM
Rack 2
Vial 14
Comment 10x prep dilution Ag

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0176 ppm | 0.2036 ppm | 0.0014 ppm | 0.0283 ppm | 0.0000 ppm | 0.0000 ppm | 0.1228 ppm |
| Concentration per Run 1 | 0.0175 ppm | 0.1996 ppm | 0.0009 ppm | 0.0296 ppm | 0.0000 ppm | 0.0000 ppm | 0.1250 ppm |
| Concentration per Run 2 | 0.0173 ppm | 0.2031 ppm | 0.0014 ppm | 0.0273 ppm | 0.0001 ppm | 0.0000 ppm | 0.1227 ppm |
| Concentration per Run 3 | 0.0179 ppm | 0.2082 ppm | 0.0020 ppm | 0.0281 ppm | -0.0001 ppm | 0.0000 ppm | 0.1207 ppm |
| Concentration RSD | 1.6 % | 2.1 % | 37.5 % | 4.1 % | 726.9 % | 115.9 % | 1.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0002 ppm | 0.0390 ppm | 0.0204 ppm | 0.1145 ppm | 1.0689 ppm | 0.0016 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0002 ppm | 0.0386 ppm | 0.0205 ppm | 0.1133 ppm | 1.0788 ppm | 0.0019 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0008 ppm | 0.0391 ppm | 0.0202 ppm | 0.1155 ppm | 1.0837 ppm | 0.0013 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0005 ppm | 0.0392 ppm | 0.0206 ppm | 0.1148 ppm | 1.0443 ppm | 0.0017 ppm |
| Concentration RSD | 72.8 % | 413.1 % | 0.8 % | 0.9 % | 1.0 % | 2.0 % | 19.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2106 ppm | 0.0074 ppm | 0.0351 ppm | 410.9414 ppm | 0.2661 ppm | -0.0009 ppm | 0.0064 ppm |
| Concentration per Run 1 | 0.2095 ppm | 0.0075 ppm | 0.0352 ppm | 409.9777 ppm | 0.2641 ppm | 0.0001 ppm | 0.0084 ppm |
| Concentration per Run 2 | 0.2126 ppm | 0.0074 ppm | 0.0357 ppm | 412.6664 ppm | 0.2658 ppm | -0.0005 ppm | 0.0080 ppm |
| Concentration per Run 3 | 0.2099 ppm | 0.0073 ppm | 0.0344 ppm | 410.1802 ppm | 0.2683 ppm | -0.0025 ppm | 0.0028 ppm |
| Concentration RSD | 0.8 % | 1.8 % | 1.9 % | 0.4 % | 0.8 % | 146.9 % | 48.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | 0.4569 ppm | 0.0052 ppm | 0.0003 ppm | 0.0839 ppm | 0.0034 ppm | 0.0198 ppm |
| Concentration per Run 1 | -0.0006 ppm | 0.4552 ppm | 0.0063 ppm | 0.0003 ppm | 0.0833 ppm | 0.0020 ppm | 0.0197 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.4563 ppm | 0.0043 ppm | 0.0003 ppm | 0.0841 ppm | 0.0041 ppm | 0.0201 ppm |
| Concentration per Run 3 | -0.0022 ppm | 0.4592 ppm | 0.0052 ppm | 0.0003 ppm | 0.0842 ppm | 0.0041 ppm | 0.0196 ppm |
| Concentration RSD | 119.4 % | 0.5 % | 19.2 % | 11.3 % | 0.6 % | 35.8 % | 1.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0024 ppm | 104.0438 % | 98.0290 % | 99.2718 % | 102.9120 % | 95.1764 % | 96.1199 % |
| Concentration per Run 1 | 0.0023 ppm | 104.6965 % | 97.8401 % | 100.0046 % | 103.3657 % | 95.0499 % | 96.4578 % |
| Concentration per Run 2 | 0.0025 ppm | 103.5567 % | 97.6978 % | 98.4534 % | 102.4413 % | 94.8060 % | 95.7685 % |
| Concentration per Run 3 | 0.0023 ppm | 103.8784 % | 98.5491 % | 99.3575 % | 102.9291 % | 95.6732 % | 96.1334 % |
| Concentration RSD | 4.6 % | 0.6 % | 0.5 % | 0.8 % | 0.4 % | 0.5 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511986-03 WG2038695
Analysis started at: 3/11/2025 5:26:40 PM
Rack 2
Vial 10
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.0077 ppm | 0.0004 ppm | 0.0006 ppm | 0.0000 ppm | 0.0000 ppm | 0.0256 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.0033 ppm | 0.0008 ppm | 0.0006 ppm | -0.0001 ppm | 0.0000 ppm | 0.0239 ppm |
| Concentration per Run 2 | 0.0017 ppm | 0.0030 ppm | -0.0010 ppm | 0.0009 ppm | 0.0001 ppm | 0.0001 ppm | 0.0258 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0169 ppm | 0.0014 ppm | 0.0002 ppm | -0.0001 ppm | 0.0000 ppm | 0.0270 ppm |
| Concentration RSD | 48.4 % | 102.5 % | 311.7 % | 56.3 % | 435.2 % | 139.2 % | 6.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | -0.0003 ppm | -0.0003 ppm | 0.0063 ppm | 0.0354 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0003 ppm | -0.0002 ppm | -0.0008 ppm | 0.0066 ppm | 0.0400 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0003 ppm | 0.0002 ppm | 0.0001 ppm | 0.0060 ppm | 0.0367 ppm | -0.0002 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0001 ppm | -0.0007 ppm | -0.0001 ppm | 0.0064 ppm | 0.0294 ppm | 0.0010 ppm |
| Concentration RSD | 210.1 % | 1,119.5 % | 169.5 % | 170.2 % | 5.2 % | 15.3 % | 158.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0002 ppm | 0.0008 ppm | 0.0561 ppm | -0.0003 ppm | -0.0007 ppm | 0.0028 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.0000 ppm | 0.0005 ppm | 0.0607 ppm | -0.0007 ppm | -0.0011 ppm | 0.0028 ppm |
| Concentration per Run 2 | -0.0005 ppm | 0.0003 ppm | 0.0009 ppm | 0.0540 ppm | 0.0009 ppm | -0.0021 ppm | -0.0017 ppm |
| Concentration per Run 3 | -0.0016 ppm | 0.0004 ppm | 0.0010 ppm | 0.0535 ppm | -0.0010 ppm | 0.0011 ppm | 0.0072 ppm |
| Concentration RSD | 488.7 % | 80.5 % | 29.8 % | 7.2 % | 354.5 % | 235.6 % | 160.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | -0.0037 ppm | -0.0019 ppm | 0.0000 ppm | -0.0004 ppm | 0.0017 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0006 ppm | -0.0036 ppm | -0.0013 ppm | 0.0000 ppm | -0.0005 ppm | 0.0032 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0011 ppm | -0.0043 ppm | -0.0021 ppm | -0.0001 ppm | -0.0003 ppm | 0.0000 ppm | -0.0003 ppm |
| Concentration per Run 3 | -0.0020 ppm | -0.0033 ppm | -0.0022 ppm | 0.0000 ppm | -0.0004 ppm | 0.0019 ppm | 0.0000 ppm |
| Concentration RSD | 56.0 % | 13.7 % | 27.1 % | 262.6 % | 20.1 % | 92.7 % | 1,952.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 103.9432 % | 99.9478 % | 98.9024 % | 103.6467 % | 97.9158 % | 98.6622 % |
| Concentration per Run 1 | 0.0006 ppm | 104.1176 % | 99.8944 % | 98.2837 % | 104.1321 % | 97.8144 % | 98.2353 % |
| Concentration per Run 2 | 0.0007 ppm | 103.5318 % | 99.8982 % | 99.1449 % | 102.9983 % | 98.2979 % | 98.7536 % |
| Concentration per Run 3 | 0.0007 ppm | 104.1801 % | 100.0509 % | 99.2785 % | 103.8097 % | 97.6352 % | 98.9978 % |
| Concentration RSD | 9.3 % | 0.3 % | 0.1 % | 0.5 % | 0.6 % | 0.4 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511986-04 WG2038695
Analysis started at: 3/11/2025 5:30:09 PM
Rack 2
Vial 11
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0120 ppm | 0.0010 ppm | -0.0001 ppm | 0.0000 ppm | 0.0000 ppm | 0.0094 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.0102 ppm | 0.0010 ppm | 0.0004 ppm | 0.0001 ppm | 0.0000 ppm | 0.0119 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0175 ppm | -0.0003 ppm | -0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0063 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0084 ppm | 0.0022 ppm | -0.0006 ppm | -0.0001 ppm | 0.0000 ppm | 0.0101 ppm |
| Concentration RSD | 39.9 % | 40.1 % | 129.1 % | 428.8 % | 798.9 % | 943.5 % | 30.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0003 ppm | 0.0000 ppm | -0.0001 ppm | 0.0040 ppm | 0.0278 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0004 ppm | 0.0007 ppm | -0.0002 ppm | 0.0034 ppm | 0.0192 ppm | 0.0016 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0004 ppm | -0.0001 ppm | -0.0003 ppm | 0.0054 ppm | 0.0243 ppm | 0.0002 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0011 ppm | -0.0006 ppm | 0.0001 ppm | 0.0033 ppm | 0.0399 ppm | -0.0006 ppm |
| Concentration RSD | 61.4 % | 228.3 % | 5,243.2 % | 205.3 % | 30.4 % | 38.9 % | 274.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0000 ppm | -0.0002 ppm | 0.0373 ppm | -0.0004 ppm | -0.0009 ppm | 0.0016 ppm |
| Concentration per Run 1 | 0.0005 ppm | -0.0001 ppm | -0.0006 ppm | 0.0373 ppm | -0.0005 ppm | -0.0013 ppm | 0.0020 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0002 ppm | 0.0003 ppm | 0.0370 ppm | 0.0000 ppm | 0.0008 ppm | -0.0018 ppm |
| Concentration per Run 3 | 0.0008 ppm | -0.0002 ppm | -0.0005 ppm | 0.0376 ppm | -0.0007 ppm | -0.0023 ppm | 0.0046 ppm |
| Concentration RSD | 197.1 % | 404.2 % | 211.8 % | 0.8 % | 99.9 % | 165.5 % | 198.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0019 ppm | -0.0060 ppm | -0.0005 ppm | 0.0000 ppm | -0.0005 ppm | 0.0015 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0029 ppm | -0.0041 ppm | 0.0003 ppm | 0.0002 ppm | -0.0007 ppm | 0.0026 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0013 ppm | -0.0069 ppm | 0.0000 ppm | 0.0000 ppm | -0.0006 ppm | 0.0018 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0016 ppm | -0.0070 ppm | -0.0017 ppm | 0.0000 ppm | -0.0003 ppm | 0.0002 ppm | 0.0003 ppm |
| Concentration RSD | 43.3 % | 27.3 % | 218.3 % | 238.6 % | 45.0 % | 81.0 % | 38.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 103.6263 % | 100.3072 % | 98.9123 % | 103.3007 % | 97.9645 % | 98.1989 % |
| Concentration per Run 1 | 0.0001 ppm | 102.9834 % | 100.6925 % | 99.1503 % | 102.5374 % | 98.2787 % | 98.5654 % |
| Concentration per Run 2 | -0.0001 ppm | 103.3115 % | 100.6428 % | 98.8151 % | 103.2092 % | 97.9700 % | 98.1345 % |
| Concentration per Run 3 | 0.0001 ppm | 104.5839 % | 99.5863 % | 98.7714 % | 104.1555 % | 97.6447 % | 97.8967 % |
| Concentration RSD | 212.5 % | 0.8 % | 0.6 % | 0.2 % | 0.8 % | 0.3 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512155-01 WG2038695
Analysis started at: 3/11/2025 5:33:38 PM
Rack 2
Vial 12
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 2.7040 ppm | 0.0025 ppm | 0.0161 ppm | 0.0431 ppm | 0.0002 ppm | 93.1750 ppm |
| Concentration per Run 1 | 0.0007 ppm | 2.7069 ppm | 0.0036 ppm | 0.0156 ppm | 0.0431 ppm | 0.0002 ppm | 92.9885 ppm |
| Concentration per Run 2 | 0.0002 ppm | 2.7123 ppm | 0.0016 ppm | 0.0166 ppm | 0.0432 ppm | 0.0002 ppm | 93.0334 ppm |
| Concentration per Run 3 | 0.0007 ppm | 2.6927 ppm | 0.0023 ppm | 0.0160 ppm | 0.0430 ppm | 0.0002 ppm | 93.5031 ppm |
| Concentration RSD | 50.7 % | 0.4 % | 40.6 % | 3.2 % | 0.2 % | 14.2 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0022 ppm | 0.0094 ppm | 0.0251 ppm | 5.5326 ppm | 2.2124 ppm | 0.0101 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0024 ppm | 0.0097 ppm | 0.0251 ppm | 5.5351 ppm | 2.2264 ppm | 0.0101 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0021 ppm | 0.0092 ppm | 0.0251 ppm | 5.5228 ppm | 2.2247 ppm | 0.0114 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0020 ppm | 0.0093 ppm | 0.0250 ppm | 5.5400 ppm | 2.1862 ppm | 0.0088 ppm |
| Concentration RSD | 55.5 % | 11.1 % | 3.0 % | 0.3 % | 0.2 % | 1.0 % | 13.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.6681 ppm | 0.1495 ppm | 0.0021 ppm | 251.2860 ppm | 0.0065 ppm | 0.0109 ppm | 0.0035 ppm |
| Concentration per Run 1 | 10.7268 ppm | 0.1494 ppm | 0.0018 ppm | 251.5171 ppm | 0.0075 ppm | 0.0085 ppm | 0.0035 ppm |
| Concentration per Run 2 | 10.5874 ppm | 0.1496 ppm | 0.0024 ppm | 250.7952 ppm | 0.0066 ppm | 0.0127 ppm | 0.0009 ppm |
| Concentration per Run 3 | 10.6902 ppm | 0.1495 ppm | 0.0021 ppm | 251.5458 ppm | 0.0053 ppm | 0.0114 ppm | 0.0061 ppm |
| Concentration RSD | 0.7 % | 0.1 % | 12.6 % | 0.2 % | 17.7 % | 20.1 % | 73.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 5.2792 ppm | -0.0009 ppm | 0.3200 ppm | 0.0447 ppm | 0.0033 ppm | 0.0068 ppm |
| Concentration per Run 1 | 0.0008 ppm | 5.2744 ppm | -0.0001 ppm | 0.3208 ppm | 0.0459 ppm | 0.0047 ppm | 0.0069 ppm |
| Concentration per Run 2 | 0.0004 ppm | 5.2758 ppm | -0.0015 ppm | 0.3195 ppm | 0.0439 ppm | 0.0031 ppm | 0.0066 ppm |
| Concentration per Run 3 | -0.0012 ppm | 5.2875 ppm | -0.0011 ppm | 0.3197 ppm | 0.0441 ppm | 0.0022 ppm | 0.0068 ppm |
| Concentration RSD | 5,199.4 % | 0.1 % | 82.7 % | 0.2 % | 2.5 % | 37.7 % | 2.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4907 ppm | 103.8676 % | 97.8170 % | 97.4841 % | 102.1135 % | 95.6957 % | 95.3993 % |
| Concentration per Run 1 | 0.4901 ppm | 104.1845 % | 97.8438 % | 97.0017 % | 102.8422 % | 95.9085 % | 95.4101 % |
| Concentration per Run 2 | 0.4900 ppm | 104.1053 % | 97.9246 % | 97.6176 % | 102.2907 % | 95.5777 % | 95.2995 % |
| Concentration per Run 3 | 0.4920 ppm | 103.3131 % | 97.6826 % | 97.8329 % | 101.2077 % | 95.6007 % | 95.4884 % |
| Concentration RSD | 0.2 % | 0.5 % | 0.1 % | 0.4 % | 0.8 % | 0.2 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCV
Analysis started at: 3/11/2025 5:37:07 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4755 ppm | 0.4858 ppm | 0.4952 ppm | 0.4825 ppm | 0.4761 ppm | 0.5070 ppm | 0.4897 ppm |
| Concentration per Run 1 | 0.4800 ppm | 0.4929 ppm | 0.4955 ppm | 0.4866 ppm | 0.4751 ppm | 0.5063 ppm | 0.4866 ppm |
| Concentration per Run 2 | 0.4740 ppm | 0.4867 ppm | 0.4932 ppm | 0.4836 ppm | 0.4768 ppm | 0.5065 ppm | 0.4917 ppm |
| Concentration per Run 3 | 0.4726 ppm | 0.4779 ppm | 0.4970 ppm | 0.4772 ppm | 0.4763 ppm | 0.5082 ppm | 0.4908 ppm |
| Recovery Percentage 1 | 95.103 % | 97.168 % | 99.048 % | 96.496 % | 95.215 % | 101.396 % | 97.941 % |
| Concentration RSD | 0.8 % | 1.6 % | 0.4 % | 1.0 % | 0.2 % | 0.2 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4824 ppm | 0.4951 ppm | 0.4853 ppm | 0.4666 ppm | 0.5106 ppm | 5.2229 ppm | 0.5214 ppm |
| Concentration per Run 1 | 0.4865 ppm | 0.4982 ppm | 0.4886 ppm | 0.4690 ppm | 0.5101 ppm | 5.2515 ppm | 0.5246 ppm |
| Concentration per Run 2 | 0.4802 ppm | 0.4923 ppm | 0.4875 ppm | 0.4643 ppm | 0.5070 ppm | 5.2422 ppm | 0.5206 ppm |
| Concentration per Run 3 | 0.4805 ppm | 0.4947 ppm | 0.4797 ppm | 0.4664 ppm | 0.5146 ppm | 5.1752 ppm | 0.5188 ppm |
| Recovery Percentage 1 | 96.477 % | 99.011 % | 97.053 % | 93.311 % | 102.115 % | 104.459 % | 104.271 % |
| Concentration RSD | 0.7 % | 0.6 % | 1.0 % | 0.5 % | 0.7 % | 0.8 % | 0.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4728 ppm | 0.4918 ppm | 0.4848 ppm | 10.2478 ppm | 0.4950 ppm | 0.4949 ppm | 0.4980 ppm |
| Concentration per Run 1 | 0.4771 ppm | 0.4917 ppm | 0.4900 ppm | 10.3036 ppm | 0.4990 ppm | 0.4931 ppm | 0.4996 ppm |
| Concentration per Run 2 | 0.4764 ppm | 0.4932 ppm | 0.4851 ppm | 10.2108 ppm | 0.4938 ppm | 0.4948 ppm | 0.4968 ppm |
| Concentration per Run 3 | 0.4650 ppm | 0.4904 ppm | 0.4793 ppm | 10.2290 ppm | 0.4921 ppm | 0.4968 ppm | 0.4975 ppm |
| Recovery Percentage 1 | 94.562 % | 98.356 % | 96.953 % | 102.478 % | 98.991 % | 98.985 % | 99.590 % |
| Concentration RSD | 1.4 % | 0.3 % | 1.1 % | 0.5 % | 0.7 % | 0.4 % | 0.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4947 ppm | 5.4592 ppm | 0.5034 ppm | 0.4942 ppm | 0.4838 ppm | 0.4811 ppm | 0.4804 ppm |
| Concentration per Run 1 | 0.4918 ppm | 5.5071 ppm | 0.5078 ppm | 0.4946 ppm | 0.4888 ppm | 0.4810 ppm | 0.4843 ppm |
| Concentration per Run 2 | 0.4961 ppm | 5.4454 ppm | 0.5027 ppm | 0.4945 ppm | 0.4824 ppm | 0.4811 ppm | 0.4796 ppm |
| Concentration per Run 3 | 0.4963 ppm | 5.4251 ppm | 0.4997 ppm | 0.4935 ppm | 0.4802 ppm | 0.4812 ppm | 0.4773 ppm |
| Recovery Percentage 1 | 98.943 % | 103.985 % | 100.685 % | 98.842 % | 96.763 % | 96.226 % | 96.080 % |
| Concentration RSD | 0.5 % | 0.8 % | 0.8 % | 0.1 % | 0.9 % | 0.0 % | 0.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4931 ppm | 103.0864 % | 99.4367 % | 99.2103 % | 101.6080 % | 96.4609 % | 96.5204 % |
| Concentration per Run 1 | 0.4984 ppm | 102.1748 % | 99.5122 % | 99.1190 % | 100.5299 % | 96.6021 % | 96.1148 % |
| Concentration per Run 2 | 0.4921 ppm | 103.0884 % | 99.3689 % | 99.1820 % | 101.6223 % | 96.5268 % | 96.1055 % |
| Concentration per Run 3 | 0.4889 ppm | 103.9961 % | 99.4290 % | 99.3299 % | 102.6719 % | 96.2538 % | 97.3408 % |
| Recovery Percentage 1 | 98.630 % | | | | | | |
| Concentration RSD | 1.0 % | 0.9 % | 0.1 % | 0.1 % | 1.1 % | 0.2 % | 0.7 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCB
Analysis started at: 3/11/2025 5:40:35 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0091 ppm | -0.0001 ppm | 0.0010 ppm | 0.0000 ppm | 0.0000 ppm | 0.0021 ppm |
| Concentration per Run 1 | 0.0014 ppm | 0.0074 ppm | 0.0005 ppm | -0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0021 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0130 ppm | -0.0004 ppm | 0.0008 ppm | 0.0000 ppm | 0.0000 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0068 ppm | -0.0003 ppm | 0.0026 ppm | 0.0000 ppm | 0.0000 ppm | 0.0039 ppm |
| Recovery Percentage 1 | 13.241 % | 9.069 % | -1.194 % | 3.267 % | 0.162 % | 1.046 % | 2.148 % |
| Concentration RSD | 44.9 % | 37.8 % | 865.3 % | 153.5 % | 62.2 % | 24.3 % | 79.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0003 ppm | -0.0001 ppm | 0.0002 ppm | 0.0009 ppm | 0.0401 ppm | 0.0012 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0005 ppm | 0.0003 ppm | 0.0006 ppm | 0.0016 ppm | 0.0328 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0002 ppm | -0.0001 ppm | 0.0001 ppm | 0.0003 ppm | 0.0716 ppm | 0.0017 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0003 ppm | -0.0006 ppm | -0.0002 ppm | 0.0007 ppm | 0.0158 ppm | 0.0017 ppm |
| Recovery Percentage 1 | -1.388 % | -1.614 % | -1.462 % | 1.517 % | 1.760 % | 1.602 % | 24.189 % |
| Concentration RSD | 51.1 % | 38.3 % | 304.1 % | 290.9 % | 77.9 % | 71.4 % | 72.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0028 ppm | -0.0002 ppm | 0.0019 ppm | 0.0324 ppm | -0.0005 ppm | -0.0015 ppm | 0.0045 ppm |
| Concentration per Run 1 | -0.0037 ppm | -0.0001 ppm | 0.0019 ppm | 0.0338 ppm | -0.0004 ppm | 0.0000 ppm | 0.0063 ppm |
| Concentration per Run 2 | -0.0020 ppm | -0.0003 ppm | 0.0021 ppm | 0.0306 ppm | -0.0003 ppm | -0.0017 ppm | 0.0043 ppm |
| Concentration per Run 3 | -0.0029 ppm | -0.0002 ppm | 0.0017 ppm | 0.0328 ppm | -0.0007 ppm | -0.0028 ppm | 0.0028 ppm |
| Recovery Percentage 1 | -2.850 % | -2.012 % | 3.832 % | 1.619 % | -1.964 % | -15.030 % | 8.947 % |
| Concentration RSD | 30.5 % | 59.9 % | 11.5 % | 5.0 % | 42.0 % | 96.1 % | 39.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | -0.0043 ppm | 0.0003 ppm | 0.0001 ppm | -0.0006 ppm | 0.0015 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0004 ppm | -0.0044 ppm | 0.0007 ppm | 0.0000 ppm | -0.0006 ppm | 0.0027 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0003 ppm | -0.0040 ppm | 0.0009 ppm | 0.0001 ppm | -0.0008 ppm | -0.0013 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0019 ppm | -0.0044 ppm | -0.0005 ppm | 0.0001 ppm | -0.0005 ppm | 0.0031 ppm | 0.0003 ppm |
| Recovery Percentage 1 | -3.927 % | -0.860 % | 0.673 % | 0.720 % | -6.402 % | 7.469 % | 0.817 % |
| Concentration RSD | 331.6 % | 5.4 % | 222.2 % | 86.4 % | 20.5 % | 161.3 % | 266.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 101.3748 % | 97.5116 % | 98.0580 % | 101.8111 % | 96.6508 % | 97.6084 % |
| Concentration per Run 1 | -0.0005 ppm | 101.8590 % | 97.7056 % | 97.9025 % | 102.4159 % | 96.9483 % | 97.7808 % |
| Concentration per Run 2 | -0.0006 ppm | 101.5381 % | 97.4460 % | 98.3156 % | 101.7209 % | 96.4140 % | 97.2412 % |
| Concentration per Run 3 | -0.0003 ppm | 100.7273 % | 97.3833 % | 97.9559 % | 101.2965 % | 96.5902 % | 97.8031 % |
| Recovery Percentage 1 | -8.893 % | | | | | | |
| Concentration RSD | 37.8 % | 0.6 % | 0.2 % | 0.2 % | 0.6 % | 0.3 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512086-01 WG2037645
Analysis started at: 3/11/2025 5:57:52 PM
Rack 2
Vial 20
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0915 ppm | -0.0002 ppm | 0.0109 ppm | 0.0038 ppm | 0.0000 ppm | 13.6671 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0926 ppm | 0.0011 ppm | 0.0114 ppm | 0.0038 ppm | 0.0000 ppm | 13.6203 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0893 ppm | -0.0010 ppm | 0.0104 ppm | 0.0038 ppm | 0.0000 ppm | 13.6581 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0927 ppm | -0.0006 ppm | 0.0109 ppm | 0.0040 ppm | 0.0000 ppm | 13.7229 ppm |
| Concentration RSD | 66.6 % | 2.1 % | 627.9 % | 4.6 % | 2.5 % | 110.0 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0003 ppm | 0.0003 ppm | 0.0019 ppm | 4.2292 ppm | 2.1660 ppm | 0.0063 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0004 ppm | 0.0006 ppm | 0.0019 ppm | 4.2087 ppm | 2.1772 ppm | 0.0075 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0002 ppm | -0.0001 ppm | 0.0020 ppm | 4.2251 ppm | 2.1584 ppm | 0.0064 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0003 ppm | 0.0005 ppm | 0.0019 ppm | 4.2537 ppm | 2.1625 ppm | 0.0050 ppm |
| Concentration RSD | 194.8 % | 26.2 % | 118.1 % | 4.4 % | 0.5 % | 0.5 % | 19.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.5129 ppm | 0.1030 ppm | 0.0048 ppm | 10.3966 ppm | -0.0003 ppm | -0.0002 ppm | -0.0007 ppm |
| Concentration per Run 1 | 3.5378 ppm | 0.1028 ppm | 0.0047 ppm | 10.3558 ppm | -0.0011 ppm | -0.0006 ppm | -0.0008 ppm |
| Concentration per Run 2 | 3.5060 ppm | 0.1029 ppm | 0.0046 ppm | 10.3644 ppm | 0.0002 ppm | 0.0009 ppm | -0.0003 ppm |
| Concentration per Run 3 | 3.4949 ppm | 0.1034 ppm | 0.0053 ppm | 10.4694 ppm | 0.0000 ppm | -0.0009 ppm | -0.0012 ppm |
| Concentration RSD | 0.6 % | 0.3 % | 8.0 % | 0.6 % | 234.0 % | 486.1 % | 62.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 3.6497 ppm | 0.0001 ppm | 0.0594 ppm | 0.0020 ppm | 0.0010 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0007 ppm | 3.6844 ppm | -0.0002 ppm | 0.0592 ppm | 0.0017 ppm | 0.0009 ppm | 0.0009 ppm |
| Concentration per Run 2 | -0.0011 ppm | 3.6387 ppm | -0.0008 ppm | 0.0594 ppm | 0.0024 ppm | 0.0024 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0024 ppm | 3.6260 ppm | 0.0012 ppm | 0.0596 ppm | 0.0018 ppm | -0.0004 ppm | 0.0002 ppm |
| Concentration RSD | 266.4 % | 0.8 % | 1,346.0 % | 0.3 % | 18.0 % | 140.2 % | 56.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0039 ppm | 104.7589 % | 100.7832 % | 99.4186 % | 102.9560 % | 97.5723 % | 97.4287 % |
| Concentration per Run 1 | 0.0040 ppm | 103.6342 % | 101.1417 % | 99.1603 % | 101.9008 % | 97.5881 % | 97.6323 % |
| Concentration per Run 2 | 0.0039 ppm | 105.0546 % | 100.7417 % | 99.7813 % | 103.0765 % | 97.4209 % | 97.3598 % |
| Concentration per Run 3 | 0.0038 ppm | 105.5880 % | 100.4661 % | 99.3142 % | 103.8907 % | 97.7080 % | 97.2939 % |
| Concentration RSD | 2.9 % | 1.0 % | 0.3 % | 0.3 % | 1.0 % | 0.1 % | 0.2 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512087-01 WG2037645
Analysis started at: 3/11/2025 6:01:27 PM
Rack 2
Vial 21
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0068 ppm | 0.0014 ppm | 0.0930 ppm | 0.0104 ppm | 0.0000 ppm | 55.1469 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0070 ppm | 0.0000 ppm | 0.1009 ppm | 0.0106 ppm | 0.0000 ppm | 55.1825 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0092 ppm | 0.0012 ppm | 0.0913 ppm | 0.0104 ppm | 0.0000 ppm | 55.3767 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0043 ppm | 0.0029 ppm | 0.0867 ppm | 0.0103 ppm | 0.0000 ppm | 54.8817 ppm |
| Concentration RSD | 8.1 % | 35.3 % | 104.5 % | 7.8 % | 1.4 % | 86.0 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0015 ppm | 0.0008 ppm | 0.0797 ppm | 0.0131 ppm | 2.8421 ppm | 0.0097 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0026 ppm | 0.0007 ppm | 0.0865 ppm | 0.0152 ppm | 2.8584 ppm | 0.0094 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0009 ppm | 0.0003 ppm | 0.0781 ppm | 0.0125 ppm | 2.8180 ppm | 0.0099 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0010 ppm | 0.0014 ppm | 0.0745 ppm | 0.0116 ppm | 2.8498 ppm | 0.0100 ppm |
| Concentration RSD | 39.6 % | 64.6 % | 72.3 % | 7.7 % | 14.2 % | 0.7 % | 3.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 21.7021 ppm | 0.0233 ppm | -0.0002 ppm | 122.1876 ppm | 0.0042 ppm | -0.0008 ppm | -0.0028 ppm |
| Concentration per Run 1 | 23.4849 ppm | 0.0234 ppm | -0.0003 ppm | 123.0957 ppm | 0.0043 ppm | -0.0001 ppm | -0.0043 ppm |
| Concentration per Run 2 | 21.3258 ppm | 0.0232 ppm | -0.0005 ppm | 122.1181 ppm | 0.0045 ppm | -0.0011 ppm | 0.0003 ppm |
| Concentration per Run 3 | 20.2955 ppm | 0.0233 ppm | 0.0002 ppm | 121.3488 ppm | 0.0037 ppm | -0.0013 ppm | -0.0043 ppm |
| Concentration RSD | 7.5 % | 0.5 % | 167.9 % | 0.7 % | 9.7 % | 73.6 % | 96.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 5.1563 ppm | 0.0013 ppm | 0.2501 ppm | 0.0001 ppm | 0.0021 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0006 ppm | 5.5563 ppm | 0.0012 ppm | 0.2503 ppm | 0.0002 ppm | 0.0020 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0012 ppm | 5.0555 ppm | 0.0015 ppm | 0.2499 ppm | 0.0000 ppm | 0.0034 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0007 ppm | 4.8570 ppm | 0.0012 ppm | 0.2501 ppm | 0.0002 ppm | 0.0009 ppm | 0.0002 ppm |
| Concentration RSD | 214.0 % | 7.0 % | 14.7 % | 0.1 % | 100.3 % | 57.9 % | 56.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0132 ppm | 104.9097 % | 99.4303 % | 101.2066 % | 103.8895 % | 96.5717 % | 98.3089 % |
| Concentration per Run 1 | 0.0149 ppm | 96.9699 % | 99.0484 % | 100.7738 % | 94.2916 % | 96.4565 % | 98.2616 % |
| Concentration per Run 2 | 0.0126 ppm | 106.8103 % | 99.4001 % | 100.5508 % | 105.8459 % | 96.5827 % | 98.2290 % |
| Concentration per Run 3 | 0.0120 ppm | 110.9490 % | 99.8423 % | 102.2952 % | 111.5309 % | 96.6760 % | 98.4362 % |
| Concentration RSD | 11.8 % | 6.8 % | 0.4 % | 0.9 % | 8.5 % | 0.1 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512088-01 WG2037645
Analysis started at: 3/11/2025 6:04:55 PM
Rack 2
Vial 22
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0083 ppm | -0.0007 ppm | 0.0201 ppm | 0.0064 ppm | 0.0000 ppm | 24.0292 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0125 ppm | -0.0021 ppm | 0.0209 ppm | 0.0065 ppm | 0.0001 ppm | 23.9681 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0034 ppm | 0.0005 ppm | 0.0193 ppm | 0.0064 ppm | 0.0000 ppm | 24.0319 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0090 ppm | -0.0006 ppm | 0.0201 ppm | 0.0063 ppm | 0.0000 ppm | 24.0876 ppm |
| Concentration RSD | 35.9 % | 55.3 % | 179.0 % | 4.0 % | 1.5 % | 184.6 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0006 ppm | -0.0001 ppm | 0.0062 ppm | 0.0302 ppm | 0.7551 ppm | 0.0024 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0004 ppm | 0.0000 ppm | 0.0059 ppm | 0.0310 ppm | 0.7689 ppm | 0.0025 ppm |
| Concentration per Run 2 | -0.0003 ppm | -0.0004 ppm | 0.0000 ppm | 0.0061 ppm | 0.0303 ppm | 0.7530 ppm | 0.0017 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0010 ppm | -0.0004 ppm | 0.0066 ppm | 0.0294 ppm | 0.7435 ppm | 0.0029 ppm |
| Concentration RSD | 79.8 % | 61.8 % | 232.9 % | 5.5 % | 2.5 % | 1.7 % | 24.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 7.4582 ppm | 0.0002 ppm | 0.0033 ppm | 11.1323 ppm | -0.0002 ppm | -0.0021 ppm | 0.0002 ppm |
| Concentration per Run 1 | 7.4661 ppm | 0.0002 ppm | 0.0041 ppm | 11.1650 ppm | -0.0001 ppm | -0.0006 ppm | 0.0005 ppm |
| Concentration per Run 2 | 7.4652 ppm | 0.0001 ppm | 0.0031 ppm | 11.1563 ppm | -0.0009 ppm | -0.0020 ppm | 0.0019 ppm |
| Concentration per Run 3 | 7.4435 ppm | 0.0002 ppm | 0.0028 ppm | 11.0758 ppm | 0.0003 ppm | -0.0037 ppm | -0.0018 ppm |
| Concentration RSD | 0.2 % | 42.8 % | 21.6 % | 0.4 % | 268.5 % | 74.6 % | 865.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | 8.9505 ppm | -0.0011 ppm | 0.0597 ppm | -0.0003 ppm | 0.0009 ppm | 0.0018 ppm |
| Concentration per Run 1 | -0.0008 ppm | 8.9562 ppm | -0.0021 ppm | 0.0596 ppm | 0.0003 ppm | 0.0024 ppm | 0.0016 ppm |
| Concentration per Run 2 | -0.0007 ppm | 8.9371 ppm | 0.0000 ppm | 0.0597 ppm | -0.0008 ppm | 0.0013 ppm | 0.0021 ppm |
| Concentration per Run 3 | -0.0013 ppm | 8.9582 ppm | -0.0013 ppm | 0.0597 ppm | -0.0003 ppm | -0.0009 ppm | 0.0017 ppm |
| Concentration RSD | 36.8 % | 0.1 % | 93.7 % | 0.1 % | 208.0 % | 186.7 % | 13.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 104.4632 % | 99.4305 % | 99.7680 % | 102.9060 % | 96.6086 % | 97.8746 % |
| Concentration per Run 1 | 0.0010 ppm | 104.4206 % | 99.7278 % | 99.9534 % | 102.9543 % | 96.9342 % | 97.6619 % |
| Concentration per Run 2 | 0.0015 ppm | 105.3124 % | 99.6620 % | 99.9901 % | 103.6440 % | 96.7587 % | 98.3571 % |
| Concentration per Run 3 | 0.0012 ppm | 103.6565 % | 98.9017 % | 99.3605 % | 102.1197 % | 96.1330 % | 97.6050 % |
| Concentration RSD | 21.0 % | 0.8 % | 0.5 % | 0.4 % | 0.7 % | 0.4 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512197-01 WG2037645
Analysis started at: 3/11/2025 6:08:24 PM
Rack 2
Vial 23
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0345 ppm | 0.0002 ppm | 0.0069 ppm | 0.3979 ppm | 0.0001 ppm | 37.0417 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.0356 ppm | 0.0018 ppm | 0.0066 ppm | 0.3989 ppm | 0.0001 ppm | 37.1620 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0299 ppm | -0.0012 ppm | 0.0068 ppm | 0.3993 ppm | 0.0002 ppm | 37.0210 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0381 ppm | 0.0001 ppm | 0.0071 ppm | 0.3956 ppm | 0.0002 ppm | 36.9421 ppm |
| Concentration RSD | 50.0 % | 12.1 % | 640.5 % | 3.7 % | 0.5 % | 20.2 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0092 ppm | 0.0003 ppm | 0.0140 ppm | 0.1744 ppm | 5.3141 ppm | 0.0087 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0096 ppm | 0.0003 ppm | 0.0142 ppm | 0.1725 ppm | 5.3346 ppm | 0.0096 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0086 ppm | 0.0002 ppm | 0.0137 ppm | 0.1751 ppm | 5.2913 ppm | 0.0085 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0094 ppm | 0.0004 ppm | 0.0141 ppm | 0.1757 ppm | 5.3166 ppm | 0.0079 ppm |
| Concentration RSD | 13.0 % | 5.8 % | 29.5 % | 1.8 % | 1.0 % | 0.4 % | 10.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.2841 ppm | 0.0581 ppm | 0.0000 ppm | 68.9944 ppm | 0.0180 ppm | -0.0005 ppm | -0.0011 ppm |
| Concentration per Run 1 | 8.2672 ppm | 0.0583 ppm | 0.0003 ppm | 69.2957 ppm | 0.0170 ppm | -0.0005 ppm | -0.0004 ppm |
| Concentration per Run 2 | 8.3156 ppm | 0.0580 ppm | 0.0000 ppm | 69.1080 ppm | 0.0186 ppm | -0.0013 ppm | -0.0057 ppm |
| Concentration per Run 3 | 8.2695 ppm | 0.0579 ppm | -0.0004 ppm | 68.5793 ppm | 0.0184 ppm | 0.0004 ppm | 0.0029 ppm |
| Concentration RSD | 0.3 % | 0.4 % | 5,662.2 % | 0.5 % | 4.6 % | 180.6 % | 400.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 13.8473 ppm | -0.0012 ppm | 0.7074 ppm | -0.0002 ppm | 0.0017 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | 13.8168 ppm | -0.0015 ppm | 0.7090 ppm | -0.0001 ppm | 0.0012 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0009 ppm | 13.8695 ppm | -0.0016 ppm | 0.7088 ppm | -0.0003 ppm | 0.0024 ppm | 0.0002 ppm |
| Concentration per Run 3 | -0.0011 ppm | 13.8556 ppm | -0.0003 ppm | 0.7042 ppm | -0.0001 ppm | 0.0014 ppm | -0.0002 ppm |
| Concentration RSD | 1,560.6 % | 0.2 % | 61.3 % | 0.4 % | 82.3 % | 38.1 % | 392.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0311 ppm | 104.6446 % | 98.8600 % | 98.8872 % | 103.0425 % | 95.8238 % | 96.8453 % |
| Concentration per Run 1 | 0.0311 ppm | 104.8151 % | 98.5005 % | 98.7097 % | 103.3585 % | 95.5726 % | 97.0765 % |
| Concentration per Run 2 | 0.0313 ppm | 104.3838 % | 98.7078 % | 99.0552 % | 102.3950 % | 95.5176 % | 96.9762 % |
| Concentration per Run 3 | 0.0309 ppm | 104.7350 % | 99.3716 % | 98.8966 % | 103.3739 % | 96.3812 % | 96.4831 % |
| Concentration RSD | 0.7 % | 0.2 % | 0.5 % | 0.2 % | 0.5 % | 0.5 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512197-02 WG2037645
Analysis started at: 3/11/2025 6:11:53 PM
Rack 2
Vial 24
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0115 ppm | 0.0003 ppm | 0.0065 ppm | 0.3919 ppm | 0.0001 ppm | 36.5440 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.0066 ppm | 0.0005 ppm | 0.0059 ppm | 0.3903 ppm | 0.0001 ppm | 36.3623 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0122 ppm | 0.0013 ppm | 0.0065 ppm | 0.3939 ppm | 0.0001 ppm | 36.6415 ppm |
| Concentration per Run 3 | 0.0013 ppm | 0.0158 ppm | -0.0009 ppm | 0.0069 ppm | 0.3916 ppm | 0.0001 ppm | 36.6284 ppm |
| Concentration RSD | 70.3 % | 40.4 % | 377.1 % | 7.8 % | 0.5 % | 2.7 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0090 ppm | -0.0001 ppm | 0.0101 ppm | 0.1577 ppm | 5.2697 ppm | 0.0088 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0093 ppm | 0.0000 ppm | 0.0106 ppm | 0.1567 ppm | 5.2863 ppm | 0.0087 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0090 ppm | -0.0001 ppm | 0.0101 ppm | 0.1580 ppm | 5.2899 ppm | 0.0092 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0086 ppm | -0.0002 ppm | 0.0097 ppm | 0.1583 ppm | 5.2329 ppm | 0.0084 ppm |
| Concentration RSD | 45.3 % | 4.1 % | 87.4 % | 4.3 % | 0.5 % | 0.6 % | 4.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.2024 ppm | 0.0574 ppm | -0.0003 ppm | 68.3548 ppm | 0.0176 ppm | -0.0001 ppm | -0.0002 ppm |
| Concentration per Run 1 | 8.2352 ppm | 0.0570 ppm | -0.0006 ppm | 68.3337 ppm | 0.0178 ppm | -0.0003 ppm | 0.0000 ppm |
| Concentration per Run 2 | 8.2042 ppm | 0.0577 ppm | 0.0003 ppm | 68.4282 ppm | 0.0171 ppm | -0.0013 ppm | 0.0032 ppm |
| Concentration per Run 3 | 8.1677 ppm | 0.0575 ppm | -0.0005 ppm | 68.3027 ppm | 0.0179 ppm | 0.0012 ppm | -0.0037 ppm |
| Concentration RSD | 0.4 % | 0.6 % | 188.7 % | 0.1 % | 2.4 % | 893.0 % | 2,202.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 13.7185 ppm | -0.0007 ppm | 0.7003 ppm | -0.0004 ppm | 0.0016 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0005 ppm | 13.7440 ppm | -0.0005 ppm | 0.6990 ppm | -0.0004 ppm | 0.0007 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0008 ppm | 13.7328 ppm | -0.0009 ppm | 0.7019 ppm | -0.0004 ppm | 0.0026 ppm | 0.0006 ppm |
| Concentration per Run 3 | -0.0009 ppm | 13.6789 ppm | -0.0007 ppm | 0.7000 ppm | -0.0005 ppm | 0.0016 ppm | 0.0001 ppm |
| Concentration RSD | 716.2 % | 0.3 % | 24.9 % | 0.2 % | 15.3 % | 58.6 % | 171.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0282 ppm | 104.3354 % | 99.0261 % | 99.0185 % | 102.6145 % | 96.1715 % | 96.7368 % |
| Concentration per Run 1 | 0.0280 ppm | 105.3091 % | 99.3791 % | 98.5861 % | 103.6025 % | 96.6336 % | 96.5973 % |
| Concentration per Run 2 | 0.0283 ppm | 103.5099 % | 98.6931 % | 98.9610 % | 101.9069 % | 95.7589 % | 96.8313 % |
| Concentration per Run 3 | 0.0284 ppm | 104.1871 % | 99.0062 % | 99.5083 % | 102.3340 % | 96.1220 % | 96.7818 % |
| Concentration RSD | 0.8 % | 0.9 % | 0.3 % | 0.5 % | 0.9 % | 0.5 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512085-01 WG2037645
Analysis started at: 3/11/2025 6:15:22 PM
Rack 2
Vial 15
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0066 ppm | 0.0014 ppm | 0.1243 ppm | 0.0019 ppm | 0.0000 ppm | 135.2649 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0061 ppm | -0.0010 ppm | 0.1238 ppm | 0.0018 ppm | 0.0000 ppm | 135.5103 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0026 ppm | 0.0023 ppm | 0.1233 ppm | 0.0019 ppm | 0.0000 ppm | 134.9675 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0112 ppm | 0.0030 ppm | 0.1260 ppm | 0.0019 ppm | 0.0000 ppm | 135.3168 ppm |
| Concentration RSD | 44.4 % | 65.2 % | 147.5 % | 1.2 % | 3.0 % | 250.9 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | -0.0003 ppm | -0.0001 ppm | 0.0109 ppm | 0.0081 ppm | 3.1887 ppm | 0.0019 ppm |
| Concentration per Run 1 | -0.0008 ppm | -0.0004 ppm | -0.0001 ppm | 0.0113 ppm | 0.0098 ppm | 3.2114 ppm | 0.0021 ppm |
| Concentration per Run 2 | -0.0006 ppm | -0.0006 ppm | -0.0003 ppm | 0.0108 ppm | 0.0072 ppm | 3.1973 ppm | 0.0021 ppm |
| Concentration per Run 3 | -0.0005 ppm | 0.0000 ppm | 0.0001 ppm | 0.0107 ppm | 0.0073 ppm | 3.1575 ppm | 0.0016 ppm |
| Concentration RSD | 17.3 % | 89.8 % | 237.6 % | 2.9 % | 18.4 % | 0.9 % | 13.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 28.5070 ppm | 0.0003 ppm | -0.0003 ppm | 97.8342 ppm | 0.0022 ppm | -0.0011 ppm | -0.0006 ppm |
| Concentration per Run 1 | 28.6628 ppm | 0.0004 ppm | -0.0004 ppm | 97.7218 ppm | 0.0019 ppm | 0.0004 ppm | -0.0021 ppm |
| Concentration per Run 2 | 28.4512 ppm | 0.0002 ppm | -0.0001 ppm | 97.7606 ppm | 0.0021 ppm | -0.0017 ppm | -0.0008 ppm |
| Concentration per Run 3 | 28.4071 ppm | 0.0003 ppm | -0.0004 ppm | 98.0201 ppm | 0.0025 ppm | -0.0020 ppm | 0.0010 ppm |
| Concentration RSD | 0.5 % | 29.6 % | 47.6 % | 0.2 % | 12.2 % | 121.3 % | 251.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 10.9626 ppm | 0.0002 ppm | 0.5069 ppm | 0.0004 ppm | 0.0025 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.0011 ppm | 10.9718 ppm | -0.0004 ppm | 0.5059 ppm | 0.0003 ppm | 0.0029 ppm | 0.0006 ppm |
| Concentration per Run 2 | -0.0019 ppm | 10.9745 ppm | -0.0004 ppm | 0.5072 ppm | 0.0003 ppm | 0.0023 ppm | 0.0014 ppm |
| Concentration per Run 3 | 0.0028 ppm | 10.9413 ppm | 0.0012 ppm | 0.5077 ppm | 0.0008 ppm | 0.0023 ppm | 0.0009 ppm |
| Concentration RSD | 367.2 % | 0.2 % | 583.8 % | 0.2 % | 66.4 % | 15.0 % | 39.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0042 ppm | 103.6986 % | 97.7882 % | 97.2179 % | 102.1092 % | 95.0325 % | 94.7186 % |
| Concentration per Run 1 | 0.0039 ppm | 103.7024 % | 97.6501 % | 97.4908 % | 102.3477 % | 95.1016 % | 94.7181 % |
| Concentration per Run 2 | 0.0045 ppm | 103.6768 % | 97.8144 % | 97.1555 % | 101.8805 % | 95.0458 % | 94.8360 % |
| Concentration per Run 3 | 0.0041 ppm | 103.7166 % | 97.9001 % | 97.0075 % | 102.0995 % | 94.9502 % | 94.6017 % |
| Concentration RSD | 7.3 % | 0.0 % | 0.1 % | 0.3 % | 0.2 % | 0.1 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2037645-7 WG2037645
Analysis started at: 3/11/2025 6:18:51 PM
Rack 2
Vial 16
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0495 ppm | 1.9741 ppm | 0.1238 ppm | 1.1065 ppm | 1.9010 ppm | 0.0502 ppm | 145.5063 ppm |
| Concentration per Run 1 | 0.0495 ppm | 1.9601 ppm | 0.1255 ppm | 1.1077 ppm | 1.9006 ppm | 0.0501 ppm | 145.1392 ppm |
| Concentration per Run 2 | 0.0489 ppm | 1.9756 ppm | 0.1218 ppm | 1.1053 ppm | 1.9052 ppm | 0.0502 ppm | 145.9650 ppm |
| Concentration per Run 3 | 0.0501 ppm | 1.9865 ppm | 0.1240 ppm | 1.1064 ppm | 1.8972 ppm | 0.0505 ppm | 145.4148 ppm |
| Concentration RSD | 1.2 % | 0.7 % | 1.5 % | 0.1 % | 0.2 % | 0.4 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0473 ppm | 0.4599 ppm | 0.1868 ppm | 0.2562 ppm | 1.0099 ppm | 14.2376 ppm | 0.0023 ppm |
| Concentration per Run 1 | 0.0474 ppm | 0.4596 ppm | 0.1864 ppm | 0.2543 ppm | 1.0112 ppm | 14.2278 ppm | 0.0032 ppm |
| Concentration per Run 2 | 0.0474 ppm | 0.4604 ppm | 0.1871 ppm | 0.2571 ppm | 1.0126 ppm | 14.1916 ppm | 0.0016 ppm |
| Concentration per Run 3 | 0.0472 ppm | 0.4598 ppm | 0.1868 ppm | 0.2571 ppm | 1.0058 ppm | 14.2933 ppm | 0.0020 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 0.2 % | 0.6 % | 0.4 % | 0.4 % | 36.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 38.2502 ppm | 0.4869 ppm | 0.9469 ppm | 109.1843 ppm | 0.4640 ppm | 0.5174 ppm | 0.3945 ppm |
| Concentration per Run 1 | 38.3195 ppm | 0.4874 ppm | 0.9419 ppm | 108.9294 ppm | 0.4655 ppm | 0.5169 ppm | 0.3893 ppm |
| Concentration per Run 2 | 38.2837 ppm | 0.4857 ppm | 0.9464 ppm | 108.8278 ppm | 0.4634 ppm | 0.5160 ppm | 0.3933 ppm |
| Concentration per Run 3 | 38.1475 ppm | 0.4878 ppm | 0.9523 ppm | 109.7956 ppm | 0.4631 ppm | 0.5194 ppm | 0.4010 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 0.6 % | 0.5 % | 0.3 % | 0.3 % | 1.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1256 ppm | 12.2624 ppm | 0.9360 ppm | 1.5010 ppm | 0.9771 ppm | 0.1219 ppm | 0.4820 ppm |
| Concentration per Run 1 | 0.1244 ppm | 12.2736 ppm | 0.9344 ppm | 1.5015 ppm | 0.9780 ppm | 0.1203 ppm | 0.4814 ppm |
| Concentration per Run 2 | 0.1252 ppm | 12.2575 ppm | 0.9360 ppm | 1.5037 ppm | 0.9777 ppm | 0.1214 ppm | 0.4820 ppm |
| Concentration per Run 3 | 0.1273 ppm | 12.2561 ppm | 0.9376 ppm | 1.4980 ppm | 0.9758 ppm | 0.1241 ppm | 0.4824 ppm |
| Concentration RSD | 1.2 % | 0.1 % | 0.2 % | 0.2 % | 0.1 % | 1.6 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4673 ppm | 103.9463 % | 97.3148 % | 96.9638 % | 101.7659 % | 94.5673 % | 94.0663 % |
| Concentration per Run 1 | 0.4669 ppm | 104.3536 % | 97.4193 % | 97.0937 % | 102.3324 % | 94.2596 % | 94.4431 % |
| Concentration per Run 2 | 0.4680 ppm | 103.4025 % | 97.3755 % | 97.1716 % | 100.8879 % | 94.8904 % | 93.3760 % |
| Concentration per Run 3 | 0.4669 ppm | 104.0829 % | 97.1497 % | 96.6261 % | 102.0773 % | 94.5520 % | 94.3797 % |
| Concentration RSD | 0.1 % | 0.5 % | 0.1 % | 0.3 % | 0.8 % | 0.3 % | 0.6 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2037645-8 WG2037645
Analysis started at: 3/11/2025 6:22:19 PM
Rack 2
Vial 17
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0045 ppm | 0.0002 ppm | 0.1268 ppm | 0.0023 ppm | 0.0000 ppm | 136.5829 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0105 ppm | 0.0016 ppm | 0.1283 ppm | 0.0022 ppm | 0.0000 ppm | 136.2806 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0042 ppm | -0.0004 ppm | 0.1260 ppm | 0.0025 ppm | 0.0000 ppm | 136.5910 ppm |
| Concentration per Run 3 | 0.0004 ppm | -0.0011 ppm | -0.0005 ppm | 0.1262 ppm | 0.0023 ppm | 0.0000 ppm | 136.8773 ppm |
| Concentration RSD | 78.5 % | 128.2 % | 497.5 % | 1.0 % | 6.5 % | 35.5 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | -0.0001 ppm | 0.0004 ppm | 0.0111 ppm | 0.0064 ppm | 3.2243 ppm | 0.0021 ppm |
| Concentration per Run 1 | -0.0006 ppm | 0.0006 ppm | 0.0003 ppm | 0.0108 ppm | 0.0070 ppm | 3.2478 ppm | 0.0027 ppm |
| Concentration per Run 2 | -0.0006 ppm | -0.0008 ppm | 0.0008 ppm | 0.0114 ppm | 0.0043 ppm | 3.2261 ppm | 0.0014 ppm |
| Concentration per Run 3 | -0.0005 ppm | -0.0002 ppm | 0.0002 ppm | 0.0111 ppm | 0.0080 ppm | 3.1991 ppm | 0.0022 ppm |
| Concentration RSD | 8.5 % | 542.6 % | 70.9 % | 2.9 % | 29.9 % | 0.8 % | 30.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 28.7701 ppm | 0.0003 ppm | 0.0048 ppm | 98.7013 ppm | 0.0013 ppm | -0.0012 ppm | 0.0090 ppm |
| Concentration per Run 1 | 28.8129 ppm | 0.0004 ppm | 0.0048 ppm | 97.9493 ppm | 0.0009 ppm | -0.0014 ppm | 0.0083 ppm |
| Concentration per Run 2 | 28.7779 ppm | 0.0005 ppm | 0.0045 ppm | 99.7995 ppm | 0.0019 ppm | 0.0002 ppm | 0.0113 ppm |
| Concentration per Run 3 | 28.7196 ppm | 0.0001 ppm | 0.0049 ppm | 98.3553 ppm | 0.0012 ppm | -0.0025 ppm | 0.0074 ppm |
| Concentration RSD | 0.2 % | 67.5 % | 3.9 % | 1.0 % | 38.9 % | 113.1 % | 22.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 11.1058 ppm | 0.0042 ppm | 0.5099 ppm | 0.0007 ppm | 0.0015 ppm | 0.0011 ppm |
| Concentration per Run 1 | -0.0005 ppm | 11.1219 ppm | 0.0043 ppm | 0.5099 ppm | 0.0008 ppm | 0.0015 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0006 ppm | 11.0997 ppm | 0.0034 ppm | 0.5112 ppm | 0.0006 ppm | 0.0014 ppm | 0.0012 ppm |
| Concentration per Run 3 | 0.0018 ppm | 11.0958 ppm | 0.0048 ppm | 0.5087 ppm | 0.0008 ppm | 0.0016 ppm | 0.0009 ppm |
| Concentration RSD | 174.6 % | 0.1 % | 17.5 % | 0.2 % | 19.3 % | 6.5 % | 12.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0047 ppm | 103.7023 % | 97.5519 % | 97.6935 % | 102.3144 % | 95.0136 % | 95.3247 % |
| Concentration per Run 1 | 0.0047 ppm | 104.1396 % | 97.9418 % | 97.9687 % | 102.7426 % | 95.0745 % | 95.5746 % |
| Concentration per Run 2 | 0.0049 ppm | 103.6006 % | 96.9122 % | 97.4746 % | 102.1432 % | 94.6270 % | 95.1281 % |
| Concentration per Run 3 | 0.0045 ppm | 103.3666 % | 97.8018 % | 97.6371 % | 102.0574 % | 95.3393 % | 95.2713 % |
| Concentration RSD | 4.5 % | 0.4 % | 0.6 % | 0.3 % | 0.4 % | 0.4 % | 0.2 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2037645-9 WG2037645
Analysis started at: 3/11/2025 6:25:48 PM
Rack 2
Vial 18
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0442 ppm | 1.9650 ppm | 0.1254 ppm | 1.0882 ppm | 1.8965 ppm | 0.0505 ppm | 140.3380 ppm |
| Concentration per Run 1 | 0.0589 ppm | 1.9647 ppm | 0.1243 ppm | 1.0863 ppm | 1.8969 ppm | 0.0506 ppm | 139.9026 ppm |
| Concentration per Run 2 | 0.0517 ppm | 1.9539 ppm | 0.1265 ppm | 1.0908 ppm | 1.8973 ppm | 0.0506 ppm | 140.6720 ppm |
| Concentration per Run 3 | 0.0220 ppm | 1.9764 ppm | 0.1254 ppm | 1.0875 ppm | 1.8953 ppm | 0.0503 ppm | 140.4395 ppm |
| Concentration RSD | 44.3 % | 0.6 % | 0.9 % | 0.2 % | 0.1 % | 0.3 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0479 ppm | 0.4630 ppm | 0.1877 ppm | 0.2560 ppm | 1.0051 ppm | 14.0384 ppm | 0.0027 ppm |
| Concentration per Run 1 | 0.0477 ppm | 0.4624 ppm | 0.1869 ppm | 0.2559 ppm | 0.9980 ppm | 14.0731 ppm | 0.0034 ppm |
| Concentration per Run 2 | 0.0480 ppm | 0.4632 ppm | 0.1884 ppm | 0.2548 ppm | 1.0130 ppm | 14.0222 ppm | 0.0026 ppm |
| Concentration per Run 3 | 0.0479 ppm | 0.4634 ppm | 0.1876 ppm | 0.2574 ppm | 1.0043 ppm | 14.0198 ppm | 0.0020 ppm |
| Concentration RSD | 0.3 % | 0.1 % | 0.4 % | 0.5 % | 0.8 % | 0.2 % | 25.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 37.1089 ppm | 0.4897 ppm | 0.9390 ppm | 105.0597 ppm | 0.4684 ppm | 0.5316 ppm | 0.3496 ppm |
| Concentration per Run 1 | 37.0802 ppm | 0.4908 ppm | 0.9294 ppm | 105.4453 ppm | 0.4694 ppm | 0.5326 ppm | 0.3385 ppm |
| Concentration per Run 2 | 37.0998 ppm | 0.4893 ppm | 0.9384 ppm | 104.5957 ppm | 0.4700 ppm | 0.5318 ppm | 0.3508 ppm |
| Concentration per Run 3 | 37.1468 ppm | 0.4890 ppm | 0.9494 ppm | 105.1382 ppm | 0.4656 ppm | 0.5305 ppm | 0.3597 ppm |
| Concentration RSD | 0.1 % | 0.2 % | 1.1 % | 0.4 % | 0.5 % | 0.2 % | 3.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1262 ppm | 11.4037 ppm | 0.9336 ppm | 1.4664 ppm | 0.9643 ppm | 0.1242 ppm | 0.4839 ppm |
| Concentration per Run 1 | 0.1275 ppm | 11.3998 ppm | 0.9335 ppm | 1.4685 ppm | 0.9635 ppm | 0.1220 ppm | 0.4834 ppm |
| Concentration per Run 2 | 0.1243 ppm | 11.4191 ppm | 0.9316 ppm | 1.4674 ppm | 0.9659 ppm | 0.1274 ppm | 0.4836 ppm |
| Concentration per Run 3 | 0.1267 ppm | 11.3923 ppm | 0.9357 ppm | 1.4633 ppm | 0.9636 ppm | 0.1231 ppm | 0.4848 ppm |
| Concentration RSD | 1.3 % | 0.1 % | 0.2 % | 0.2 % | 0.1 % | 2.3 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4722 ppm | 104.3136 % | 97.5623 % | 97.9734 % | 102.0889 % | 94.4694 % | 94.8952 % |
| Concentration per Run 1 | 0.4723 ppm | 103.9272 % | 97.7758 % | 98.1062 % | 101.4855 % | 94.8290 % | 95.1774 % |
| Concentration per Run 2 | 0.4729 ppm | 104.8912 % | 97.5364 % | 97.9816 % | 102.6046 % | 94.2774 % | 94.6211 % |
| Concentration per Run 3 | 0.4715 ppm | 104.1224 % | 97.3747 % | 97.8324 % | 102.1765 % | 94.3017 % | 94.8872 % |
| Concentration RSD | 0.2 % | 0.5 % | 0.2 % | 0.1 % | 0.6 % | 0.3 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2037645-10d5 WG2037645
Analysis started at: 3/11/2025 6:29:16 PM
Rack 2
Vial 19
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 0.0081 ppm | 0.0008 ppm | 0.0260 ppm | 0.0005 ppm | 0.0000 ppm | 27.6575 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0050 ppm | -0.0002 ppm | 0.0253 ppm | 0.0004 ppm | 0.0000 ppm | 27.6556 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0109 ppm | 0.0017 ppm | 0.0269 ppm | 0.0005 ppm | 0.0000 ppm | 27.6372 ppm |
| Concentration per Run 3 | 0.0013 ppm | 0.0085 ppm | 0.0008 ppm | 0.0258 ppm | 0.0005 ppm | 0.0000 ppm | 27.6796 ppm |
| Concentration RSD | 11.5 % | 36.1 % | 118.3 % | 3.1 % | 12.1 % | 2,939.7 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0000 ppm | 0.0001 ppm | 0.0021 ppm | 0.0030 ppm | 0.6679 ppm | 0.0013 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0001 ppm | 0.0001 ppm | 0.0024 ppm | 0.0023 ppm | 0.6721 ppm | 0.0008 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0003 ppm | 0.0005 ppm | 0.0020 ppm | 0.0017 ppm | 0.6634 ppm | 0.0010 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0002 ppm | -0.0004 ppm | 0.0021 ppm | 0.0050 ppm | 0.6683 ppm | 0.0020 ppm |
| Concentration RSD | 60.1 % | 4,196.9 % | 534.0 % | 11.1 % | 58.8 % | 0.7 % | 50.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.8594 ppm | -0.0001 ppm | 0.0054 ppm | 19.6982 ppm | -0.0004 ppm | -0.0020 ppm | 0.0139 ppm |
| Concentration per Run 1 | 5.8476 ppm | 0.0001 ppm | 0.0055 ppm | 19.6610 ppm | 0.0006 ppm | -0.0020 ppm | 0.0147 ppm |
| Concentration per Run 2 | 5.8668 ppm | -0.0001 ppm | 0.0059 ppm | 19.8222 ppm | -0.0009 ppm | -0.0028 ppm | 0.0134 ppm |
| Concentration per Run 3 | 5.8637 ppm | -0.0004 ppm | 0.0049 ppm | 19.6113 ppm | -0.0008 ppm | -0.0011 ppm | 0.0138 ppm |
| Concentration RSD | 0.2 % | 225.4 % | 9.0 % | 0.6 % | 226.0 % | 44.3 % | 4.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0014 ppm | 2.1555 ppm | 0.0137 ppm | 0.1015 ppm | 0.0004 ppm | 0.0014 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0006 ppm | 2.1551 ppm | 0.0150 ppm | 0.1013 ppm | 0.0002 ppm | -0.0017 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0026 ppm | 2.1561 ppm | 0.0135 ppm | 0.1015 ppm | 0.0008 ppm | 0.0012 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0010 ppm | 2.1552 ppm | 0.0126 ppm | 0.1017 ppm | 0.0002 ppm | 0.0047 ppm | -0.0001 ppm |
| Concentration RSD | 72.5 % | 0.0 % | 8.9 % | 0.2 % | 77.4 % | 225.9 % | 145.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 104.0369 % | 98.7142 % | 99.3885 % | 102.0609 % | 96.1412 % | 97.2792 % |
| Concentration per Run 1 | 0.0008 ppm | 104.3991 % | 98.3020 % | 99.6317 % | 102.5234 % | 96.1148 % | 97.4036 % |
| Concentration per Run 2 | 0.0007 ppm | 103.6816 % | 98.9585 % | 99.4352 % | 101.6208 % | 96.3627 % | 97.2052 % |
| Concentration per Run 3 | 0.0008 ppm | 104.0302 % | 98.8819 % | 99.0984 % | 102.0385 % | 95.9461 % | 97.2289 % |
| Concentration RSD | 5.4 % | 0.3 % | 0.4 % | 0.3 % | 0.4 % | 0.2 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCV
Analysis started at: 3/11/2025 6:32:45 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4690 ppm | 0.4811 ppm | 0.4939 ppm | 0.4781 ppm | 0.4704 ppm | 0.5057 ppm | 0.4847 ppm |
| Concentration per Run 1 | 0.4711 ppm | 0.4755 ppm | 0.4961 ppm | 0.4767 ppm | 0.4735 ppm | 0.5072 ppm | 0.4763 ppm |
| Concentration per Run 2 | 0.4661 ppm | 0.4767 ppm | 0.4920 ppm | 0.4781 ppm | 0.4671 ppm | 0.5041 ppm | 0.4906 ppm |
| Concentration per Run 3 | 0.4698 ppm | 0.4910 ppm | 0.4936 ppm | 0.4795 ppm | 0.4706 ppm | 0.5059 ppm | 0.4871 ppm |
| Recovery Percentage 1 | 93.798 % | 96.212 % | 98.779 % | 95.618 % | 94.076 % | 101.147 % | 96.936 % |
| Concentration RSD | 0.5 % | 1.8 % | 0.4 % | 0.3 % | 0.7 % | 0.3 % | 1.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4768 ppm | 0.4895 ppm | 0.4792 ppm | 0.4604 ppm | 0.5043 ppm | 5.2049 ppm | 0.5182 ppm |
| Concentration per Run 1 | 0.4766 ppm | 0.4871 ppm | 0.4805 ppm | 0.4575 ppm | 0.5049 ppm | 5.2317 ppm | 0.5212 ppm |
| Concentration per Run 2 | 0.4769 ppm | 0.4907 ppm | 0.4777 ppm | 0.4624 ppm | 0.5080 ppm | 5.1802 ppm | 0.5165 ppm |
| Concentration per Run 3 | 0.4769 ppm | 0.4907 ppm | 0.4794 ppm | 0.4612 ppm | 0.5000 ppm | 5.2028 ppm | 0.5168 ppm |
| Recovery Percentage 1 | 95.357 % | 97.906 % | 95.841 % | 92.073 % | 100.859 % | 104.099 % | 103.632 % |
| Concentration RSD | 0.0 % | 0.4 % | 0.3 % | 0.6 % | 0.8 % | 0.5 % | 0.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4673 ppm | 0.4904 ppm | 0.4826 ppm | 10.2034 ppm | 0.4912 ppm | 0.4922 ppm | 0.4956 ppm |
| Concentration per Run 1 | 0.4676 ppm | 0.4888 ppm | 0.4801 ppm | 10.2584 ppm | 0.4926 ppm | 0.4915 ppm | 0.4968 ppm |
| Concentration per Run 2 | 0.4646 ppm | 0.4913 ppm | 0.4823 ppm | 10.1352 ppm | 0.4907 ppm | 0.4943 ppm | 0.4953 ppm |
| Concentration per Run 3 | 0.4698 ppm | 0.4911 ppm | 0.4854 ppm | 10.2164 ppm | 0.4904 ppm | 0.4907 ppm | 0.4946 ppm |
| Recovery Percentage 1 | 93.465 % | 98.089 % | 96.524 % | 102.034 % | 98.248 % | 98.433 % | 99.115 % |
| Concentration RSD | 0.6 % | 0.3 % | 0.5 % | 0.6 % | 0.2 % | 0.4 % | 0.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4955 ppm | 5.4063 ppm | 0.5025 ppm | 0.4914 ppm | 0.4778 ppm | 0.4785 ppm | 0.4755 ppm |
| Concentration per Run 1 | 0.4960 ppm | 5.3857 ppm | 0.5003 ppm | 0.4924 ppm | 0.4793 ppm | 0.4770 ppm | 0.4748 ppm |
| Concentration per Run 2 | 0.4952 ppm | 5.3964 ppm | 0.4994 ppm | 0.4907 ppm | 0.4751 ppm | 0.4813 ppm | 0.4756 ppm |
| Concentration per Run 3 | 0.4954 ppm | 5.4367 ppm | 0.5079 ppm | 0.4910 ppm | 0.4789 ppm | 0.4773 ppm | 0.4763 ppm |
| Recovery Percentage 1 | 99.105 % | 102.977 % | 100.499 % | 98.278 % | 95.557 % | 95.708 % | 95.106 % |
| Concentration RSD | 0.1 % | 0.5 % | 0.9 % | 0.2 % | 0.5 % | 0.5 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4875 ppm | 104.6274 % | 99.6446 % | 100.1268 % | 102.6495 % | 96.7139 % | 97.5431 % |
| Concentration per Run 1 | 0.4889 ppm | 104.7099 % | 99.5002 % | 99.5558 % | 102.7639 % | 96.2419 % | 97.4577 % |
| Concentration per Run 2 | 0.4880 ppm | 104.5879 % | 99.8100 % | 99.9320 % | 102.9013 % | 97.1050 % | 97.3255 % |
| Concentration per Run 3 | 0.4857 ppm | 104.5844 % | 99.6235 % | 100.8926 % | 102.2832 % | 96.7948 % | 97.8460 % |
| Recovery Percentage 1 | 97.510 % | | | | | | |
| Concentration RSD | 0.3 % | 0.1 % | 0.2 % | 0.7 % | 0.3 % | 0.5 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCB
Analysis started at: 3/11/2025 6:36:13 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0015 ppm | 0.0006 ppm | 0.0013 ppm | 0.0000 ppm | 0.0000 ppm | 0.0027 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0052 ppm | 0.0030 ppm | 0.0011 ppm | 0.0000 ppm | 0.0001 ppm | 0.0028 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0012 ppm | -0.0008 ppm | 0.0003 ppm | -0.0001 ppm | 0.0000 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0008 ppm | -0.0019 ppm | -0.0002 ppm | 0.0024 ppm | 0.0003 ppm | 0.0000 ppm | 0.0043 ppm |
| Recovery Percentage 1 | 10.941 % | 1.522 % | 12.629 % | 4.238 % | 0.399 % | 0.929 % | 2.676 % |
| Concentration RSD | 26.9 % | 233.9 % | 322.6 % | 83.7 % | 494.7 % | 61.5 % | 62.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0002 ppm | 0.0001 ppm | 0.0001 ppm | 0.0005 ppm | 0.0302 ppm | 0.0012 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0000 ppm | 0.0003 ppm | 0.0003 ppm | 0.0025 ppm | 0.0276 ppm | 0.0011 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0003 ppm | 0.0003 ppm | 0.0005 ppm | 0.0002 ppm | 0.0176 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0008 ppm | -0.0002 ppm | -0.0006 ppm | -0.0011 ppm | 0.0454 ppm | 0.0016 ppm |
| Recovery Percentage 1 | -0.081 % | -0.834 % | 1.439 % | 0.890 % | 1.025 % | 1.209 % | 24.007 % |
| Concentration RSD | 3,850.1 % | 344.3 % | 188.4 % | 678.6 % | 353.3 % | 46.6 % | 31.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0040 ppm | 0.0000 ppm | 0.0023 ppm | 0.0259 ppm | -0.0010 ppm | -0.0022 ppm | 0.0032 ppm |
| Concentration per Run 1 | -0.0063 ppm | 0.0000 ppm | 0.0022 ppm | 0.0253 ppm | -0.0003 ppm | -0.0029 ppm | 0.0035 ppm |
| Concentration per Run 2 | -0.0037 ppm | 0.0001 ppm | 0.0023 ppm | 0.0273 ppm | -0.0021 ppm | -0.0028 ppm | 0.0026 ppm |
| Concentration per Run 3 | -0.0020 ppm | 0.0000 ppm | 0.0024 ppm | 0.0249 ppm | -0.0006 ppm | -0.0008 ppm | 0.0035 ppm |
| Recovery Percentage 1 | -3.996 % | 0.012 % | 4.637 % | 1.293 % | -4.034 % | -21.520 % | 6.380 % |
| Concentration RSD | 54.8 % | 5,312.4 % | 4.6 % | 5.0 % | 93.9 % | 56.2 % | 16.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0038 ppm | 0.0006 ppm | 0.0000 ppm | -0.0003 ppm | 0.0019 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0009 ppm | -0.0054 ppm | -0.0001 ppm | 0.0000 ppm | -0.0002 ppm | 0.0005 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0015 ppm | -0.0017 ppm | 0.0005 ppm | 0.0000 ppm | -0.0001 ppm | 0.0037 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0005 ppm | -0.0044 ppm | 0.0014 ppm | 0.0000 ppm | -0.0007 ppm | 0.0014 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 0.516 % | -0.764 % | 1.253 % | 0.011 % | -3.450 % | 9.306 % | -0.597 % |
| Concentration RSD | 2,438.4 % | 48.9 % | 123.5 % | 1,441.1 % | 98.2 % | 87.1 % | 300.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 102.1910 % | 97.7097 % | 98.5332 % | 102.5247 % | 96.7928 % | 98.1209 % |
| Concentration per Run 1 | -0.0007 ppm | 102.0564 % | 97.6166 % | 99.5471 % | 102.4122 % | 96.4602 % | 98.7189 % |
| Concentration per Run 2 | -0.0006 ppm | 102.3644 % | 97.4780 % | 98.2935 % | 102.6538 % | 96.6215 % | 98.0775 % |
| Concentration per Run 3 | -0.0008 ppm | 102.1522 % | 98.0344 % | 97.7592 % | 102.5081 % | 97.2968 % | 97.5661 % |
| Recovery Percentage 1 | -14.462 % | | | | | | |
| Concentration RSD | 15.1 % | 0.2 % | 0.3 % | 0.9 % | 0.1 % | 0.5 % | 0.6 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512197-03 WG2037645
Analysis started at: 3/11/2025 6:46:32 PM
Rack 2
Vial 25
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0101 ppm | -0.0002 ppm | 0.0047 ppm | 0.3966 ppm | 0.0002 ppm | 37.1798 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0041 ppm | 0.0011 ppm | 0.0038 ppm | 0.3970 ppm | 0.0002 ppm | 37.2955 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0158 ppm | -0.0017 ppm | 0.0053 ppm | 0.3946 ppm | 0.0002 ppm | 37.1740 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0104 ppm | -0.0001 ppm | 0.0050 ppm | 0.3981 ppm | 0.0002 ppm | 37.0699 ppm |
| Concentration RSD | 66.3 % | 58.1 % | 635.5 % | 16.1 % | 0.4 % | 2.8 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0092 ppm | 0.0001 ppm | 0.0216 ppm | 0.1568 ppm | 5.4017 ppm | 0.0088 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0092 ppm | -0.0003 ppm | 0.0220 ppm | 0.1568 ppm | 5.3992 ppm | 0.0089 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0095 ppm | 0.0002 ppm | 0.0219 ppm | 0.1581 ppm | 5.4012 ppm | 0.0088 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0088 ppm | 0.0004 ppm | 0.0210 ppm | 0.1555 ppm | 5.4047 ppm | 0.0086 ppm |
| Concentration RSD | 52.7 % | 3.9 % | 392.8 % | 2.5 % | 0.8 % | 0.1 % | 2.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.3570 ppm | 0.0614 ppm | 0.0003 ppm | 69.4241 ppm | 0.0187 ppm | 0.0010 ppm | 0.0019 ppm |
| Concentration per Run 1 | 8.3875 ppm | 0.0616 ppm | 0.0009 ppm | 69.2169 ppm | 0.0178 ppm | 0.0003 ppm | 0.0006 ppm |
| Concentration per Run 2 | 8.3158 ppm | 0.0617 ppm | -0.0001 ppm | 69.2091 ppm | 0.0183 ppm | 0.0015 ppm | 0.0030 ppm |
| Concentration per Run 3 | 8.3677 ppm | 0.0608 ppm | 0.0000 ppm | 69.8463 ppm | 0.0200 ppm | 0.0011 ppm | 0.0021 ppm |
| Concentration RSD | 0.4 % | 0.8 % | 208.7 % | 0.5 % | 6.3 % | 64.3 % | 65.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 13.9081 ppm | 0.0011 ppm | 0.7114 ppm | -0.0003 ppm | 0.0014 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0008 ppm | 13.9071 ppm | 0.0027 ppm | 0.7141 ppm | -0.0005 ppm | 0.0000 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0024 ppm | 13.9026 ppm | 0.0007 ppm | 0.7076 ppm | -0.0005 ppm | 0.0024 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0000 ppm | 13.9146 ppm | -0.0002 ppm | 0.7125 ppm | -0.0001 ppm | 0.0019 ppm | -0.0005 ppm |
| Concentration RSD | 111.6 % | 0.0 % | 139.0 % | 0.5 % | 67.9 % | 86.2 % | 130.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0338 ppm | 104.8823 % | 98.1496 % | 99.3918 % | 102.9597 % | 95.4275 % | 97.0630 % |
| Concentration per Run 1 | 0.0335 ppm | 105.5146 % | 97.5233 % | 99.5930 % | 104.0987 % | 94.9475 % | 97.0604 % |
| Concentration per Run 2 | 0.0340 ppm | 105.1518 % | 98.4122 % | 99.3233 % | 102.8884 % | 95.7205 % | 97.0101 % |
| Concentration per Run 3 | 0.0340 ppm | 103.9804 % | 98.5132 % | 99.2592 % | 101.8921 % | 95.6144 % | 97.1184 % |
| Concentration RSD | 0.8 % | 0.8 % | 0.6 % | 0.2 % | 1.1 % | 0.4 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512197-04 WG2037645
Analysis started at: 3/11/2025 6:50:07 PM
Rack 2
Vial 26
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 0.0125 ppm | 0.0536 ppm | 0.0000 ppm | 0.2867 ppm | 0.0000 ppm | 28.0490 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0115 ppm | 0.0542 ppm | -0.0011 ppm | 0.2854 ppm | 0.0000 ppm | 28.0025 ppm |
| Concentration per Run 2 | 0.0015 ppm | 0.0106 ppm | 0.0555 ppm | -0.0001 ppm | 0.2873 ppm | 0.0000 ppm | 28.0407 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0155 ppm | 0.0511 ppm | 0.0013 ppm | 0.2874 ppm | 0.0000 ppm | 28.1037 ppm |
| Concentration RSD | 18.1 % | 21.0 % | 4.2 % | 2,839.6 % | 0.4 % | 27.3 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0029 ppm | -0.0001 ppm | 0.0121 ppm | 0.0085 ppm | 5.5046 ppm | 0.0518 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0025 ppm | 0.0001 ppm | 0.0125 ppm | 0.0087 ppm | 5.5195 ppm | 0.0517 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0027 ppm | -0.0001 ppm | 0.0119 ppm | 0.0085 ppm | 5.5037 ppm | 0.0520 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0035 ppm | -0.0003 ppm | 0.0120 ppm | 0.0083 ppm | 5.4906 ppm | 0.0516 ppm |
| Concentration RSD | 196.2 % | 18.5 % | 159.1 % | 2.5 % | 1.9 % | 0.3 % | 0.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 7.7361 ppm | 0.0196 ppm | 0.0000 ppm | 72.6828 ppm | 0.0109 ppm | -0.0013 ppm | 0.0013 ppm |
| Concentration per Run 1 | 7.7615 ppm | 0.0196 ppm | -0.0003 ppm | 72.1916 ppm | 0.0107 ppm | -0.0025 ppm | 0.0025 ppm |
| Concentration per Run 2 | 7.7400 ppm | 0.0197 ppm | 0.0003 ppm | 73.1841 ppm | 0.0109 ppm | 0.0002 ppm | 0.0042 ppm |
| Concentration per Run 3 | 7.7069 ppm | 0.0197 ppm | 0.0001 ppm | 72.6727 ppm | 0.0112 ppm | -0.0015 ppm | -0.0028 ppm |
| Concentration RSD | 0.4 % | 0.3 % | 854.0 % | 0.7 % | 2.1 % | 107.1 % | 282.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0026 ppm | 15.6777 ppm | 0.0012 ppm | 2.3065 ppm | -0.0001 ppm | 0.0013 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0004 ppm | 15.7130 ppm | 0.0011 ppm | 2.2963 ppm | -0.0001 ppm | -0.0004 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0036 ppm | 15.6745 ppm | 0.0006 ppm | 2.3138 ppm | -0.0001 ppm | 0.0021 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0037 ppm | 15.6455 ppm | 0.0017 ppm | 2.3094 ppm | 0.0000 ppm | 0.0021 ppm | 0.0001 ppm |
| Concentration RSD | 72.1 % | 0.2 % | 49.6 % | 0.4 % | 97.9 % | 112.2 % | 56.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0210 ppm | 104.6921 % | 98.9814 % | 99.1859 % | 103.0452 % | 96.1363 % | 96.9877 % |
| Concentration per Run 1 | 0.0214 ppm | 104.3806 % | 98.8384 % | 99.4443 % | 103.0376 % | 95.9154 % | 97.4031 % |
| Concentration per Run 2 | 0.0207 ppm | 104.9092 % | 98.7575 % | 99.1770 % | 103.1338 % | 95.8703 % | 96.9061 % |
| Concentration per Run 3 | 0.0208 ppm | 104.7864 % | 99.3482 % | 98.9365 % | 102.9643 % | 96.6232 % | 96.6540 % |
| Concentration RSD | 1.8 % | 0.3 % | 0.3 % | 0.3 % | 0.1 % | 0.4 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512197-05 WG2037645
Analysis started at: 3/11/2025 6:53:36 PM
Rack 2
Vial 27
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0121 ppm | -0.0001 ppm | 0.0072 ppm | 0.4189 ppm | 0.0005 ppm | 42.8768 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0109 ppm | 0.0011 ppm | 0.0074 ppm | 0.4186 ppm | 0.0005 ppm | 42.8828 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0126 ppm | -0.0006 ppm | 0.0062 ppm | 0.4183 ppm | 0.0005 ppm | 42.8247 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0129 ppm | -0.0008 ppm | 0.0082 ppm | 0.4198 ppm | 0.0005 ppm | 42.9230 ppm |
| Concentration RSD | 20.5 % | 9.1 % | 830.8 % | 13.5 % | 0.2 % | 1.4 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0027 ppm | 0.0009 ppm | 0.0075 ppm | 0.0032 ppm | 5.1923 ppm | 0.0109 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0027 ppm | 0.0007 ppm | 0.0075 ppm | 0.0021 ppm | 5.1966 ppm | 0.0113 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0026 ppm | 0.0011 ppm | 0.0076 ppm | 0.0035 ppm | 5.1927 ppm | 0.0111 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0027 ppm | 0.0008 ppm | 0.0074 ppm | 0.0041 ppm | 5.1877 ppm | 0.0103 ppm |
| Concentration RSD | 23.8 % | 1.8 % | 25.1 % | 1.0 % | 31.5 % | 0.1 % | 5.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.7979 ppm | 0.0184 ppm | 0.0000 ppm | 75.4847 ppm | 0.0217 ppm | 0.0003 ppm | 0.0015 ppm |
| Concentration per Run 1 | 9.7768 ppm | 0.0185 ppm | 0.0003 ppm | 75.1983 ppm | 0.0217 ppm | -0.0008 ppm | 0.0007 ppm |
| Concentration per Run 2 | 9.8008 ppm | 0.0183 ppm | -0.0005 ppm | 75.4010 ppm | 0.0212 ppm | 0.0011 ppm | 0.0032 ppm |
| Concentration per Run 3 | 9.8160 ppm | 0.0184 ppm | 0.0002 ppm | 75.8548 ppm | 0.0221 ppm | 0.0005 ppm | 0.0007 ppm |
| Concentration RSD | 0.2 % | 0.7 % | 4,242.2 % | 0.4 % | 2.2 % | 361.2 % | 91.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 14.8432 ppm | -0.0018 ppm | 0.8531 ppm | -0.0004 ppm | 0.0019 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0003 ppm | 14.8331 ppm | -0.0035 ppm | 0.8532 ppm | -0.0001 ppm | 0.0037 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0015 ppm | 14.8331 ppm | -0.0013 ppm | 0.8509 ppm | -0.0003 ppm | 0.0001 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0021 ppm | 14.8633 ppm | -0.0008 ppm | 0.8552 ppm | -0.0007 ppm | 0.0019 ppm | -0.0001 ppm |
| Concentration RSD | 72.3 % | 0.1 % | 76.7 % | 0.2 % | 86.1 % | 93.9 % | 635.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0161 ppm | 104.1514 % | 98.0509 % | 98.5081 % | 103.8721 % | 96.7894 % | 97.5902 % |
| Concentration per Run 1 | 0.0162 ppm | 104.3455 % | 98.2780 % | 98.4807 % | 104.1718 % | 96.6974 % | 97.3762 % |
| Concentration per Run 2 | 0.0159 ppm | 103.6430 % | 98.2758 % | 98.0114 % | 103.3947 % | 97.2046 % | 97.3890 % |
| Concentration per Run 3 | 0.0161 ppm | 104.4658 % | 97.5988 % | 99.0323 % | 104.0499 % | 96.4661 % | 98.0053 % |
| Concentration RSD | 1.0 % | 0.4 % | 0.4 % | 0.5 % | 0.4 % | 0.4 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512197-06 WG2037645
Analysis started at: 3/11/2025 6:57:04 PM
Rack 2
Vial 28
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0119 ppm | 0.0008 ppm | 0.0069 ppm | 0.4209 ppm | 0.0005 ppm | 43.0185 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0105 ppm | 0.0006 ppm | 0.0073 ppm | 0.4222 ppm | 0.0005 ppm | 43.0737 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0190 ppm | 0.0015 ppm | 0.0073 ppm | 0.4174 ppm | 0.0005 ppm | 43.2747 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0062 ppm | 0.0002 ppm | 0.0061 ppm | 0.4230 ppm | 0.0005 ppm | 42.7071 ppm |
| Concentration RSD | 68.1 % | 54.6 % | 82.2 % | 10.0 % | 0.7 % | 1.4 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0026 ppm | -0.0002 ppm | 0.0083 ppm | 0.0119 ppm | 5.2253 ppm | 0.0108 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0019 ppm | -0.0004 ppm | 0.0087 ppm | 0.0120 ppm | 5.2317 ppm | 0.0106 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0031 ppm | 0.0003 ppm | 0.0085 ppm | 0.0112 ppm | 5.2125 ppm | 0.0104 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0029 ppm | -0.0004 ppm | 0.0078 ppm | 0.0124 ppm | 5.2318 ppm | 0.0115 ppm |
| Concentration RSD | 42.9 % | 25.1 % | 207.4 % | 5.8 % | 4.9 % | 0.2 % | 5.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.8725 ppm | 0.0187 ppm | -0.0002 ppm | 75.3799 ppm | 0.0223 ppm | 0.0000 ppm | -0.0017 ppm |
| Concentration per Run 1 | 9.9155 ppm | 0.0188 ppm | -0.0003 ppm | 75.2145 ppm | 0.0215 ppm | 0.0005 ppm | 0.0002 ppm |
| Concentration per Run 2 | 9.8502 ppm | 0.0189 ppm | 0.0007 ppm | 75.1112 ppm | 0.0233 ppm | -0.0003 ppm | -0.0012 ppm |
| Concentration per Run 3 | 9.8519 ppm | 0.0184 ppm | -0.0010 ppm | 75.8140 ppm | 0.0221 ppm | -0.0002 ppm | -0.0039 ppm |
| Concentration RSD | 0.4 % | 1.5 % | 430.9 % | 0.5 % | 4.1 % | 4,818.7 % | 126.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 15.0314 ppm | -0.0002 ppm | 0.8576 ppm | -0.0002 ppm | 0.0036 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0007 ppm | 15.0500 ppm | -0.0008 ppm | 0.8592 ppm | -0.0006 ppm | 0.0054 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0002 ppm | 15.0294 ppm | -0.0007 ppm | 0.8515 ppm | 0.0000 ppm | 0.0036 ppm | 0.0005 ppm |
| Concentration per Run 3 | -0.0005 ppm | 15.0146 ppm | 0.0007 ppm | 0.8622 ppm | -0.0002 ppm | 0.0019 ppm | -0.0002 ppm |
| Concentration RSD | 50.7 % | 0.1 % | 346.5 % | 0.6 % | 138.4 % | 48.6 % | 175.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0190 ppm | 103.2645 % | 97.8448 % | 98.5134 % | 102.9467 % | 96.6108 % | 97.0422 % |
| Concentration per Run 1 | 0.0188 ppm | 103.3869 % | 97.8293 % | 99.3704 % | 103.7631 % | 96.4089 % | 97.1231 % |
| Concentration per Run 2 | 0.0194 ppm | 103.0866 % | 97.5561 % | 98.0617 % | 102.4784 % | 96.6003 % | 97.1248 % |
| Concentration per Run 3 | 0.0189 ppm | 103.3202 % | 98.1491 % | 98.1081 % | 102.5985 % | 96.8233 % | 96.8786 % |
| Concentration RSD | 1.9 % | 0.2 % | 0.3 % | 0.8 % | 0.7 % | 0.2 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512197-07 WG2037645
Analysis started at: 3/11/2025 7:00:33 PM
Rack 2
Vial 29
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0133 ppm | -0.0001 ppm | 0.0067 ppm | 0.4137 ppm | 0.0005 ppm | 42.3054 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0140 ppm | 0.0004 ppm | 0.0079 ppm | 0.4116 ppm | 0.0005 ppm | 42.1837 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0115 ppm | -0.0005 ppm | 0.0060 ppm | 0.4157 ppm | 0.0005 ppm | 42.3688 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0144 ppm | -0.0001 ppm | 0.0060 ppm | 0.4136 ppm | 0.0004 ppm | 42.3638 ppm |
| Concentration RSD | 40.5 % | 11.9 % | 796.6 % | 16.3 % | 0.5 % | 4.9 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0025 ppm | -0.0008 ppm | 0.0154 ppm | 0.0054 ppm | 5.1453 ppm | 0.0114 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0021 ppm | -0.0006 ppm | 0.0154 ppm | 0.0053 ppm | 5.1656 ppm | 0.0120 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0032 ppm | -0.0013 ppm | 0.0157 ppm | 0.0047 ppm | 5.1536 ppm | 0.0117 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0023 ppm | -0.0006 ppm | 0.0152 ppm | 0.0063 ppm | 5.1168 ppm | 0.0106 ppm |
| Concentration RSD | 18.4 % | 22.2 % | 50.0 % | 1.7 % | 15.0 % | 0.5 % | 6.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.6314 ppm | 0.0187 ppm | 0.0002 ppm | 73.8537 ppm | 0.0212 ppm | -0.0009 ppm | 0.0014 ppm |
| Concentration per Run 1 | 9.6419 ppm | 0.0185 ppm | -0.0007 ppm | 73.4762 ppm | 0.0221 ppm | -0.0012 ppm | -0.0014 ppm |
| Concentration per Run 2 | 9.6651 ppm | 0.0188 ppm | 0.0003 ppm | 74.0684 ppm | 0.0201 ppm | -0.0013 ppm | 0.0019 ppm |
| Concentration per Run 3 | 9.5871 ppm | 0.0187 ppm | 0.0009 ppm | 74.0164 ppm | 0.0214 ppm | -0.0003 ppm | 0.0037 ppm |
| Concentration RSD | 0.4 % | 0.7 % | 469.8 % | 0.4 % | 4.8 % | 60.8 % | 184.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 14.7949 ppm | -0.0005 ppm | 0.8437 ppm | 0.0000 ppm | 0.0016 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0003 ppm | 14.8225 ppm | -0.0015 ppm | 0.8416 ppm | -0.0001 ppm | 0.0015 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0003 ppm | 14.8023 ppm | 0.0000 ppm | 0.8475 ppm | 0.0001 ppm | 0.0008 ppm | -0.0006 ppm |
| Concentration per Run 3 | -0.0015 ppm | 14.7598 ppm | 0.0000 ppm | 0.8421 ppm | -0.0001 ppm | 0.0026 ppm | 0.0002 ppm |
| Concentration RSD | 107.8 % | 0.2 % | 176.6 % | 0.4 % | 286.5 % | 54.8 % | 311.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0233 ppm | 103.7107 % | 98.1076 % | 99.0058 % | 103.2512 % | 96.8633 % | 97.9526 % |
| Concentration per Run 1 | 0.0235 ppm | 103.5289 % | 98.5691 % | 99.1352 % | 103.4238 % | 97.0997 % | 98.4758 % |
| Concentration per Run 2 | 0.0232 ppm | 103.3858 % | 97.9343 % | 99.3928 % | 103.0699 % | 96.9668 % | 97.9934 % |
| Concentration per Run 3 | 0.0232 ppm | 104.2175 % | 97.8193 % | 98.4895 % | 103.2600 % | 96.5235 % | 97.3887 % |
| Concentration RSD | 0.8 % | 0.4 % | 0.4 % | 0.5 % | 0.2 % | 0.3 % | 0.6 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512197-08 WG2037645
Analysis started at: 3/11/2025 7:04:02 PM
Rack 2
Vial 30
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0136 ppm | 0.0585 ppm | 0.0010 ppm | 0.2922 ppm | 0.0000 ppm | 28.5611 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0181 ppm | 0.0576 ppm | 0.0016 ppm | 0.2920 ppm | 0.0001 ppm | 28.5786 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0125 ppm | 0.0564 ppm | 0.0004 ppm | 0.2927 ppm | 0.0000 ppm | 28.6273 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0102 ppm | 0.0616 ppm | 0.0010 ppm | 0.2919 ppm | 0.0000 ppm | 28.4772 ppm |
| Concentration RSD | 17.9 % | 29.5 % | 4.7 % | 61.7 % | 0.2 % | 57.5 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0015 ppm | 0.0005 ppm | 0.0092 ppm | 0.0051 ppm | 5.3711 ppm | 0.0741 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0017 ppm | 0.0007 ppm | 0.0091 ppm | 0.0055 ppm | 5.3940 ppm | 0.0745 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0011 ppm | -0.0003 ppm | 0.0093 ppm | 0.0054 ppm | 5.3459 ppm | 0.0741 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0017 ppm | 0.0011 ppm | 0.0093 ppm | 0.0044 ppm | 5.3736 ppm | 0.0737 ppm |
| Concentration RSD | 62.1 % | 23.4 % | 134.8 % | 1.2 % | 11.0 % | 0.4 % | 0.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.3361 ppm | 0.0048 ppm | 0.0003 ppm | 78.4809 ppm | 0.0106 ppm | -0.0006 ppm | 0.0028 ppm |
| Concentration per Run 1 | 8.3189 ppm | 0.0048 ppm | -0.0003 ppm | 78.6693 ppm | 0.0098 ppm | -0.0008 ppm | 0.0016 ppm |
| Concentration per Run 2 | 8.3711 ppm | 0.0049 ppm | 0.0009 ppm | 78.8552 ppm | 0.0116 ppm | -0.0006 ppm | 0.0043 ppm |
| Concentration per Run 3 | 8.3183 ppm | 0.0047 ppm | 0.0004 ppm | 77.9180 ppm | 0.0104 ppm | -0.0003 ppm | 0.0024 ppm |
| Concentration RSD | 0.4 % | 2.1 % | 170.3 % | 0.6 % | 8.3 % | 48.0 % | 49.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0031 ppm | 17.3745 ppm | -0.0015 ppm | 2.8375 ppm | -0.0002 ppm | 0.0030 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0039 ppm | 17.3202 ppm | -0.0026 ppm | 2.8368 ppm | 0.0000 ppm | 0.0027 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0011 ppm | 17.3589 ppm | -0.0009 ppm | 2.8390 ppm | -0.0003 ppm | 0.0031 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0044 ppm | 17.4446 ppm | -0.0010 ppm | 2.8367 ppm | -0.0002 ppm | 0.0032 ppm | 0.0000 ppm |
| Concentration RSD | 57.5 % | 0.4 % | 63.9 % | 0.0 % | 80.4 % | 9.3 % | 149.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0108 ppm | 103.6845 % | 97.6641 % | 98.4292 % | 102.1631 % | 95.0977 % | 96.4082 % |
| Concentration per Run 1 | 0.0109 ppm | 104.0061 % | 97.7447 % | 98.5959 % | 102.9344 % | 95.0335 % | 96.2222 % |
| Concentration per Run 2 | 0.0110 ppm | 103.4300 % | 97.8007 % | 98.0759 % | 101.3674 % | 95.6005 % | 96.1914 % |
| Concentration per Run 3 | 0.0106 ppm | 103.6175 % | 97.4469 % | 98.6158 % | 102.1875 % | 94.6592 % | 96.8110 % |
| Concentration RSD | 1.7 % | 0.3 % | 0.2 % | 0.3 % | 0.8 % | 0.5 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCV
Analysis started at: 3/11/2025 7:07:31 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4770 ppm | 0.4884 ppm | 0.4985 ppm | 0.4861 ppm | 0.4736 ppm | 0.5099 ppm | 0.4871 ppm |
| Concentration per Run 1 | 0.4769 ppm | 0.4882 ppm | 0.4990 ppm | 0.4853 ppm | 0.4733 ppm | 0.5083 ppm | 0.4902 ppm |
| Concentration per Run 2 | 0.4757 ppm | 0.4931 ppm | 0.4959 ppm | 0.4859 ppm | 0.4734 ppm | 0.5107 ppm | 0.4866 ppm |
| Concentration per Run 3 | 0.4784 ppm | 0.4840 ppm | 0.5006 ppm | 0.4872 ppm | 0.4741 ppm | 0.5106 ppm | 0.4846 ppm |
| Recovery Percentage 1 | 95.397 % | 97.689 % | 99.694 % | 97.226 % | 94.719 % | 101.978 % | 97.425 % |
| Concentration RSD | 0.3 % | 0.9 % | 0.5 % | 0.2 % | 0.1 % | 0.3 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4832 ppm | 0.4938 ppm | 0.4857 ppm | 0.4645 ppm | 0.5090 ppm | 5.2663 ppm | 0.5197 ppm |
| Concentration per Run 1 | 0.4841 ppm | 0.4957 ppm | 0.4839 ppm | 0.4683 ppm | 0.5073 ppm | 5.2637 ppm | 0.5201 ppm |
| Concentration per Run 2 | 0.4835 ppm | 0.4931 ppm | 0.4862 ppm | 0.4641 ppm | 0.5094 ppm | 5.2497 ppm | 0.5184 ppm |
| Concentration per Run 3 | 0.4820 ppm | 0.4925 ppm | 0.4870 ppm | 0.4610 ppm | 0.5103 ppm | 5.2855 ppm | 0.5206 ppm |
| Recovery Percentage 1 | 96.643 % | 98.759 % | 97.146 % | 92.897 % | 101.803 % | 105.326 % | 103.946 % |
| Concentration RSD | 0.2 % | 0.3 % | 0.3 % | 0.8 % | 0.3 % | 0.3 % | 0.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4723 ppm | 0.4893 ppm | 0.4863 ppm | 10.2467 ppm | 0.4958 ppm | 0.4975 ppm | 0.4963 ppm |
| Concentration per Run 1 | 0.4701 ppm | 0.4901 ppm | 0.4856 ppm | 10.2842 ppm | 0.4955 ppm | 0.5008 ppm | 0.4971 ppm |
| Concentration per Run 2 | 0.4745 ppm | 0.4906 ppm | 0.4887 ppm | 10.2556 ppm | 0.4955 ppm | 0.4952 ppm | 0.4971 ppm |
| Concentration per Run 3 | 0.4723 ppm | 0.4871 ppm | 0.4848 ppm | 10.2002 ppm | 0.4966 ppm | 0.4964 ppm | 0.4946 ppm |
| Recovery Percentage 1 | 94.464 % | 97.858 % | 97.267 % | 102.467 % | 99.168 % | 99.492 % | 99.257 % |
| Concentration RSD | 0.5 % | 0.4 % | 0.4 % | 0.4 % | 0.1 % | 0.6 % | 0.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4948 ppm | 5.4655 ppm | 0.5044 ppm | 0.4921 ppm | 0.4821 ppm | 0.4839 ppm | 0.4795 ppm |
| Concentration per Run 1 | 0.4936 ppm | 5.4689 ppm | 0.5040 ppm | 0.4906 ppm | 0.4819 ppm | 0.4878 ppm | 0.4814 ppm |
| Concentration per Run 2 | 0.4936 ppm | 5.4580 ppm | 0.5014 ppm | 0.4933 ppm | 0.4815 ppm | 0.4789 ppm | 0.4798 ppm |
| Concentration per Run 3 | 0.4971 ppm | 5.4696 ppm | 0.5077 ppm | 0.4925 ppm | 0.4828 ppm | 0.4850 ppm | 0.4772 ppm |
| Recovery Percentage 1 | 98.953 % | 104.104 % | 100.872 % | 98.429 % | 96.413 % | 96.774 % | 95.893 % |
| Concentration RSD | 0.4 % | 0.1 % | 0.6 % | 0.3 % | 0.1 % | 0.9 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4940 ppm | 103.4150 % | 98.2879 % | 99.1466 % | 101.7296 % | 95.5343 % | 96.6863 % |
| Concentration per Run 1 | 0.4929 ppm | 103.8003 % | 98.6561 % | 98.9307 % | 102.0218 % | 96.3502 % | 96.5297 % |
| Concentration per Run 2 | 0.4940 ppm | 103.3008 % | 98.2583 % | 99.9875 % | 101.7571 % | 95.5414 % | 97.3240 % |
| Concentration per Run 3 | 0.4951 ppm | 103.1438 % | 97.9493 % | 98.5215 % | 101.4099 % | 94.7111 % | 96.2053 % |
| Recovery Percentage 1 | 98.803 % | | | | | | |
| Concentration RSD | 0.2 % | 0.3 % | 0.4 % | 0.8 % | 0.3 % | 0.9 % | 0.6 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCB
Analysis started at: 3/11/2025 7:11:00 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0081 ppm | 0.0011 ppm | 0.0009 ppm | 0.0001 ppm | 0.0001 ppm | 0.0042 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0132 ppm | 0.0022 ppm | -0.0003 ppm | 0.0001 ppm | 0.0001 ppm | 0.0046 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0066 ppm | -0.0021 ppm | 0.0012 ppm | 0.0001 ppm | 0.0000 ppm | 0.0038 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0046 ppm | 0.0032 ppm | 0.0017 ppm | 0.0001 ppm | 0.0001 ppm | 0.0042 ppm |
| Recovery Percentage 1 | 12.060 % | 8.149 % | 21.749 % | 2.880 % | 1.198 % | 1.688 % | 4.213 % |
| Concentration RSD | 25.2 % | 55.6 % | 255.8 % | 116.6 % | 29.9 % | 45.4 % | 8.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0004 ppm | 0.0016 ppm | 0.0395 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0008 ppm | 0.0002 ppm | 0.0009 ppm | 0.0007 ppm | 0.0436 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0002 ppm | -0.0007 ppm | 0.0002 ppm | -0.0001 ppm | 0.0024 ppm | 0.0367 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0001 ppm | -0.0003 ppm | 0.0003 ppm | 0.0018 ppm | 0.0382 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 0.694 % | 0.115 % | 0.034 % | 3.774 % | 3.243 % | 1.580 % | 11.824 % |
| Concentration RSD | 473.2 % | 3,326.9 % | 8,513.6 % | 135.5 % | 55.6 % | 9.2 % | 93.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0021 ppm | -0.0001 ppm | 0.0020 ppm | 0.0277 ppm | -0.0006 ppm | -0.0008 ppm | 0.0032 ppm |
| Concentration per Run 1 | -0.0038 ppm | 0.0000 ppm | 0.0018 ppm | 0.0314 ppm | -0.0008 ppm | 0.0001 ppm | 0.0007 ppm |
| Concentration per Run 2 | -0.0021 ppm | -0.0001 ppm | 0.0021 ppm | 0.0268 ppm | -0.0010 ppm | -0.0030 ppm | 0.0025 ppm |
| Concentration per Run 3 | -0.0006 ppm | -0.0002 ppm | 0.0020 ppm | 0.0248 ppm | 0.0000 ppm | 0.0004 ppm | 0.0063 ppm |
| Recovery Percentage 1 | -2.148 % | -1.070 % | 3.930 % | 1.383 % | -2.436 % | -8.477 % | 6.308 % |
| Concentration RSD | 74.4 % | 121.4 % | 5.7 % | 12.3 % | 92.7 % | 225.5 % | 89.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0013 ppm | -0.0059 ppm | -0.0008 ppm | 0.0001 ppm | -0.0007 ppm | 0.0023 ppm | -0.0002 ppm |
| Concentration per Run 1 | -0.0027 ppm | -0.0056 ppm | -0.0005 ppm | 0.0000 ppm | -0.0004 ppm | -0.0008 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0061 ppm | -0.0007 ppm | 0.0002 ppm | -0.0008 ppm | 0.0044 ppm | -0.0003 ppm |
| Concentration per Run 3 | -0.0013 ppm | -0.0059 ppm | -0.0011 ppm | 0.0001 ppm | -0.0010 ppm | 0.0034 ppm | -0.0003 ppm |
| Recovery Percentage 1 | -13.214 % | -1.172 % | -1.542 % | 0.684 % | -7.240 % | 11.666 % | -2.474 % |
| Concentration RSD | 102.2 % | 4.2 % | 40.5 % | 166.2 % | 40.7 % | 117.0 % | 45.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 101.4345 % | 97.3193 % | 97.4672 % | 101.9103 % | 96.6855 % | 97.2341 % |
| Concentration per Run 1 | -0.0007 ppm | 101.3066 % | 97.7258 % | 97.7943 % | 102.1353 % | 97.2143 % | 97.4035 % |
| Concentration per Run 2 | -0.0005 ppm | 101.0951 % | 97.1216 % | 96.9512 % | 101.4177 % | 96.5003 % | 96.8829 % |
| Concentration per Run 3 | -0.0007 ppm | 101.9017 % | 97.1106 % | 97.6560 % | 102.1780 % | 96.3418 % | 97.4160 % |
| Recovery Percentage 1 | -12.638 % | | | | | | |
| Concentration RSD | 22.2 % | 0.4 % | 0.4 % | 0.5 % | 0.4 % | 0.5 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512011-01 WG2038582
Analysis started at: 3/11/2025 7:20:27 PM
Rack 2
Vial 31
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 0.1187 ppm | -0.0010 ppm | 0.0687 ppm | 0.1580 ppm | 0.0000 ppm | 1.3120 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.1167 ppm | -0.0037 ppm | 0.0676 ppm | 0.1581 ppm | 0.0000 ppm | 1.3023 ppm |
| Concentration per Run 2 | 0.0016 ppm | 0.1240 ppm | 0.0012 ppm | 0.0699 ppm | 0.1579 ppm | 0.0000 ppm | 1.3079 ppm |
| Concentration per Run 3 | 0.0014 ppm | 0.1153 ppm | -0.0005 ppm | 0.0686 ppm | 0.1579 ppm | 0.0000 ppm | 1.3258 ppm |
| Concentration RSD | 23.2 % | 3.9 % | 253.8 % | 1.7 % | 0.1 % | 44.3 % | 0.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0016 ppm | 0.0003 ppm | 0.0002 ppm | 0.4931 ppm | 0.2439 ppm | 0.0019 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0021 ppm | 0.0000 ppm | 0.0005 ppm | 0.4891 ppm | 0.2423 ppm | 0.0013 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0008 ppm | 0.0005 ppm | -0.0002 ppm | 0.4966 ppm | 0.2374 ppm | 0.0023 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0019 ppm | 0.0003 ppm | 0.0003 ppm | 0.4936 ppm | 0.2521 ppm | 0.0021 ppm |
| Concentration RSD | 539.5 % | 46.1 % | 87.4 % | 191.9 % | 0.8 % | 3.1 % | 29.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0940 ppm | 0.0141 ppm | -0.0002 ppm | 129.7232 ppm | 0.0029 ppm | -0.0024 ppm | 0.0024 ppm |
| Concentration per Run 1 | 0.0951 ppm | 0.0141 ppm | -0.0009 ppm | 130.0842 ppm | 0.0023 ppm | -0.0031 ppm | -0.0014 ppm |
| Concentration per Run 2 | 0.0941 ppm | 0.0142 ppm | 0.0000 ppm | 129.4699 ppm | 0.0032 ppm | -0.0017 ppm | 0.0017 ppm |
| Concentration per Run 3 | 0.0928 ppm | 0.0141 ppm | 0.0001 ppm | 129.6154 ppm | 0.0032 ppm | -0.0024 ppm | 0.0070 ppm |
| Concentration RSD | 1.2 % | 0.6 % | 239.6 % | 0.2 % | 17.5 % | 28.9 % | 176.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 1.1128 ppm | 0.0001 ppm | 0.0062 ppm | -0.0004 ppm | -0.0018 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0033 ppm | 1.1079 ppm | 0.0003 ppm | 0.0063 ppm | -0.0001 ppm | -0.0008 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0003 ppm | 1.1176 ppm | -0.0004 ppm | 0.0062 ppm | -0.0001 ppm | -0.0021 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0012 ppm | 1.1129 ppm | 0.0004 ppm | 0.0062 ppm | -0.0008 ppm | -0.0024 ppm | -0.0002 ppm |
| Concentration RSD | 97.3 % | 0.4 % | 458.6 % | 0.8 % | 105.9 % | 47.3 % | 204.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4504 ppm | 103.5212 % | 97.4991 % | 98.0205 % | 101.5464 % | 95.1188 % | 95.4332 % |
| Concentration per Run 1 | 0.4484 ppm | 104.2234 % | 97.5820 % | 97.5802 % | 102.2403 % | 95.5754 % | 95.4370 % |
| Concentration per Run 2 | 0.4535 ppm | 102.9991 % | 97.4294 % | 98.5808 % | 101.0811 % | 94.9849 % | 95.5855 % |
| Concentration per Run 3 | 0.4494 ppm | 103.3413 % | 97.4859 % | 97.9006 % | 101.3177 % | 94.7962 % | 95.2769 % |
| Concentration RSD | 0.6 % | 0.6 % | 0.1 % | 0.5 % | 0.6 % | 0.4 % | 0.2 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512360-01 WG2038582
Analysis started at: 3/11/2025 7:29:20 PM
Rack 2
Vial 32
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0138 ppm | 0.0004 ppm | 0.0311 ppm | 0.4620 ppm | 0.0000 ppm | 26.6960 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0128 ppm | 0.0005 ppm | 0.0307 ppm | 0.4618 ppm | 0.0000 ppm | 26.6846 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0121 ppm | 0.0000 ppm | 0.0307 ppm | 0.4624 ppm | 0.0000 ppm | 26.6451 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0164 ppm | 0.0007 ppm | 0.0320 ppm | 0.4618 ppm | 0.0001 ppm | 26.7582 ppm |
| Concentration RSD | 28.9 % | 16.6 % | 96.7 % | 2.4 % | 0.1 % | 65.6 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0034 ppm | 0.0001 ppm | 0.0001 ppm | 40.6134 ppm | 0.3454 ppm | 0.0024 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0034 ppm | -0.0003 ppm | 0.0002 ppm | 40.6055 ppm | 0.3509 ppm | 0.0018 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0029 ppm | 0.0002 ppm | 0.0000 ppm | 40.5289 ppm | 0.3300 ppm | 0.0020 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0038 ppm | 0.0006 ppm | 0.0002 ppm | 40.7058 ppm | 0.3552 ppm | 0.0033 ppm |
| Concentration RSD | 65.2 % | 12.7 % | 325.7 % | 84.8 % | 0.2 % | 3.9 % | 33.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.1621 ppm | 0.6930 ppm | 0.0001 ppm | 134.7824 ppm | 0.0395 ppm | -0.0019 ppm | 0.0019 ppm |
| Concentration per Run 1 | 4.1849 ppm | 0.6928 ppm | 0.0007 ppm | 134.0205 ppm | 0.0396 ppm | -0.0020 ppm | 0.0022 ppm |
| Concentration per Run 2 | 4.1553 ppm | 0.6947 ppm | 0.0001 ppm | 135.9188 ppm | 0.0402 ppm | -0.0009 ppm | 0.0011 ppm |
| Concentration per Run 3 | 4.1461 ppm | 0.6914 ppm | -0.0005 ppm | 134.4080 ppm | 0.0388 ppm | -0.0028 ppm | 0.0025 ppm |
| Concentration RSD | 0.5 % | 0.2 % | 701.5 % | 0.7 % | 1.8 % | 52.1 % | 39.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 1.3000 ppm | 0.0009 ppm | 0.1709 ppm | -0.0004 ppm | -0.0016 ppm | -0.0005 ppm |
| Concentration per Run 1 | 0.0002 ppm | 1.3074 ppm | -0.0001 ppm | 0.1707 ppm | -0.0002 ppm | -0.0005 ppm | -0.0005 ppm |
| Concentration per Run 2 | 0.0017 ppm | 1.2962 ppm | 0.0020 ppm | 0.1713 ppm | -0.0007 ppm | -0.0025 ppm | -0.0005 ppm |
| Concentration per Run 3 | 0.0019 ppm | 1.2963 ppm | 0.0008 ppm | 0.1708 ppm | -0.0003 ppm | -0.0018 ppm | -0.0006 ppm |
| Concentration RSD | 75.8 % | 0.5 % | 114.7 % | 0.2 % | 74.7 % | 60.7 % | 15.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1623 ppm | 103.2624 % | 96.6236 % | 97.2026 % | 101.1546 % | 94.2418 % | 95.0134 % |
| Concentration per Run 1 | 0.1643 ppm | 103.1823 % | 96.6089 % | 97.2589 % | 101.4633 % | 94.1030 % | 94.9432 % |
| Concentration per Run 2 | 0.1619 ppm | 103.1105 % | 96.7784 % | 97.1384 % | 100.5283 % | 94.4654 % | 94.8465 % |
| Concentration per Run 3 | 0.1609 ppm | 103.4943 % | 96.4835 % | 97.2104 % | 101.4723 % | 94.1569 % | 95.2504 % |
| Concentration RSD | 1.1 % | 0.2 % | 0.2 % | 0.1 % | 0.5 % | 0.2 % | 0.2 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512447-01 WG2038582
Analysis started at: 3/11/2025 7:33:07 PM
Rack 2
Vial 33
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0272 ppm | 0.0019 ppm | 0.2658 ppm | 0.0553 ppm | 0.0000 ppm | 43.7080 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.0273 ppm | 0.0013 ppm | 0.2673 ppm | 0.0552 ppm | 0.0000 ppm | 43.7096 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0233 ppm | 0.0027 ppm | 0.2644 ppm | 0.0552 ppm | 0.0000 ppm | 43.7579 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0310 ppm | 0.0016 ppm | 0.2655 ppm | 0.0554 ppm | 0.0000 ppm | 43.6566 ppm |
| Concentration RSD | 3.2 % | 14.3 % | 41.4 % | 0.6 % | 0.3 % | 60.4 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0002 ppm | -0.0001 ppm | 0.0005 ppm | 0.0288 ppm | 1.1572 ppm | 0.0011 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0003 ppm | -0.0003 ppm | 0.0008 ppm | 0.0273 ppm | 1.1300 ppm | 0.0016 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0006 ppm | 0.0003 ppm | 0.0005 ppm | 0.0300 ppm | 1.1844 ppm | -0.0004 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0004 ppm | -0.0002 ppm | 0.0001 ppm | 0.0291 ppm | 1.1573 ppm | 0.0019 ppm |
| Concentration RSD | 17.1 % | 194.5 % | 488.0 % | 71.5 % | 4.7 % | 2.4 % | 116.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7914 ppm | 0.5103 ppm | 0.0002 ppm | 133.5864 ppm | -0.0003 ppm | -0.0029 ppm | 0.0056 ppm |
| Concentration per Run 1 | 0.7910 ppm | 0.5099 ppm | 0.0005 ppm | 132.9582 ppm | -0.0012 ppm | -0.0036 ppm | 0.0043 ppm |
| Concentration per Run 2 | 0.7911 ppm | 0.5113 ppm | 0.0000 ppm | 134.3348 ppm | 0.0011 ppm | -0.0027 ppm | 0.0079 ppm |
| Concentration per Run 3 | 0.7922 ppm | 0.5099 ppm | 0.0002 ppm | 133.4661 ppm | -0.0009 ppm | -0.0024 ppm | 0.0046 ppm |
| Concentration RSD | 0.1 % | 0.2 % | 114.7 % | 0.5 % | 358.3 % | 21.6 % | 35.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.1593 ppm | 0.0001 ppm | 0.0480 ppm | 0.0068 ppm | -0.0021 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.1584 ppm | 0.0006 ppm | 0.0479 ppm | 0.0067 ppm | -0.0024 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.1581 ppm | -0.0003 ppm | 0.0480 ppm | 0.0067 ppm | -0.0015 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.1615 ppm | -0.0001 ppm | 0.0480 ppm | 0.0070 ppm | -0.0024 ppm | 0.0001 ppm |
| Concentration RSD | 52.6 % | 1.2 % | 746.5 % | 0.2 % | 2.0 % | 24.6 % | 967.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3142 ppm | 102.2179 % | 96.7193 % | 96.2496 % | 100.0153 % | 94.3683 % | 94.2563 % |
| Concentration per Run 1 | 0.3145 ppm | 102.3261 % | 96.5728 % | 96.3913 % | 100.0258 % | 94.2628 % | 94.5349 % |
| Concentration per Run 2 | 0.3136 ppm | 102.1714 % | 96.8105 % | 96.5387 % | 99.9428 % | 94.7345 % | 94.4675 % |
| Concentration per Run 3 | 0.3144 ppm | 102.1562 % | 96.7747 % | 95.8187 % | 100.0773 % | 94.1077 % | 93.7666 % |
| Concentration RSD | 0.2 % | 0.1 % | 0.1 % | 0.4 % | 0.1 % | 0.3 % | 0.5 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512483-01 WG2038582
Analysis started at: 3/11/2025 7:36:36 PM
Rack 2
Vial 34
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0079 ppm | 0.0010 ppm | 0.0035 ppm | 0.0470 ppm | 0.0000 ppm | 60.6922 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.0123 ppm | 0.0025 ppm | 0.0035 ppm | 0.0473 ppm | 0.0000 ppm | 61.1553 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0033 ppm | 0.0008 ppm | 0.0035 ppm | 0.0470 ppm | 0.0000 ppm | 60.7295 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0081 ppm | -0.0001 ppm | 0.0036 ppm | 0.0466 ppm | 0.0000 ppm | 60.1918 ppm |
| Concentration RSD | 98.8 % | 56.9 % | 126.6 % | 2.3 % | 0.7 % | 934.7 % | 0.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0049 ppm | 0.0000 ppm | 0.0005 ppm | 0.0111 ppm | 0.4497 ppm | 0.0023 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0053 ppm | -0.0002 ppm | 0.0003 ppm | 0.0124 ppm | 0.4719 ppm | 0.0030 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0047 ppm | -0.0003 ppm | 0.0006 ppm | 0.0114 ppm | 0.4407 ppm | 0.0019 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0048 ppm | 0.0004 ppm | 0.0005 ppm | 0.0096 ppm | 0.4365 ppm | 0.0020 ppm |
| Concentration RSD | 90.3 % | 7.3 % | 1,320.1 % | 31.2 % | 12.7 % | 4.3 % | 27.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0057 ppm | 0.7585 ppm | 0.0014 ppm | 132.2241 ppm | 0.0068 ppm | -0.0016 ppm | 0.0026 ppm |
| Concentration per Run 1 | 1.0060 ppm | 0.7627 ppm | 0.0014 ppm | 132.3924 ppm | 0.0063 ppm | -0.0012 ppm | 0.0027 ppm |
| Concentration per Run 2 | 1.0092 ppm | 0.7596 ppm | 0.0011 ppm | 133.3705 ppm | 0.0064 ppm | -0.0023 ppm | 0.0004 ppm |
| Concentration per Run 3 | 1.0019 ppm | 0.7532 ppm | 0.0015 ppm | 130.9093 ppm | 0.0076 ppm | -0.0013 ppm | 0.0048 ppm |
| Concentration RSD | 0.4 % | 0.6 % | 14.6 % | 0.9 % | 10.8 % | 38.1 % | 82.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0025 ppm | 0.1615 ppm | 0.0002 ppm | 0.2691 ppm | -0.0003 ppm | -0.0016 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0033 ppm | 0.1603 ppm | -0.0013 ppm | 0.2700 ppm | -0.0006 ppm | -0.0023 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0022 ppm | 0.1616 ppm | 0.0011 ppm | 0.2695 ppm | 0.0001 ppm | -0.0025 ppm | -0.0007 ppm |
| Concentration per Run 3 | 0.0021 ppm | 0.1625 ppm | 0.0008 ppm | 0.2677 ppm | -0.0004 ppm | 0.0000 ppm | -0.0002 ppm |
| Concentration RSD | 26.8 % | 0.7 % | 769.1 % | 0.5 % | 110.1 % | 86.7 % | 80.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0019 ppm | 102.4853 % | 96.4731 % | 96.4232 % | 100.7688 % | 94.3964 % | 94.7478 % |
| Concentration per Run 1 | 0.0018 ppm | 101.9803 % | 96.0932 % | 96.7650 % | 99.8994 % | 94.1561 % | 94.5812 % |
| Concentration per Run 2 | 0.0019 ppm | 102.3963 % | 96.2435 % | 96.1362 % | 100.7613 % | 94.4501 % | 94.8896 % |
| Concentration per Run 3 | 0.0021 ppm | 103.0793 % | 97.0826 % | 96.3682 % | 101.6456 % | 94.5831 % | 94.7727 % |
| Concentration RSD | 5.9 % | 0.5 % | 0.6 % | 0.3 % | 0.9 % | 0.2 % | 0.2 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512499-01 WG2038582
Analysis started at: 3/11/2025 7:40:05 PM
Rack 2
Vial 35
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 0.0550 ppm | 0.0019 ppm | 0.0021 ppm | 0.0135 ppm | 0.0000 ppm | 0.5684 ppm |
| Concentration per Run 1 | 0.0015 ppm | 0.0498 ppm | 0.0022 ppm | 0.0020 ppm | 0.0137 ppm | 0.0001 ppm | 0.5677 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0556 ppm | 0.0027 ppm | 0.0025 ppm | 0.0134 ppm | 0.0000 ppm | 0.5727 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0597 ppm | 0.0009 ppm | 0.0019 ppm | 0.0136 ppm | 0.0000 ppm | 0.5647 ppm |
| Concentration RSD | 23.0 % | 9.0 % | 47.0 % | 16.1 % | 0.9 % | 73.8 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0008 ppm | 0.0004 ppm | 0.0008 ppm | 0.0239 ppm | 0.4762 ppm | 0.0022 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0008 ppm | 0.0004 ppm | 0.0012 ppm | 0.0228 ppm | 0.4966 ppm | 0.0028 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0010 ppm | 0.0005 ppm | 0.0006 ppm | 0.0242 ppm | 0.4504 ppm | 0.0016 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0006 ppm | 0.0004 ppm | 0.0007 ppm | 0.0248 ppm | 0.4816 ppm | 0.0021 ppm |
| Concentration RSD | 412.2 % | 30.1 % | 21.8 % | 36.9 % | 4.4 % | 5.0 % | 27.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0459 ppm | 0.0396 ppm | 0.0001 ppm | 132.7956 ppm | 0.0011 ppm | 0.0051 ppm | 0.0029 ppm |
| Concentration per Run 1 | 0.0448 ppm | 0.0399 ppm | 0.0005 ppm | 133.0801 ppm | 0.0010 ppm | 0.0058 ppm | 0.0047 ppm |
| Concentration per Run 2 | 0.0456 ppm | 0.0395 ppm | -0.0001 ppm | 133.2437 ppm | 0.0014 ppm | 0.0042 ppm | 0.0035 ppm |
| Concentration per Run 3 | 0.0472 ppm | 0.0395 ppm | 0.0000 ppm | 132.0630 ppm | 0.0010 ppm | 0.0052 ppm | 0.0004 ppm |
| Concentration RSD | 2.8 % | 0.5 % | 197.5 % | 0.5 % | 20.1 % | 15.3 % | 77.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0035 ppm | 0.1142 ppm | 0.0001 ppm | 0.0032 ppm | -0.0004 ppm | -0.0013 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0031 ppm | 0.1134 ppm | 0.0014 ppm | 0.0032 ppm | -0.0006 ppm | -0.0011 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0023 ppm | 0.1136 ppm | -0.0006 ppm | 0.0031 ppm | -0.0003 ppm | -0.0017 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0050 ppm | 0.1156 ppm | -0.0006 ppm | 0.0032 ppm | -0.0004 ppm | -0.0011 ppm | -0.0004 ppm |
| Concentration RSD | 39.8 % | 1.0 % | 1,730.0 % | 0.7 % | 26.9 % | 28.6 % | 5,887.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0045 ppm | 102.9817 % | 96.7442 % | 97.9314 % | 101.1029 % | 95.0003 % | 95.4494 % |
| Concentration per Run 1 | 0.0046 ppm | 103.2974 % | 96.3714 % | 98.0364 % | 101.1791 % | 94.7550 % | 95.6140 % |
| Concentration per Run 2 | 0.0047 ppm | 102.5799 % | 96.5201 % | 97.7644 % | 100.9082 % | 94.6425 % | 95.1412 % |
| Concentration per Run 3 | 0.0043 ppm | 103.0678 % | 97.3411 % | 97.9934 % | 101.2213 % | 95.6034 % | 95.5930 % |
| Concentration RSD | 4.4 % | 0.4 % | 0.5 % | 0.1 % | 0.2 % | 0.6 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512500-01 WG2038582
Analysis started at: 3/11/2025 7:43:34 PM
Rack 2
Vial 36
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0040 ppm | 0.0508 ppm | 0.0015 ppm | 0.0039 ppm | 0.0454 ppm | 0.0000 ppm | 10.7345 ppm |
| Concentration per Run 1 | 0.0043 ppm | 0.0462 ppm | 0.0005 ppm | 0.0024 ppm | 0.0455 ppm | 0.0000 ppm | 10.7127 ppm |
| Concentration per Run 2 | 0.0039 ppm | 0.0494 ppm | 0.0031 ppm | 0.0049 ppm | 0.0454 ppm | 0.0000 ppm | 10.7826 ppm |
| Concentration per Run 3 | 0.0039 ppm | 0.0568 ppm | 0.0008 ppm | 0.0045 ppm | 0.0451 ppm | 0.0000 ppm | 10.7083 ppm |
| Concentration RSD | 6.1 % | 10.7 % | 94.2 % | 34.6 % | 0.5 % | 18.2 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0001 ppm | 0.0004 ppm | 1.1625 ppm | 0.0391 ppm | 0.0973 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0005 ppm | 0.0004 ppm | 1.1654 ppm | 0.0389 ppm | 0.1024 ppm | 0.0007 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0007 ppm | 0.0008 ppm | 1.1603 ppm | 0.0397 ppm | 0.0974 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0003 ppm | -0.0001 ppm | 1.1619 ppm | 0.0386 ppm | 0.0922 ppm | 0.0001 ppm |
| Concentration RSD | 20.5 % | 957.6 % | 118.8 % | 0.2 % | 1.4 % | 5.3 % | 103.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1232 ppm | 0.1014 ppm | 0.0000 ppm | 136.5812 ppm | 0.0037 ppm | 0.0046 ppm | 0.0035 ppm |
| Concentration per Run 1 | 0.1245 ppm | 0.1011 ppm | -0.0003 ppm | 137.1347 ppm | 0.0047 ppm | 0.0030 ppm | 0.0036 ppm |
| Concentration per Run 2 | 0.1240 ppm | 0.1013 ppm | 0.0005 ppm | 136.0441 ppm | 0.0028 ppm | 0.0064 ppm | 0.0035 ppm |
| Concentration per Run 3 | 0.1211 ppm | 0.1018 ppm | -0.0003 ppm | 136.5647 ppm | 0.0036 ppm | 0.0044 ppm | 0.0035 ppm |
| Concentration RSD | 1.5 % | 0.3 % | 3,001.6 % | 0.4 % | 25.7 % | 37.6 % | 2.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0024 ppm | 0.0846 ppm | -0.0002 ppm | 0.0300 ppm | -0.0009 ppm | -0.0030 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0835 ppm | 0.0000 ppm | 0.0301 ppm | -0.0008 ppm | -0.0049 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0027 ppm | 0.0853 ppm | -0.0004 ppm | 0.0298 ppm | -0.0007 ppm | -0.0035 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0032 ppm | 0.0851 ppm | -0.0002 ppm | 0.0299 ppm | -0.0013 ppm | -0.0006 ppm | 0.0001 ppm |
| Concentration RSD | 41.6 % | 1.2 % | 87.0 % | 0.6 % | 35.0 % | 71.9 % | 487.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0072 ppm | 103.2446 % | 96.7040 % | 97.1482 % | **156.7184 %** | **146.9399 %** | **147.4513 %** |
| Concentration per Run 1 | 0.0073 ppm | 103.5338 % | 97.1158 % | 97.1882 % | **157.4182 %** | **147.7147 %** | **146.7817 %** |
| Concentration per Run 2 | 0.0071 ppm | 102.7343 % | 96.3000 % | 97.3041 % | **155.7644 %** | **146.5537 %** | **147.9871 %** |
| Concentration per Run 3 | 0.0071 ppm | 103.4657 % | 96.6963 % | 96.9523 % | **156.9728 %** | **146.5512 %** | **147.5851 %** |
| Concentration RSD | 1.4 % | 0.4 % | 0.4 % | 0.2 % | **0.5 %** | **0.5 %** | **0.4 %** |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512611-01 WG2038582
Analysis started at: 3/11/2025 7:47:04 PM
Rack 2
Vial 37
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 0.0962 ppm | 0.0011 ppm | 0.0130 ppm | 0.0118 ppm | 0.0002 ppm | 4.4599 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0928 ppm | 0.0020 ppm | 0.0126 ppm | 0.0117 ppm | 0.0003 ppm | 4.4728 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.1007 ppm | 0.0027 ppm | 0.0133 ppm | 0.0118 ppm | 0.0002 ppm | 4.4427 ppm |
| Concentration per Run 3 | 0.0018 ppm | 0.0952 ppm | -0.0014 ppm | 0.0133 ppm | 0.0119 ppm | 0.0002 ppm | 4.4643 ppm |
| Concentration RSD | 23.8 % | 4.2 % | 196.2 % | 3.0 % | 0.8 % | 23.8 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0002 ppm | 0.0004 ppm | 0.0100 ppm | 0.1871 ppm | 0.1744 ppm | 0.0016 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0003 ppm | 0.0002 ppm | 0.0101 ppm | 0.1862 ppm | 0.1717 ppm | 0.0025 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0004 ppm | 0.0006 ppm | 0.0099 ppm | 0.1910 ppm | 0.1885 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0003 ppm | 0.0006 ppm | 0.0100 ppm | 0.1840 ppm | 0.1629 ppm | 0.0014 ppm |
| Concentration RSD | 93.5 % | 228.8 % | 55.4 % | 0.7 % | 1.9 % | 7.5 % | 60.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2953 ppm | 0.0400 ppm | 0.0002 ppm | 133.4143 ppm | -0.0004 ppm | 0.0111 ppm | 0.0030 ppm |
| Concentration per Run 1 | 0.2961 ppm | 0.0400 ppm | 0.0004 ppm | 132.5111 ppm | -0.0004 ppm | 0.0102 ppm | 0.0065 ppm |
| Concentration per Run 2 | 0.2945 ppm | 0.0401 ppm | 0.0001 ppm | 133.6282 ppm | -0.0004 ppm | 0.0121 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.2951 ppm | 0.0400 ppm | 0.0001 ppm | 134.1037 ppm | -0.0004 ppm | 0.0109 ppm | 0.0026 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 91.1 % | 0.6 % | 9.3 % | 8.4 % | 110.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0037 ppm | 0.4389 ppm | -0.0001 ppm | 0.0224 ppm | 0.0006 ppm | -0.0034 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0032 ppm | 0.4360 ppm | 0.0003 ppm | 0.0225 ppm | 0.0009 ppm | -0.0027 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0028 ppm | 0.4372 ppm | -0.0016 ppm | 0.0223 ppm | 0.0006 ppm | -0.0042 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0052 ppm | 0.4436 ppm | 0.0011 ppm | 0.0224 ppm | 0.0004 ppm | -0.0032 ppm | 0.0002 ppm |
| Concentration RSD | 34.8 % | 0.9 % | 1,407.3 % | 0.4 % | 44.9 % | 22.9 % | 45.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1387 ppm | 102.7688 % | 96.9148 % | 97.9459 % | 100.9783 % | 94.8287 % | 95.3395 % |
| Concentration per Run 1 | 0.1398 ppm | 102.3407 % | 96.6900 % | 97.6096 % | 100.6777 % | 94.4248 % | 95.1803 % |
| Concentration per Run 2 | 0.1378 ppm | 103.3646 % | 97.0495 % | 97.7943 % | 101.3655 % | 95.1695 % | 95.5315 % |
| Concentration per Run 3 | 0.1386 ppm | 102.6011 % | 97.0048 % | 98.4339 % | 100.8916 % | 94.8918 % | 95.3066 % |
| Concentration RSD | 0.7 % | 0.5 % | 0.2 % | 0.4 % | 0.3 % | 0.4 % | 0.2 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512624-01 WG2038582
Analysis started at: 3/11/2025 7:50:33 PM
Rack 2
Vial 38
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.1073 ppm | 0.0010 ppm | 0.0051 ppm | 0.0027 ppm | 0.0000 ppm | 2.1635 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.1121 ppm | 0.0019 ppm | 0.0048 ppm | 0.0027 ppm | 0.0001 ppm | 2.1711 ppm |
| Concentration per Run 2 | 0.0015 ppm | 0.1119 ppm | 0.0007 ppm | 0.0057 ppm | 0.0027 ppm | 0.0000 ppm | 2.1604 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0979 ppm | 0.0006 ppm | 0.0047 ppm | 0.0026 ppm | 0.0000 ppm | 2.1590 ppm |
| Concentration RSD | 32.1 % | 7.6 % | 71.2 % | 11.3 % | 2.2 % | 92.6 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0006 ppm | 0.0009 ppm | 0.0003 ppm | 0.0298 ppm | 0.1714 ppm | 0.0010 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0006 ppm | 0.0013 ppm | 0.0003 ppm | 0.0293 ppm | 0.1550 ppm | 0.0012 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0006 ppm | 0.0005 ppm | 0.0002 ppm | 0.0312 ppm | 0.1682 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0006 ppm | 0.0009 ppm | 0.0003 ppm | 0.0289 ppm | 0.1910 ppm | 0.0013 ppm |
| Concentration RSD | 4,815.5 % | 3.2 % | 43.7 % | 25.2 % | 4.2 % | 10.6 % | 43.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0696 ppm | 0.0026 ppm | 0.0002 ppm | 128.8617 ppm | -0.0014 ppm | -0.0019 ppm | 0.0051 ppm |
| Concentration per Run 1 | 0.0693 ppm | 0.0026 ppm | 0.0000 ppm | 128.8658 ppm | -0.0011 ppm | -0.0021 ppm | 0.0038 ppm |
| Concentration per Run 2 | 0.0725 ppm | 0.0026 ppm | 0.0008 ppm | 127.8195 ppm | -0.0015 ppm | -0.0013 ppm | 0.0022 ppm |
| Concentration per Run 3 | 0.0671 ppm | 0.0024 ppm | 0.0000 ppm | 129.8999 ppm | -0.0016 ppm | -0.0024 ppm | 0.0095 ppm |
| Concentration RSD | 3.9 % | 4.4 % | 195.5 % | 0.8 % | 19.1 % | 28.8 % | 74.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 0.1830 ppm | -0.0004 ppm | 0.0103 ppm | 0.0007 ppm | -0.0025 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0007 ppm | 0.1844 ppm | -0.0004 ppm | 0.0103 ppm | 0.0005 ppm | -0.0036 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0016 ppm | 0.1841 ppm | -0.0003 ppm | 0.0102 ppm | 0.0007 ppm | -0.0017 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0035 ppm | 0.1806 ppm | -0.0006 ppm | 0.0104 ppm | 0.0010 ppm | -0.0022 ppm | -0.0001 ppm |
| Concentration RSD | 139.5 % | 1.1 % | 36.6 % | 0.8 % | 37.3 % | 40.2 % | 470.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 102.7793 % | 96.4997 % | 97.9554 % | 101.0933 % | 94.1736 % | 95.4473 % |
| Concentration per Run 1 | 0.0014 ppm | 102.5745 % | 96.1732 % | 98.1216 % | 100.5191 % | 94.0902 % | 95.1587 % |
| Concentration per Run 2 | 0.0016 ppm | 102.9016 % | 96.5041 % | 98.1210 % | 101.1125 % | 93.6076 % | 95.6716 % |
| Concentration per Run 3 | 0.0019 ppm | 102.8619 % | 96.8216 % | 97.6236 % | 101.6484 % | 94.8231 % | 95.5118 % |
| Concentration RSD | 17.5 % | 0.2 % | 0.3 % | 0.3 % | 0.6 % | 0.6 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512667-02 WG2038582
Analysis started at: 3/11/2025 7:54:02 PM
Rack 2
Vial 39
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0540 ppm | 0.0012 ppm | 0.0058 ppm | 0.0621 ppm | 0.0001 ppm | 14.3482 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0472 ppm | 0.0012 ppm | 0.0056 ppm | 0.0623 ppm | 0.0001 ppm | 14.3515 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0580 ppm | 0.0002 ppm | 0.0063 ppm | 0.0618 ppm | 0.0001 ppm | 14.3377 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0569 ppm | 0.0022 ppm | 0.0054 ppm | 0.0622 ppm | 0.0001 ppm | 14.3554 ppm |
| Concentration RSD | 24.0 % | 11.0 % | 84.4 % | 8.4 % | 0.5 % | 26.1 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0028 ppm | 0.0001 ppm | 0.0098 ppm | 0.0152 ppm | 0.5200 ppm | 0.0011 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0030 ppm | 0.0000 ppm | 0.0100 ppm | 0.0157 ppm | 0.5325 ppm | 0.0012 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0029 ppm | 0.0001 ppm | 0.0094 ppm | 0.0153 ppm | 0.5369 ppm | 0.0015 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0025 ppm | 0.0003 ppm | 0.0100 ppm | 0.0145 ppm | 0.4905 ppm | 0.0005 ppm |
| Concentration RSD | 67.3 % | 9.6 % | 100.6 % | 3.5 % | 4.1 % | 4.9 % | 49.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.1223 ppm | 0.3035 ppm | -0.0003 ppm | 131.0067 ppm | 0.0014 ppm | 0.0078 ppm | -0.0007 ppm |
| Concentration per Run 1 | 2.1234 ppm | 0.3045 ppm | -0.0002 ppm | 131.0399 ppm | 0.0005 ppm | 0.0086 ppm | -0.0042 ppm |
| Concentration per Run 2 | 2.1143 ppm | 0.3026 ppm | 0.0001 ppm | 131.1926 ppm | 0.0024 ppm | 0.0072 ppm | -0.0007 ppm |
| Concentration per Run 3 | 2.1291 ppm | 0.3035 ppm | -0.0006 ppm | 130.7875 ppm | 0.0013 ppm | 0.0076 ppm | 0.0029 ppm |
| Concentration RSD | 0.4 % | 0.3 % | 130.3 % | 0.2 % | 66.0 % | 9.5 % | 535.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0020 ppm | 0.7571 ppm | 0.0002 ppm | 0.0600 ppm | -0.0003 ppm | -0.0032 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0016 ppm | 0.7568 ppm | 0.0011 ppm | 0.0599 ppm | -0.0005 ppm | -0.0049 ppm | -0.0004 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.7545 ppm | 0.0004 ppm | 0.0599 ppm | -0.0001 ppm | -0.0027 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0043 ppm | 0.7598 ppm | -0.0007 ppm | 0.0601 ppm | -0.0004 ppm | -0.0021 ppm | 0.0002 ppm |
| Concentration RSD | 99.8 % | 0.4 % | 361.0 % | 0.2 % | 62.9 % | 45.5 % | 891.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0616 ppm | 103.0722 % | 96.6514 % | 97.3906 % | 101.3752 % | 94.8990 % | 95.5235 % |
| Concentration per Run 1 | 0.0614 ppm | 102.8770 % | 96.3481 % | 97.7220 % | 101.0267 % | 94.5841 % | 95.7625 % |
| Concentration per Run 2 | 0.0618 ppm | 103.3987 % | 96.7922 % | 97.7600 % | 101.8581 % | 95.0962 % | 95.5722 % |
| Concentration per Run 3 | 0.0616 ppm | 102.9408 % | 96.8140 % | 96.6897 % | 101.2409 % | 95.0165 % | 95.2358 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.3 % | 0.6 % | 0.4 % | 0.3 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512667-05 WG2038582
Analysis started at: 3/11/2025 7:57:31 PM
Rack 2
Vial 40
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.0462 ppm | 0.0014 ppm | 0.0046 ppm | 0.0581 ppm | 0.0001 ppm | 8.7047 ppm |
| Concentration per Run 1 | 0.0014 ppm | 0.0426 ppm | 0.0010 ppm | 0.0049 ppm | 0.0583 ppm | 0.0001 ppm | 8.6899 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0514 ppm | 0.0011 ppm | 0.0057 ppm | 0.0581 ppm | 0.0001 ppm | 8.7013 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0445 ppm | 0.0021 ppm | 0.0032 ppm | 0.0580 ppm | 0.0001 ppm | 8.7230 ppm |
| Concentration RSD | 23.6 % | 10.0 % | 44.6 % | 28.1 % | 0.2 % | 13.1 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0032 ppm | 0.0002 ppm | 0.0168 ppm | 0.0218 ppm | 0.2822 ppm | 0.0018 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0029 ppm | 0.0003 ppm | 0.0171 ppm | 0.0231 ppm | 0.2796 ppm | 0.0021 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0030 ppm | 0.0005 ppm | 0.0168 ppm | 0.0210 ppm | 0.2791 ppm | 0.0015 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0038 ppm | -0.0003 ppm | 0.0165 ppm | 0.0213 ppm | 0.2878 ppm | 0.0018 ppm |
| Concentration RSD | 20.4 % | 15.2 % | 221.3 % | 2.0 % | 5.3 % | 1.7 % | 17.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.3562 ppm | 0.4522 ppm | 0.0000 ppm | 128.3762 ppm | 0.0008 ppm | 0.0039 ppm | 0.0024 ppm |
| Concentration per Run 1 | 1.3468 ppm | 0.4521 ppm | 0.0001 ppm | 129.1831 ppm | 0.0010 ppm | 0.0052 ppm | 0.0038 ppm |
| Concentration per Run 2 | 1.3608 ppm | 0.4511 ppm | 0.0001 ppm | 127.7339 ppm | 0.0013 ppm | 0.0023 ppm | 0.0018 ppm |
| Concentration per Run 3 | 1.3610 ppm | 0.4534 ppm | -0.0003 ppm | 128.2115 ppm | 0.0002 ppm | 0.0041 ppm | 0.0014 ppm |
| Concentration RSD | 0.6 % | 0.3 % | 777.8 % | 0.6 % | 71.2 % | 38.0 % | 54.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0032 ppm | 0.2992 ppm | 0.0004 ppm | 0.0389 ppm | -0.0004 ppm | -0.0028 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0039 ppm | 0.3005 ppm | 0.0018 ppm | 0.0388 ppm | -0.0001 ppm | -0.0036 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0022 ppm | 0.2976 ppm | -0.0006 ppm | 0.0388 ppm | -0.0006 ppm | -0.0012 ppm | -0.0007 ppm |
| Concentration per Run 3 | 0.0034 ppm | 0.2995 ppm | -0.0001 ppm | 0.0391 ppm | -0.0004 ppm | -0.0035 ppm | -0.0003 ppm |
| Concentration RSD | 27.0 % | 0.5 % | 357.3 % | 0.4 % | 66.6 % | 48.6 % | 158.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1042 ppm | 103.8492 % | 97.1421 % | 97.6489 % | 102.3944 % | 95.2851 % | 95.6677 % |
| Concentration per Run 1 | 0.1035 ppm | 103.5397 % | 96.5118 % | 97.7196 % | 101.9522 % | 94.9798 % | 95.3816 % |
| Concentration per Run 2 | 0.1047 ppm | 104.2619 % | 97.5151 % | 97.3343 % | 102.9144 % | 95.7396 % | 95.4438 % |
| Concentration per Run 3 | 0.1043 ppm | 103.7460 % | 97.3994 % | 97.8929 % | 102.3165 % | 95.1360 % | 96.1778 % |
| Concentration RSD | 0.6 % | 0.4 % | 0.6 % | 0.3 % | 0.5 % | 0.4 % | 0.5 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCV
Analysis started at: 3/11/2025 8:01:00 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4797 ppm | 0.4933 ppm | 0.5026 ppm | 0.4845 ppm | 0.4783 ppm | 0.5141 ppm | 0.4896 ppm |
| Concentration per Run 1 | 0.4798 ppm | 0.4884 ppm | 0.5009 ppm | 0.4869 ppm | 0.4765 ppm | 0.5143 ppm | 0.4831 ppm |
| Concentration per Run 2 | 0.4794 ppm | 0.5011 ppm | 0.5046 ppm | 0.4850 ppm | 0.4800 ppm | 0.5143 ppm | 0.4942 ppm |
| Concentration per Run 3 | 0.4800 ppm | 0.4904 ppm | 0.5023 ppm | 0.4817 ppm | 0.4784 ppm | 0.5138 ppm | 0.4915 ppm |
| Recovery Percentage 1 | 95.941 % | 98.660 % | 100.516 % | 96.905 % | 95.661 % | 102.822 % | 97.922 % |
| Concentration RSD | 0.1 % | 1.4 % | 0.4 % | 0.5 % | 0.4 % | 0.1 % | 1.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4883 ppm | 0.4972 ppm | 0.4875 ppm | 0.4688 ppm | 0.5129 ppm | 5.2654 ppm | 0.5269 ppm |
| Concentration per Run 1 | 0.4877 ppm | 0.4957 ppm | 0.4900 ppm | 0.4655 ppm | 0.5177 ppm | 5.2761 ppm | 0.5294 ppm |
| Concentration per Run 2 | 0.4879 ppm | 0.4989 ppm | 0.4868 ppm | 0.4685 ppm | 0.5085 ppm | 5.2474 ppm | 0.5242 ppm |
| Concentration per Run 3 | 0.4892 ppm | 0.4970 ppm | 0.4855 ppm | 0.4724 ppm | 0.5126 ppm | 5.2726 ppm | 0.5270 ppm |
| Recovery Percentage 1 | 97.650 % | 99.441 % | 97.491 % | 93.759 % | 102.581 % | 105.307 % | 105.372 % |
| Concentration RSD | 0.2 % | 0.3 % | 0.5 % | 0.7 % | 0.9 % | 0.3 % | 0.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4746 ppm | 0.4972 ppm | 0.4893 ppm | 10.3832 ppm | 0.4981 ppm | 0.5026 ppm | 0.5003 ppm |
| Concentration per Run 1 | 0.4741 ppm | 0.4989 ppm | 0.4878 ppm | 10.3716 ppm | 0.5000 ppm | 0.5052 ppm | 0.4987 ppm |
| Concentration per Run 2 | 0.4736 ppm | 0.4967 ppm | 0.4898 ppm | 10.4040 ppm | 0.4999 ppm | 0.5037 ppm | 0.5027 ppm |
| Concentration per Run 3 | 0.4762 ppm | 0.4960 ppm | 0.4904 ppm | 10.3740 ppm | 0.4942 ppm | 0.4990 ppm | 0.4995 ppm |
| Recovery Percentage 1 | 94.930 % | 99.439 % | 97.867 % | 103.832 % | 99.610 % | 100.525 % | 100.061 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.3 % | 0.2 % | 0.7 % | 0.6 % | 0.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4986 ppm | 5.4857 ppm | 0.5068 ppm | 0.4987 ppm | 0.4840 ppm | 0.4892 ppm | 0.4834 ppm |
| Concentration per Run 1 | 0.4992 ppm | 5.4783 ppm | 0.5041 ppm | 0.4982 ppm | 0.4835 ppm | 0.4899 ppm | 0.4826 ppm |
| Concentration per Run 2 | 0.4982 ppm | 5.4790 ppm | 0.5095 ppm | 0.4972 ppm | 0.4839 ppm | 0.4885 ppm | 0.4833 ppm |
| Concentration per Run 3 | 0.4982 ppm | 5.4999 ppm | 0.5070 ppm | 0.5007 ppm | 0.4846 ppm | 0.4892 ppm | 0.4844 ppm |
| Recovery Percentage 1 | 99.710 % | 104.490 % | 101.368 % | 99.737 % | 96.801 % | 97.842 % | 96.685 % |
| Concentration RSD | 0.1 % | 0.2 % | 0.5 % | 0.4 % | 0.1 % | 0.1 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4950 ppm | 103.6635 % | 98.7672 % | 98.8883 % | 101.7664 % | 96.5226 % | 96.4433 % |
| Concentration per Run 1 | 0.4962 ppm | 103.7982 % | 99.1484 % | 98.9491 % | 101.8566 % | 96.7701 % | 96.3031 % |
| Concentration per Run 2 | 0.4974 ppm | 103.3740 % | 98.3933 % | 98.5542 % | 101.3848 % | 96.1235 % | 96.5377 % |
| Concentration per Run 3 | 0.4915 ppm | 103.8183 % | 98.7600 % | 99.1616 % | 102.0579 % | 96.6742 % | 96.4892 % |
| Recovery Percentage 1 | 99.009 % | | | | | | |
| Concentration RSD | 0.6 % | 0.2 % | 0.4 % | 0.3 % | 0.3 % | 0.4 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCB
Analysis started at: 3/11/2025 8:04:29 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0066 ppm | -0.0004 ppm | -0.0002 ppm | -0.0001 ppm | 0.0001 ppm | 0.0012 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.0066 ppm | -0.0022 ppm | -0.0002 ppm | -0.0001 ppm | 0.0000 ppm | 0.0013 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0083 ppm | 0.0007 ppm | -0.0020 ppm | -0.0001 ppm | 0.0000 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0050 ppm | 0.0003 ppm | 0.0015 ppm | -0.0001 ppm | 0.0001 ppm | 0.0021 ppm |
| Recovery Percentage 1 | 13.007 % | 6.634 % | -8.297 % | -0.752 % | -1.131 % | 1.334 % | 1.198 % |
| Concentration RSD | 46.4 % | 25.0 % | 379.3 % | 769.8 % | 40.2 % | 48.6 % | 76.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0003 ppm | -0.0002 ppm | 0.0008 ppm | 0.0004 ppm | 0.0261 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0011 ppm | 0.0003 ppm | 0.0012 ppm | 0.0004 ppm | 0.0247 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0003 ppm | 0.0009 ppm | 0.0016 ppm | 0.0347 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0003 ppm | -0.0014 ppm | 0.0002 ppm | -0.0007 ppm | 0.0188 ppm | 0.0009 ppm |
| Recovery Percentage 1 | -0.078 % | 1.570 % | -2.445 % | 7.557 % | 0.862 % | 1.043 % | 9.492 % |
| Concentration RSD | 400.9 % | 236.8 % | 391.9 % | 69.0 % | 273.1 % | 30.9 % | 111.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0015 ppm | -0.0001 ppm | 0.0020 ppm | 0.0269 ppm | -0.0010 ppm | -0.0013 ppm | 0.0027 ppm |
| Concentration per Run 1 | -0.0021 ppm | -0.0001 ppm | 0.0015 ppm | 0.0319 ppm | -0.0010 ppm | 0.0002 ppm | 0.0023 ppm |
| Concentration per Run 2 | 0.0006 ppm | -0.0002 ppm | 0.0019 ppm | 0.0230 ppm | -0.0012 ppm | -0.0027 ppm | -0.0027 ppm |
| Concentration per Run 3 | -0.0028 ppm | -0.0002 ppm | 0.0024 ppm | 0.0257 ppm | -0.0008 ppm | -0.0015 ppm | 0.0084 ppm |
| Recovery Percentage 1 | -1.450 % | -1.355 % | 3.901 % | 1.343 % | -4.072 % | -13.459 % | 5.335 % |
| Concentration RSD | 122.9 % | 49.3 % | 24.1 % | 17.1 % | 21.4 % | 106.7 % | 210.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | -0.0047 ppm | -0.0010 ppm | 0.0001 ppm | -0.0006 ppm | 0.0034 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0007 ppm | -0.0053 ppm | -0.0016 ppm | 0.0001 ppm | -0.0004 ppm | 0.0019 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0014 ppm | -0.0037 ppm | -0.0002 ppm | 0.0001 ppm | -0.0008 ppm | 0.0032 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0051 ppm | -0.0013 ppm | 0.0001 ppm | -0.0006 ppm | 0.0050 ppm | -0.0005 ppm |
| Recovery Percentage 1 | -6.031 % | -0.948 % | -2.048 % | 1.037 % | -6.210 % | 16.750 % | -1.477 % |
| Concentration RSD | 134.3 % | 18.4 % | 66.9 % | 21.9 % | 27.1 % | 47.0 % | 211.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 101.0789 % | 97.0996 % | 97.1114 % | 101.1908 % | 96.7297 % | 96.7169 % |
| Concentration per Run 1 | -0.0004 ppm | 100.6680 % | 97.7104 % | 97.0864 % | 100.6643 % | 97.0688 % | 97.1779 % |
| Concentration per Run 2 | -0.0008 ppm | 101.5804 % | 97.0353 % | 97.2841 % | 101.9283 % | 96.7671 % | 96.5887 % |
| Concentration per Run 3 | -0.0008 ppm | 100.9883 % | 96.5530 % | 96.9637 % | 100.9798 % | 96.3532 % | 96.3841 % |
| Recovery Percentage 1 | -12.938 % | | | | | | |
| Concentration RSD | 31.8 % | 0.5 % | 0.6 % | 0.2 % | 0.7 % | 0.4 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038695-2 WG2038695
Analysis started at: 3/11/2025 8:17:57 PM
Rack 2
Vial 45
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0514 ppm | 2.0787 ppm | 0.1204 ppm | 1.0040 ppm | 1.9853 ppm | 0.0531 ppm | 10.2931 ppm |
| Concentration per Run 1 | 0.0505 ppm | 2.0826 ppm | 0.1190 ppm | 1.0056 ppm | 1.9928 ppm | 0.0532 ppm | 10.2597 ppm |
| Concentration per Run 2 | 0.0517 ppm | 2.0725 ppm | 0.1205 ppm | 1.0011 ppm | 1.9825 ppm | 0.0531 ppm | 10.3246 ppm |
| Concentration per Run 3 | 0.0519 ppm | 2.0810 ppm | 0.1217 ppm | 1.0054 ppm | 1.9807 ppm | 0.0531 ppm | 10.2950 ppm |
| Concentration RSD | 1.5 % | 0.3 % | 1.1 % | 0.3 % | 0.3 % | 0.1 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0533 ppm | 0.5051 ppm | 0.2019 ppm | 0.2500 ppm | 1.0656 ppm | 10.9893 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0535 ppm | 0.5071 ppm | 0.2023 ppm | 0.2504 ppm | 1.0673 ppm | 11.0219 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0531 ppm | 0.5038 ppm | 0.2009 ppm | 0.2496 ppm | 1.0662 ppm | 11.0097 ppm | -0.0007 ppm |
| Concentration per Run 3 | 0.0533 ppm | 0.5045 ppm | 0.2025 ppm | 0.2501 ppm | 1.0634 ppm | 10.9364 ppm | -0.0001 ppm |
| Concentration RSD | 0.4 % | 0.3 % | 0.4 % | 0.2 % | 0.2 % | 0.4 % | 184.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.0591 ppm | 0.5240 ppm | 1.0068 ppm | 10.9706 ppm | 0.5093 ppm | 0.5494 ppm | 0.4400 ppm |
| Concentration per Run 1 | 10.1109 ppm | 0.5231 ppm | 1.0001 ppm | 11.0597 ppm | 0.5097 ppm | 0.5482 ppm | 0.4380 ppm |
| Concentration per Run 2 | 10.0604 ppm | 0.5252 ppm | 1.0094 ppm | 10.8930 ppm | 0.5105 ppm | 0.5480 ppm | 0.4391 ppm |
| Concentration per Run 3 | 10.0061 ppm | 0.5236 ppm | 1.0110 ppm | 10.9590 ppm | 0.5078 ppm | 0.5522 ppm | 0.4430 ppm |
| Concentration RSD | 0.5 % | 0.2 % | 0.6 % | 0.8 % | 0.3 % | 0.4 % | 0.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1196 ppm | 1.0578 ppm | 0.9944 ppm | 1.0236 ppm | 1.0095 ppm | 0.1164 ppm | 0.5097 ppm |
| Concentration per Run 1 | 0.1182 ppm | 1.0539 ppm | 0.9919 ppm | 1.0257 ppm | 1.0127 ppm | 0.1176 ppm | 0.5087 ppm |
| Concentration per Run 2 | 0.1204 ppm | 1.0611 ppm | 0.9992 ppm | 1.0229 ppm | 1.0114 ppm | 0.1135 ppm | 0.5095 ppm |
| Concentration per Run 3 | 0.1203 ppm | 1.0583 ppm | 0.9921 ppm | 1.0221 ppm | 1.0043 ppm | 0.1182 ppm | 0.5110 ppm |
| Concentration RSD | 1.0 % | 0.3 % | 0.4 % | 0.2 % | 0.4 % | 2.2 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5163 ppm | 103.1081 % | 98.1998 % | 98.5787 % | 100.9460 % | 96.1469 % | 95.7414 % |
| Concentration per Run 1 | 0.5174 ppm | 102.8052 % | 98.1624 % | 98.9506 % | 100.6216 % | 96.2071 % | 95.9980 % |
| Concentration per Run 2 | 0.5168 ppm | 103.4072 % | 97.9264 % | 99.2255 % | 101.3602 % | 96.0430 % | 96.0367 % |
| Concentration per Run 3 | 0.5147 ppm | 103.1120 % | 98.5107 % | 97.5600 % | 100.8562 % | 96.1905 % | 95.1896 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.3 % | 0.9 % | 0.4 % | 0.1 % | 0.5 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512667-08 WG2038582
Analysis started at: 3/11/2025 8:21:32 PM
Rack 2
Vial 41
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.0702 ppm | 0.0014 ppm | 0.0048 ppm | 0.0449 ppm | 0.0002 ppm | 3.9826 ppm |
| Concentration per Run 1 | 0.0015 ppm | 0.0779 ppm | 0.0035 ppm | 0.0045 ppm | 0.0448 ppm | 0.0002 ppm | 3.9802 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0639 ppm | 0.0006 ppm | 0.0054 ppm | 0.0447 ppm | 0.0002 ppm | 3.9842 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0688 ppm | 0.0001 ppm | 0.0046 ppm | 0.0450 ppm | 0.0002 ppm | 3.9834 ppm |
| Concentration RSD | 36.0 % | 10.2 % | 134.9 % | 9.3 % | 0.3 % | 10.9 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0047 ppm | -0.0001 ppm | 0.0182 ppm | 0.0273 ppm | 0.2644 ppm | 0.0013 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0042 ppm | -0.0004 ppm | 0.0184 ppm | 0.0266 ppm | 0.2529 ppm | 0.0014 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0040 ppm | 0.0005 ppm | 0.0181 ppm | 0.0259 ppm | 0.2691 ppm | 0.0012 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0058 ppm | -0.0005 ppm | 0.0181 ppm | 0.0295 ppm | 0.2713 ppm | 0.0013 ppm |
| Concentration RSD | 160.7 % | 21.5 % | 428.0 % | 0.8 % | 7.0 % | 3.8 % | 7.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.2801 ppm | 0.3464 ppm | 0.0046 ppm | 129.5740 ppm | 0.0015 ppm | 0.0067 ppm | 0.0160 ppm |
| Concentration per Run 1 | 1.2768 ppm | 0.3462 ppm | 0.0050 ppm | 129.6323 ppm | 0.0016 ppm | 0.0083 ppm | 0.0184 ppm |
| Concentration per Run 2 | 1.2806 ppm | 0.3460 ppm | 0.0047 ppm | 129.6296 ppm | 0.0011 ppm | 0.0050 ppm | 0.0137 ppm |
| Concentration per Run 3 | 1.2831 ppm | 0.3469 ppm | 0.0040 ppm | 129.4602 ppm | 0.0019 ppm | 0.0067 ppm | 0.0158 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 11.1 % | 0.1 % | 27.1 % | 24.0 % | 14.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | 0.2887 ppm | 0.0103 ppm | 0.0170 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0017 ppm | 0.2868 ppm | 0.0116 ppm | 0.0169 ppm | 0.0004 ppm | -0.0002 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.2906 ppm | 0.0111 ppm | 0.0170 ppm | 0.0000 ppm | 0.0030 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0025 ppm | 0.2885 ppm | 0.0081 ppm | 0.0170 ppm | 0.0004 ppm | -0.0027 ppm | -0.0003 ppm |
| Concentration RSD | 136.6 % | 0.7 % | 18.7 % | 0.4 % | 87.4 % | 8,605.6 % | 3,105.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1264 ppm | 103.5230 % | 97.1295 % | 98.2262 % | 102.0794 % | 95.6175 % | 95.9428 % |
| Concentration per Run 1 | 0.1254 ppm | 103.9661 % | 96.7254 % | 97.9656 % | 102.3360 % | 94.9890 % | 96.0224 % |
| Concentration per Run 2 | 0.1263 ppm | 103.4677 % | 97.3334 % | 97.8352 % | 102.0856 % | 96.1139 % | 95.2719 % |
| Concentration per Run 3 | 0.1275 ppm | 103.1352 % | 97.3296 % | 98.8777 % | 101.8166 % | 95.7496 % | 96.5341 % |
| Concentration RSD | 0.8 % | 0.4 % | 0.4 % | 0.6 % | 0.3 % | 0.6 % | 0.7 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512877-02 WG2038582
Analysis started at: 3/11/2025 8:25:01 PM
Rack 2
Vial 42
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0067 ppm | 0.0019 ppm | 0.0082 ppm | 0.0767 ppm | 0.0000 ppm | 70.4355 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.0012 ppm | 0.0038 ppm | 0.0080 ppm | 0.0767 ppm | 0.0000 ppm | 70.0586 ppm |
| Concentration per Run 2 | 0.0013 ppm | 0.0060 ppm | 0.0000 ppm | 0.0089 ppm | 0.0766 ppm | 0.0000 ppm | 70.4456 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0128 ppm | 0.0018 ppm | 0.0079 ppm | 0.0768 ppm | 0.0000 ppm | 70.8025 ppm |
| Concentration RSD | 51.6 % | 87.7 % | 102.6 % | 6.5 % | 0.1 % | 363.7 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0073 ppm | 0.0038 ppm | -0.0002 ppm | 0.0063 ppm | 0.0039 ppm | 0.2188 ppm | 0.0018 ppm |
| Concentration per Run 1 | 0.0074 ppm | 0.0044 ppm | -0.0002 ppm | 0.0067 ppm | 0.0027 ppm | 0.2234 ppm | 0.0022 ppm |
| Concentration per Run 2 | 0.0076 ppm | 0.0035 ppm | -0.0002 ppm | 0.0068 ppm | 0.0054 ppm | 0.2380 ppm | 0.0015 ppm |
| Concentration per Run 3 | 0.0071 ppm | 0.0034 ppm | -0.0003 ppm | 0.0055 ppm | 0.0037 ppm | 0.1950 ppm | 0.0016 ppm |
| Concentration RSD | 3.3 % | 13.9 % | 11.6 % | 10.9 % | 34.9 % | 10.0 % | 19.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4809 ppm | 0.2351 ppm | 0.0008 ppm | 133.2877 ppm | 0.0003 ppm | 0.0661 ppm | 0.0055 ppm |
| Concentration per Run 1 | 0.4914 ppm | 0.2342 ppm | 0.0002 ppm | 132.9826 ppm | 0.0001 ppm | 0.0654 ppm | 0.0055 ppm |
| Concentration per Run 2 | 0.4924 ppm | 0.2344 ppm | 0.0014 ppm | 133.6614 ppm | 0.0010 ppm | 0.0682 ppm | 0.0052 ppm |
| Concentration per Run 3 | 0.4589 ppm | 0.2367 ppm | 0.0007 ppm | 133.2190 ppm | -0.0002 ppm | 0.0646 ppm | 0.0059 ppm |
| Concentration RSD | 4.0 % | 0.6 % | 77.6 % | 0.3 % | 220.6 % | 2.9 % | 6.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | 0.5172 ppm | 0.0002 ppm | 0.4253 ppm | -0.0002 ppm | -0.0033 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0014 ppm | 0.5294 ppm | 0.0013 ppm | 0.4236 ppm | -0.0002 ppm | -0.0038 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0022 ppm | 0.5305 ppm | -0.0007 ppm | 0.4261 ppm | -0.0005 ppm | -0.0034 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0029 ppm | 0.4919 ppm | 0.0000 ppm | 0.4261 ppm | 0.0000 ppm | -0.0025 ppm | 0.0002 ppm |
| Concentration RSD | 35.1 % | 4.2 % | 454.9 % | 0.3 % | 115.4 % | 20.3 % | 213.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.7156 ppm | 105.3577 % | 96.9322 % | 95.5813 % | 102.9352 % | 94.8067 % | 93.9497 % |
| Concentration per Run 1 | 6.8342 ppm | 102.3854 % | 97.3656 % | 95.8834 % | 100.3570 % | 95.1913 % | 94.0476 % |
| Concentration per Run 2 | 6.8761 ppm | 103.5467 % | 97.0017 % | 93.9167 % | 101.9526 % | 94.8493 % | 92.7266 % |
| Concentration per Run 3 | 6.4365 ppm | 110.1410 % | 96.4293 % | 96.9438 % | 106.4960 % | 94.3797 % | 95.0748 % |
| Concentration RSD | 3.6 % | 4.0 % | 0.5 % | 1.6 % | 3.1 % | 0.4 % | 1.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512877-04 WG2038582
Analysis started at: 3/11/2025 8:28:30 PM
Rack 2
Vial 43
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.0191 ppm | 0.0013 ppm | 0.0055 ppm | 0.2278 ppm | 0.0000 ppm | 38.7172 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.0192 ppm | 0.0005 ppm | 0.0059 ppm | 0.2276 ppm | 0.0000 ppm | 38.7687 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0151 ppm | 0.0016 ppm | 0.0062 ppm | 0.2281 ppm | 0.0000 ppm | 38.5945 ppm |
| Concentration per Run 3 | 0.0015 ppm | 0.0230 ppm | 0.0019 ppm | 0.0044 ppm | 0.2278 ppm | 0.0000 ppm | 38.7886 ppm |
| Concentration RSD | 31.5 % | 20.5 % | 52.5 % | 17.9 % | 0.1 % | 47.9 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0075 ppm | 0.0013 ppm | -0.0001 ppm | 0.0105 ppm | 0.0049 ppm | 0.3263 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0075 ppm | 0.0017 ppm | -0.0001 ppm | 0.0107 ppm | 0.0050 ppm | 0.3399 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0075 ppm | 0.0011 ppm | -0.0003 ppm | 0.0101 ppm | 0.0048 ppm | 0.3210 ppm | 0.0016 ppm |
| Concentration per Run 3 | 0.0074 ppm | 0.0012 ppm | 0.0001 ppm | 0.0107 ppm | 0.0049 ppm | 0.3180 ppm | 0.0004 ppm |
| Concentration RSD | 0.6 % | 23.7 % | 184.5 % | 3.6 % | 1.3 % | 3.6 % | 78.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4101 ppm | 0.2213 ppm | 0.0010 ppm | 132.8970 ppm | 0.0006 ppm | 0.1436 ppm | 0.0059 ppm |
| Concentration per Run 1 | 0.4083 ppm | 0.2222 ppm | 0.0009 ppm | 133.0689 ppm | 0.0008 ppm | 0.1431 ppm | 0.0047 ppm |
| Concentration per Run 2 | 0.4097 ppm | 0.2214 ppm | 0.0018 ppm | 132.7406 ppm | 0.0001 ppm | 0.1441 ppm | 0.0057 ppm |
| Concentration per Run 3 | 0.4124 ppm | 0.2205 ppm | 0.0002 ppm | 132.8815 ppm | 0.0010 ppm | 0.1435 ppm | 0.0074 ppm |
| Concentration RSD | 0.5 % | 0.4 % | 81.3 % | 0.1 % | 68.6 % | 0.4 % | 23.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0028 ppm | 0.4038 ppm | -0.0002 ppm | 0.1934 ppm | -0.0003 ppm | -0.0022 ppm | -0.0005 ppm |
| Concentration per Run 1 | 0.0024 ppm | 0.4018 ppm | -0.0007 ppm | 0.1936 ppm | -0.0001 ppm | -0.0022 ppm | -0.0004 ppm |
| Concentration per Run 2 | 0.0023 ppm | 0.4034 ppm | -0.0001 ppm | 0.1932 ppm | -0.0003 ppm | -0.0042 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0036 ppm | 0.4063 ppm | 0.0003 ppm | 0.1934 ppm | -0.0003 ppm | -0.0002 ppm | -0.0006 ppm |
| Concentration RSD | 25.3 % | 0.6 % | 300.5 % | 0.1 % | 39.5 % | 89.5 % | 32.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.6510 ppm | 103.0832 % | 96.1746 % | 97.3380 % | 100.9147 % | 94.1184 % | 95.3256 % |
| Concentration per Run 1 | 4.6351 ppm | 103.6250 % | 95.7796 % | 97.9197 % | 101.3845 % | 93.4865 % | 96.1520 % |
| Concentration per Run 2 | 4.6357 ppm | 103.2445 % | 96.8170 % | 97.1570 % | 100.8663 % | 94.9447 % | 95.1514 % |
| Concentration per Run 3 | 4.6820 ppm | 102.3801 % | 95.9273 % | 96.9373 % | 100.4933 % | 93.9240 % | 94.6735 % |
| Concentration RSD | 0.6 % | 0.6 % | 0.6 % | 0.5 % | 0.4 % | 0.8 % | 0.8 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512877-07 WG2038582
Analysis started at: 3/11/2025 8:31:59 PM
Rack 2
Vial 44
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0103 ppm | -0.0008 ppm | 0.0073 ppm | 0.1795 ppm | 0.0000 ppm | 66.2076 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0148 ppm | -0.0003 ppm | 0.0071 ppm | 0.1796 ppm | 0.0000 ppm | 66.1548 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0062 ppm | -0.0023 ppm | 0.0062 ppm | 0.1786 ppm | 0.0001 ppm | 66.3005 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0099 ppm | 0.0003 ppm | 0.0087 ppm | 0.1804 ppm | 0.0000 ppm | 66.1675 ppm |
| Concentration RSD | 4.7 % | 42.0 % | 174.7 % | 17.0 % | 0.5 % | 45.7 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0088 ppm | 0.0015 ppm | -0.0002 ppm | 0.0017 ppm | 0.0037 ppm | 0.2721 ppm | 0.0018 ppm |
| Concentration per Run 1 | 0.0087 ppm | 0.0021 ppm | -0.0004 ppm | 0.0014 ppm | 0.0033 ppm | 0.2682 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0088 ppm | 0.0019 ppm | -0.0004 ppm | 0.0017 ppm | 0.0035 ppm | 0.2676 ppm | 0.0020 ppm |
| Concentration per Run 3 | 0.0088 ppm | 0.0006 ppm | 0.0001 ppm | 0.0019 ppm | 0.0044 ppm | 0.2804 ppm | 0.0022 ppm |
| Concentration RSD | 0.7 % | 53.4 % | 122.8 % | 15.5 % | 16.6 % | 2.6 % | 31.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5525 ppm | 0.0328 ppm | 0.0001 ppm | 133.6727 ppm | 0.0035 ppm | 0.7025 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.5514 ppm | 0.0328 ppm | 0.0002 ppm | 134.1032 ppm | 0.0042 ppm | 0.7040 ppm | 0.0049 ppm |
| Concentration per Run 2 | 0.5527 ppm | 0.0327 ppm | -0.0004 ppm | 132.4530 ppm | 0.0027 ppm | 0.7016 ppm | -0.0009 ppm |
| Concentration per Run 3 | 0.5533 ppm | 0.0330 ppm | 0.0005 ppm | 134.4620 ppm | 0.0036 ppm | 0.7019 ppm | -0.0010 ppm |
| Concentration RSD | 0.2 % | 0.5 % | 426.4 % | 0.8 % | 21.1 % | 0.2 % | 339.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 0.4976 ppm | -0.0013 ppm | 0.1322 ppm | -0.0004 ppm | -0.0031 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0021 ppm | 0.5013 ppm | -0.0002 ppm | 0.1323 ppm | -0.0003 ppm | -0.0042 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0016 ppm | 0.4936 ppm | -0.0015 ppm | 0.1315 ppm | -0.0005 ppm | -0.0019 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0013 ppm | 0.4979 ppm | -0.0021 ppm | 0.1328 ppm | -0.0004 ppm | -0.0031 ppm | 0.0001 ppm |
| Concentration RSD | 26.9 % | 0.8 % | 74.4 % | 0.5 % | 23.3 % | 37.8 % | 150.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.9484 ppm | 102.6649 % | 96.2562 % | 96.8911 % | 100.7330 % | 94.3976 % | 94.9863 % |
| Concentration per Run 1 | 4.9502 ppm | 102.8045 % | 96.3613 % | 96.4153 % | 100.6083 % | 94.3284 % | 94.7274 % |
| Concentration per Run 2 | 4.9331 ppm | 102.7182 % | 96.2601 % | 97.0792 % | 100.9885 % | 94.3257 % | 95.1336 % |
| Concentration per Run 3 | 4.9618 ppm | 102.4719 % | 96.1471 % | 97.1787 % | 100.6022 % | 94.5388 % | 95.0978 % |
| Concentration RSD | 0.3 % | 0.2 % | 0.1 % | 0.4 % | 0.2 % | 0.1 % | 0.2 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCV
Analysis started at: 3/11/2025 8:35:28 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4811 ppm | 0.4978 ppm | 0.5013 ppm | 0.4847 ppm | 0.4779 ppm | 0.5152 ppm | 0.4917 ppm |
| Concentration per Run 1 | 0.4805 ppm | 0.4860 ppm | 0.5022 ppm | 0.4845 ppm | 0.4797 ppm | 0.5161 ppm | 0.4927 ppm |
| Concentration per Run 2 | 0.4819 ppm | 0.5023 ppm | 0.5022 ppm | 0.4857 ppm | 0.4753 ppm | 0.5125 ppm | 0.4954 ppm |
| Concentration per Run 3 | 0.4809 ppm | 0.5052 ppm | 0.4995 ppm | 0.4839 ppm | 0.4787 ppm | 0.5172 ppm | 0.4869 ppm |
| Recovery Percentage 1 | 96.215 % | 99.563 % | 100.258 % | 96.939 % | 95.577 % | 103.050 % | 98.338 % |
| Concentration RSD | 0.1 % | 2.1 % | 0.3 % | 0.2 % | 0.5 % | 0.5 % | 0.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4858 ppm | 0.4941 ppm | 0.4889 ppm | 0.4692 ppm | 0.5147 ppm | 5.3137 ppm | 0.5238 ppm |
| Concentration per Run 1 | 0.4865 ppm | 0.4938 ppm | 0.4881 ppm | 0.4699 ppm | 0.5148 ppm | 5.3234 ppm | 0.5247 ppm |
| Concentration per Run 2 | 0.4836 ppm | 0.4931 ppm | 0.4911 ppm | 0.4678 ppm | 0.5131 ppm | 5.2899 ppm | 0.5233 ppm |
| Concentration per Run 3 | 0.4873 ppm | 0.4952 ppm | 0.4874 ppm | 0.4699 ppm | 0.5163 ppm | 5.3277 ppm | 0.5234 ppm |
| Recovery Percentage 1 | 97.158 % | 98.811 % | 97.776 % | 93.842 % | 102.942 % | 106.273 % | 104.759 % |
| Concentration RSD | 0.4 % | 0.2 % | 0.4 % | 0.3 % | 0.3 % | 0.4 % | 0.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4745 ppm | 0.4927 ppm | 0.4884 ppm | 10.3829 ppm | 0.4940 ppm | 0.5023 ppm | 0.4971 ppm |
| Concentration per Run 1 | 0.4724 ppm | 0.4916 ppm | 0.4889 ppm | 10.3888 ppm | 0.4935 ppm | 0.5047 ppm | 0.4973 ppm |
| Concentration per Run 2 | 0.4744 ppm | 0.4930 ppm | 0.4885 ppm | 10.2921 ppm | 0.4962 ppm | 0.4998 ppm | 0.4949 ppm |
| Concentration per Run 3 | 0.4766 ppm | 0.4934 ppm | 0.4879 ppm | 10.4678 ppm | 0.4923 ppm | 0.5023 ppm | 0.4990 ppm |
| Recovery Percentage 1 | 94.896 % | 98.536 % | 97.689 % | 103.829 % | 98.803 % | 100.454 % | 99.414 % |
| Concentration RSD | 0.4 % | 0.2 % | 0.1 % | 0.8 % | 0.4 % | 0.5 % | 0.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4968 ppm | 5.4935 ppm | 0.5019 ppm | 0.4967 ppm | 0.4841 ppm | 0.4900 ppm | 0.4825 ppm |
| Concentration per Run 1 | 0.4971 ppm | 5.4771 ppm | 0.4998 ppm | 0.4966 ppm | 0.4831 ppm | 0.4921 ppm | 0.4842 ppm |
| Concentration per Run 2 | 0.4995 ppm | 5.4924 ppm | 0.5038 ppm | 0.4959 ppm | 0.4855 ppm | 0.4888 ppm | 0.4812 ppm |
| Concentration per Run 3 | 0.4937 ppm | 5.5110 ppm | 0.5022 ppm | 0.4977 ppm | 0.4836 ppm | 0.4891 ppm | 0.4821 ppm |
| Recovery Percentage 1 | 99.351 % | 104.638 % | 100.387 % | 99.345 % | 96.818 % | 97.993 % | 96.496 % |
| Concentration RSD | 0.6 % | 0.3 % | 0.4 % | 0.2 % | 0.3 % | 0.4 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4917 ppm | 103.3409 % | 98.0711 % | 98.9472 % | 101.6912 % | 96.2243 % | 96.6395 % |
| Concentration per Run 1 | 0.4922 ppm | 103.8069 % | 97.9245 % | 99.0866 % | 102.3822 % | 96.0096 % | 97.2536 % |
| Concentration per Run 2 | 0.4940 ppm | 103.3337 % | 98.9712 % | 98.8659 % | 101.7591 % | 97.4568 % | 96.1899 % |
| Concentration per Run 3 | 0.4888 ppm | 102.8821 % | 97.3177 % | 98.8890 % | 100.9322 % | 95.2065 % | 96.4750 % |
| Recovery Percentage 1 | 98.334 % | | | | | | |
| Concentration RSD | 0.5 % | 0.4 % | 0.9 % | 0.1 % | 0.7 % | 1.2 % | 0.6 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCB
Analysis started at: 3/11/2025 8:38:57 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0149 ppm | 0.0006 ppm | 0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0014 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.0146 ppm | 0.0008 ppm | 0.0020 ppm | -0.0002 ppm | 0.0000 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0134 ppm | -0.0005 ppm | -0.0002 ppm | -0.0001 ppm | 0.0000 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0167 ppm | 0.0016 ppm | -0.0005 ppm | 0.0001 ppm | 0.0000 ppm | 0.0030 ppm |
| Recovery Percentage 1 | 11.878 % | 14.894 % | 12.461 % | 1.422 % | -0.440 % | 0.272 % | 1.438 % |
| Concentration RSD | 46.3 % | 11.3 % | 171.4 % | 320.2 % | 308.4 % | 135.7 % | 91.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0002 ppm | -0.0001 ppm | 0.0005 ppm | 0.0019 ppm | 0.0359 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0000 ppm | -0.0003 ppm | 0.0011 ppm | 0.0023 ppm | 0.0319 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0004 ppm | -0.0004 ppm | 0.0002 ppm | 0.0006 ppm | 0.0351 ppm | 0.0002 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0010 ppm | 0.0004 ppm | 0.0002 ppm | 0.0028 ppm | 0.0407 ppm | -0.0003 ppm |
| Recovery Percentage 1 | -1.149 % | 0.783 % | -0.935 % | 5.058 % | 3.789 % | 1.435 % | 3.672 % |
| Concentration RSD | 107.3 % | 459.8 % | 439.5 % | 101.2 % | 61.4 % | 12.3 % | 268.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0018 ppm | -0.0002 ppm | 0.0024 ppm | 0.0258 ppm | -0.0015 ppm | -0.0001 ppm | 0.0019 ppm |
| Concentration per Run 1 | -0.0025 ppm | -0.0001 ppm | 0.0021 ppm | 0.0303 ppm | -0.0009 ppm | -0.0012 ppm | 0.0034 ppm |
| Concentration per Run 2 | -0.0015 ppm | -0.0002 ppm | 0.0023 ppm | 0.0262 ppm | -0.0021 ppm | -0.0005 ppm | 0.0011 ppm |
| Concentration per Run 3 | -0.0014 ppm | -0.0003 ppm | 0.0030 ppm | 0.0207 ppm | -0.0014 ppm | 0.0014 ppm | 0.0013 ppm |
| Recovery Percentage 1 | -1.783 % | -2.048 % | 4.889 % | 1.288 % | -5.877 % | -0.925 % | 3.818 % |
| Concentration RSD | 35.0 % | 42.7 % | 18.8 % | 18.7 % | 41.2 % | 1,452.4 % | 66.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | -0.0039 ppm | 0.0006 ppm | 0.0001 ppm | -0.0006 ppm | 0.0028 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0005 ppm | -0.0032 ppm | -0.0002 ppm | 0.0001 ppm | -0.0007 ppm | 0.0037 ppm | -0.0004 ppm |
| Concentration per Run 2 | -0.0033 ppm | -0.0014 ppm | 0.0007 ppm | 0.0001 ppm | -0.0008 ppm | 0.0032 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0009 ppm | -0.0070 ppm | 0.0014 ppm | 0.0001 ppm | -0.0004 ppm | 0.0013 ppm | -0.0001 ppm |
| Recovery Percentage 1 | -6.179 % | -0.780 % | 1.208 % | 1.040 % | -6.340 % | 13.786 % | -0.047 % |
| Concentration RSD | 371.1 % | 73.3 % | 132.9 % | 23.4 % | 31.4 % | 45.4 % | 9,115.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 101.0537 % | 97.1416 % | 96.8076 % | 101.5865 % | 97.0372 % | 96.9179 % |
| Concentration per Run 1 | -0.0008 ppm | 100.7286 % | 97.7106 % | 97.2781 % | 101.2802 % | 97.5082 % | 97.1124 % |
| Concentration per Run 2 | -0.0009 ppm | 101.2864 % | 96.7463 % | 96.6822 % | 102.3640 % | 96.7506 % | 97.0081 % |
| Concentration per Run 3 | -0.0005 ppm | 101.1461 % | 96.9678 % | 96.4627 % | 101.1154 % | 96.8529 % | 96.6334 % |
| Recovery Percentage 1 | -14.859 % | | | | | | |
| Concentration RSD | 25.0 % | 0.3 % | 0.5 % | 0.4 % | 0.7 % | 0.4 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512255-01 WG2038730
Analysis started at: 3/11/2025 9:15:02 PM
Rack 2
Vial 51
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 0.0231 ppm | -0.0001 ppm | 0.0414 ppm | 0.0559 ppm | 0.0000 ppm | 20.1047 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0282 ppm | -0.0005 ppm | 0.0424 ppm | 0.0561 ppm | 0.0000 ppm | 20.1051 ppm |
| Concentration per Run 2 | 0.0017 ppm | 0.0148 ppm | 0.0014 ppm | 0.0403 ppm | 0.0557 ppm | 0.0000 ppm | 20.1165 ppm |
| Concentration per Run 3 | 0.0016 ppm | 0.0265 ppm | -0.0012 ppm | 0.0414 ppm | 0.0560 ppm | 0.0000 ppm | 20.0925 ppm |
| Concentration RSD | 24.6 % | 31.6 % | 1,941.9 % | 2.6 % | 0.4 % | 23.8 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0002 ppm | 0.0006 ppm | 0.0019 ppm | 0.0372 ppm | 1.7965 ppm | 0.0017 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0002 ppm | 0.0007 ppm | 0.0013 ppm | 0.0361 ppm | 1.7979 ppm | 0.0019 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0003 ppm | 0.0008 ppm | 0.0020 ppm | 0.0377 ppm | 1.7774 ppm | 0.0018 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0001 ppm | 0.0003 ppm | 0.0022 ppm | 0.0377 ppm | 1.8143 ppm | 0.0013 ppm |
| Concentration RSD | 173.1 % | 55.6 % | 47.8 % | 25.3 % | 2.6 % | 1.0 % | 16.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.3484 ppm | 0.0748 ppm | 0.0004 ppm | 82.1742 ppm | 0.0010 ppm | -0.0014 ppm | 0.0034 ppm |
| Concentration per Run 1 | 3.3293 ppm | 0.0748 ppm | 0.0007 ppm | 82.4708 ppm | 0.0006 ppm | -0.0035 ppm | 0.0006 ppm |
| Concentration per Run 2 | 3.3599 ppm | 0.0749 ppm | 0.0004 ppm | 81.8438 ppm | 0.0007 ppm | 0.0000 ppm | 0.0045 ppm |
| Concentration per Run 3 | 3.3559 ppm | 0.0746 ppm | 0.0001 ppm | 82.2081 ppm | 0.0017 ppm | -0.0008 ppm | 0.0052 ppm |
| Concentration RSD | 0.5 % | 0.2 % | 73.6 % | 0.4 % | 61.3 % | 124.8 % | 72.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 5.6362 ppm | -0.0005 ppm | 0.1035 ppm | -0.0005 ppm | 0.0014 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0012 ppm | 5.6392 ppm | 0.0001 ppm | 0.1036 ppm | -0.0003 ppm | 0.0017 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0014 ppm | 5.6122 ppm | -0.0010 ppm | 0.1029 ppm | -0.0003 ppm | 0.0015 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0005 ppm | 5.6571 ppm | -0.0008 ppm | 0.1040 ppm | -0.0008 ppm | 0.0010 ppm | 0.0000 ppm |
| Concentration RSD | 45.3 % | 0.4 % | 108.7 % | 0.6 % | 66.0 % | 24.9 % | 3,634.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0875 ppm | 102.9865 % | 96.7762 % | 97.7791 % | 100.7886 % | 94.6795 % | 94.5308 % |
| Concentration per Run 1 | 0.0869 ppm | 103.6702 % | 96.2468 % | 97.5174 % | 101.2231 % | 94.1529 % | 94.3283 % |
| Concentration per Run 2 | 0.0879 ppm | 103.0085 % | 97.2241 % | 97.9043 % | 100.7407 % | 95.1800 % | 94.5746 % |
| Concentration per Run 3 | 0.0879 ppm | 102.2808 % | 96.8576 % | 97.9157 % | 100.4021 % | 94.7057 % | 94.6894 % |
| Concentration RSD | 0.7 % | 0.7 % | 0.5 % | 0.2 % | 0.4 % | 0.5 % | 0.2 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512255-02 WG2038730
Analysis started at: 3/11/2025 9:18:53 PM
Rack 2
Vial 52
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0283 ppm | 0.0006 ppm | 0.0748 ppm | 0.0401 ppm | 0.0000 ppm | 15.0933 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0233 ppm | -0.0003 ppm | 0.0755 ppm | 0.0402 ppm | 0.0000 ppm | 15.1953 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0271 ppm | -0.0008 ppm | 0.0752 ppm | 0.0400 ppm | 0.0000 ppm | 15.0010 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0346 ppm | 0.0030 ppm | 0.0737 ppm | 0.0400 ppm | 0.0000 ppm | 15.0836 ppm |
| Concentration RSD | 70.2 % | 20.2 % | 319.6 % | 1.3 % | 0.2 % | 158.6 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0004 ppm | 0.0001 ppm | 0.0019 ppm | 0.0435 ppm | 2.5695 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0002 ppm | 0.0002 ppm | 0.0021 ppm | 0.0420 ppm | 2.5864 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0008 ppm | 0.0001 ppm | 0.0019 ppm | 0.0450 ppm | 2.5546 ppm | 0.0005 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0003 ppm | 0.0000 ppm | 0.0016 ppm | 0.0434 ppm | 2.5677 ppm | 0.0002 ppm |
| Concentration RSD | 127.7 % | 76.7 % | 122.8 % | 11.8 % | 3.4 % | 0.6 % | 45.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.8812 ppm | 0.0975 ppm | 0.0000 ppm | 19.7839 ppm | -0.0001 ppm | -0.0010 ppm | 0.0013 ppm |
| Concentration per Run 1 | 1.8914 ppm | 0.0978 ppm | 0.0003 ppm | 19.8765 ppm | -0.0004 ppm | -0.0006 ppm | 0.0006 ppm |
| Concentration per Run 2 | 1.8815 ppm | 0.0968 ppm | 0.0000 ppm | 19.7429 ppm | 0.0011 ppm | -0.0012 ppm | 0.0038 ppm |
| Concentration per Run 3 | 1.8705 ppm | 0.0978 ppm | -0.0001 ppm | 19.7324 ppm | -0.0009 ppm | -0.0014 ppm | -0.0004 ppm |
| Concentration RSD | 0.6 % | 0.6 % | 537.7 % | 0.4 % | 1,220.8 % | 41.1 % | 166.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 7.4448 ppm | -0.0020 ppm | 0.0968 ppm | -0.0005 ppm | 0.0031 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | 7.4863 ppm | -0.0014 ppm | 0.0971 ppm | -0.0003 ppm | 0.0020 ppm | -0.0002 ppm |
| Concentration per Run 2 | -0.0022 ppm | 7.4215 ppm | -0.0024 ppm | 0.0968 ppm | -0.0006 ppm | 0.0048 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0001 ppm | 7.4265 ppm | -0.0021 ppm | 0.0966 ppm | -0.0005 ppm | 0.0025 ppm | -0.0002 ppm |
| Concentration RSD | 184.1 % | 0.5 % | 24.4 % | 0.3 % | 27.6 % | 48.9 % | 393.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0374 ppm | 102.0477 % | 97.2515 % | 97.0473 % | 101.0612 % | 95.6083 % | 95.3732 % |
| Concentration per Run 1 | 0.0377 ppm | 101.8105 % | 96.9441 % | 97.0298 % | 101.3455 % | 95.5936 % | 95.5015 % |
| Concentration per Run 2 | 0.0372 ppm | 101.9268 % | 97.8576 % | 96.7243 % | 100.9204 % | 95.9975 % | 95.3007 % |
| Concentration per Run 3 | 0.0374 ppm | 102.4059 % | 96.9529 % | 97.3878 % | 100.9177 % | 95.2336 % | 95.3173 % |
| Concentration RSD | 0.7 % | 0.3 % | 0.5 % | 0.3 % | 0.2 % | 0.4 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512325-03 WG2038730
Analysis started at: 3/11/2025 9:22:23 PM
Rack 2
Vial 46
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0033 ppm | 0.5184 ppm | 0.0013 ppm | 0.0194 ppm | 0.0236 ppm | 0.0000 ppm | 25.6356 ppm |
| Concentration per Run 1 | 0.0033 ppm | 0.5207 ppm | 0.0006 ppm | 0.0203 ppm | 0.0235 ppm | 0.0000 ppm | 25.5758 ppm |
| Concentration per Run 2 | 0.0035 ppm | 0.5266 ppm | 0.0025 ppm | 0.0180 ppm | 0.0237 ppm | 0.0000 ppm | 25.6703 ppm |
| Concentration per Run 3 | 0.0030 ppm | 0.5078 ppm | 0.0007 ppm | 0.0200 ppm | 0.0237 ppm | 0.0001 ppm | 25.6607 ppm |
| Concentration RSD | 8.5 % | 1.9 % | 80.3 % | 6.5 % | 0.4 % | 56.5 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0004 ppm | 0.0040 ppm | 0.0036 ppm | 0.6230 ppm | 1.1587 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0004 ppm | -0.0001 ppm | 0.0047 ppm | 0.0033 ppm | 0.6186 ppm | 1.1540 ppm | 0.0013 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0008 ppm | 0.0030 ppm | 0.0039 ppm | 0.6193 ppm | 1.1540 ppm | -0.0008 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0005 ppm | 0.0044 ppm | 0.0037 ppm | 0.6312 ppm | 1.1680 ppm | 0.0007 ppm |
| Concentration RSD | 110.6 % | 119.0 % | 23.0 % | 7.6 % | 1.1 % | 0.7 % | 252.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.3957 ppm | 0.0412 ppm | 0.0006 ppm | 2.6524 ppm | 0.0021 ppm | -0.0003 ppm | 0.0003 ppm |
| Concentration per Run 1 | 8.3856 ppm | 0.0413 ppm | 0.0003 ppm | 2.6437 ppm | 0.0021 ppm | 0.0014 ppm | 0.0040 ppm |
| Concentration per Run 2 | 8.4023 ppm | 0.0412 ppm | 0.0010 ppm | 2.6544 ppm | 0.0029 ppm | -0.0003 ppm | -0.0044 ppm |
| Concentration per Run 3 | 8.3991 ppm | 0.0411 ppm | 0.0003 ppm | 2.6592 ppm | 0.0013 ppm | -0.0020 ppm | 0.0014 ppm |
| Concentration RSD | 0.1 % | 0.3 % | 68.0 % | 0.3 % | 37.0 % | 574.5 % | 1,401.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 3.8338 ppm | -0.0010 ppm | 0.1034 ppm | 0.0249 ppm | 0.0020 ppm | 0.0011 ppm |
| Concentration per Run 1 | -0.0003 ppm | 3.8391 ppm | -0.0011 ppm | 0.1032 ppm | 0.0249 ppm | 0.0007 ppm | 0.0012 ppm |
| Concentration per Run 2 | -0.0001 ppm | 3.8402 ppm | -0.0012 ppm | 0.1034 ppm | 0.0244 ppm | 0.0016 ppm | 0.0010 ppm |
| Concentration per Run 3 | 0.0013 ppm | 3.8223 ppm | -0.0008 ppm | 0.1036 ppm | 0.0253 ppm | 0.0036 ppm | 0.0011 ppm |
| Concentration RSD | 263.1 % | 0.3 % | 20.8 % | 0.2 % | 1.9 % | 73.3 % | 7.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0051 ppm | 101.9112 % | 97.1183 % | 96.6536 % | 101.7959 % | 96.1308 % | 96.2655 % |
| Concentration per Run 1 | 0.0050 ppm | 102.5935 % | 97.6675 % | 96.4291 % | 102.8236 % | 96.9298 % | 96.4106 % |
| Concentration per Run 2 | 0.0049 ppm | 101.7442 % | 97.0826 % | 96.7178 % | 101.4097 % | 96.1629 % | 96.1890 % |
| Concentration per Run 3 | 0.0053 ppm | 101.3961 % | 96.6047 % | 96.8140 % | 101.1544 % | 95.2996 % | 96.1970 % |
| Concentration RSD | 4.0 % | 0.6 % | 0.5 % | 0.2 % | 0.9 % | 0.8 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038730-7 WG2038730
Analysis started at: 3/11/2025 9:25:53 PM
Rack 2
Vial 47
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0539 ppm | 2.6518 ppm | 0.1214 ppm | 1.0242 ppm | 1.9956 ppm | 0.0532 ppm | 35.8415 ppm |
| Concentration per Run 1 | 0.0541 ppm | 2.6444 ppm | 0.1239 ppm | 1.0252 ppm | 1.9910 ppm | 0.0530 ppm | 35.5647 ppm |
| Concentration per Run 2 | 0.0535 ppm | 2.6517 ppm | 0.1217 ppm | 1.0165 ppm | 1.9948 ppm | 0.0532 ppm | 35.9996 ppm |
| Concentration per Run 3 | 0.0540 ppm | 2.6594 ppm | 0.1186 ppm | 1.0309 ppm | 2.0011 ppm | 0.0534 ppm | 35.9602 ppm |
| Concentration RSD | 0.5 % | 0.3 % | 2.2 % | 0.7 % | 0.3 % | 0.4 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0520 ppm | 0.4916 ppm | 0.2013 ppm | 0.2525 ppm | 1.6470 ppm | 12.1174 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0522 ppm | 0.4916 ppm | 0.2018 ppm | 0.2525 ppm | 1.6464 ppm | 12.0679 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0521 ppm | 0.4933 ppm | 0.2006 ppm | 0.2537 ppm | 1.6465 ppm | 12.0960 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0517 ppm | 0.4899 ppm | 0.2014 ppm | 0.2513 ppm | 1.6482 ppm | 12.1883 ppm | 0.0006 ppm |
| Concentration RSD | 0.5 % | 0.3 % | 0.3 % | 0.5 % | 0.1 % | 0.5 % | 45.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 18.2576 ppm | 0.5561 ppm | 0.9722 ppm | 13.5745 ppm | 0.4942 ppm | 0.5375 ppm | 0.4504 ppm |
| Concentration per Run 1 | 18.2508 ppm | 0.5547 ppm | 0.9680 ppm | 13.5592 ppm | 0.4937 ppm | 0.5361 ppm | 0.4464 ppm |
| Concentration per Run 2 | 18.2582 ppm | 0.5568 ppm | 0.9730 ppm | 13.5690 ppm | 0.4957 ppm | 0.5422 ppm | 0.4530 ppm |
| Concentration per Run 3 | 18.2636 ppm | 0.5568 ppm | 0.9755 ppm | 13.5952 ppm | 0.4931 ppm | 0.5342 ppm | 0.4517 ppm |
| Concentration RSD | 0.0 % | 0.2 % | 0.4 % | 0.1 % | 0.3 % | 0.8 % | 0.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1207 ppm | 5.0252 ppm | 0.9576 ppm | 1.1092 ppm | 1.0108 ppm | 0.1175 ppm | 0.5059 ppm |
| Concentration per Run 1 | 0.1192 ppm | 5.0298 ppm | 0.9601 ppm | 1.1074 ppm | 1.0145 ppm | 0.1187 ppm | 0.5059 ppm |
| Concentration per Run 2 | 0.1234 ppm | 4.9988 ppm | 0.9524 ppm | 1.1092 ppm | 1.0070 ppm | 0.1179 ppm | 0.5066 ppm |
| Concentration per Run 3 | 0.1193 ppm | 5.0469 ppm | 0.9603 ppm | 1.1109 ppm | 1.0110 ppm | 0.1158 ppm | 0.5052 ppm |
| Concentration RSD | 2.0 % | 0.5 % | 0.5 % | 0.2 % | 0.4 % | 1.3 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5085 ppm | 102.3001 % | 97.2714 % | 97.7437 % | 101.3606 % | 96.3263 % | 95.7747 % |
| Concentration per Run 1 | 0.5104 ppm | 102.4634 % | 97.9106 % | 97.2428 % | 101.7126 % | 96.8321 % | 95.2726 % |
| Concentration per Run 2 | 0.5071 ppm | 102.6850 % | 96.9418 % | 97.3108 % | 101.8728 % | 96.0230 % | 95.8299 % |
| Concentration per Run 3 | 0.5079 ppm | 101.7520 % | 96.9617 % | 98.6774 % | 100.4963 % | 96.1238 % | 96.2216 % |
| Concentration RSD | 0.3 % | 0.5 % | 0.6 % | 0.8 % | 0.7 % | 0.5 % | 0.5 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038730-8 WG2038730
Analysis started at: 3/11/2025 9:29:22 PM
Rack 2
Vial 48
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0033 ppm | 0.5201 ppm | 0.0000 ppm | 0.0208 ppm | 0.0240 ppm | 0.0001 ppm | 25.9274 ppm |
| Concentration per Run 1 | 0.0032 ppm | 0.5255 ppm | 0.0017 ppm | 0.0211 ppm | 0.0242 ppm | 0.0000 ppm | 26.0591 ppm |
| Concentration per Run 2 | 0.0036 ppm | 0.5177 ppm | -0.0017 ppm | 0.0207 ppm | 0.0238 ppm | 0.0001 ppm | 25.8550 ppm |
| Concentration per Run 3 | 0.0030 ppm | 0.5172 ppm | -0.0001 ppm | 0.0206 ppm | 0.0239 ppm | 0.0001 ppm | 25.8681 ppm |
| Concentration RSD | 9.7 % | 0.9 % | 11,296.6 % | 1.5 % | 0.7 % | 70.2 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0007 ppm | 0.0043 ppm | 0.0040 ppm | 0.6215 ppm | 1.1487 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0003 ppm | 0.0045 ppm | 0.0038 ppm | 0.6265 ppm | 1.1690 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0017 ppm | 0.0043 ppm | 0.0039 ppm | 0.6156 ppm | 1.1374 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0005 ppm | 0.0041 ppm | 0.0044 ppm | 0.6222 ppm | 1.1397 ppm | 0.0004 ppm |
| Concentration RSD | 47.2 % | 149.9 % | 5.2 % | 7.9 % | 0.9 % | 1.5 % | 79.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.5199 ppm | 0.0418 ppm | 0.0057 ppm | 2.6670 ppm | 0.0030 ppm | -0.0004 ppm | 0.0051 ppm |
| Concentration per Run 1 | 8.5441 ppm | 0.0419 ppm | 0.0055 ppm | 2.6636 ppm | 0.0022 ppm | -0.0008 ppm | 0.0040 ppm |
| Concentration per Run 2 | 8.5080 ppm | 0.0418 ppm | 0.0066 ppm | 2.6744 ppm | 0.0035 ppm | 0.0001 ppm | 0.0053 ppm |
| Concentration per Run 3 | 8.5075 ppm | 0.0419 ppm | 0.0051 ppm | 2.6631 ppm | 0.0033 ppm | -0.0005 ppm | 0.0061 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 13.9 % | 0.2 % | 23.7 % | 109.4 % | 21.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 3.8687 ppm | 0.0043 ppm | 0.1041 ppm | 0.0254 ppm | 0.0002 ppm | 0.0014 ppm |
| Concentration per Run 1 | -0.0005 ppm | 3.8892 ppm | 0.0053 ppm | 0.1043 ppm | 0.0258 ppm | 0.0004 ppm | 0.0014 ppm |
| Concentration per Run 2 | 0.0016 ppm | 3.8571 ppm | 0.0032 ppm | 0.1037 ppm | 0.0255 ppm | 0.0010 ppm | 0.0014 ppm |
| Concentration per Run 3 | -0.0020 ppm | 3.8599 ppm | 0.0042 ppm | 0.1043 ppm | 0.0250 ppm | -0.0008 ppm | 0.0014 ppm |
| Concentration RSD | 620.9 % | 0.5 % | 24.4 % | 0.3 % | 1.7 % | 538.4 % | 2.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0073 ppm | 101.8775 % | 97.5462 % | 96.5345 % | 101.9592 % | 96.8753 % | 96.4514 % |
| Concentration per Run 1 | 0.0070 ppm | 101.3211 % | 96.9832 % | 96.2896 % | 101.2520 % | 96.2955 % | 96.4847 % |
| Concentration per Run 2 | 0.0075 ppm | 102.0596 % | 98.0913 % | 96.4957 % | 102.1996 % | 97.4871 % | 96.7292 % |
| Concentration per Run 3 | 0.0075 ppm | 102.2519 % | 97.5642 % | 96.8184 % | 102.4260 % | 96.8432 % | 96.1404 % |
| Concentration RSD | 3.8 % | 0.5 % | 0.6 % | 0.3 % | 0.6 % | 0.6 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038730-9 WG2038730
Analysis started at: 3/11/2025 9:32:52 PM
Rack 2
Vial 49
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0220 ppm | 2.5357 ppm | 0.1299 ppm | 1.0273 ppm | 1.9546 ppm | 0.0523 ppm | 34.8233 ppm |
| Concentration per Run 1 | 0.0222 ppm | 2.5460 ppm | 0.1297 ppm | 1.0238 ppm | 1.9642 ppm | 0.0525 ppm | 34.9985 ppm |
| Concentration per Run 2 | 0.0218 ppm | 2.5396 ppm | 0.1306 ppm | 1.0235 ppm | 1.9541 ppm | 0.0522 ppm | 34.6902 ppm |
| Concentration per Run 3 | 0.0220 ppm | 2.5216 ppm | 0.1296 ppm | 1.0345 ppm | 1.9457 ppm | 0.0522 ppm | 34.7812 ppm |
| Concentration RSD | 1.0 % | 0.5 % | 0.4 % | 0.6 % | 0.5 % | 0.3 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0527 ppm | 0.4942 ppm | 0.2012 ppm | 0.2550 ppm | 1.6354 ppm | 12.1268 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0527 ppm | 0.4961 ppm | 0.2011 ppm | 0.2569 ppm | 1.6533 ppm | 12.1995 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0527 ppm | 0.4927 ppm | 0.2014 ppm | 0.2536 ppm | 1.6172 ppm | 12.0829 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0526 ppm | 0.4939 ppm | 0.2013 ppm | 0.2545 ppm | 1.6357 ppm | 12.0981 ppm | 0.0010 ppm |
| Concentration RSD | 0.1 % | 0.4 % | 0.1 % | 0.7 % | 1.1 % | 0.5 % | 294.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 18.0698 ppm | 0.5483 ppm | 0.9892 ppm | 13.4419 ppm | 0.4962 ppm | 0.5539 ppm | 0.3705 ppm |
| Concentration per Run 1 | 18.0653 ppm | 0.5493 ppm | 0.9832 ppm | 13.4699 ppm | 0.4913 ppm | 0.5543 ppm | 0.3567 ppm |
| Concentration per Run 2 | 18.0204 ppm | 0.5474 ppm | 0.9879 ppm | 13.4837 ppm | 0.4977 ppm | 0.5551 ppm | 0.3687 ppm |
| Concentration per Run 3 | 18.1238 ppm | 0.5483 ppm | 0.9964 ppm | 13.3720 ppm | 0.4996 ppm | 0.5523 ppm | 0.3861 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 0.7 % | 0.5 % | 0.9 % | 0.3 % | 4.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1318 ppm | 4.5257 ppm | 0.9868 ppm | 1.1065 ppm | 1.0220 ppm | 0.1246 ppm | 0.5058 ppm |
| Concentration per Run 1 | 0.1312 ppm | 4.5220 ppm | 0.9839 ppm | 1.1122 ppm | 1.0180 ppm | 0.1236 ppm | 0.5063 ppm |
| Concentration per Run 2 | 0.1326 ppm | 4.5062 ppm | 0.9808 ppm | 1.1037 ppm | 1.0234 ppm | 0.1262 ppm | 0.5053 ppm |
| Concentration per Run 3 | 0.1316 ppm | 4.5488 ppm | 0.9956 ppm | 1.1035 ppm | 1.0246 ppm | 0.1239 ppm | 0.5058 ppm |
| Concentration RSD | 0.5 % | 0.5 % | 0.8 % | 0.5 % | 0.3 % | 1.1 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5085 ppm | 101.6154 % | 96.8567 % | 97.2082 % | 100.8897 % | 96.0144 % | 95.3010 % |
| Concentration per Run 1 | 0.5076 ppm | 101.5208 % | 96.0707 % | 96.8484 % | 100.6014 % | 95.4615 % | 95.0005 % |
| Concentration per Run 2 | 0.5066 ppm | 102.3861 % | 97.4306 % | 97.2255 % | 102.1358 % | 96.4662 % | 95.7009 % |
| Concentration per Run 3 | 0.5114 ppm | 100.9394 % | 97.0687 % | 97.5506 % | 99.9318 % | 96.1154 % | 95.2018 % |
| Concentration RSD | 0.5 % | 0.7 % | 0.7 % | 0.4 % | 1.1 % | 0.5 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038730-10d5 WG2038730
Analysis started at: 3/11/2025 9:36:21 PM
Rack 2
Vial 50
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 0.1094 ppm | -0.0005 ppm | 0.0036 ppm | 0.0047 ppm | 0.0000 ppm | 5.0035 ppm |
| Concentration per Run 1 | 0.0022 ppm | 0.1080 ppm | -0.0012 ppm | 0.0047 ppm | 0.0048 ppm | 0.0000 ppm | 5.0016 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.1126 ppm | -0.0004 ppm | 0.0029 ppm | 0.0046 ppm | 0.0001 ppm | 5.0098 ppm |
| Concentration per Run 3 | 0.0014 ppm | 0.1076 ppm | 0.0000 ppm | 0.0032 ppm | 0.0047 ppm | 0.0000 ppm | 4.9993 ppm |
| Concentration RSD | 32.9 % | 2.6 % | 125.2 % | 26.3 % | 1.8 % | 104.6 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0001 ppm | 0.0008 ppm | 0.0009 ppm | 0.1228 ppm | 0.2473 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0008 ppm | 0.0013 ppm | 0.0005 ppm | 0.1251 ppm | 0.2373 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | 0.0008 ppm | 0.0009 ppm | 0.1235 ppm | 0.2473 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0002 ppm | 0.0004 ppm | 0.0013 ppm | 0.1199 ppm | 0.2573 ppm | 0.0005 ppm |
| Concentration RSD | 96.3 % | 379.9 % | 59.4 % | 40.7 % | 2.2 % | 4.0 % | 93.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.6151 ppm | 0.0086 ppm | 0.0053 ppm | 0.5257 ppm | 0.0001 ppm | -0.0014 ppm | 0.0164 ppm |
| Concentration per Run 1 | 1.6052 ppm | 0.0088 ppm | 0.0053 ppm | 0.5247 ppm | -0.0007 ppm | -0.0019 ppm | 0.0130 ppm |
| Concentration per Run 2 | 1.6198 ppm | 0.0085 ppm | 0.0048 ppm | 0.5269 ppm | 0.0000 ppm | -0.0016 ppm | 0.0224 ppm |
| Concentration per Run 3 | 1.6203 ppm | 0.0083 ppm | 0.0056 ppm | 0.5255 ppm | 0.0010 ppm | -0.0005 ppm | 0.0139 ppm |
| Concentration RSD | 0.5 % | 3.1 % | 7.8 % | 0.2 % | 1,130.7 % | 55.7 % | 31.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | 0.7319 ppm | 0.0135 ppm | 0.0199 ppm | 0.0045 ppm | 0.0007 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0037 ppm | 0.7291 ppm | 0.0136 ppm | 0.0198 ppm | 0.0047 ppm | 0.0006 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0012 ppm | 0.7333 ppm | 0.0143 ppm | 0.0199 ppm | 0.0044 ppm | 0.0022 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0013 ppm | 0.7334 ppm | 0.0125 ppm | 0.0199 ppm | 0.0043 ppm | -0.0007 ppm | 0.0004 ppm |
| Concentration RSD | 208.4 % | 0.3 % | 6.9 % | 0.3 % | 4.9 % | 204.3 % | 93.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 101.7691 % | 97.7903 % | 97.6042 % | 101.5394 % | 96.6431 % | 97.0937 % |
| Concentration per Run 1 | 0.0009 ppm | 102.1375 % | 98.3564 % | 97.2156 % | 102.5651 % | 97.0023 % | 96.7508 % |
| Concentration per Run 2 | 0.0007 ppm | 101.6801 % | 97.3591 % | 97.4422 % | 100.8584 % | 95.9638 % | 97.0321 % |
| Concentration per Run 3 | 0.0007 ppm | 101.4897 % | 97.6555 % | 98.1548 % | 101.1947 % | 96.9634 % | 97.4981 % |
| Concentration RSD | 14.3 % | 0.3 % | 0.5 % | 0.5 % | 0.9 % | 0.6 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCV
Analysis started at: 3/11/2025 9:39:51 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4815 ppm | 0.4944 ppm | 0.5029 ppm | 0.4898 ppm | 0.4761 ppm | 0.5163 ppm | 0.4898 ppm |
| Concentration per Run 1 | 0.4813 ppm | 0.4883 ppm | 0.4996 ppm | 0.4891 ppm | 0.4778 ppm | 0.5183 ppm | 0.4906 ppm |
| Concentration per Run 2 | 0.4805 ppm | 0.5051 ppm | 0.5011 ppm | 0.4868 ppm | 0.4746 ppm | 0.5144 ppm | 0.4916 ppm |
| Concentration per Run 3 | 0.4828 ppm | 0.4899 ppm | 0.5079 ppm | 0.4937 ppm | 0.4760 ppm | 0.5162 ppm | 0.4871 ppm |
| Recovery Percentage 1 | 96.307 % | 98.882 % | 100.571 % | 97.967 % | 95.221 % | 103.265 % | 97.954 % |
| Concentration RSD | 0.2 % | 1.9 % | 0.9 % | 0.7 % | 0.3 % | 0.4 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4892 ppm | 0.4999 ppm | 0.4897 ppm | 0.4724 ppm | 0.5128 ppm | 5.2740 ppm | 0.5267 ppm |
| Concentration per Run 1 | 0.4899 ppm | 0.4999 ppm | 0.4886 ppm | 0.4724 ppm | 0.5144 ppm | 5.2735 ppm | 0.5271 ppm |
| Concentration per Run 2 | 0.4873 ppm | 0.4987 ppm | 0.4884 ppm | 0.4721 ppm | 0.5110 ppm | 5.2664 ppm | 0.5249 ppm |
| Concentration per Run 3 | 0.4905 ppm | 0.5010 ppm | 0.4922 ppm | 0.4728 ppm | 0.5130 ppm | 5.2823 ppm | 0.5281 ppm |
| Recovery Percentage 1 | 97.849 % | 99.980 % | 97.949 % | 94.484 % | 102.559 % | 105.481 % | 105.337 % |
| Concentration RSD | 0.3 % | 0.2 % | 0.4 % | 0.1 % | 0.3 % | 0.2 % | 0.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4763 ppm | 0.4980 ppm | 0.4908 ppm | 10.3913 ppm | 0.4970 ppm | 0.4984 ppm | 0.5048 ppm |
| Concentration per Run 1 | 0.4774 ppm | 0.5001 ppm | 0.4889 ppm | 10.3956 ppm | 0.4938 ppm | 0.4998 ppm | 0.5006 ppm |
| Concentration per Run 2 | 0.4785 ppm | 0.4956 ppm | 0.4908 ppm | 10.3473 ppm | 0.4950 ppm | 0.4940 ppm | 0.4986 ppm |
| Concentration per Run 3 | 0.4731 ppm | 0.4982 ppm | 0.4926 ppm | 10.4311 ppm | 0.5023 ppm | 0.5015 ppm | 0.5153 ppm |
| Recovery Percentage 1 | 95.267 % | 99.593 % | 98.154 % | 103.913 % | 99.403 % | 99.688 % | 100.967 % |
| Concentration RSD | 0.6 % | 0.5 % | 0.4 % | 0.4 % | 0.9 % | 0.8 % | 1.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4990 ppm | 5.5280 ppm | 0.5109 ppm | 0.4969 ppm | 0.4847 ppm | 0.4870 ppm | 0.4836 ppm |
| Concentration per Run 1 | 0.5009 ppm | 5.5153 ppm | 0.5142 ppm | 0.4967 ppm | 0.4841 ppm | 0.4831 ppm | 0.4825 ppm |
| Concentration per Run 2 | 0.4995 ppm | 5.5183 ppm | 0.5067 ppm | 0.4961 ppm | 0.4836 ppm | 0.4904 ppm | 0.4839 ppm |
| Concentration per Run 3 | 0.4966 ppm | 5.5504 ppm | 0.5119 ppm | 0.4978 ppm | 0.4865 ppm | 0.4874 ppm | 0.4842 ppm |
| Recovery Percentage 1 | 99.795 % | 105.295 % | 102.186 % | 99.378 % | 96.948 % | 97.400 % | 96.712 % |
| Concentration RSD | 0.4 % | 0.4 % | 0.8 % | 0.2 % | 0.3 % | 0.8 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4958 ppm | 102.5947 % | 97.8498 % | 98.5032 % | 100.8381 % | 95.9678 % | 96.0249 % |
| Concentration per Run 1 | 0.4947 ppm | 102.7058 % | 97.4421 % | 98.6637 % | 101.2471 % | 95.8177 % | 96.0304 % |
| Concentration per Run 2 | 0.4934 ppm | 102.8069 % | 98.1196 % | 98.4928 % | 101.1548 % | 96.1812 % | 95.9091 % |
| Concentration per Run 3 | 0.4993 ppm | 102.2713 % | 97.9878 % | 98.3531 % | 100.1125 % | 95.9046 % | 96.1351 % |
| Recovery Percentage 1 | 99.166 % | | | | | | |
| Concentration RSD | 0.6 % | 0.3 % | 0.4 % | 0.2 % | 0.6 % | 0.2 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCB
Analysis started at: 3/11/2025 9:43:20 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 0.0162 ppm | 0.0003 ppm | 0.0008 ppm | -0.0001 ppm | 0.0001 ppm | 0.0015 ppm |
| Concentration per Run 1 | 0.0015 ppm | 0.0153 ppm | 0.0010 ppm | 0.0000 ppm | -0.0002 ppm | 0.0001 ppm | 0.0012 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0190 ppm | -0.0012 ppm | 0.0013 ppm | 0.0001 ppm | 0.0000 ppm | 0.0045 ppm |
| Concentration per Run 3 | 0.0018 ppm | 0.0143 ppm | 0.0012 ppm | 0.0011 ppm | 0.0000 ppm | 0.0001 ppm | -0.0012 ppm |
| Recovery Percentage 1 | 20.680 % | 16.215 % | 6.659 % | 2.693 % | -0.594 % | 1.451 % | 1.507 % |
| Concentration RSD | 26.3 % | 15.1 % | 391.2 % | 89.8 % | 245.4 % | 33.0 % | 191.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0001 ppm | -0.0002 ppm | 0.0000 ppm | 0.0011 ppm | 0.0304 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0006 ppm | -0.0003 ppm | 0.0001 ppm | 0.0021 ppm | 0.0114 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | -0.0006 ppm | -0.0004 ppm | 0.0013 ppm | 0.0412 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0009 ppm | 0.0004 ppm | 0.0004 ppm | -0.0002 ppm | 0.0387 ppm | 0.0007 ppm |
| Recovery Percentage 1 | 2.534 % | -0.272 % | -1.582 % | 0.325 % | 2.178 % | 1.218 % | 16.410 % |
| Concentration RSD | 96.6 % | 1,449.2 % | 304.0 % | 1,301.0 % | 107.7 % | 54.5 % | 14.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0043 ppm | -0.0001 ppm | 0.0025 ppm | 0.0157 ppm | 0.0001 ppm | -0.0019 ppm | 0.0060 ppm |
| Concentration per Run 1 | -0.0054 ppm | 0.0000 ppm | 0.0026 ppm | 0.0145 ppm | 0.0010 ppm | -0.0016 ppm | 0.0069 ppm |
| Concentration per Run 2 | -0.0049 ppm | 0.0000 ppm | 0.0025 ppm | 0.0166 ppm | -0.0005 ppm | -0.0024 ppm | 0.0046 ppm |
| Concentration per Run 3 | -0.0027 ppm | -0.0003 ppm | 0.0024 ppm | 0.0159 ppm | -0.0002 ppm | -0.0018 ppm | 0.0066 ppm |
| Recovery Percentage 1 | -4.326 % | -0.947 % | 5.014 % | 0.784 % | 0.380 % | -19.228 % | 12.088 % |
| Concentration RSD | 33.4 % | 196.0 % | 3.5 % | 6.7 % | 832.1 % | 21.5 % | 20.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0013 ppm | -0.0030 ppm | 0.0016 ppm | 0.0000 ppm | -0.0005 ppm | 0.0013 ppm | -0.0002 ppm |
| Concentration per Run 1 | -0.0029 ppm | -0.0010 ppm | 0.0003 ppm | 0.0001 ppm | -0.0007 ppm | 0.0038 ppm | -0.0006 ppm |
| Concentration per Run 2 | 0.0007 ppm | -0.0043 ppm | 0.0012 ppm | 0.0000 ppm | -0.0005 ppm | 0.0006 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0016 ppm | -0.0038 ppm | 0.0032 ppm | 0.0000 ppm | -0.0004 ppm | -0.0007 ppm | 0.0001 ppm |
| Recovery Percentage 1 | -12.661 % | -0.605 % | 3.171 % | 0.228 % | -5.391 % | 6.275 % | -1.870 % |
| Concentration RSD | 141.3 % | 58.0 % | 93.0 % | 342.9 % | 24.9 % | 183.7 % | 208.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | 100.4593 % | 96.2920 % | 97.0509 % | 100.8733 % | 96.2861 % | 97.0262 % |
| Concentration per Run 1 | -0.0007 ppm | 99.8418 % | 96.0037 % | 97.8933 % | 99.9465 % | 96.2092 % | 97.4437 % |
| Concentration per Run 2 | -0.0009 ppm | 101.1287 % | 96.5550 % | 96.4314 % | 101.8420 % | 96.7239 % | 96.4598 % |
| Concentration per Run 3 | -0.0008 ppm | 100.4073 % | 96.3175 % | 96.8280 % | 100.8315 % | 95.9251 % | 97.1751 % |
| Recovery Percentage 1 | -16.191 % | | | | | | |
| Concentration RSD | 10.1 % | 0.6 % | 0.3 % | 0.8 % | 0.9 % | 0.4 % | 0.5 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512255-03 WG2038730
Analysis started at: 3/11/2025 9:52:26 PM
Rack 2
Vial 53
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0419 ppm | 0.0000 ppm | 0.0712 ppm | 0.0409 ppm | 0.0000 ppm | 10.5520 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.0474 ppm | 0.0013 ppm | 0.0704 ppm | 0.0409 ppm | 0.0000 ppm | 10.5680 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0359 ppm | 0.0008 ppm | 0.0713 ppm | 0.0409 ppm | 0.0000 ppm | 10.5539 ppm |
| Concentration per Run 3 | 0.0014 ppm | 0.0425 ppm | -0.0021 ppm | 0.0718 ppm | 0.0409 ppm | 0.0000 ppm | 10.5342 ppm |
| Concentration RSD | 61.0 % | 13.8 % | 50,984.9 % | 1.0 % | 0.0 % | 23.9 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0006 ppm | 0.0002 ppm | 0.0008 ppm | 0.2609 ppm | 2.5157 ppm | 0.0017 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0010 ppm | -0.0001 ppm | 0.0005 ppm | 0.2608 ppm | 2.5457 ppm | 0.0018 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0006 ppm | 0.0002 ppm | 0.0008 ppm | 0.2601 ppm | 2.4785 ppm | 0.0010 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0003 ppm | 0.0005 ppm | 0.0012 ppm | 0.2619 ppm | 2.5230 ppm | 0.0024 ppm |
| Concentration RSD | 1,223.7 % | 57.6 % | 130.2 % | 46.9 % | 0.3 % | 1.4 % | 41.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.4099 ppm | 0.1424 ppm | -0.0001 ppm | 7.3005 ppm | 0.0014 ppm | -0.0019 ppm | 0.0011 ppm |
| Concentration per Run 1 | 1.4125 ppm | 0.1425 ppm | -0.0003 ppm | 7.3107 ppm | 0.0012 ppm | -0.0019 ppm | 0.0023 ppm |
| Concentration per Run 2 | 1.4144 ppm | 0.1428 ppm | -0.0004 ppm | 7.3286 ppm | 0.0010 ppm | -0.0012 ppm | -0.0028 ppm |
| Concentration per Run 3 | 1.4029 ppm | 0.1418 ppm | 0.0005 ppm | 7.2622 ppm | 0.0020 ppm | -0.0027 ppm | 0.0039 ppm |
| Concentration RSD | 0.4 % | 0.4 % | 805.4 % | 0.5 % | 37.0 % | 37.7 % | 307.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 8.0814 ppm | -0.0011 ppm | 0.0934 ppm | -0.0003 ppm | 0.0020 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0010 ppm | 8.0897 ppm | -0.0007 ppm | 0.0934 ppm | -0.0006 ppm | 0.0005 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0004 ppm | 8.0971 ppm | -0.0024 ppm | 0.0934 ppm | -0.0007 ppm | 0.0028 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0009 ppm | 8.0573 ppm | -0.0001 ppm | 0.0934 ppm | 0.0004 ppm | 0.0026 ppm | 0.0000 ppm |
| Concentration RSD | 594.2 % | 0.3 % | 107.9 % | 0.0 % | 191.9 % | 63.7 % | 2,227.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0217 ppm | 103.7919 % | 99.4571 % | 98.8002 % | 102.9775 % | 97.5264 % | 97.5915 % |
| Concentration per Run 1 | 0.0218 ppm | 104.2822 % | 99.4832 % | 98.0081 % | 103.4213 % | 97.4516 % | 96.8542 % |
| Concentration per Run 2 | 0.0215 ppm | 103.2557 % | 99.3979 % | 99.2761 % | 102.4331 % | 97.5825 % | 97.6624 % |
| Concentration per Run 3 | 0.0217 ppm | 103.8378 % | 99.4901 % | 99.1163 % | 103.0782 % | 97.5452 % | 98.2579 % |
| Concentration RSD | 0.7 % | 0.5 % | 0.1 % | 0.7 % | 0.5 % | 0.1 % | 0.7 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512255-04 WG2038730
Analysis started at: 3/11/2025 9:56:02 PM
Rack 2
Vial 54
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.5875 ppm | 0.0002 ppm | 0.0365 ppm | 0.0233 ppm | 0.0001 ppm | 7.5133 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.5870 ppm | 0.0007 ppm | 0.0357 ppm | 0.0233 ppm | 0.0001 ppm | 7.5325 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.5874 ppm | -0.0014 ppm | 0.0363 ppm | 0.0232 ppm | 0.0001 ppm | 7.4794 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.5881 ppm | 0.0012 ppm | 0.0376 ppm | 0.0233 ppm | 0.0001 ppm | 7.5279 ppm |
| Concentration RSD | 44.0 % | 0.1 % | 828.2 % | 2.6 % | 0.3 % | 8.4 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0008 ppm | 0.0006 ppm | 0.0052 ppm | 0.9833 ppm | 1.5611 ppm | 0.0024 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0006 ppm | 0.0008 ppm | 0.0052 ppm | 0.9912 ppm | 1.5773 ppm | 0.0016 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0012 ppm | -0.0002 ppm | 0.0051 ppm | 0.9790 ppm | 1.5490 ppm | 0.0032 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0007 ppm | 0.0012 ppm | 0.0052 ppm | 0.9798 ppm | 1.5569 ppm | 0.0023 ppm |
| Concentration RSD | 224.9 % | 38.6 % | 120.3 % | 0.5 % | 0.7 % | 0.9 % | 34.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.1537 ppm | 0.1082 ppm | 0.0002 ppm | 20.9306 ppm | 0.0019 ppm | 0.0070 ppm | -0.0020 ppm |
| Concentration per Run 1 | 2.1547 ppm | 0.1088 ppm | -0.0001 ppm | 20.9510 ppm | 0.0025 ppm | 0.0058 ppm | -0.0049 ppm |
| Concentration per Run 2 | 2.1564 ppm | 0.1073 ppm | 0.0005 ppm | 20.9827 ppm | 0.0023 ppm | 0.0073 ppm | -0.0008 ppm |
| Concentration per Run 3 | 2.1499 ppm | 0.1085 ppm | 0.0002 ppm | 20.8580 ppm | 0.0008 ppm | 0.0081 ppm | -0.0002 ppm |
| Concentration RSD | 0.2 % | 0.8 % | 145.6 % | 0.3 % | 50.1 % | 16.2 % | 128.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 7.1227 ppm | -0.0009 ppm | 0.0470 ppm | 0.0219 ppm | 0.0016 ppm | 0.0019 ppm |
| Concentration per Run 1 | -0.0002 ppm | 7.1409 ppm | -0.0016 ppm | 0.0472 ppm | 0.0219 ppm | 0.0002 ppm | 0.0021 ppm |
| Concentration per Run 2 | -0.0025 ppm | 7.1498 ppm | -0.0004 ppm | 0.0468 ppm | 0.0219 ppm | 0.0032 ppm | 0.0017 ppm |
| Concentration per Run 3 | 0.0007 ppm | 7.0773 ppm | -0.0008 ppm | 0.0469 ppm | 0.0218 ppm | 0.0013 ppm | 0.0018 ppm |
| Concentration RSD | 256.0 % | 0.6 % | 62.5 % | 0.5 % | 0.4 % | 98.1 % | 9.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0215 ppm | 103.8183 % | 98.6961 % | 98.2904 % | 102.9293 % | 96.3788 % | 96.7916 % |
| Concentration per Run 1 | 0.0213 ppm | 104.2538 % | 98.2476 % | 98.1207 % | 103.6062 % | 96.0470 % | 96.8079 % |
| Concentration per Run 2 | 0.0215 ppm | 104.2439 % | 98.7991 % | 98.5504 % | 103.1539 % | 96.5034 % | 96.7452 % |
| Concentration per Run 3 | 0.0217 ppm | 102.9571 % | 99.0417 % | 98.2002 % | 102.0278 % | 96.5859 % | 96.8218 % |
| Concentration RSD | 0.9 % | 0.7 % | 0.4 % | 0.2 % | 0.8 % | 0.3 % | 0.0 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512255-05 WG2038730
Analysis started at: 3/11/2025 9:59:32 PM
Rack 2
Vial 55
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0427 ppm | -0.0001 ppm | 0.0463 ppm | 0.0305 ppm | 0.0000 ppm | 12.2735 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0413 ppm | 0.0003 ppm | 0.0460 ppm | 0.0305 ppm | 0.0000 ppm | 12.2632 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0441 ppm | 0.0005 ppm | 0.0470 ppm | 0.0304 ppm | 0.0000 ppm | 12.2450 ppm |
| Concentration per Run 3 | 0.0012 ppm | 0.0426 ppm | -0.0011 ppm | 0.0460 ppm | 0.0305 ppm | 0.0001 ppm | 12.3122 ppm |
| Concentration RSD | 49.4 % | 3.2 % | 824.7 % | 1.2 % | 0.2 % | 53.2 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0005 ppm | 0.0000 ppm | 0.0011 ppm | 0.0717 ppm | 1.9772 ppm | 0.0024 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0002 ppm | 0.0001 ppm | 0.0013 ppm | 0.0730 ppm | 1.9817 ppm | 0.0029 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0003 ppm | 0.0004 ppm | 0.0012 ppm | 0.0704 ppm | 1.9891 ppm | 0.0019 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0016 ppm | -0.0004 ppm | 0.0009 ppm | 0.0717 ppm | 1.9608 ppm | 0.0024 ppm |
| Concentration RSD | 3,213.8 % | 168.5 % | 960.8 % | 16.4 % | 1.8 % | 0.7 % | 19.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.1024 ppm | 0.0408 ppm | 0.0003 ppm | 20.4588 ppm | 0.0015 ppm | -0.0018 ppm | 0.0008 ppm |
| Concentration per Run 1 | 3.1005 ppm | 0.0411 ppm | 0.0005 ppm | 20.3269 ppm | 0.0020 ppm | -0.0030 ppm | 0.0008 ppm |
| Concentration per Run 2 | 3.1055 ppm | 0.0403 ppm | -0.0005 ppm | 20.5194 ppm | 0.0012 ppm | -0.0018 ppm | -0.0003 ppm |
| Concentration per Run 3 | 3.1012 ppm | 0.0409 ppm | 0.0008 ppm | 20.5300 ppm | 0.0013 ppm | -0.0007 ppm | 0.0018 ppm |
| Concentration RSD | 0.1 % | 1.0 % | 241.4 % | 0.6 % | 27.7 % | 64.3 % | 136.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0014 ppm | 7.2068 ppm | -0.0008 ppm | 0.1073 ppm | 0.0003 ppm | 0.0016 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0016 ppm | 7.2088 ppm | -0.0005 ppm | 0.1070 ppm | 0.0007 ppm | 0.0010 ppm | 0.0004 ppm |
| Concentration per Run 2 | -0.0032 ppm | 7.2074 ppm | -0.0009 ppm | 0.1072 ppm | 0.0002 ppm | 0.0007 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0007 ppm | 7.2043 ppm | -0.0012 ppm | 0.1077 ppm | 0.0001 ppm | 0.0030 ppm | 0.0001 ppm |
| Concentration RSD | 144.8 % | 0.0 % | 44.4 % | 0.4 % | 88.6 % | 80.7 % | 317.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0598 ppm | 103.3453 % | 98.3328 % | 98.4746 % | 102.3865 % | 96.3255 % | 96.6052 % |
| Concentration per Run 1 | 0.0602 ppm | 103.0936 % | 98.2591 % | 98.8186 % | 102.0933 % | 96.1522 % | 96.9457 % |
| Concentration per Run 2 | 0.0603 ppm | 103.1760 % | 98.6676 % | 97.3530 % | 102.2607 % | 96.7766 % | 95.9890 % |
| Concentration per Run 3 | 0.0588 ppm | 103.7662 % | 98.0716 % | 99.2522 % | 102.8054 % | 96.0479 % | 96.8808 % |
| Concentration RSD | 1.4 % | 0.4 % | 0.3 % | 1.0 % | 0.4 % | 0.4 % | 0.6 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512325-01 WG2038730
Analysis started at: 3/11/2025 10:03:02 PM
Rack 2
Vial 56
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0047 ppm | 0.0219 ppm | 0.0011 ppm | 0.0188 ppm | 0.0191 ppm | 0.0000 ppm | 23.7918 ppm |
| Concentration per Run 1 | 0.0045 ppm | 0.0266 ppm | 0.0018 ppm | 0.0191 ppm | 0.0193 ppm | 0.0001 ppm | 23.8728 ppm |
| Concentration per Run 2 | 0.0048 ppm | 0.0172 ppm | 0.0015 ppm | 0.0190 ppm | 0.0192 ppm | 0.0000 ppm | 23.6890 ppm |
| Concentration per Run 3 | 0.0048 ppm | 0.0219 ppm | 0.0002 ppm | 0.0182 ppm | 0.0189 ppm | 0.0001 ppm | 23.8138 ppm |
| Concentration RSD | 4.7 % | 21.3 % | 71.8 % | 2.8 % | 1.0 % | 142.3 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0003 ppm | 0.0017 ppm | 0.0022 ppm | 0.0250 ppm | 2.0041 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0007 ppm | 0.0016 ppm | 0.0019 ppm | 0.0240 ppm | 2.0241 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0006 ppm | 0.0019 ppm | 0.0026 ppm | 0.0253 ppm | 2.0124 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0004 ppm | 0.0015 ppm | 0.0021 ppm | 0.0257 ppm | 1.9758 ppm | 0.0009 ppm |
| Concentration RSD | 36.5 % | 200.4 % | 12.3 % | 15.8 % | 3.5 % | 1.3 % | 99.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.4887 ppm | 0.0016 ppm | 0.0007 ppm | 12.4211 ppm | 0.0014 ppm | -0.0013 ppm | 0.0033 ppm |
| Concentration per Run 1 | 6.5248 ppm | 0.0013 ppm | 0.0010 ppm | 12.3745 ppm | 0.0019 ppm | -0.0014 ppm | 0.0014 ppm |
| Concentration per Run 2 | 6.4679 ppm | 0.0017 ppm | 0.0008 ppm | 12.4166 ppm | 0.0004 ppm | -0.0003 ppm | 0.0034 ppm |
| Concentration per Run 3 | 6.4733 ppm | 0.0019 ppm | 0.0004 ppm | 12.4721 ppm | 0.0019 ppm | -0.0021 ppm | 0.0050 ppm |
| Concentration RSD | 0.5 % | 18.7 % | 38.6 % | 0.4 % | 60.5 % | 69.5 % | 56.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | 3.2663 ppm | -0.0010 ppm | 0.0900 ppm | -0.0004 ppm | 0.0003 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0023 ppm | 3.2773 ppm | -0.0020 ppm | 0.0901 ppm | -0.0005 ppm | -0.0007 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0023 ppm | 3.2597 ppm | -0.0011 ppm | 0.0901 ppm | -0.0004 ppm | -0.0007 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0019 ppm | 3.2618 ppm | 0.0000 ppm | 0.0897 ppm | -0.0003 ppm | 0.0024 ppm | 0.0002 ppm |
| Concentration RSD | 9.9 % | 0.3 % | 95.0 % | 0.3 % | 23.5 % | 533.3 % | 1,657.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | 103.3031 % | 98.7310 % | 98.8093 % | 101.9142 % | 96.3739 % | 96.6640 % |
| Concentration per Run 1 | 0.0021 ppm | 103.6233 % | 98.8896 % | 98.9578 % | 102.4095 % | 96.5561 % | 96.7004 % |
| Concentration per Run 2 | 0.0022 ppm | 103.3606 % | 99.0679 % | 98.7677 % | 101.7524 % | 96.6795 % | 96.5180 % |
| Concentration per Run 3 | 0.0021 ppm | 102.9255 % | 98.2354 % | 98.7024 % | 101.5807 % | 95.8861 % | 96.7736 % |
| Concentration RSD | 2.6 % | 0.3 % | 0.4 % | 0.1 % | 0.4 % | 0.4 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512325-04 WG2038730
Analysis started at: 3/11/2025 10:06:31 PM
Rack 2
Vial 57
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0697 ppm | -0.0003 ppm | 0.0926 ppm | 0.0650 ppm | 0.0000 ppm | 62.3825 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0750 ppm | -0.0012 ppm | 0.0944 ppm | 0.0649 ppm | 0.0000 ppm | 62.2379 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0622 ppm | 0.0005 ppm | 0.0921 ppm | 0.0651 ppm | 0.0000 ppm | 62.4514 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0720 ppm | -0.0002 ppm | 0.0911 ppm | 0.0651 ppm | 0.0000 ppm | 62.4582 ppm |
| Concentration RSD | 65.0 % | 9.5 % | 272.1 % | 1.9 % | 0.2 % | 60.4 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0005 ppm | -0.0003 ppm | 0.0031 ppm | 0.0743 ppm | 7.8832 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0004 ppm | -0.0006 ppm | 0.0031 ppm | 0.0768 ppm | 7.8873 ppm | -0.0006 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | -0.0006 ppm | 0.0031 ppm | 0.0734 ppm | 7.8641 ppm | 0.0009 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0010 ppm | 0.0002 ppm | 0.0031 ppm | 0.0726 ppm | 7.8981 ppm | 0.0001 ppm |
| Concentration RSD | 98.3 % | 99.4 % | 150.9 % | 0.2 % | 3.0 % | 0.2 % | 514.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.1980 ppm | 0.0852 ppm | 0.0020 ppm | 11.9737 ppm | 0.0003 ppm | -0.0012 ppm | 0.0010 ppm |
| Concentration per Run 1 | 10.2712 ppm | 0.0852 ppm | 0.0020 ppm | 11.9516 ppm | 0.0000 ppm | -0.0007 ppm | -0.0012 ppm |
| Concentration per Run 2 | 10.1862 ppm | 0.0853 ppm | 0.0024 ppm | 11.9428 ppm | 0.0000 ppm | -0.0010 ppm | 0.0029 ppm |
| Concentration per Run 3 | 10.1365 ppm | 0.0852 ppm | 0.0015 ppm | 12.0267 ppm | 0.0009 ppm | -0.0020 ppm | 0.0014 ppm |
| Concentration RSD | 0.7 % | 0.1 % | 22.5 % | 0.4 % | 167.7 % | 52.2 % | 199.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 4.8475 ppm | -0.0008 ppm | 0.3721 ppm | 0.0024 ppm | 0.0034 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0017 ppm | 4.8685 ppm | -0.0007 ppm | 0.3712 ppm | 0.0019 ppm | 0.0033 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0007 ppm | 4.8462 ppm | -0.0013 ppm | 0.3715 ppm | 0.0024 ppm | 0.0040 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0009 ppm | 4.8277 ppm | -0.0005 ppm | 0.3735 ppm | 0.0030 ppm | 0.0029 ppm | 0.0006 ppm |
| Concentration RSD | 44.8 % | 0.4 % | 53.2 % | 0.3 % | 24.2 % | 15.2 % | 40.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 103.7177 % | 98.1339 % | 98.3422 % | 102.1291 % | 95.7456 % | 96.5195 % |
| Concentration per Run 1 | 0.0002 ppm | 103.1023 % | 98.5129 % | 98.7589 % | 101.7478 % | 95.9813 % | 96.5051 % |
| Concentration per Run 2 | 0.0005 ppm | 103.5671 % | 97.7845 % | 98.4329 % | 101.9509 % | 95.5667 % | 96.9218 % |
| Concentration per Run 3 | 0.0009 ppm | 104.4837 % | 98.1041 % | 97.8348 % | 102.6885 % | 95.6888 % | 96.1316 % |
| Concentration RSD | 64.7 % | 0.7 % | 0.4 % | 0.5 % | 0.5 % | 0.2 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512325-05 WG2038730
Analysis started at: 3/11/2025 10:10:01 PM
Rack 2
Vial 58
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0197 ppm | 0.0010 ppm | 0.0192 ppm | 0.0434 ppm | 0.0001 ppm | 15.1526 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0276 ppm | -0.0006 ppm | 0.0200 ppm | 0.0437 ppm | 0.0000 ppm | 15.2173 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0168 ppm | 0.0026 ppm | 0.0187 ppm | 0.0432 ppm | 0.0000 ppm | 15.1179 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0147 ppm | 0.0011 ppm | 0.0190 ppm | 0.0434 ppm | 0.0001 ppm | 15.1226 ppm |
| Concentration RSD | 24.2 % | 35.1 % | 155.0 % | 3.5 % | 0.5 % | 31.6 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | 0.0011 ppm | 0.0003 ppm | 0.0232 ppm | 1.3364 ppm | 0.0023 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0000 ppm | 0.0011 ppm | 0.0004 ppm | 0.0228 ppm | 1.3684 ppm | 0.0027 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0003 ppm | 0.0005 ppm | 0.0003 ppm | 0.0249 ppm | 1.3172 ppm | 0.0019 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0001 ppm | 0.0018 ppm | 0.0002 ppm | 0.0218 ppm | 1.3236 ppm | 0.0021 ppm |
| Concentration RSD | 497.9 % | 120.9 % | 59.2 % | 35.7 % | 6.8 % | 2.1 % | 19.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.7302 ppm | 0.0011 ppm | 0.0000 ppm | 19.8440 ppm | -0.0006 ppm | -0.0019 ppm | -0.0002 ppm |
| Concentration per Run 1 | 6.7485 ppm | 0.0011 ppm | 0.0005 ppm | 19.8292 ppm | -0.0003 ppm | -0.0015 ppm | 0.0001 ppm |
| Concentration per Run 2 | 6.7145 ppm | 0.0010 ppm | -0.0009 ppm | 19.8521 ppm | -0.0004 ppm | -0.0023 ppm | -0.0004 ppm |
| Concentration per Run 3 | 6.7277 ppm | 0.0012 ppm | 0.0003 ppm | 19.8507 ppm | -0.0012 ppm | -0.0018 ppm | -0.0003 ppm |
| Concentration RSD | 0.3 % | 10.8 % | 2,640.9 % | 0.1 % | 81.7 % | 23.9 % | 115.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0010 ppm | 9.5127 ppm | -0.0009 ppm | 0.0899 ppm | 0.0001 ppm | 0.0019 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0028 ppm | 9.5263 ppm | -0.0006 ppm | 0.0900 ppm | 0.0001 ppm | 0.0038 ppm | 0.0004 ppm |
| Concentration per Run 2 | -0.0004 ppm | 9.4851 ppm | -0.0017 ppm | 0.0900 ppm | 0.0003 ppm | -0.0004 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0000 ppm | 9.5267 ppm | -0.0005 ppm | 0.0899 ppm | -0.0001 ppm | 0.0022 ppm | -0.0001 ppm |
| Concentration RSD | 142.8 % | 0.3 % | 74.5 % | 0.1 % | 191.8 % | 116.0 % | 438.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7175 ppm | 103.5493 % | 98.9033 % | 98.4832 % | 102.0526 % | 96.5381 % | 96.9201 % |
| Concentration per Run 1 | 0.7185 ppm | 103.6820 % | 98.6723 % | 98.6186 % | 102.1979 % | 96.6307 % | 96.9620 % |
| Concentration per Run 2 | 0.7139 ppm | 103.8820 % | 98.7316 % | 97.6351 % | 102.1449 % | 96.0813 % | 96.6780 % |
| Concentration per Run 3 | 0.7201 ppm | 103.0839 % | 99.3059 % | 99.1960 % | 101.8149 % | 96.9022 % | 97.1202 % |
| Concentration RSD | 0.4 % | 0.4 % | 0.4 % | 0.8 % | 0.2 % | 0.4 % | 0.2 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512325-06 WG2038730
Analysis started at: 3/11/2025 10:13:31 PM
Rack 2
Vial 59
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.1338 ppm | 0.0002 ppm | 0.0153 ppm | 0.0121 ppm | 0.0001 ppm | 14.2244 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.1247 ppm | 0.0012 ppm | 0.0152 ppm | 0.0122 ppm | 0.0001 ppm | 14.2711 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.1344 ppm | 0.0001 ppm | 0.0157 ppm | 0.0121 ppm | 0.0001 ppm | 14.1798 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.1422 ppm | -0.0007 ppm | 0.0149 ppm | 0.0120 ppm | 0.0000 ppm | 14.2225 ppm |
| Concentration RSD | 120.7 % | 6.6 % | 490.6 % | 2.8 % | 1.0 % | 32.2 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0002 ppm | 0.0237 ppm | 0.0004 ppm | 0.8385 ppm | 1.1617 ppm | 0.0028 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0007 ppm | 0.0232 ppm | 0.0005 ppm | 0.8285 ppm | 1.1761 ppm | 0.0025 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0002 ppm | 0.0245 ppm | 0.0008 ppm | 0.8421 ppm | 1.1574 ppm | 0.0037 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0002 ppm | 0.0233 ppm | -0.0002 ppm | 0.8449 ppm | 1.1514 ppm | 0.0024 ppm |
| Concentration RSD | 98.3 % | 172.3 % | 3.2 % | 140.2 % | 1.0 % | 1.1 % | 25.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.7891 ppm | 0.0148 ppm | 0.0011 ppm | 12.0914 ppm | 0.0021 ppm | -0.0021 ppm | 0.0014 ppm |
| Concentration per Run 1 | 6.7751 ppm | 0.0147 ppm | 0.0007 ppm | 12.1040 ppm | 0.0010 ppm | -0.0028 ppm | 0.0031 ppm |
| Concentration per Run 2 | 6.8070 ppm | 0.0148 ppm | 0.0011 ppm | 12.0866 ppm | 0.0030 ppm | -0.0018 ppm | -0.0013 ppm |
| Concentration per Run 3 | 6.7851 ppm | 0.0149 ppm | 0.0014 ppm | 12.0837 ppm | 0.0024 ppm | -0.0016 ppm | 0.0025 ppm |
| Concentration RSD | 0.2 % | 0.6 % | 31.5 % | 0.1 % | 49.5 % | 33.1 % | 166.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0013 ppm | 6.9356 ppm | -0.0008 ppm | 0.0672 ppm | 0.0026 ppm | 0.0015 ppm | 0.0007 ppm |
| Concentration per Run 1 | -0.0007 ppm | 6.9677 ppm | 0.0004 ppm | 0.0672 ppm | 0.0023 ppm | -0.0016 ppm | 0.0007 ppm |
| Concentration per Run 2 | -0.0019 ppm | 6.9259 ppm | -0.0018 ppm | 0.0671 ppm | 0.0031 ppm | 0.0046 ppm | 0.0009 ppm |
| Concentration per Run 3 | -0.0012 ppm | 6.9132 ppm | -0.0010 ppm | 0.0672 ppm | 0.0025 ppm | 0.0014 ppm | 0.0004 ppm |
| Concentration RSD | 43.9 % | 0.4 % | 146.4 % | 0.1 % | 17.3 % | 211.0 % | 34.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 103.3736 % | 98.6578 % | 98.3256 % | 102.1176 % | 96.5712 % | 96.8602 % |
| Concentration per Run 1 | 0.0016 ppm | 103.9735 % | 98.4488 % | 97.8325 % | 103.1843 % | 96.7957 % | 96.4950 % |
| Concentration per Run 2 | 0.0016 ppm | 102.5174 % | 98.1273 % | 98.1711 % | 101.0776 % | 95.9590 % | 97.3056 % |
| Concentration per Run 3 | 0.0013 ppm | 103.6298 % | 99.3974 % | 98.9733 % | 102.0908 % | 96.9590 % | 96.7800 % |
| Concentration RSD | 10.1 % | 0.7 % | 0.7 % | 0.6 % | 1.0 % | 0.6 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512325-07 WG2038730
Analysis started at: 3/11/2025 10:17:01 PM
Rack 2
Vial 60
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0027 ppm | 1.0558 ppm | -0.0002 ppm | 0.0122 ppm | 0.0470 ppm | 0.0001 ppm | 12.4526 ppm |
| Concentration per Run 1 | 0.0020 ppm | 1.0560 ppm | 0.0000 ppm | 0.0101 ppm | 0.0471 ppm | 0.0002 ppm | 12.4170 ppm |
| Concentration per Run 2 | 0.0034 ppm | 1.0555 ppm | 0.0001 ppm | 0.0127 ppm | 0.0469 ppm | 0.0002 ppm | 12.4561 ppm |
| Concentration per Run 3 | 0.0028 ppm | 1.0560 ppm | -0.0007 ppm | 0.0139 ppm | 0.0469 ppm | 0.0001 ppm | 12.4846 ppm |
| Concentration RSD | 25.3 % | 0.0 % | 189.7 % | 15.8 % | 0.3 % | 45.2 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0007 ppm | 0.0045 ppm | 0.0029 ppm | 1.4749 ppm | 1.4385 ppm | 0.0020 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0009 ppm | 0.0039 ppm | 0.0026 ppm | 1.4813 ppm | 1.4559 ppm | 0.0028 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0010 ppm | 0.0044 ppm | 0.0034 ppm | 1.4690 ppm | 1.4322 ppm | 0.0015 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0001 ppm | 0.0053 ppm | 0.0029 ppm | 1.4745 ppm | 1.4274 ppm | 0.0018 ppm |
| Concentration RSD | 538.9 % | 76.1 % | 16.0 % | 12.9 % | 0.4 % | 1.1 % | 33.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.6993 ppm | 0.1462 ppm | -0.0001 ppm | 7.5722 ppm | 0.0027 ppm | -0.0008 ppm | 0.0025 ppm |
| Concentration per Run 1 | 5.1912 ppm | 0.1465 ppm | 0.0006 ppm | 7.5894 ppm | 0.0016 ppm | -0.0007 ppm | 0.0037 ppm |
| Concentration per Run 2 | 6.0639 ppm | 0.1456 ppm | 0.0000 ppm | 7.5977 ppm | 0.0030 ppm | -0.0008 ppm | 0.0004 ppm |
| Concentration per Run 3 | 5.8428 ppm | 0.1464 ppm | -0.0009 ppm | 7.5296 ppm | 0.0036 ppm | -0.0010 ppm | 0.0034 ppm |
| Concentration RSD | 8.0 % | 0.3 % | 771.3 % | 0.5 % | 38.4 % | 16.2 % | 72.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 7.3625 ppm | -0.0012 ppm | 0.0690 ppm | 0.0711 ppm | 0.0001 ppm | 0.0027 ppm |
| Concentration per Run 1 | 0.0008 ppm | 6.6842 ppm | -0.0018 ppm | 0.0691 ppm | 0.0648 ppm | 0.0006 ppm | 0.0025 ppm |
| Concentration per Run 2 | 0.0001 ppm | 7.8471 ppm | -0.0027 ppm | 0.0690 ppm | 0.0754 ppm | 0.0010 ppm | 0.0026 ppm |
| Concentration per Run 3 | 0.0001 ppm | 7.5561 ppm | 0.0009 ppm | 0.0688 ppm | 0.0731 ppm | -0.0012 ppm | 0.0031 ppm |
| Concentration RSD | 122.1 % | 8.2 % | 150.7 % | 0.2 % | 7.8 % | 782.2 % | 12.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0063 ppm | 105.9797 % | 99.3183 % | 98.6245 % | 105.7638 % | 97.1888 % | 97.8489 % |
| Concentration per Run 1 | 0.0056 ppm | 115.2644 % | 99.6809 % | 98.2892 % | 116.2693 % | 97.5075 % | 97.5536 % |
| Concentration per Run 2 | 0.0067 ppm | 99.6917 % | 99.0890 % | 98.2445 % | 98.4987 % | 97.3002 % | 98.0212 % |
| Concentration per Run 3 | 0.0067 ppm | 102.9829 % | 99.1851 % | 99.3399 % | 102.5233 % | 96.7588 % | 97.9718 % |
| Concentration RSD | 10.2 % | 7.7 % | 0.3 % | 0.6 % | 8.8 % | 0.4 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512325-08 WG2038730
Analysis started at: 3/11/2025 10:20:31 PM
Rack 3
Vial 1
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0041 ppm | 0.0251 ppm | 0.0005 ppm | 0.0172 ppm | 0.0282 ppm | 0.0000 ppm | 12.0196 ppm |
| Concentration per Run 1 | 0.0039 ppm | 0.0289 ppm | 0.0000 ppm | 0.0155 ppm | 0.0282 ppm | 0.0000 ppm | 12.0248 ppm |
| Concentration per Run 2 | 0.0043 ppm | 0.0204 ppm | 0.0004 ppm | 0.0180 ppm | 0.0283 ppm | 0.0000 ppm | 12.0748 ppm |
| Concentration per Run 3 | 0.0040 ppm | 0.0260 ppm | 0.0010 ppm | 0.0180 ppm | 0.0281 ppm | 0.0000 ppm | 11.9590 ppm |
| Concentration RSD | 5.6 % | 17.3 % | 109.2 % | 8.5 % | 0.3 % | 129.8 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0004 ppm | 0.0051 ppm | 0.0021 ppm | 0.0513 ppm | 1.2487 ppm | 0.0023 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0004 ppm | 0.0054 ppm | 0.0018 ppm | 0.0519 ppm | 1.2697 ppm | 0.0023 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0004 ppm | 0.0055 ppm | 0.0017 ppm | 0.0509 ppm | 1.2481 ppm | 0.0024 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0004 ppm | 0.0043 ppm | 0.0027 ppm | 0.0512 ppm | 1.2282 ppm | 0.0023 ppm |
| Concentration RSD | 52.5 % | 5.1 % | 12.7 % | 26.6 % | 1.0 % | 1.7 % | 2.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.3671 ppm | 0.0023 ppm | 0.0007 ppm | 17.3122 ppm | 0.0033 ppm | -0.0018 ppm | -0.0023 ppm |
| Concentration per Run 1 | 5.3813 ppm | 0.0023 ppm | 0.0006 ppm | 17.2547 ppm | 0.0031 ppm | -0.0034 ppm | -0.0039 ppm |
| Concentration per Run 2 | 5.3625 ppm | 0.0023 ppm | 0.0010 ppm | 17.3554 ppm | 0.0034 ppm | -0.0021 ppm | 0.0016 ppm |
| Concentration per Run 3 | 5.3575 ppm | 0.0023 ppm | 0.0004 ppm | 17.3266 ppm | 0.0033 ppm | 0.0001 ppm | -0.0047 ppm |
| Concentration RSD | 0.2 % | 1.1 % | 44.7 % | 0.3 % | 4.5 % | 96.3 % | 148.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 8.1636 ppm | -0.0008 ppm | 0.0676 ppm | 0.0003 ppm | 0.0018 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | 8.1712 ppm | -0.0014 ppm | 0.0676 ppm | -0.0002 ppm | 0.0032 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0002 ppm | 8.1871 ppm | -0.0005 ppm | 0.0676 ppm | 0.0006 ppm | 0.0004 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0017 ppm | 8.1325 ppm | -0.0004 ppm | 0.0674 ppm | 0.0006 ppm | 0.0019 ppm | -0.0005 ppm |
| Concentration RSD | 144.7 % | 0.3 % | 80.0 % | 0.2 % | 148.4 % | 77.6 % | 294.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0029 ppm | 104.0876 % | 99.3481 % | 99.9418 % | 102.2839 % | 96.8750 % | 98.4076 % |
| Concentration per Run 1 | 0.0031 ppm | 104.2949 % | 99.0103 % | 99.2787 % | 102.6357 % | 96.5554 % | 98.0144 % |
| Concentration per Run 2 | 0.0027 ppm | 104.0692 % | 99.0936 % | 97.4198 % | 102.3338 % | 96.8430 % | 96.4146 % |
| Concentration per Run 3 | 0.0029 ppm | 103.8985 % | 99.9404 % | 103.1267 % | 101.8821 % | 97.2267 % | 100.7939 % |
| Concentration RSD | 7.2 % | 0.2 % | 0.5 % | 2.9 % | 0.4 % | 0.3 % | 2.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2512325-09 WG2038730
Analysis started at: 3/11/2025 10:24:02 PM
Rack 3
Vial 2
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0111 ppm | 0.3413 ppm | 0.0011 ppm | 0.0902 ppm | 0.0141 ppm | 0.0000 ppm | 17.6783 ppm |
| Concentration per Run 1 | 0.0104 ppm | 0.3388 ppm | 0.0028 ppm | 0.0894 ppm | 0.0142 ppm | 0.0001 ppm | 17.6490 ppm |
| Concentration per Run 2 | 0.0113 ppm | 0.3392 ppm | 0.0006 ppm | 0.0904 ppm | 0.0140 ppm | 0.0000 ppm | 17.6815 ppm |
| Concentration per Run 3 | 0.0115 ppm | 0.3460 ppm | -0.0001 ppm | 0.0906 ppm | 0.0141 ppm | 0.0000 ppm | 17.7046 ppm |
| Concentration RSD | 5.4 % | 1.2 % | 139.7 % | 0.7 % | 0.8 % | 30.2 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0008 ppm | 0.0089 ppm | 0.0057 ppm | 0.3773 ppm | 1.4693 ppm | 0.0027 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0007 ppm | 0.0083 ppm | 0.0053 ppm | 0.3745 ppm | 1.4651 ppm | 0.0032 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0010 ppm | 0.0098 ppm | 0.0060 ppm | 0.3797 ppm | 1.4726 ppm | 0.0027 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0007 ppm | 0.0084 ppm | 0.0059 ppm | 0.3778 ppm | 1.4700 ppm | 0.0021 ppm |
| Concentration RSD | 136.0 % | 20.8 % | 9.6 % | 6.4 % | 0.7 % | 0.3 % | 19.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.3471 ppm | 0.0065 ppm | 0.0015 ppm | 13.6828 ppm | 0.0091 ppm | -0.0011 ppm | -0.0001 ppm |
| Concentration per Run 1 | 8.3899 ppm | 0.0065 ppm | 0.0022 ppm | 13.7222 ppm | 0.0092 ppm | -0.0012 ppm | 0.0008 ppm |
| Concentration per Run 2 | 8.3071 ppm | 0.0066 ppm | 0.0012 ppm | 13.6133 ppm | 0.0093 ppm | -0.0008 ppm | 0.0009 ppm |
| Concentration per Run 3 | 8.3442 ppm | 0.0063 ppm | 0.0013 ppm | 13.7131 ppm | 0.0087 ppm | -0.0012 ppm | -0.0019 ppm |
| Concentration RSD | 0.5 % | 2.6 % | 36.5 % | 0.4 % | 3.5 % | 22.0 % | 3,150.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 10.1308 ppm | 0.0010 ppm | 0.0881 ppm | 0.0074 ppm | 0.0010 ppm | 0.0020 ppm |
| Concentration per Run 1 | 0.0008 ppm | 10.1217 ppm | 0.0007 ppm | 0.0882 ppm | 0.0073 ppm | 0.0028 ppm | 0.0020 ppm |
| Concentration per Run 2 | -0.0006 ppm | 10.1476 ppm | 0.0006 ppm | 0.0879 ppm | 0.0074 ppm | -0.0004 ppm | 0.0022 ppm |
| Concentration per Run 3 | -0.0004 ppm | 10.1230 ppm | 0.0016 ppm | 0.0881 ppm | 0.0074 ppm | 0.0006 ppm | 0.0018 ppm |
| Concentration RSD | 1,264.4 % | 0.1 % | 53.9 % | 0.1 % | 0.6 % | 162.5 % | 8.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0911 ppm | 103.7012 % | 98.2982 % | 98.7540 % | 102.1015 % | 95.9095 % | 97.0912 % |
| Concentration per Run 1 | 0.0908 ppm | 103.8658 % | 98.0519 % | 98.8362 % | 101.8218 % | 95.8963 % | 96.9910 % |
| Concentration per Run 2 | 0.0913 ppm | 103.6720 % | 98.3971 % | 98.8795 % | 102.2918 % | 95.5118 % | 97.1632 % |
| Concentration per Run 3 | 0.0911 ppm | 103.5659 % | 98.4456 % | 98.5462 % | 102.1908 % | 96.3203 % | 97.1194 % |
| Concentration RSD | 0.3 % | 0.1 % | 0.2 % | 0.2 % | 0.2 % | 0.4 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCV
Analysis started at: 3/11/2025 10:27:33 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4701 ppm | 0.4832 ppm | 0.4926 ppm | 0.4777 ppm | 0.4671 ppm | 0.5076 ppm | 0.4799 ppm |
| Concentration per Run 1 | 0.4676 ppm | 0.4859 ppm | 0.4928 ppm | 0.4747 ppm | 0.4646 ppm | 0.5054 ppm | 0.4800 ppm |
| Concentration per Run 2 | 0.4717 ppm | 0.4801 ppm | 0.4957 ppm | 0.4798 ppm | 0.4684 ppm | 0.5079 ppm | 0.4796 ppm |
| Concentration per Run 3 | 0.4710 ppm | 0.4835 ppm | 0.4892 ppm | 0.4785 ppm | 0.4684 ppm | 0.5096 ppm | 0.4801 ppm |
| Recovery Percentage 1 | 94.016 % | 96.632 % | 98.517 % | 95.539 % | 93.425 % | 101.525 % | 95.980 % |
| Concentration RSD | 0.5 % | 0.6 % | 0.7 % | 0.6 % | 0.5 % | 0.4 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4783 ppm | 0.4897 ppm | 0.4793 ppm | 0.4590 ppm | 0.5045 ppm | 5.1570 ppm | 0.5164 ppm |
| Concentration per Run 1 | 0.4769 ppm | 0.4887 ppm | 0.4742 ppm | 0.4595 ppm | 0.5010 ppm | 5.1393 ppm | 0.5164 ppm |
| Concentration per Run 2 | 0.4787 ppm | 0.4898 ppm | 0.4819 ppm | 0.4595 ppm | 0.5045 ppm | 5.1581 ppm | 0.5192 ppm |
| Concentration per Run 3 | 0.4792 ppm | 0.4905 ppm | 0.4818 ppm | 0.4579 ppm | 0.5079 ppm | 5.1734 ppm | 0.5135 ppm |
| Recovery Percentage 1 | 95.651 % | 97.934 % | 95.860 % | 91.796 % | 100.895 % | 103.139 % | 103.271 % |
| Concentration RSD | 0.3 % | 0.2 % | 0.9 % | 0.2 % | 0.7 % | 0.3 % | 0.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4688 ppm | 0.4859 ppm | 0.4786 ppm | 10.1063 ppm | 0.4880 ppm | 0.4933 ppm | 0.4920 ppm |
| Concentration per Run 1 | 0.4692 ppm | 0.4860 ppm | 0.4754 ppm | 9.9706 ppm | 0.4872 ppm | 0.4913 ppm | 0.4938 ppm |
| Concentration per Run 2 | 0.4686 ppm | 0.4861 ppm | 0.4796 ppm | 10.1436 ppm | 0.4881 ppm | 0.4956 ppm | 0.4911 ppm |
| Concentration per Run 3 | 0.4686 ppm | 0.4856 ppm | 0.4809 ppm | 10.2048 ppm | 0.4886 ppm | 0.4929 ppm | 0.4911 ppm |
| Recovery Percentage 1 | 93.756 % | 97.177 % | 95.726 % | 101.063 % | 97.595 % | 98.653 % | 98.396 % |
| Concentration RSD | 0.1 % | 0.1 % | 0.6 % | 1.2 % | 0.1 % | 0.4 % | 0.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4900 ppm | 5.4294 ppm | 0.4944 ppm | 0.4896 ppm | 0.4773 ppm | 0.4785 ppm | 0.4742 ppm |
| Concentration per Run 1 | 0.4891 ppm | 5.4065 ppm | 0.4919 ppm | 0.4893 ppm | 0.4747 ppm | 0.4782 ppm | 0.4742 ppm |
| Concentration per Run 2 | 0.4905 ppm | 5.4481 ppm | 0.4996 ppm | 0.4904 ppm | 0.4782 ppm | 0.4821 ppm | 0.4746 ppm |
| Concentration per Run 3 | 0.4904 ppm | 5.4334 ppm | 0.4917 ppm | 0.4890 ppm | 0.4789 ppm | 0.4752 ppm | 0.4739 ppm |
| Recovery Percentage 1 | 98.000 % | 103.416 % | 98.882 % | 97.919 % | 95.452 % | 95.698 % | 94.845 % |
| Concentration RSD | 0.2 % | 0.4 % | 0.9 % | 0.1 % | 0.5 % | 0.7 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4850 ppm | 104.6617 % | 99.4680 % | 99.6285 % | 102.6370 % | 96.9321 % | 97.3861 % |
| Concentration per Run 1 | 0.4839 ppm | 105.0832 % | 100.0249 % | 99.9044 % | 103.5787 % | 97.0333 % | 97.3158 % |
| Concentration per Run 2 | 0.4874 ppm | 104.1761 % | 99.3071 % | 99.2593 % | 101.8051 % | 96.8072 % | 97.4750 % |
| Concentration per Run 3 | 0.4837 ppm | 104.7258 % | 99.0721 % | 99.7218 % | 102.5272 % | 96.9557 % | 97.3677 % |
| Recovery Percentage 1 | 96.999 % | | | | | | |
| Concentration RSD | 0.4 % | 0.4 % | 0.5 % | 0.3 % | 0.9 % | 0.1 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCB
Analysis started at: 3/11/2025 10:31:02 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0110 ppm | 0.0011 ppm | 0.0005 ppm | -0.0001 ppm | 0.0000 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.0104 ppm | 0.0029 ppm | 0.0005 ppm | -0.0001 ppm | 0.0001 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0126 ppm | 0.0011 ppm | 0.0005 ppm | -0.0001 ppm | 0.0000 ppm | -0.0010 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0102 ppm | -0.0005 ppm | 0.0004 ppm | -0.0001 ppm | 0.0000 ppm | 0.0019 ppm |
| Recovery Percentage 1 | 12.856 % | 11.049 % | 22.697 % | 1.639 % | -0.914 % | 0.913 % | 0.356 % |
| Concentration RSD | 24.8 % | 12.2 % | 149.1 % | 9.6 % | 38.3 % | 37.4 % | 409.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0003 ppm | -0.0005 ppm | 0.0000 ppm | 0.0010 ppm | 0.0257 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0004 ppm | -0.0002 ppm | 0.0001 ppm | -0.0001 ppm | 0.0278 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0004 ppm | -0.0005 ppm | 0.0000 ppm | 0.0021 ppm | 0.0224 ppm | 0.0015 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0007 ppm | -0.0007 ppm | -0.0002 ppm | 0.0012 ppm | 0.0271 ppm | -0.0003 ppm |
| Recovery Percentage 1 | 0.796 % | 1.273 % | -4.840 % | -0.307 % | 2.097 % | 1.030 % | 7.000 % |
| Concentration RSD | 110.5 % | 224.0 % | 55.7 % | 481.0 % | 105.6 % | 11.4 % | 295.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0028 ppm | -0.0001 ppm | 0.0019 ppm | 0.0125 ppm | -0.0001 ppm | -0.0016 ppm | 0.0027 ppm |
| Concentration per Run 1 | -0.0038 ppm | -0.0001 ppm | 0.0018 ppm | 0.0130 ppm | -0.0002 ppm | -0.0006 ppm | 0.0040 ppm |
| Concentration per Run 2 | -0.0025 ppm | 0.0000 ppm | 0.0023 ppm | 0.0145 ppm | -0.0002 ppm | -0.0030 ppm | 0.0053 ppm |
| Concentration per Run 3 | -0.0021 ppm | -0.0002 ppm | 0.0017 ppm | 0.0100 ppm | 0.0001 ppm | -0.0012 ppm | -0.0013 ppm |
| Recovery Percentage 1 | -2.770 % | -0.628 % | 3.815 % | 0.626 % | -0.358 % | -16.273 % | 5.301 % |
| Concentration RSD | 32.0 % | 164.6 % | 16.8 % | 18.5 % | 198.8 % | 77.6 % | 133.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | -0.0041 ppm | -0.0002 ppm | 0.0000 ppm | -0.0002 ppm | 0.0027 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0030 ppm | -0.0005 ppm | 0.0001 ppm | -0.0006 ppm | 0.0023 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0009 ppm | -0.0053 ppm | -0.0001 ppm | 0.0000 ppm | 0.0003 ppm | 0.0025 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0025 ppm | -0.0038 ppm | -0.0001 ppm | 0.0000 ppm | -0.0002 ppm | 0.0032 ppm | -0.0003 ppm |
| Recovery Percentage 1 | 5.251 % | -0.811 % | -0.473 % | 0.439 % | -1.975 % | 13.480 % | 0.566 % |
| Concentration RSD | 338.6 % | 29.1 % | 93.9 % | 109.6 % | 231.9 % | 17.7 % | 496.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 101.9924 % | 97.8613 % | 97.8245 % | 102.4618 % | 97.3787 % | 97.9596 % |
| Concentration per Run 1 | -0.0008 ppm | 102.1449 % | 98.3977 % | 98.0652 % | 103.0053 % | 98.2876 % | 97.8924 % |
| Concentration per Run 2 | -0.0005 ppm | 101.9184 % | 97.7650 % | 97.5775 % | 102.5716 % | 97.1246 % | 98.0425 % |
| Concentration per Run 3 | -0.0007 ppm | 101.9140 % | 97.4213 % | 97.8309 % | 101.8085 % | 96.7239 % | 97.9440 % |
| Recovery Percentage 1 | -13.854 % | | | | | | |
| Concentration RSD | 20.8 % | 0.1 % | 0.5 % | 0.2 % | 0.6 % | 0.8 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038690-1 WG2038690
Analysis started at: 3/11/2025 10:35:18 PM
Rack 3
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0069 ppm | 0.0010 ppm | 0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0076 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0061 ppm | 0.0015 ppm | 0.0010 ppm | -0.0001 ppm | 0.0000 ppm | 0.0139 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0132 ppm | 0.0005 ppm | -0.0011 ppm | 0.0000 ppm | 0.0001 ppm | 0.0054 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0012 ppm | 0.0009 ppm | 0.0013 ppm | 0.0001 ppm | 0.0001 ppm | 0.0034 ppm |
| Recovery Percentage 1 | 10.929 % | 6.861 % | 20.067 % | 1.344 % | -0.275 % | 0.907 % | 7.568 % |
| Concentration RSD | 41.8 % | 88.0 % | 49.7 % | 330.3 % | 382.0 % | 83.8 % | 74.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0001 ppm | 0.0001 ppm | 0.0005 ppm | 0.0017 ppm | 0.0127 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0009 ppm | 0.0006 ppm | 0.0003 ppm | 0.0010 ppm | 0.0248 ppm | 0.0008 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0003 ppm | -0.0002 ppm | 0.0007 ppm | 0.0027 ppm | 0.0071 ppm | 0.0012 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0004 ppm | -0.0001 ppm | 0.0004 ppm | 0.0015 ppm | 0.0062 ppm | -0.0003 ppm |
| Recovery Percentage 1 | -3.061 % | -0.343 % | 0.975 % | 4.787 % | 3.445 % | 0.509 % | 11.689 % |
| Concentration RSD | 45.2 % | 989.1 % | 441.5 % | 42.0 % | 52.2 % | 82.6 % | 128.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0011 ppm | -0.0001 ppm | 0.0010 ppm | 0.0082 ppm | -0.0010 ppm | -0.0025 ppm | 0.0014 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0000 ppm | 0.0011 ppm | 0.0074 ppm | -0.0016 ppm | -0.0034 ppm | -0.0004 ppm |
| Concentration per Run 2 | -0.0010 ppm | -0.0002 ppm | 0.0009 ppm | 0.0082 ppm | 0.0001 ppm | -0.0019 ppm | 0.0008 ppm |
| Concentration per Run 3 | -0.0025 ppm | 0.0000 ppm | 0.0009 ppm | 0.0090 ppm | -0.0015 ppm | -0.0022 ppm | 0.0036 ppm |
| Recovery Percentage 1 | -1.059 % | -0.798 % | 1.931 % | 0.409 % | -3.958 % | -25.218 % | 2.709 % |
| Concentration RSD | 131.8 % | 94.7 % | 10.6 % | 9.4 % | 98.0 % | 30.2 % | 149.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | -0.0074 ppm | -0.0006 ppm | 0.0000 ppm | -0.0008 ppm | 0.0005 ppm | -0.0002 ppm |
| Concentration per Run 1 | -0.0014 ppm | -0.0080 ppm | 0.0001 ppm | 0.0000 ppm | -0.0005 ppm | -0.0005 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0075 ppm | -0.0005 ppm | -0.0001 ppm | -0.0006 ppm | 0.0020 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0065 ppm | -0.0013 ppm | 0.0000 ppm | -0.0012 ppm | 0.0001 ppm | -0.0003 ppm |
| Recovery Percentage 1 | -5.235 % | -1.473 % | -1.121 % | -0.279 % | -7.506 % | 2.604 % | -1.540 % |
| Concentration RSD | 141.0 % | 10.5 % | 132.5 % | 299.4 % | 53.2 % | 250.4 % | 108.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 103.2863 % | 98.9459 % | 99.6090 % | 103.7425 % | 97.9302 % | 99.5408 % |
| Concentration per Run 1 | -0.0006 ppm | 103.6749 % | 98.5626 % | 99.5320 % | 104.0613 % | 97.8268 % | 99.8640 % |
| Concentration per Run 2 | -0.0003 ppm | 103.3080 % | 99.6723 % | 99.2937 % | 103.5527 % | 98.6016 % | 99.1744 % |
| Concentration per Run 3 | -0.0003 ppm | 102.8759 % | 98.6028 % | 100.0012 % | 103.6134 % | 97.3621 % | 99.5839 % |
| Recovery Percentage 1 | -7.811 % | | | | | | |
| Concentration RSD | 37.0 % | 0.4 % | 0.6 % | 0.4 % | 0.3 % | 0.6 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038690-2 WG2038690
Analysis started at: 3/11/2025 10:38:48 PM
Rack 3
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0493 ppm | 2.0066 ppm | 0.1188 ppm | 0.9591 ppm | 1.9182 ppm | 0.0516 ppm | 9.8577 ppm |
| Concentration per Run 1 | 0.0497 ppm | 2.0083 ppm | 0.1168 ppm | 0.9595 ppm | 1.9280 ppm | 0.0519 ppm | 9.8646 ppm |
| Concentration per Run 2 | 0.0493 ppm | 2.0050 ppm | 0.1198 ppm | 0.9574 ppm | 1.9124 ppm | 0.0515 ppm | 9.8341 ppm |
| Concentration per Run 3 | 0.0491 ppm | 2.0067 ppm | 0.1196 ppm | 0.9605 ppm | 1.9143 ppm | 0.0515 ppm | 9.8745 ppm |
| Concentration RSD | 0.5 % | 0.1 % | 1.4 % | 0.2 % | 0.4 % | 0.4 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0514 ppm | 0.4883 ppm | 0.1945 ppm | 0.2405 ppm | 1.0308 ppm | 10.5369 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0513 ppm | 0.4861 ppm | 0.1949 ppm | 0.2406 ppm | 1.0336 ppm | 10.5777 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0516 ppm | 0.4888 ppm | 0.1942 ppm | 0.2413 ppm | 1.0325 ppm | 10.5128 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0513 ppm | 0.4901 ppm | 0.1944 ppm | 0.2396 ppm | 1.0261 ppm | 10.5201 ppm | -0.0006 ppm |
| Concentration RSD | 0.3 % | 0.4 % | 0.2 % | 0.3 % | 0.4 % | 0.3 % | 867.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.6883 ppm | 0.5035 ppm | 0.9596 ppm | 10.5947 ppm | 0.4897 ppm | 0.5278 ppm | 0.4057 ppm |
| Concentration per Run 1 | 9.6615 ppm | 0.5044 ppm | 0.9543 ppm | 10.6861 ppm | 0.4886 ppm | 0.5298 ppm | 0.3956 ppm |
| Concentration per Run 2 | 9.6983 ppm | 0.5025 ppm | 0.9615 ppm | 10.5425 ppm | 0.4893 ppm | 0.5238 ppm | 0.4068 ppm |
| Concentration per Run 3 | 9.7052 ppm | 0.5036 ppm | 0.9630 ppm | 10.5555 ppm | 0.4912 ppm | 0.5299 ppm | 0.4148 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 0.5 % | 0.7 % | 0.3 % | 0.7 % | 2.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1147 ppm | 0.9913 ppm | 0.9448 ppm | 0.9860 ppm | 0.9765 ppm | 0.1119 ppm | 0.4949 ppm |
| Concentration per Run 1 | 0.1149 ppm | 0.9913 ppm | 0.9420 ppm | 0.9902 ppm | 0.9737 ppm | 0.1102 ppm | 0.4937 ppm |
| Concentration per Run 2 | 0.1125 ppm | 0.9935 ppm | 0.9464 ppm | 0.9835 ppm | 0.9772 ppm | 0.1118 ppm | 0.4950 ppm |
| Concentration per Run 3 | 0.1168 ppm | 0.9890 ppm | 0.9459 ppm | 0.9842 ppm | 0.9786 ppm | 0.1137 ppm | 0.4960 ppm |
| Concentration RSD | 1.9 % | 0.2 % | 0.3 % | 0.4 % | 0.3 % | 1.6 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4914 ppm | 104.1416 % | 98.9802 % | 99.5588 % | 102.4263 % | 96.4971 % | 96.7721 % |
| Concentration per Run 1 | 0.4911 ppm | 104.2966 % | 99.1295 % | 99.3230 % | 103.0576 % | 96.9167 % | 96.6668 % |
| Concentration per Run 2 | 0.4911 ppm | 103.3201 % | 99.2008 % | 100.8074 % | 101.7266 % | 96.7078 % | 97.1600 % |
| Concentration per Run 3 | 0.4920 ppm | 104.8082 % | 98.6103 % | 98.5460 % | 102.4946 % | 95.8666 % | 96.4895 % |
| Concentration RSD | 0.1 % | 0.7 % | 0.3 % | 1.2 % | 0.7 % | 0.6 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511919-01 WG2038690
Analysis started at: 3/11/2025 10:42:19 PM
Rack 3
Vial 10
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0128 ppm | -0.0007 ppm | 0.0202 ppm | 0.0200 ppm | 0.0000 ppm | 24.6719 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0114 ppm | 0.0005 ppm | 0.0205 ppm | 0.0201 ppm | 0.0000 ppm | 24.7575 ppm |
| Concentration per Run 2 | 0.0014 ppm | 0.0122 ppm | -0.0026 ppm | 0.0188 ppm | 0.0199 ppm | 0.0000 ppm | 24.6646 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0148 ppm | 0.0001 ppm | 0.0211 ppm | 0.0201 ppm | 0.0000 ppm | 24.5935 ppm |
| Concentration RSD | 71.7 % | 13.7 % | 252.2 % | 6.0 % | 0.6 % | 89.5 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0003 ppm | -0.0002 ppm | 0.0066 ppm | 0.0071 ppm | 2.1717 ppm | -0.0005 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0000 ppm | -0.0005 ppm | 0.0067 ppm | 0.0071 ppm | 2.1939 ppm | -0.0005 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0003 ppm | 0.0003 ppm | 0.0066 ppm | 0.0072 ppm | 2.1698 ppm | -0.0011 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0005 ppm | -0.0003 ppm | 0.0065 ppm | 0.0071 ppm | 2.1513 ppm | 0.0002 ppm |
| Concentration RSD | 39.2 % | 78.1 % | 263.9 % | 1.5 % | 1.0 % | 1.0 % | 143.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.3523 ppm | 0.0016 ppm | 0.0052 ppm | 9.6985 ppm | 0.0002 ppm | -0.0011 ppm | 0.0061 ppm |
| Concentration per Run 1 | 4.3662 ppm | 0.0016 ppm | 0.0060 ppm | 9.6016 ppm | 0.0000 ppm | -0.0025 ppm | 0.0045 ppm |
| Concentration per Run 2 | 4.3432 ppm | 0.0015 ppm | 0.0048 ppm | 9.7162 ppm | 0.0013 ppm | -0.0020 ppm | 0.0103 ppm |
| Concentration per Run 3 | 4.3475 ppm | 0.0015 ppm | 0.0047 ppm | 9.7776 ppm | -0.0005 ppm | 0.0012 ppm | 0.0037 ppm |
| Concentration RSD | 0.3 % | 3.7 % | 13.3 % | 0.9 % | 404.4 % | 184.5 % | 58.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 2.1345 ppm | 0.0026 ppm | 0.0636 ppm | 0.0001 ppm | 0.0009 ppm | 0.0005 ppm |
| Concentration per Run 1 | -0.0012 ppm | 2.1345 ppm | 0.0015 ppm | 0.0636 ppm | 0.0001 ppm | 0.0000 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0001 ppm | 2.1415 ppm | 0.0023 ppm | 0.0636 ppm | -0.0001 ppm | -0.0004 ppm | 0.0006 ppm |
| Concentration per Run 3 | -0.0006 ppm | 2.1276 ppm | 0.0039 ppm | 0.0637 ppm | 0.0004 ppm | 0.0030 ppm | 0.0001 ppm |
| Concentration RSD | 115.6 % | 0.3 % | 47.9 % | 0.0 % | 187.0 % | 207.2 % | 68.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0278 ppm | 103.9657 % | 99.6043 % | 99.7501 % | 103.0032 % | 96.9513 % | 97.9405 % |
| Concentration per Run 1 | 0.0280 ppm | 103.9797 % | 99.7797 % | 100.3848 % | 103.3702 % | 96.9028 % | 98.6080 % |
| Concentration per Run 2 | 0.0278 ppm | 104.4405 % | 99.2499 % | 99.2927 % | 103.2754 % | 96.7706 % | 97.6117 % |
| Concentration per Run 3 | 0.0275 ppm | 103.4769 % | 99.7831 % | 99.5728 % | 102.3638 % | 97.1805 % | 97.6018 % |
| Concentration RSD | 1.0 % | 0.5 % | 0.3 % | 0.6 % | 0.5 % | 0.2 % | 0.6 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511919-02 WG2038690
Analysis started at: 3/11/2025 10:45:49 PM
Rack 3
Vial 11
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0095 ppm | 0.0001 ppm | 0.0178 ppm | 0.0395 ppm | 0.0000 ppm | 25.2194 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0182 ppm | 0.0004 ppm | 0.0168 ppm | 0.0395 ppm | 0.0000 ppm | 25.2952 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0065 ppm | 0.0004 ppm | 0.0169 ppm | 0.0395 ppm | 0.0000 ppm | 25.2134 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0037 ppm | -0.0004 ppm | 0.0199 ppm | 0.0395 ppm | 0.0000 ppm | 25.1497 ppm |
| Concentration RSD | 93.7 % | 81.1 % | 322.6 % | 9.8 % | 0.1 % | 2,375.4 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0004 ppm | -0.0001 ppm | 0.0008 ppm | 0.0075 ppm | 0.9491 ppm | 0.0010 ppm |
| Concentration per Run 1 | -0.0003 ppm | -0.0002 ppm | -0.0001 ppm | 0.0009 ppm | 0.0071 ppm | 0.9761 ppm | 0.0012 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0002 ppm | -0.0004 ppm | 0.0013 ppm | 0.0090 ppm | 0.9502 ppm | 0.0013 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0009 ppm | 0.0004 ppm | 0.0003 ppm | 0.0063 ppm | 0.9211 ppm | 0.0007 ppm |
| Concentration RSD | 38.6 % | 90.5 % | 766.2 % | 61.1 % | 18.0 % | 2.9 % | 32.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.6087 ppm | 0.0006 ppm | 0.0005 ppm | 9.5310 ppm | -0.0009 ppm | -0.0020 ppm | 0.0010 ppm |
| Concentration per Run 1 | 5.6328 ppm | 0.0005 ppm | 0.0010 ppm | 9.5851 ppm | -0.0010 ppm | -0.0012 ppm | 0.0046 ppm |
| Concentration per Run 2 | 5.5935 ppm | 0.0004 ppm | 0.0005 ppm | 9.5665 ppm | -0.0008 ppm | -0.0022 ppm | 0.0011 ppm |
| Concentration per Run 3 | 5.5997 ppm | 0.0007 ppm | 0.0000 ppm | 9.4416 ppm | -0.0009 ppm | -0.0026 ppm | -0.0027 ppm |
| Concentration RSD | 0.4 % | 28.1 % | 97.1 % | 0.8 % | 16.1 % | 36.3 % | 367.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 3.0832 ppm | 0.0009 ppm | 0.0829 ppm | 0.0001 ppm | 0.0012 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0015 ppm | 3.0800 ppm | 0.0025 ppm | 0.0830 ppm | -0.0002 ppm | 0.0003 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0017 ppm | 3.0830 ppm | -0.0002 ppm | 0.0830 ppm | 0.0002 ppm | 0.0016 ppm | -0.0006 ppm |
| Concentration per Run 3 | -0.0006 ppm | 3.0867 ppm | 0.0005 ppm | 0.0826 ppm | 0.0004 ppm | 0.0016 ppm | 0.0003 ppm |
| Concentration RSD | 142.4 % | 0.1 % | 150.3 % | 0.3 % | 215.0 % | 62.2 % | 250.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0172 ppm | 103.9000 % | 99.3512 % | 98.7688 % | 102.4092 % | 96.4524 % | 97.4212 % |
| Concentration per Run 1 | 0.0169 ppm | 103.7188 % | 99.1666 % | 98.5801 % | 102.0569 % | 96.2894 % | 97.5759 % |
| Concentration per Run 2 | 0.0173 ppm | 104.4694 % | 98.6786 % | 98.5106 % | 103.4310 % | 95.9716 % | 96.7621 % |
| Concentration per Run 3 | 0.0174 ppm | 103.5118 % | 100.2084 % | 99.2157 % | 101.7397 % | 97.0964 % | 97.9257 % |
| Concentration RSD | 1.5 % | 0.5 % | 0.8 % | 0.4 % | 0.9 % | 0.6 % | 0.6 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511919-04 WG2038690
Analysis started at: 3/11/2025 10:49:19 PM
Rack 3
Vial 12
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0083 ppm | 0.0013 ppm | 0.0243 ppm | 0.0247 ppm | 0.0000 ppm | 27.8550 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0048 ppm | 0.0012 ppm | 0.0236 ppm | 0.0249 ppm | 0.0000 ppm | 27.9340 ppm |
| Concentration per Run 2 | 0.0013 ppm | 0.0111 ppm | 0.0026 ppm | 0.0240 ppm | 0.0247 ppm | 0.0000 ppm | 27.8661 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0090 ppm | 0.0001 ppm | 0.0253 ppm | 0.0244 ppm | 0.0000 ppm | 27.7649 ppm |
| Concentration RSD | 19.6 % | 38.5 % | 100.4 % | 3.6 % | 1.0 % | 201.4 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0003 ppm | 0.0003 ppm | 0.0069 ppm | 0.0070 ppm | 1.9091 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0000 ppm | 0.0002 ppm | 0.0066 ppm | 0.0074 ppm | 1.9437 ppm | 0.0004 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0006 ppm | 0.0003 ppm | 0.0075 ppm | 0.0059 ppm | 1.8988 ppm | 0.0007 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0001 ppm | 0.0002 ppm | 0.0066 ppm | 0.0075 ppm | 1.8848 ppm | -0.0002 ppm |
| Concentration RSD | 40.4 % | 120.6 % | 20.4 % | 7.6 % | 13.0 % | 1.6 % | 155.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.4076 ppm | 0.0061 ppm | 0.0005 ppm | 10.4561 ppm | -0.0006 ppm | -0.0012 ppm | 0.0009 ppm |
| Concentration per Run 1 | 5.3662 ppm | 0.0060 ppm | 0.0005 ppm | 10.4775 ppm | -0.0005 ppm | -0.0018 ppm | 0.0049 ppm |
| Concentration per Run 2 | 5.4319 ppm | 0.0061 ppm | 0.0004 ppm | 10.5208 ppm | -0.0011 ppm | 0.0002 ppm | -0.0009 ppm |
| Concentration per Run 3 | 5.4248 ppm | 0.0060 ppm | 0.0006 ppm | 10.3699 ppm | -0.0002 ppm | -0.0021 ppm | -0.0013 ppm |
| Concentration RSD | 0.7 % | 1.1 % | 19.7 % | 0.7 % | 74.9 % | 100.9 % | 384.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 3.4128 ppm | -0.0004 ppm | 0.0791 ppm | -0.0002 ppm | 0.0014 ppm | 0.0008 ppm |
| Concentration per Run 1 | -0.0005 ppm | 3.3792 ppm | -0.0001 ppm | 0.0796 ppm | -0.0002 ppm | 0.0018 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0003 ppm | 3.4203 ppm | -0.0003 ppm | 0.0789 ppm | -0.0008 ppm | 0.0020 ppm | 0.0007 ppm |
| Concentration per Run 3 | -0.0012 ppm | 3.4390 ppm | -0.0009 ppm | 0.0787 ppm | 0.0003 ppm | 0.0003 ppm | 0.0010 ppm |
| Concentration RSD | 163.0 % | 0.9 % | 105.8 % | 0.6 % | 233.6 % | 66.2 % | 16.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0247 ppm | 104.6116 % | 99.8890 % | 99.1380 % | 103.3817 % | 96.6921 % | 97.6277 % |
| Concentration per Run 1 | 0.0244 ppm | 105.1201 % | 99.5923 % | 98.5504 % | 103.9172 % | 96.7014 % | 96.9793 % |
| Concentration per Run 2 | 0.0250 ppm | 104.1832 % | 99.8818 % | 99.4815 % | 102.8810 % | 96.4537 % | 97.9077 % |
| Concentration per Run 3 | 0.0246 ppm | 104.5315 % | 100.1930 % | 99.3823 % | 103.3467 % | 96.9211 % | 97.9960 % |
| Concentration RSD | 1.4 % | 0.5 % | 0.3 % | 0.5 % | 0.5 % | 0.2 % | 0.6 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511919-08 WG2038690
Analysis started at: 3/11/2025 10:52:50 PM
Rack 3
Vial 5
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0105 ppm | -0.0012 ppm | 0.0190 ppm | 0.0178 ppm | 0.0000 ppm | 19.9922 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.0088 ppm | -0.0001 ppm | 0.0186 ppm | 0.0178 ppm | 0.0000 ppm | 20.0199 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0133 ppm | -0.0012 ppm | 0.0208 ppm | 0.0177 ppm | 0.0000 ppm | 19.9542 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0093 ppm | -0.0022 ppm | 0.0177 ppm | 0.0177 ppm | 0.0000 ppm | 20.0025 ppm |
| Concentration RSD | 26.5 % | 23.5 % | 89.3 % | 8.2 % | 0.3 % | 166.7 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0001 ppm | 0.0010 ppm | 0.0060 ppm | 0.0115 ppm | 1.0021 ppm | 0.0011 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0003 ppm | 0.0012 ppm | 0.0060 ppm | 0.0095 ppm | 0.9914 ppm | 0.0016 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0001 ppm | 0.0012 ppm | 0.0065 ppm | 0.0122 ppm | 1.0090 ppm | 0.0005 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0007 ppm | 0.0007 ppm | 0.0057 ppm | 0.0127 ppm | 1.0060 ppm | 0.0012 ppm |
| Concentration RSD | 7.3 % | 522.3 % | 27.4 % | 6.2 % | 15.1 % | 0.9 % | 51.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.2624 ppm | 0.0017 ppm | 0.0002 ppm | 10.3186 ppm | 0.0322 ppm | -0.0004 ppm | -0.0013 ppm |
| Concentration per Run 1 | 5.2710 ppm | 0.0016 ppm | 0.0002 ppm | 10.3502 ppm | 0.0320 ppm | -0.0015 ppm | -0.0005 ppm |
| Concentration per Run 2 | 5.2492 ppm | 0.0018 ppm | 0.0001 ppm | 10.3432 ppm | 0.0327 ppm | -0.0001 ppm | 0.0030 ppm |
| Concentration per Run 3 | 5.2669 ppm | 0.0017 ppm | 0.0003 ppm | 10.2624 ppm | 0.0319 ppm | 0.0004 ppm | -0.0065 ppm |
| Concentration RSD | 0.2 % | 4.4 % | 45.3 % | 0.5 % | 1.2 % | 239.9 % | 370.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 1.9906 ppm | -0.0005 ppm | 0.0480 ppm | 0.0001 ppm | 0.0020 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0010 ppm | 1.9999 ppm | -0.0010 ppm | 0.0480 ppm | -0.0003 ppm | 0.0019 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0019 ppm | 1.9927 ppm | 0.0001 ppm | 0.0478 ppm | 0.0002 ppm | 0.0035 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0019 ppm | 1.9792 ppm | -0.0004 ppm | 0.0481 ppm | 0.0002 ppm | 0.0007 ppm | 0.0007 ppm |
| Concentration RSD | 582.0 % | 0.5 % | 116.8 % | 0.3 % | 437.9 % | 69.8 % | 190.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0254 ppm | 104.9576 % | 99.3963 % | 99.8790 % | 103.5561 % | 96.7861 % | 97.9270 % |
| Concentration per Run 1 | 0.0254 ppm | 104.9718 % | 99.0318 % | 100.2486 % | 103.5486 % | 96.5604 % | 98.2642 % |
| Concentration per Run 2 | 0.0255 ppm | 104.8613 % | 99.3195 % | 100.1366 % | 103.4862 % | 96.8574 % | 98.0211 % |
| Concentration per Run 3 | 0.0254 ppm | 105.0396 % | 99.8375 % | 99.2518 % | 103.6334 % | 96.9404 % | 97.4956 % |
| Concentration RSD | 0.3 % | 0.1 % | 0.4 % | 0.5 % | 0.1 % | 0.2 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038690-3 WG2038690
Analysis started at: 3/11/2025 10:56:20 PM
Rack 3
Vial 6
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0499 ppm | 2.0067 ppm | 0.1188 ppm | 0.9975 ppm | 1.9601 ppm | 0.0523 ppm | 29.4793 ppm |
| Concentration per Run 1 | 0.0498 ppm | 2.0034 ppm | 0.1200 ppm | 0.9982 ppm | 1.9565 ppm | 0.0523 ppm | 29.4511 ppm |
| Concentration per Run 2 | 0.0495 ppm | 2.0178 ppm | 0.1196 ppm | 0.9948 ppm | 1.9705 ppm | 0.0524 ppm | 29.6191 ppm |
| Concentration per Run 3 | 0.0505 ppm | 1.9988 ppm | 0.1167 ppm | 0.9995 ppm | 1.9532 ppm | 0.0522 ppm | 29.3677 ppm |
| Concentration RSD | 1.0 % | 0.5 % | 1.5 % | 0.2 % | 0.5 % | 0.2 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0508 ppm | 0.4850 ppm | 0.1956 ppm | 0.2488 ppm | 1.0437 ppm | 11.7658 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0509 ppm | 0.4830 ppm | 0.1958 ppm | 0.2492 ppm | 1.0443 ppm | 11.7869 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0505 ppm | 0.4858 ppm | 0.1953 ppm | 0.2486 ppm | 1.0481 ppm | 11.7795 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0511 ppm | 0.4861 ppm | 0.1958 ppm | 0.2486 ppm | 1.0387 ppm | 11.7310 ppm | 0.0000 ppm |
| Concentration RSD | 0.6 % | 0.4 % | 0.1 % | 0.1 % | 0.5 % | 0.3 % | 100.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 14.8419 ppm | 0.5089 ppm | 0.9501 ppm | 20.7375 ppm | 0.5210 ppm | 0.5270 ppm | 0.4245 ppm |
| Concentration per Run 1 | 14.7945 ppm | 0.5084 ppm | 0.9393 ppm | 20.6454 ppm | 0.5201 ppm | 0.5276 ppm | 0.4197 ppm |
| Concentration per Run 2 | 14.8494 ppm | 0.5109 ppm | 0.9503 ppm | 20.9620 ppm | 0.5209 ppm | 0.5297 ppm | 0.4252 ppm |
| Concentration per Run 3 | 14.8819 ppm | 0.5073 ppm | 0.9608 ppm | 20.6052 ppm | 0.5219 ppm | 0.5237 ppm | 0.4286 ppm |
| Concentration RSD | 0.3 % | 0.4 % | 1.1 % | 0.9 % | 0.2 % | 0.6 % | 1.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1186 ppm | 3.0100 ppm | 0.9509 ppm | 1.0388 ppm | 0.9768 ppm | 0.1134 ppm | 0.4975 ppm |
| Concentration per Run 1 | 0.1197 ppm | 3.0053 ppm | 0.9448 ppm | 1.0362 ppm | 0.9740 ppm | 0.1126 ppm | 0.4958 ppm |
| Concentration per Run 2 | 0.1191 ppm | 3.0142 ppm | 0.9536 ppm | 1.0425 ppm | 0.9749 ppm | 0.1135 ppm | 0.4984 ppm |
| Concentration per Run 3 | 0.1168 ppm | 3.0103 ppm | 0.9544 ppm | 1.0375 ppm | 0.9815 ppm | 0.1141 ppm | 0.4985 ppm |
| Concentration RSD | 1.3 % | 0.1 % | 0.6 % | 0.3 % | 0.4 % | 0.7 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5230 ppm | 103.7550 % | 98.2561 % | 99.3434 % | 101.8249 % | 94.8986 % | 96.0387 % |
| Concentration per Run 1 | 0.5201 ppm | 104.6213 % | 98.1757 % | 99.1609 % | 102.8324 % | 95.0872 % | 95.7159 % |
| Concentration per Run 2 | 0.5242 ppm | 103.3268 % | 98.0385 % | 98.9416 % | 101.7067 % | 95.1406 % | 95.6298 % |
| Concentration per Run 3 | 0.5247 ppm | 103.3170 % | 98.5541 % | 99.9279 % | 100.9355 % | 94.4679 % | 96.7702 % |
| Concentration RSD | 0.5 % | 0.7 % | 0.3 % | 0.5 % | 0.9 % | 0.4 % | 0.7 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038690-4 WG2038690
Analysis started at: 3/11/2025 10:59:51 PM
Rack 3
Vial 7
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0038 ppm | 0.0008 ppm | 0.0204 ppm | 0.0174 ppm | 0.0000 ppm | 19.6061 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0044 ppm | 0.0011 ppm | 0.0203 ppm | 0.0172 ppm | 0.0000 ppm | 19.5686 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0040 ppm | -0.0002 ppm | 0.0222 ppm | 0.0173 ppm | 0.0000 ppm | 19.6731 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0029 ppm | 0.0014 ppm | 0.0187 ppm | 0.0176 ppm | 0.0000 ppm | 19.5765 ppm |
| Concentration RSD | 34.4 % | 19.8 % | 107.5 % | 8.8 % | 1.0 % | 15,651.3 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0002 ppm | 0.0010 ppm | 0.0055 ppm | 0.0078 ppm | 0.9876 ppm | -0.0006 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0002 ppm | 0.0015 ppm | 0.0050 ppm | 0.0088 ppm | 0.9863 ppm | -0.0008 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0001 ppm | 0.0006 ppm | 0.0053 ppm | 0.0063 ppm | 0.9763 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0003 ppm | 0.0010 ppm | 0.0061 ppm | 0.0082 ppm | 1.0000 ppm | -0.0012 ppm |
| Concentration RSD | 74.6 % | 62.4 % | 46.9 % | 10.6 % | 16.8 % | 1.2 % | 128.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.1839 ppm | 0.0016 ppm | 0.0054 ppm | 10.1053 ppm | 0.0304 ppm | -0.0016 ppm | 0.0053 ppm |
| Concentration per Run 1 | 5.1617 ppm | 0.0017 ppm | 0.0053 ppm | 10.1184 ppm | 0.0303 ppm | -0.0010 ppm | 0.0088 ppm |
| Concentration per Run 2 | 5.1921 ppm | 0.0015 ppm | 0.0056 ppm | 10.0768 ppm | 0.0308 ppm | -0.0009 ppm | 0.0051 ppm |
| Concentration per Run 3 | 5.1980 ppm | 0.0015 ppm | 0.0053 ppm | 10.1207 ppm | 0.0301 ppm | -0.0030 ppm | 0.0021 ppm |
| Concentration RSD | 0.4 % | 6.8 % | 3.1 % | 0.2 % | 1.2 % | 71.4 % | 63.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 1.9546 ppm | 0.0051 ppm | 0.0470 ppm | 0.0001 ppm | 0.0016 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0013 ppm | 1.9483 ppm | 0.0065 ppm | 0.0470 ppm | 0.0000 ppm | 0.0007 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0013 ppm | 1.9587 ppm | 0.0048 ppm | 0.0471 ppm | -0.0001 ppm | 0.0022 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0016 ppm | 1.9566 ppm | 0.0042 ppm | 0.0470 ppm | 0.0003 ppm | 0.0020 ppm | 0.0003 ppm |
| Concentration RSD | 316.4 % | 0.3 % | 23.4 % | 0.1 % | 303.9 % | 49.6 % | 222.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0249 ppm | 104.7665 % | 99.4981 % | 99.6785 % | 103.3971 % | 96.7758 % | 97.9476 % |
| Concentration per Run 1 | 0.0245 ppm | 105.0092 % | 99.3371 % | 99.5363 % | 103.7730 % | 96.3553 % | 97.8885 % |
| Concentration per Run 2 | 0.0249 ppm | 104.7638 % | 99.5601 % | 100.4702 % | 103.2549 % | 96.8395 % | 98.2302 % |
| Concentration per Run 3 | 0.0254 ppm | 104.5264 % | 99.5972 % | 99.0291 % | 103.1636 % | 97.1327 % | 97.7241 % |
| Concentration RSD | 1.9 % | 0.2 % | 0.1 % | 0.7 % | 0.3 % | 0.4 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038690-5 WG2038690
Analysis started at: 3/11/2025 11:03:21 PM
Rack 3
Vial 8
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0266 ppm | 1.9572 ppm | 0.1231 ppm | 0.9698 ppm | 1.8927 ppm | 0.0510 ppm | 29.0408 ppm |
| Concentration per Run 1 | 0.0269 ppm | 1.9530 ppm | 0.1208 ppm | 0.9723 ppm | 1.8840 ppm | 0.0509 ppm | 28.8786 ppm |
| Concentration per Run 2 | 0.0262 ppm | 1.9584 ppm | 0.1241 ppm | 0.9746 ppm | 1.8935 ppm | 0.0509 ppm | 29.1648 ppm |
| Concentration per Run 3 | 0.0267 ppm | 1.9603 ppm | 0.1245 ppm | 0.9624 ppm | 1.9004 ppm | 0.0510 ppm | 29.0790 ppm |
| Concentration RSD | 1.4 % | 0.2 % | 1.6 % | 0.7 % | 0.4 % | 0.1 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0491 ppm | 0.4679 ppm | 0.1877 ppm | 0.2379 ppm | 1.0219 ppm | 11.5963 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0490 ppm | 0.4678 ppm | 0.1880 ppm | 0.2369 ppm | 1.0170 ppm | 11.5819 ppm | 0.0010 ppm |
| Concentration per Run 2 | 0.0494 ppm | 0.4697 ppm | 0.1890 ppm | 0.2378 ppm | 1.0185 ppm | 11.5980 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0489 ppm | 0.4663 ppm | 0.1861 ppm | 0.2390 ppm | 1.0300 ppm | 11.6090 ppm | 0.0005 ppm |
| Concentration RSD | 0.5 % | 0.4 % | 0.8 % | 0.4 % | 0.7 % | 0.1 % | 51.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 14.5237 ppm | 0.4925 ppm | 0.9282 ppm | 20.5241 ppm | 0.5009 ppm | 0.5258 ppm | 0.3449 ppm |
| Concentration per Run 1 | 14.5973 ppm | 0.4916 ppm | 0.9220 ppm | 20.3913 ppm | 0.5029 ppm | 0.5227 ppm | 0.3371 ppm |
| Concentration per Run 2 | 14.5441 ppm | 0.4923 ppm | 0.9306 ppm | 20.4860 ppm | 0.5028 ppm | 0.5245 ppm | 0.3432 ppm |
| Concentration per Run 3 | 14.4297 ppm | 0.4936 ppm | 0.9322 ppm | 20.6949 ppm | 0.4970 ppm | 0.5301 ppm | 0.3544 ppm |
| Concentration RSD | 0.6 % | 0.2 % | 0.6 % | 0.8 % | 0.7 % | 0.7 % | 2.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1239 ppm | 2.6886 ppm | 0.9291 ppm | 1.0250 ppm | 0.9519 ppm | 0.1188 ppm | 0.4762 ppm |
| Concentration per Run 1 | 0.1219 ppm | 2.6951 ppm | 0.9305 ppm | 1.0215 ppm | 0.9573 ppm | 0.1178 ppm | 0.4765 ppm |
| Concentration per Run 2 | 0.1254 ppm | 2.6938 ppm | 0.9280 ppm | 1.0253 ppm | 0.9504 ppm | 0.1182 ppm | 0.4771 ppm |
| Concentration per Run 3 | 0.1242 ppm | 2.6769 ppm | 0.9288 ppm | 1.0282 ppm | 0.9481 ppm | 0.1204 ppm | 0.4749 ppm |
| Concentration RSD | 1.4 % | 0.4 % | 0.1 % | 0.3 % | 0.5 % | 1.2 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5008 ppm | 104.0799 % | 98.6342 % | 99.6883 % | 102.1150 % | 95.5387 % | 96.7776 % |
| Concentration per Run 1 | 0.5018 ppm | 104.4445 % | 99.3381 % | 99.6612 % | 102.3076 % | 95.8462 % | 96.9331 % |
| Concentration per Run 2 | 0.5048 ppm | 103.6550 % | 98.8288 % | 99.9093 % | 101.6544 % | 95.7756 % | 96.6718 % |
| Concentration per Run 3 | 0.4957 ppm | 104.1401 % | 97.7358 % | 99.4942 % | 102.3830 % | 94.9942 % | 96.7278 % |
| Concentration RSD | 0.9 % | 0.4 % | 0.8 % | 0.2 % | 0.4 % | 0.5 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: WG2038690-6d5 WG2038690
Analysis started at: 3/11/2025 11:06:52 PM
Rack 3
Vial 9
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0064 ppm | 0.0001 ppm | 0.0050 ppm | 0.0034 ppm | 0.0000 ppm | 3.9510 ppm |
| Concentration per Run 1 | 0.0010 ppm | -0.0001 ppm | -0.0007 ppm | 0.0053 ppm | 0.0035 ppm | 0.0000 ppm | 3.9656 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0090 ppm | 0.0019 ppm | 0.0050 ppm | 0.0034 ppm | 0.0000 ppm | 3.9331 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0104 ppm | -0.0010 ppm | 0.0046 ppm | 0.0034 ppm | 0.0001 ppm | 3.9545 ppm |
| Concentration RSD | 11.6 % | 88.2 % | 1,866.2 % | 7.4 % | 2.4 % | 175.9 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0000 ppm | -0.0001 ppm | 0.0006 ppm | 0.0048 ppm | 0.2155 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0003 ppm | -0.0004 ppm | 0.0000 ppm | 0.0006 ppm | 0.0071 ppm | 0.2278 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | -0.0003 ppm | 0.0005 ppm | 0.0042 ppm | 0.2061 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0005 ppm | 0.0000 ppm | 0.0008 ppm | 0.0031 ppm | 0.2126 ppm | -0.0003 ppm |
| Concentration RSD | 160.3 % | 1,114.4 % | 189.6 % | 28.0 % | 43.4 % | 5.2 % | 182.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0328 ppm | 0.0003 ppm | 0.0051 ppm | 2.0235 ppm | 0.0052 ppm | -0.0017 ppm | 0.0161 ppm |
| Concentration per Run 1 | 1.0302 ppm | 0.0001 ppm | 0.0054 ppm | 2.0205 ppm | 0.0049 ppm | -0.0018 ppm | 0.0138 ppm |
| Concentration per Run 2 | 1.0361 ppm | 0.0004 ppm | 0.0051 ppm | 2.0244 ppm | 0.0052 ppm | -0.0012 ppm | 0.0198 ppm |
| Concentration per Run 3 | 1.0322 ppm | 0.0003 ppm | 0.0048 ppm | 2.0255 ppm | 0.0056 ppm | -0.0022 ppm | 0.0148 ppm |
| Concentration RSD | 0.3 % | 47.2 % | 6.0 % | 0.1 % | 7.0 % | 26.6 % | 19.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 0.3868 ppm | 0.0143 ppm | 0.0096 ppm | 0.0003 ppm | 0.0007 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.3869 ppm | 0.0159 ppm | 0.0096 ppm | 0.0003 ppm | 0.0022 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.3885 ppm | 0.0152 ppm | 0.0096 ppm | 0.0003 ppm | -0.0012 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0018 ppm | 0.3850 ppm | 0.0119 ppm | 0.0095 ppm | 0.0002 ppm | 0.0012 ppm | -0.0003 ppm |
| Concentration RSD | 179.7 % | 0.5 % | 14.9 % | 0.8 % | 23.7 % | 244.1 % | 278.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0049 ppm | 104.3437 % | 99.7437 % | 99.8815 % | 102.9086 % | 97.2710 % | 98.9513 % |
| Concentration per Run 1 | 0.0048 ppm | 104.4716 % | 99.4297 % | 99.6355 % | 103.2215 % | 96.7867 % | 98.9155 % |
| Concentration per Run 2 | 0.0050 ppm | 104.0023 % | 100.1524 % | 100.0564 % | 102.6899 % | 97.9102 % | 98.9747 % |
| Concentration per Run 3 | 0.0048 ppm | 104.5572 % | 99.6488 % | 99.9525 % | 102.8145 % | 97.1160 % | 98.9636 % |
| Concentration RSD | 1.8 % | 0.3 % | 0.4 % | 0.2 % | 0.3 % | 0.6 % | 0.0 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCV
Analysis started at: 3/11/2025 11:10:22 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4666 ppm | 0.4744 ppm | 0.4943 ppm | 0.4717 ppm | 0.4675 ppm | 0.5069 ppm | 0.4802 ppm |
| Concentration per Run 1 | 0.4656 ppm | 0.4740 ppm | 0.4938 ppm | 0.4702 ppm | 0.4685 ppm | 0.5078 ppm | 0.4806 ppm |
| Concentration per Run 2 | 0.4670 ppm | 0.4823 ppm | 0.4922 ppm | 0.4733 ppm | 0.4675 ppm | 0.5073 ppm | 0.4755 ppm |
| Concentration per Run 3 | 0.4673 ppm | 0.4669 ppm | 0.4969 ppm | 0.4716 ppm | 0.4665 ppm | 0.5057 ppm | 0.4845 ppm |
| Recovery Percentage 1 | 93.327 % | 94.879 % | 98.866 % | 94.343 % | 93.504 % | 101.387 % | 96.034 % |
| Concentration RSD | 0.2 % | 1.6 % | 0.5 % | 0.3 % | 0.2 % | 0.2 % | 0.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4735 ppm | 0.4865 ppm | 0.4706 ppm | 0.4597 ppm | 0.5025 ppm | 5.1480 ppm | 0.5142 ppm |
| Concentration per Run 1 | 0.4733 ppm | 0.4844 ppm | 0.4701 ppm | 0.4541 ppm | 0.5042 ppm | 5.1597 ppm | 0.5145 ppm |
| Concentration per Run 2 | 0.4728 ppm | 0.4858 ppm | 0.4730 ppm | 0.4632 ppm | 0.5041 ppm | 5.1780 ppm | 0.5143 ppm |
| Concentration per Run 3 | 0.4743 ppm | 0.4892 ppm | 0.4687 ppm | 0.4618 ppm | 0.4992 ppm | 5.1062 ppm | 0.5139 ppm |
| Recovery Percentage 1 | 94.698 % | 97.291 % | 94.125 % | 91.940 % | 100.496 % | 102.960 % | 102.850 % |
| Concentration RSD | 0.2 % | 0.5 % | 0.5 % | 1.1 % | 0.6 % | 0.7 % | 0.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4630 ppm | 0.4828 ppm | 0.4748 ppm | 10.1321 ppm | 0.4779 ppm | 0.4941 ppm | 0.4945 ppm |
| Concentration per Run 1 | 0.4622 ppm | 0.4843 ppm | 0.4729 ppm | 10.1611 ppm | 0.4756 ppm | 0.4932 ppm | 0.4911 ppm |
| Concentration per Run 2 | 0.4642 ppm | 0.4813 ppm | 0.4756 ppm | 10.1359 ppm | 0.4820 ppm | 0.4936 ppm | 0.4956 ppm |
| Concentration per Run 3 | 0.4627 ppm | 0.4828 ppm | 0.4760 ppm | 10.0993 ppm | 0.4761 ppm | 0.4954 ppm | 0.4966 ppm |
| Recovery Percentage 1 | 92.607 % | 96.559 % | 94.968 % | 101.321 % | 95.576 % | 98.811 % | 98.891 % |
| Concentration RSD | 0.2 % | 0.3 % | 0.3 % | 0.3 % | 0.8 % | 0.2 % | 0.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4934 ppm | 5.3729 ppm | 0.4930 ppm | 0.4875 ppm | 0.4764 ppm | 0.4783 ppm | 0.4733 ppm |
| Concentration per Run 1 | 0.4898 ppm | 5.3576 ppm | 0.4881 ppm | 0.4870 ppm | 0.4748 ppm | 0.4750 ppm | 0.4723 ppm |
| Concentration per Run 2 | 0.4938 ppm | 5.3807 ppm | 0.4924 ppm | 0.4883 ppm | 0.4775 ppm | 0.4793 ppm | 0.4746 ppm |
| Concentration per Run 3 | 0.4967 ppm | 5.3804 ppm | 0.4986 ppm | 0.4873 ppm | 0.4767 ppm | 0.4806 ppm | 0.4732 ppm |
| Recovery Percentage 1 | 98.688 % | 102.341 % | 98.608 % | 97.503 % | 95.273 % | 95.660 % | 94.668 % |
| Concentration RSD | 0.7 % | 0.2 % | 1.1 % | 0.1 % | 0.3 % | 0.6 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4773 ppm | 104.0077 % | 99.3978 % | 99.6101 % | 102.3650 % | 96.3334 % | 97.5510 % |
| Concentration per Run 1 | 0.4747 ppm | 104.5276 % | 99.3191 % | 99.4479 % | 102.8083 % | 96.3745 % | 97.4193 % |
| Concentration per Run 2 | 0.4787 ppm | 104.6247 % | 99.1171 % | 100.1693 % | 103.2586 % | 96.3408 % | 97.6439 % |
| Concentration per Run 3 | 0.4784 ppm | 102.8709 % | 99.7572 % | 99.2129 % | 101.0282 % | 96.2847 % | 97.5898 % |
| Recovery Percentage 1 | 95.454 % | | | | | | |
| Concentration RSD | 0.5 % | 0.9 % | 0.3 % | 0.5 % | 1.2 % | 0.0 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCB
Analysis started at: 3/11/2025 11:13:52 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0079 ppm | -0.0003 ppm | 0.0017 ppm | -0.0001 ppm | 0.0001 ppm | 0.0007 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0084 ppm | 0.0006 ppm | 0.0019 ppm | -0.0001 ppm | 0.0001 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0071 ppm | -0.0019 ppm | 0.0013 ppm | -0.0001 ppm | 0.0001 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0012 ppm | 0.0082 ppm | 0.0006 ppm | 0.0017 ppm | 0.0000 ppm | 0.0000 ppm | 0.0017 ppm |
| Recovery Percentage 1 | 12.450 % | 7.897 % | -5.002 % | 5.515 % | -0.733 % | 1.453 % | 0.715 % |
| Concentration RSD | 37.2 % | 9.2 % | 579.4 % | 20.2 % | 94.1 % | 57.8 % | 134.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0002 ppm | -0.0001 ppm | 0.0004 ppm | 0.0017 ppm | 0.0275 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0001 ppm | 0.0003 ppm | 0.0005 ppm | 0.0017 ppm | 0.0289 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0007 ppm | 0.0000 ppm | 0.0001 ppm | 0.0015 ppm | 0.0213 ppm | 0.0016 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0001 ppm | -0.0007 ppm | 0.0005 ppm | 0.0018 ppm | 0.0323 ppm | -0.0006 ppm |
| Recovery Percentage 1 | -1.586 % | 0.849 % | -1.367 % | 3.521 % | 3.323 % | 1.100 % | 5.618 % |
| Concentration RSD | 131.1 % | 274.8 % | 397.5 % | 67.2 % | 8.9 % | 20.5 % | 406.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | 0.0000 ppm | 0.0023 ppm | 0.0087 ppm | -0.0010 ppm | -0.0008 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0028 ppm | -0.0004 ppm | 0.0019 ppm | 0.0068 ppm | -0.0008 ppm | -0.0011 ppm | 0.0008 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0003 ppm | 0.0018 ppm | 0.0112 ppm | -0.0006 ppm | -0.0006 ppm | 0.0023 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0001 ppm | 0.0032 ppm | 0.0080 ppm | -0.0016 ppm | -0.0006 ppm | -0.0020 ppm |
| Recovery Percentage 1 | -1.153 % | -0.157 % | 4.665 % | 0.433 % | -4.015 % | -7.702 % | 0.788 % |
| Concentration RSD | 126.2 % | 2,328.1 % | 33.4 % | 26.7 % | 49.6 % | 42.4 % | 554.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0013 ppm | 0.0003 ppm | 0.0012 ppm | 0.0001 ppm | 0.0002 ppm | 0.0046 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0015 ppm | -0.0054 ppm | 0.0018 ppm | 0.0001 ppm | 0.0000 ppm | 0.0020 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0025 ppm | 0.0109 ppm | 0.0013 ppm | 0.0001 ppm | -0.0003 ppm | 0.0055 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0048 ppm | 0.0005 ppm | 0.0000 ppm | 0.0008 ppm | 0.0062 ppm | 0.0003 ppm |
| Recovery Percentage 1 | -12.950 % | 0.051 % | 2.380 % | 0.678 % | 1.749 % | 22.850 % | 1.270 % |
| Concentration RSD | 97.6 % | 3,638.3 % | 56.5 % | 48.8 % | 305.0 % | 49.4 % | 186.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 101.8596 % | 98.7083 % | 100.1247 % | 103.7952 % | 97.7110 % | 100.2509 % |
| Concentration per Run 1 | -0.0006 ppm | 102.2079 % | 98.2543 % | 100.0109 % | 103.6130 % | 97.6698 % | 100.3943 % |
| Concentration per Run 2 | -0.0007 ppm | 103.0093 % | 98.6542 % | 99.8148 % | 105.8165 % | 97.6013 % | 100.2494 % |
| Concentration per Run 3 | -0.0005 ppm | 100.3615 % | 99.2163 % | 100.5483 % | 101.9562 % | 97.8619 % | 100.1089 % |
| Recovery Percentage 1 | -11.908 % | | | | | | |
| Concentration RSD | 15.5 % | 1.3 % | 0.5 % | 0.4 % | 1.9 % | 0.1 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511919-05 WG2038690
Analysis started at: 3/11/2025 11:17:21 PM
Rack 3
Vial 13
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0029 ppm | -0.0010 ppm | 0.0256 ppm | 0.0207 ppm | 0.0000 ppm | 26.7301 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.0034 ppm | -0.0008 ppm | 0.0254 ppm | 0.0207 ppm | 0.0000 ppm | 26.7471 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0017 ppm | -0.0024 ppm | 0.0267 ppm | 0.0207 ppm | 0.0000 ppm | 26.8289 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0037 ppm | 0.0000 ppm | 0.0248 ppm | 0.0207 ppm | 0.0000 ppm | 26.6142 ppm |
| Concentration RSD | 26.5 % | 37.1 % | 118.3 % | 3.8 % | 0.2 % | 88.4 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0001 ppm | 0.0003 ppm | 0.0008 ppm | 0.0177 ppm | 1.6887 ppm | 0.0008 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0002 ppm | 0.0002 ppm | 0.0007 ppm | 0.0180 ppm | 1.7229 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0002 ppm | 0.0004 ppm | 0.0010 ppm | 0.0182 ppm | 1.6679 ppm | 0.0008 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0000 ppm | 0.0002 ppm | 0.0007 ppm | 0.0168 ppm | 1.6754 ppm | 0.0015 ppm |
| Concentration RSD | 30.2 % | 83.0 % | 46.9 % | 19.8 % | 4.3 % | 1.8 % | 83.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.8041 ppm | 0.0069 ppm | 0.0011 ppm | 10.7510 ppm | -0.0009 ppm | -0.0017 ppm | 0.0001 ppm |
| Concentration per Run 1 | 5.8204 ppm | 0.0072 ppm | 0.0011 ppm | 10.7090 ppm | -0.0016 ppm | -0.0014 ppm | 0.0000 ppm |
| Concentration per Run 2 | 5.7886 ppm | 0.0068 ppm | 0.0015 ppm | 10.8431 ppm | -0.0008 ppm | -0.0027 ppm | 0.0012 ppm |
| Concentration per Run 3 | 5.8032 ppm | 0.0068 ppm | 0.0008 ppm | 10.7010 ppm | -0.0004 ppm | -0.0011 ppm | -0.0010 ppm |
| Concentration RSD | 0.3 % | 3.7 % | 28.0 % | 0.7 % | 67.6 % | 49.7 % | 1,915.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 3.4188 ppm | -0.0010 ppm | 0.0763 ppm | 0.0004 ppm | 0.0016 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | 3.4224 ppm | -0.0014 ppm | 0.0762 ppm | 0.0006 ppm | 0.0007 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0016 ppm | 3.4229 ppm | -0.0012 ppm | 0.0764 ppm | 0.0005 ppm | 0.0014 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0012 ppm | 3.4109 ppm | -0.0005 ppm | 0.0763 ppm | 0.0001 ppm | 0.0026 ppm | 0.0003 ppm |
| Concentration RSD | 936.3 % | 0.2 % | 48.2 % | 0.1 % | 64.0 % | 62.2 % | 115.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0153 ppm | 105.1541 % | 99.6914 % | 99.7482 % | 104.2332 % | 96.7632 % | 98.2727 % |
| Concentration per Run 1 | 0.0154 ppm | 105.3095 % | 99.6612 % | 99.5614 % | 104.5374 % | 96.6942 % | 98.2121 % |
| Concentration per Run 2 | 0.0153 ppm | 104.4395 % | 99.4174 % | 100.0497 % | 103.0892 % | 96.6778 % | 98.6232 % |
| Concentration per Run 3 | 0.0152 ppm | 105.7134 % | 99.9956 % | 99.6335 % | 105.0730 % | 96.9176 % | 97.9827 % |
| Concentration RSD | 0.7 % | 0.6 % | 0.3 % | 0.3 % | 1.0 % | 0.1 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: L2511919-07 WG2038690
Analysis started at: 3/11/2025 11:20:52 PM
Rack 3
Vial 14
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0070 ppm | 0.0003 ppm | 0.0168 ppm | 0.0159 ppm | 0.0000 ppm | 26.0502 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0039 ppm | 0.0001 ppm | 0.0172 ppm | 0.0158 ppm | 0.0000 ppm | 26.1263 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0084 ppm | 0.0012 ppm | 0.0173 ppm | 0.0160 ppm | 0.0000 ppm | 25.9660 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0089 ppm | -0.0003 ppm | 0.0160 ppm | 0.0159 ppm | 0.0000 ppm | 26.0584 ppm |
| Concentration RSD | 114.4 % | 39.1 % | 264.2 % | 4.1 % | 0.5 % | 514.9 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0007 ppm | 0.0005 ppm | 0.0138 ppm | 0.0054 ppm | 2.1792 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0005 ppm | 0.0004 ppm | 0.0141 ppm | 0.0048 ppm | 2.1838 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0009 ppm | 0.0007 ppm | 0.0141 ppm | 0.0046 ppm | 2.2121 ppm | 0.0002 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0006 ppm | 0.0005 ppm | 0.0133 ppm | 0.0067 ppm | 2.1416 ppm | 0.0005 ppm |
| Concentration RSD | 113.0 % | 34.8 % | 24.9 % | 3.3 % | 21.5 % | 1.6 % | 58.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.1613 ppm | 0.0143 ppm | 0.0014 ppm | 10.1287 ppm | -0.0002 ppm | 0.0005 ppm | 0.0012 ppm |
| Concentration per Run 1 | 5.1747 ppm | 0.0143 ppm | 0.0007 ppm | 10.0664 ppm | -0.0003 ppm | -0.0009 ppm | 0.0028 ppm |
| Concentration per Run 2 | 5.1547 ppm | 0.0142 ppm | 0.0014 ppm | 10.2569 ppm | -0.0001 ppm | 0.0007 ppm | 0.0002 ppm |
| Concentration per Run 3 | 5.1544 ppm | 0.0144 ppm | 0.0021 ppm | 10.0627 ppm | -0.0002 ppm | 0.0017 ppm | 0.0005 ppm |
| Concentration RSD | 0.2 % | 0.5 % | 49.9 % | 1.1 % | 36.8 % | 274.3 % | 116.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 1.7966 ppm | -0.0003 ppm | 0.0771 ppm | 0.0002 ppm | 0.0017 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0001 ppm | 1.8080 ppm | -0.0004 ppm | 0.0770 ppm | -0.0001 ppm | 0.0010 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0027 ppm | 1.7920 ppm | -0.0007 ppm | 0.0773 ppm | 0.0003 ppm | 0.0026 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.0000 ppm | 1.7898 ppm | 0.0004 ppm | 0.0769 ppm | 0.0003 ppm | 0.0015 ppm | 0.0000 ppm |
| Concentration RSD | 163.6 % | 0.6 % | 231.9 % | 0.3 % | 128.2 % | 47.7 % | 96.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0362 ppm | 104.2591 % | 99.0701 % | 99.5264 % | 103.2185 % | 96.5992 % | 98.0093 % |
| Concentration per Run 1 | 0.0363 ppm | 104.0008 % | 98.7886 % | 98.7571 % | 102.9057 % | 96.2551 % | 97.7153 % |
| Concentration per Run 2 | 0.0365 ppm | 104.2707 % | 99.2396 % | 99.8222 % | 103.3744 % | 97.1633 % | 98.0112 % |
| Concentration per Run 3 | 0.0359 ppm | 104.5057 % | 99.1820 % | 99.9998 % | 103.3754 % | 96.3790 % | 98.3015 % |
| Concentration RSD | 0.9 % | 0.2 % | 0.2 % | 0.7 % | 0.3 % | 0.5 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCV
Analysis started at: 3/11/2025 11:24:23 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4657 ppm | 0.4707 ppm | 0.4868 ppm | 0.4699 ppm | 0.4700 ppm | 0.5069 ppm | 0.4815 ppm |
| Concentration per Run 1 | 0.4669 ppm | 0.4690 ppm | 0.4872 ppm | 0.4716 ppm | 0.4705 ppm | 0.5060 ppm | 0.4866 ppm |
| Concentration per Run 2 | 0.4656 ppm | 0.4695 ppm | 0.4896 ppm | 0.4697 ppm | 0.4692 ppm | 0.5069 ppm | 0.4793 ppm |
| Concentration per Run 3 | 0.4644 ppm | 0.4736 ppm | 0.4837 ppm | 0.4683 ppm | 0.4703 ppm | 0.5077 ppm | 0.4785 ppm |
| Recovery Percentage 1 | 93.131 % | 94.138 % | 97.369 % | 93.975 % | 94.004 % | 101.373 % | 96.297 % |
| Concentration RSD | 0.3 % | 0.5 % | 0.6 % | 0.4 % | 0.1 % | 0.2 % | 0.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4695 ppm | 0.4831 ppm | 0.4728 ppm | 0.4568 ppm | 0.5033 ppm | 5.1703 ppm | 0.5180 ppm |
| Concentration per Run 1 | 0.4730 ppm | 0.4863 ppm | 0.4740 ppm | 0.4570 ppm | 0.5052 ppm | 5.1606 ppm | 0.5180 ppm |
| Concentration per Run 2 | 0.4676 ppm | 0.4807 ppm | 0.4726 ppm | 0.4556 ppm | 0.5066 ppm | 5.1226 ppm | 0.5142 ppm |
| Concentration per Run 3 | 0.4678 ppm | 0.4824 ppm | 0.4719 ppm | 0.4576 ppm | 0.4981 ppm | 5.2277 ppm | 0.5219 ppm |
| Recovery Percentage 1 | 93.899 % | 96.623 % | 94.562 % | 91.351 % | 100.664 % | 103.406 % | 103.605 % |
| Concentration RSD | 0.7 % | 0.6 % | 0.2 % | 0.2 % | 0.9 % | 1.0 % | 0.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4658 ppm | 0.4851 ppm | 0.4703 ppm | 10.1769 ppm | 0.4803 ppm | 0.4895 ppm | 0.4895 ppm |
| Concentration per Run 1 | 0.4657 ppm | 0.4859 ppm | 0.4718 ppm | 10.1006 ppm | 0.4827 ppm | 0.4918 ppm | 0.4889 ppm |
| Concentration per Run 2 | 0.4680 ppm | 0.4836 ppm | 0.4698 ppm | 10.1288 ppm | 0.4795 ppm | 0.4879 ppm | 0.4924 ppm |
| Concentration per Run 3 | 0.4638 ppm | 0.4859 ppm | 0.4693 ppm | 10.3014 ppm | 0.4786 ppm | 0.4888 ppm | 0.4872 ppm |
| Recovery Percentage 1 | 93.162 % | 97.025 % | 94.058 % | 101.769 % | 96.056 % | 97.900 % | 97.896 % |
| Concentration RSD | 0.5 % | 0.3 % | 0.3 % | 1.1 % | 0.4 % | 0.4 % | 0.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4900 ppm | 5.3394 ppm | 0.4857 ppm | 0.4886 ppm | 0.4763 ppm | 0.4727 ppm | 0.4715 ppm |
| Concentration per Run 1 | 0.4885 ppm | 5.3629 ppm | 0.4896 ppm | 0.4886 ppm | 0.4765 ppm | 0.4729 ppm | 0.4727 ppm |
| Concentration per Run 2 | 0.4932 ppm | 5.3377 ppm | 0.4852 ppm | 0.4872 ppm | 0.4773 ppm | 0.4729 ppm | 0.4716 ppm |
| Concentration per Run 3 | 0.4883 ppm | 5.3177 ppm | 0.4824 ppm | 0.4899 ppm | 0.4751 ppm | 0.4723 ppm | 0.4702 ppm |
| Recovery Percentage 1 | 97.998 % | 101.704 % | 97.145 % | 97.712 % | 95.262 % | 94.536 % | 94.306 % |
| Concentration RSD | 0.6 % | 0.4 % | 0.7 % | 0.3 % | 0.2 % | 0.1 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4762 ppm | 104.5380 % | 98.8377 % | 100.5228 % | 102.7244 % | 95.6347 % | 97.6275 % |
| Concentration per Run 1 | 0.4802 ppm | 103.8265 % | 99.0665 % | 100.5417 % | 102.6561 % | 95.7831 % | 97.8202 % |
| Concentration per Run 2 | 0.4756 ppm | 104.1661 % | 99.3067 % | 100.8201 % | 101.8757 % | 95.6151 % | 97.7160 % |
| Concentration per Run 3 | 0.4727 ppm | 105.6213 % | 98.1399 % | 100.2067 % | 103.6414 % | 95.5060 % | 97.3463 % |
| Recovery Percentage 1 | 95.235 % | | | | | | |
| Concentration RSD | 0.8 % | 0.9 % | 0.6 % | 0.3 % | 0.9 % | 0.1 % | 0.3 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCB
Analysis started at: 3/11/2025 11:27:53 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0016 ppm | 0.0002 ppm | 0.0006 ppm | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0057 ppm | 0.0004 ppm | 0.0008 ppm | 0.0000 ppm | 0.0000 ppm | 0.0023 ppm |
| Concentration per Run 2 | 0.0007 ppm | -0.0062 ppm | -0.0001 ppm | 0.0005 ppm | 0.0000 ppm | 0.0000 ppm | -0.0010 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0052 ppm | 0.0001 ppm | 0.0006 ppm | 0.0001 ppm | 0.0000 ppm | -0.0009 ppm |
| Recovery Percentage 1 | 13.491 % | 1.557 % | 3.327 % | 2.130 % | 0.207 % | 0.576 % | 0.135 % |
| Concentration RSD | 21.7 % | 433.3 % | 154.7 % | 24.1 % | 432.6 % | 38.1 % | 1,376.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0001 ppm | 0.0000 ppm | -0.0001 ppm | 0.0003 ppm | 0.0135 ppm | 0.0007 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0002 ppm | -0.0001 ppm | -0.0001 ppm | 0.0006 ppm | 0.0094 ppm | 0.0012 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0003 ppm | -0.0006 ppm | 0.0001 ppm | 0.0009 ppm | -0.0176 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0009 ppm | 0.0008 ppm | -0.0002 ppm | -0.0005 ppm | 0.0487 ppm | 0.0008 ppm |
| Recovery Percentage 1 | 1.667 % | 0.586 % | 0.212 % | -0.514 % | 0.627 % | 0.540 % | 14.758 % |
| Concentration RSD | 117.1 % | 549.2 % | 3,262.1 % | 325.2 % | 222.2 % | 246.8 % | 64.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0033 ppm | 0.0000 ppm | 0.0020 ppm | 0.0091 ppm | -0.0009 ppm | -0.0014 ppm | 0.0033 ppm |
| Concentration per Run 1 | -0.0043 ppm | 0.0002 ppm | 0.0022 ppm | 0.0112 ppm | 0.0001 ppm | -0.0021 ppm | 0.0027 ppm |
| Concentration per Run 2 | -0.0037 ppm | -0.0001 ppm | 0.0015 ppm | 0.0027 ppm | -0.0018 ppm | -0.0008 ppm | 0.0049 ppm |
| Concentration per Run 3 | -0.0019 ppm | 0.0000 ppm | 0.0022 ppm | 0.0132 ppm | -0.0009 ppm | -0.0012 ppm | 0.0024 ppm |
| Recovery Percentage 1 | -3.291 % | 0.050 % | 3.965 % | 0.453 % | -3.501 % | -13.790 % | 6.697 % |
| Concentration RSD | 37.2 % | 2,723.8 % | 21.1 % | 61.5 % | 104.8 % | 47.1 % | 40.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | -0.0061 ppm | 0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0024 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0007 ppm | -0.0060 ppm | 0.0003 ppm | 0.0002 ppm | 0.0000 ppm | 0.0020 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0014 ppm | -0.0045 ppm | -0.0002 ppm | 0.0000 ppm | 0.0001 ppm | 0.0032 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0003 ppm | -0.0078 ppm | 0.0011 ppm | 0.0000 ppm | -0.0002 ppm | 0.0021 ppm | -0.0003 ppm |
| Recovery Percentage 1 | 7.981 % | -1.222 % | 0.819 % | 0.495 % | -0.307 % | 12.107 % | -0.707 % |
| Concentration RSD | 68.8 % | 27.3 % | 155.0 % | 227.0 % | 444.6 % | 27.1 % | 404.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 105.3638 % | 100.0903 % | 101.2653 % | 105.9185 % | 98.6817 % | 101.2358 % |
| Concentration per Run 1 | -0.0007 ppm | 106.5493 % | 100.6213 % | 101.1910 % | 107.6938 % | 99.2313 % | 101.1218 % |
| Concentration per Run 2 | -0.0007 ppm | 104.5989 % | 99.3825 % | 101.5215 % | 104.9669 % | 97.6701 % | 101.3729 % |
| Concentration per Run 3 | -0.0008 ppm | 104.9433 % | 100.2671 % | 101.0834 % | 105.0948 % | 99.1437 % | 101.2127 % |
| Recovery Percentage 1 | -14.616 % | | | | | | |
| Concentration RSD | 8.3 % | 1.0 % | 0.6 % | 0.2 % | 1.5 % | 0.9 % | 0.1 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCV
Analysis started at: 3/11/2025 11:31:23 PM
Rack 0
Vial 10
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4596 ppm | 0.4815 ppm | 0.4960 ppm | 0.4723 ppm | 0.4704 ppm | 0.5084 ppm | 0.4822 ppm |
| Concentration per Run 1 | 0.4588 ppm | 0.4817 ppm | 0.4948 ppm | 0.4725 ppm | 0.4727 ppm | 0.5093 ppm | 0.4815 ppm |
| Concentration per Run 2 | 0.4596 ppm | 0.4815 ppm | 0.5004 ppm | 0.4716 ppm | 0.4678 ppm | 0.5072 ppm | 0.4815 ppm |
| Concentration per Run 3 | 0.4605 ppm | 0.4813 ppm | 0.4928 ppm | 0.4728 ppm | 0.4706 ppm | 0.5087 ppm | 0.4837 ppm |
| Recovery Percentage 1 | 91.926 % | 96.304 % | 99.207 % | 94.467 % | 94.070 % | 101.682 % | 96.445 % |
| Concentration RSD | 0.2 % | 0.0 % | 0.8 % | 0.1 % | 0.5 % | 0.2 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4729 ppm | 0.4862 ppm | 0.4762 ppm | 0.4597 ppm | 0.5060 ppm | 5.1631 ppm | 0.5136 ppm |
| Concentration per Run 1 | 0.4705 ppm | 0.4822 ppm | 0.4767 ppm | 0.4538 ppm | 0.5062 ppm | 5.1752 ppm | 0.5157 ppm |
| Concentration per Run 2 | 0.4745 ppm | 0.4886 ppm | 0.4762 ppm | 0.4637 ppm | 0.5055 ppm | 5.1304 ppm | 0.5124 ppm |
| Concentration per Run 3 | 0.4738 ppm | 0.4879 ppm | 0.4757 ppm | 0.4617 ppm | 0.5063 ppm | 5.1839 ppm | 0.5126 ppm |
| Recovery Percentage 1 | 94.589 % | 97.242 % | 95.240 % | 91.947 % | 101.196 % | 103.263 % | 102.719 % |
| Concentration RSD | 0.5 % | 0.7 % | 0.1 % | 1.1 % | 0.1 % | 0.6 % | 0.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4668 ppm | 0.4863 ppm | 0.4734 ppm | 10.0951 ppm | 0.4843 ppm | 0.4945 ppm | 0.4874 ppm |
| Concentration per Run 1 | 0.4653 ppm | 0.4873 ppm | 0.4711 ppm | 10.1535 ppm | 0.4853 ppm | 0.4946 ppm | 0.4857 ppm |
| Concentration per Run 2 | 0.4699 ppm | 0.4858 ppm | 0.4730 ppm | 10.0485 ppm | 0.4829 ppm | 0.4989 ppm | 0.4874 ppm |
| Concentration per Run 3 | 0.4652 ppm | 0.4858 ppm | 0.4761 ppm | 10.0834 ppm | 0.4846 ppm | 0.4901 ppm | 0.4891 ppm |
| Recovery Percentage 1 | 93.355 % | 97.256 % | 94.680 % | 100.951 % | 96.856 % | 98.909 % | 97.480 % |
| Concentration RSD | 0.6 % | 0.2 % | 0.5 % | 0.5 % | 0.3 % | 0.9 % | 0.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4973 ppm | 5.3858 ppm | 0.4847 ppm | 0.4911 ppm | 0.4792 ppm | 0.4797 ppm | 0.4755 ppm |
| Concentration per Run 1 | 0.4962 ppm | 5.3631 ppm | 0.4820 ppm | 0.4923 ppm | 0.4785 ppm | 0.4774 ppm | 0.4734 ppm |
| Concentration per Run 2 | 0.5021 ppm | 5.3848 ppm | 0.4870 ppm | 0.4898 ppm | 0.4788 ppm | 0.4853 ppm | 0.4763 ppm |
| Concentration per Run 3 | 0.4937 ppm | 5.4095 ppm | 0.4850 ppm | 0.4910 ppm | 0.4805 ppm | 0.4763 ppm | 0.4768 ppm |
| Recovery Percentage 1 | 99.466 % | 102.586 % | 96.935 % | 98.212 % | 95.849 % | 95.933 % | 95.097 % |
| Concentration RSD | 0.9 % | 0.4 % | 0.5 % | 0.3 % | 0.2 % | 1.0 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4802 ppm | 104.2188 % | 99.4302 % | 99.2266 % | 102.3705 % | 96.0978 % | 96.9994 % |
| Concentration per Run 1 | 0.4796 ppm | 104.2493 % | 99.2631 % | 99.8611 % | 101.9324 % | 96.4640 % | 97.5332 % |
| Concentration per Run 2 | 0.4806 ppm | 104.6987 % | 99.2473 % | 97.8723 % | 103.1240 % | 95.9018 % | 96.3785 % |
| Concentration per Run 3 | 0.4803 ppm | 103.7084 % | 99.7802 % | 99.9465 % | 102.0550 % | 95.9276 % | 97.0864 % |
| Recovery Percentage 1 | 96.035 % | | | | | | |
| Concentration RSD | 0.1 % | 0.5 % | 0.3 % | 1.2 % | 0.6 % | 0.3 % | 0.6 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: CCB
Analysis started at: 3/11/2025 11:34:56 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0064 ppm | -0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0048 ppm | -0.0012 ppm | -0.0005 ppm | 0.0000 ppm | 0.0001 ppm | -0.0004 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0108 ppm | 0.0015 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm | -0.0030 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0036 ppm | -0.0007 ppm | 0.0007 ppm | 0.0001 ppm | 0.0000 ppm | 0.0046 ppm |
| Recovery Percentage 1 | 6.379 % | 6.381 % | -2.779 % | 0.306 % | 0.096 % | 0.858 % | 0.402 % |
| Concentration RSD | 117.1 % | 60.3 % | 1,055.2 % | 674.7 % | 471.0 % | 77.4 % | 953.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0007 ppm | -0.0002 ppm | 0.0004 ppm | 0.0010 ppm | 0.0168 ppm | 0.0009 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0010 ppm | -0.0005 ppm | 0.0006 ppm | 0.0013 ppm | 0.0321 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0007 ppm | -0.0002 ppm | 0.0000 ppm | 0.0005 ppm | -0.0037 ppm | 0.0012 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0004 ppm | 0.0000 ppm | 0.0005 ppm | 0.0012 ppm | 0.0220 ppm | 0.0003 ppm |
| Recovery Percentage 1 | -1.587 % | 3.436 % | -2.273 % | 3.754 % | 1.982 % | 0.671 % | 17.531 % |
| Concentration RSD | 94.3 % | 47.8 % | 111.6 % | 80.6 % | 46.7 % | 109.9 % | 56.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0033 ppm | 0.0001 ppm | 0.0020 ppm | 0.0053 ppm | -0.0002 ppm | 0.0000 ppm | 0.0007 ppm |
| Concentration per Run 1 | -0.0025 ppm | 0.0001 ppm | 0.0021 ppm | 0.0063 ppm | 0.0003 ppm | 0.0002 ppm | 0.0017 ppm |
| Concentration per Run 2 | -0.0030 ppm | 0.0001 ppm | 0.0023 ppm | 0.0048 ppm | 0.0005 ppm | 0.0001 ppm | -0.0021 ppm |
| Concentration per Run 3 | -0.0044 ppm | 0.0000 ppm | 0.0015 ppm | 0.0049 ppm | -0.0013 ppm | -0.0003 ppm | 0.0024 ppm |
| Recovery Percentage 1 | -3.285 % | 0.796 % | 3.959 % | 0.266 % | -0.721 % | -0.117 % | 1.307 % |
| Concentration RSD | 29.8 % | 64.1 % | 19.8 % | 15.3 % | 558.0 % | 2,587.9 % | 371.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0011 ppm | -0.0060 ppm | 0.0000 ppm | 0.0001 ppm | -0.0001 ppm | 0.0032 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0008 ppm | -0.0066 ppm | 0.0001 ppm | 0.0002 ppm | 0.0001 ppm | 0.0033 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0009 ppm | -0.0038 ppm | -0.0001 ppm | 0.0000 ppm | -0.0003 ppm | 0.0040 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0034 ppm | -0.0075 ppm | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | 0.0024 ppm | 0.0003 ppm |
| Recovery Percentage 1 | -11.078 % | -1.199 % | 0.021 % | 1.047 % | -0.672 % | 16.160 % | 0.819 % |
| Concentration RSD | 197.2 % | 32.3 % | 949.4 % | 87.3 % | 338.2 % | 24.3 % | 216.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 102.1814 % | 97.9353 % | 98.5176 % | 102.5236 % | 96.5901 % | 98.4624 % |
| Concentration per Run 1 | -0.0003 ppm | 102.0478 % | 97.7638 % | 98.4253 % | 102.4338 % | 96.8841 % | 98.4739 % |
| Concentration per Run 2 | -0.0009 ppm | 102.2668 % | 98.1434 % | 98.4209 % | 102.8611 % | 96.5390 % | 98.0236 % |
| Concentration per Run 3 | -0.0007 ppm | 102.2295 % | 97.8987 % | 98.7067 % | 102.2758 % | 96.3470 % | 98.8896 % |
| Recovery Percentage 1 | -12.620 % | | | | | | |
| Concentration RSD | 47.0 % | 0.1 % | 0.2 % | 0.2 % | 0.3 % | 0.3 % | 0.4 % |

# ICP DataTrace 9

3/12/2025 9:27:21 AM

LabBook: WG2038860_03112025T9.imexp

Sample: LLOQ
Analysis started at: 3/11/2025 11:38:26 PM
Rack 0
Vial 5
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0055 ppm | 0.0986 ppm | 0.0048 ppm | 0.0306 ppm | 0.0093 ppm | 0.0050 ppm | 0.0989 ppm |
| Concentration per Run 1 | 0.0058 ppm | 0.0999 ppm | 0.0054 ppm | 0.0286 ppm | 0.0095 ppm | 0.0050 ppm | 0.0990 ppm |
| Concentration per Run 2 | 0.0051 ppm | 0.0862 ppm | 0.0053 ppm | 0.0322 ppm | 0.0092 ppm | 0.0050 ppm | 0.1009 ppm |
| Concentration per Run 3 | 0.0055 ppm | 0.1098 ppm | 0.0036 ppm | 0.0309 ppm | 0.0093 ppm | 0.0050 ppm | 0.0969 ppm |
| Recovery Percentage 1 | 109.453 % | 98.629 % | 95.305 % | 101.931 % | 93.210 % | 100.187 % | 98.944 % |
| Concentration RSD | 6.2 % | 12.0 % | 20.6 % | 6.0 % | 1.3 % | 0.2 % | 2.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0038 ppm | 0.0099 ppm | 0.0093 ppm | 0.0088 ppm | 0.0537 ppm | 2.5790 ppm | 0.0105 ppm |
| Concentration per Run 1 | 0.0038 ppm | 0.0096 ppm | 0.0096 ppm | 0.0086 ppm | 0.0547 ppm | 2.5974 ppm | 0.0100 ppm |
| Concentration per Run 2 | 0.0037 ppm | 0.0098 ppm | 0.0090 ppm | 0.0084 ppm | 0.0531 ppm | 2.5825 ppm | 0.0100 ppm |
| Concentration per Run 3 | 0.0037 ppm | 0.0104 ppm | 0.0092 ppm | 0.0093 ppm | 0.0532 ppm | 2.5570 ppm | 0.0116 ppm |
| Recovery Percentage 1 | 93.922 % | 99.444 % | 92.658 % | 87.716 % | 107.307 % | 103.159 % | 105.304 % |
| Concentration RSD | 2.3 % | 4.6 % | 3.0 % | 5.1 % | 1.7 % | 0.8 % | 8.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0917 ppm | 0.0096 ppm | 0.0481 ppm | 2.0332 ppm | **0.0185 ppm** | 0.0091 ppm | 0.0512 ppm |
| Concentration per Run 1 | 0.0919 ppm | 0.0096 ppm | 0.0477 ppm | 2.0452 ppm | 0.0183 ppm | 0.0096 ppm | 0.0496 ppm |
| Concentration per Run 2 | 0.0924 ppm | 0.0094 ppm | 0.0476 ppm | 2.0294 ppm | 0.0188 ppm | 0.0090 ppm | 0.0509 ppm |
| Concentration per Run 3 | 0.0907 ppm | 0.0097 ppm | 0.0490 ppm | 2.0252 ppm | 0.0182 ppm | 0.0085 ppm | 0.0531 ppm |
| Recovery Percentage 1 | 91.686 % | 95.864 % | 96.216 % | 101.662 % | 73.838 % | 90.612 % | 102.452 % |
| Concentration RSD | 0.9 % | 1.9 % | 1.6 % | 0.5 % | **1.8 %** | 6.2 % | 3.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0100 ppm | 0.5071 ppm | 0.0491 ppm | 0.0097 ppm | 0.0092 ppm | 0.0186 ppm | 0.0094 ppm |
| Concentration per Run 1 | 0.0110 ppm | 0.5049 ppm | 0.0498 ppm | 0.0098 ppm | 0.0091 ppm | 0.0186 ppm | 0.0094 ppm |
| Concentration per Run 2 | 0.0094 ppm | 0.5063 ppm | 0.0494 ppm | 0.0097 ppm | 0.0095 ppm | 0.0181 ppm | 0.0095 ppm |
| Concentration per Run 3 | 0.0095 ppm | 0.5102 ppm | 0.0481 ppm | 0.0097 ppm | 0.0090 ppm | 0.0192 ppm | 0.0093 ppm |
| Recovery Percentage 1 | 99.680 % | 101.426 % | 98.191 % | 97.359 % | 91.996 % | 93.175 % | 93.871 % |
| Concentration RSD | 9.4 % | 0.5 % | 1.7 % | 0.3 % | 2.8 % | 2.9 % | 1.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0045 ppm | 104.2277 % | 100.1475 % | 99.7030 % | 102.9109 % | 97.3554 % | 98.5305 % |
| Concentration per Run 1 | 0.0046 ppm | 104.0025 % | 99.9797 % | 99.2309 % | 102.5515 % | 97.6930 % | 98.5096 % |
| Concentration per Run 2 | 0.0045 ppm | 104.8613 % | 100.2989 % | 100.2125 % | 103.6222 % | 97.5603 % | 99.0672 % |
| Concentration per Run 3 | 0.0045 ppm | 103.8193 % | 100.1639 % | 99.6657 % | 102.5590 % | 96.8130 % | 98.0149 % |
| Recovery Percentage 1 | 90.765 % | | | | | | |
| Concentration RSD | 0.6 % | 0.5 % | 0.2 % | 0.5 % | 0.6 % | 0.5 % | 0.5 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: Blank DHL Trace7
Analysis started at: 3/12/2025 06:30:23
Comments <Comment>
Rack: 0
Vial: 1

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -0.5 % | -0.9 % | 0.1 % | 0.0 % | 0.2 % | 0.0 % | 0.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -0.5 % | -1.7 % | 1.5 % | 0.0 % | -0.3 % | 3.0 % | 0.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -1.6 % | -1.2 % | -7.8 % | -0.3 % | -0.1 % | 0.2 % | -0.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -0.9 % | 0.0 % | 0.4 % | -0.3 % | -0.1 % | -0.1 % | -0.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % |
| Concentration per Run | 0.0000 ppm | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % |
| Concentration RSD | 0.7 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: ICAL
Analysis started at: 3/12/2025 06:35:34
Comments <Comment>
Rack: 0
Vial: 2

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 10.0000 ppm |
| Concentration per Run 1 | 0.9907 ppm | 24.6875 ppm | 0.9978 ppm | 0.9954 ppm | 0.9874 ppm | 0.9882 ppm | 9.8958 ppm |
| Concentration per Run 2 | 1.0109 ppm | 25.1341 ppm | 1.0038 ppm | 1.0037 ppm | 1.0059 ppm | 1.0051 ppm | 10.0314 ppm |
| Concentration per Run 3 | 0.9985 ppm | 25.1785 ppm | 0.9985 ppm | 1.0009 ppm | 1.0068 ppm | 1.0067 ppm | 10.0728 ppm |
| Concentration RSD | 1.0 % | 1.1 % | 0.3 % | 0.4 % | 1.1 % | 1.0 % | 0.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 35.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 0.9976 ppm | 0.9961 ppm | 0.9900 ppm | 0.9907 ppm | 24.7213 ppm | 34.6373 ppm | 0.9884 ppm |
| Concentration per Run 2 | 1.0035 ppm | 1.0027 ppm | 1.0099 ppm | 1.0098 ppm | 25.1056 ppm | 35.2132 ppm | 1.0058 ppm |
| Concentration per Run 3 | 0.9990 ppm | 1.0012 ppm | 1.0001 ppm | 0.9996 ppm | 25.1731 ppm | 35.1495 ppm | 1.0059 ppm |
| Concentration RSD | 0.3 % | 0.3 % | 1.0 % | 1.0 % | 1.0 % | 0.9 % | 1.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.0000 ppm | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 9.8856 ppm | 0.9883 ppm | 0.9947 ppm | 24.7072 ppm | 0.9953 ppm | 0.9946 ppm | 0.9980 ppm |
| Concentration per Run 2 | 10.1044 ppm | 1.0067 ppm | 1.0037 ppm | 25.1542 ppm | 1.0033 ppm | 1.0053 ppm | 1.0003 ppm |
| Concentration per Run 3 | 10.0100 ppm | 1.0050 ppm | 1.0016 ppm | 25.1385 ppm | 1.0013 ppm | 1.0002 ppm | 1.0017 ppm |
| Concentration RSD | 1.1 % | 1.0 % | 0.5 % | 1.0 % | 0.4 % | 0.5 % | 0.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 10.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 0.9947 ppm | 9.9691 ppm | 0.9956 ppm | 0.9880 ppm | 0.9896 ppm | 0.9963 ppm | 0.9904 ppm |
| Concentration per Run 2 | 1.0049 ppm | 10.0326 ppm | 1.0036 ppm | 1.0055 ppm | 1.0098 ppm | 1.0063 ppm | 1.0100 ppm |
| Concentration per Run 3 | 1.0004 ppm | 9.9983 ppm | 1.0008 ppm | 1.0065 ppm | 1.0006 ppm | 0.9975 ppm | 0.9996 ppm |
| Concentration RSD | 0.5 % | 0.3 % | 0.4 % | 1.0 % | 1.0 % | 0.5 % | 1.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 98.3419 % | 97.5483 % | 99.7935 % | 99.7310 % | 99.3421 % | 98.6876 % |
| Concentration per Run 1 | 0.9977 ppm | 99.1136 % | 98.5331 % | 99.9032 % | 100.7425 % | 99.7121 % | 99.7653 % |
| Concentration per Run 2 | 1.0026 ppm | 97.9947 % | 96.5985 % | 99.8711 % | 99.4247 % | 99.0679 % | 97.5754 % |
| Concentration per Run 3 | 0.9997 ppm | 97.9175 % | 97.5134 % | 99.6061 % | 99.0259 % | 99.2464 % | 98.7222 % |
| Concentration RSD | 0.2 % | 0.7 % | 1.0 % | 0.2 % | 0.9 % | 0.3 % | 1.1 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: ICV
Analysis started at: 3/12/2025 06:45:15
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4720 ppm | 0.5056 ppm | 0.4908 ppm | 0.4844 ppm | 0.4810 ppm | 0.5032 ppm | 0.5025 ppm |
| Concentration per Run 1 | 0.4711 ppm | 0.4996 ppm | 0.4984 ppm | 0.4927 ppm | 0.4739 ppm | 0.4962 ppm | 0.4960 ppm |
| Concentration per Run 2 | 0.4730 ppm | 0.5144 ppm | 0.4897 ppm | 0.4813 ppm | 0.4870 ppm | 0.5089 ppm | 0.5076 ppm |
| Concentration per Run 3 | 0.4718 ppm | 0.5026 ppm | 0.4842 ppm | 0.4792 ppm | 0.4821 ppm | 0.5044 ppm | 0.5040 ppm |
| Recovery Percentage 1 | 94.398 % | 101.112 % | 98.151 % | 96.883 % | 96.195 % | 100.634 % | 100.510 % |
| Concentration RSD | 0.2 % | 1.6 % | 1.5 % | 1.5 % | 1.4 % | 1.3 % | 1.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4988 ppm | 0.4956 ppm | 0.4891 ppm | 0.4754 ppm | 0.5115 ppm | 5.1709 ppm | 0.5004 ppm |
| Concentration per Run 1 | 0.5079 ppm | 0.5038 ppm | 0.4882 ppm | 0.4746 ppm | 0.5048 ppm | 5.0950 ppm | 0.4929 ppm |
| Concentration per Run 2 | 0.4951 ppm | 0.4929 ppm | 0.4922 ppm | 0.4765 ppm | 0.5168 ppm | 5.2322 ppm | 0.5065 ppm |
| Concentration per Run 3 | 0.4935 ppm | 0.4901 ppm | 0.4870 ppm | 0.4752 ppm | 0.5130 ppm | 5.1856 ppm | 0.5020 ppm |
| Recovery Percentage 1 | 99.764 % | 99.122 % | 97.826 % | 95.082 % | 102.300 % | 103.419 % | 100.090 % |
| Concentration RSD | 1.6 % | 1.5 % | 0.6 % | 0.2 % | 1.2 % | 1.3 % | 1.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4966 ppm | 0.4934 ppm | 0.4849 ppm | 9.9119 ppm | 0.4918 ppm | 0.4831 ppm | 0.5030 ppm |
| Concentration per Run 1 | 0.4944 ppm | 0.4866 ppm | 0.4939 ppm | 9.7729 ppm | 0.5010 ppm | 0.4917 ppm | 0.5125 ppm |
| Concentration per Run 2 | 0.5003 ppm | 0.4988 ppm | 0.4810 ppm | 10.0327 ppm | 0.4886 ppm | 0.4800 ppm | 0.4974 ppm |
| Concentration per Run 3 | 0.4951 ppm | 0.4947 ppm | 0.4798 ppm | 9.9302 ppm | 0.4859 ppm | 0.4776 ppm | 0.4991 ppm |
| Recovery Percentage 1 | 99.317 % | 98.672 % | 96.975 % | 99.119 % | 98.367 % | 96.622 % | 100.604 % |
| Concentration RSD | 0.6 % | 1.3 % | 1.6 % | 1.3 % | 1.6 % | 1.6 % | 1.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4953 ppm | 5.5980 ppm | 0.5006 ppm | 0.4989 ppm | 0.4888 ppm | 0.4693 ppm | 0.4857 ppm |
| Concentration per Run 1 | 0.5038 ppm | 5.6927 ppm | 0.5073 ppm | 0.4920 ppm | 0.4888 ppm | 0.4769 ppm | 0.4860 ppm |
| Concentration per Run 2 | 0.4919 ppm | 5.5639 ppm | 0.4990 ppm | 0.5042 ppm | 0.4906 ppm | 0.4683 ppm | 0.4869 ppm |
| Concentration per Run 3 | 0.4902 ppm | 5.5375 ppm | 0.4955 ppm | 0.5005 ppm | 0.4870 ppm | 0.4627 ppm | 0.4842 ppm |
| Recovery Percentage 1 | 99.066 % | 106.629 % | 100.119 % | 99.781 % | 97.758 % | 93.859 % | 97.136 % |
| Concentration RSD | 1.5 % | 1.5 % | 1.2 % | 1.3 % | 0.4 % | 1.5 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5043 ppm | 99.0555 % | 99.1796 % | 100.2459 % | 100.6572 % | 98.6268 % | 101.2806 % |
| Concentration per Run 1 | 0.5135 ppm | 99.9417 % | 99.4921 % | 98.9769 % | 101.4939 % | 97.1416 % | 101.6022 % |
| Concentration per Run 2 | 0.5005 ppm | 98.1836 % | 98.7531 % | 100.7424 % | 99.7782 % | 99.1896 % | 100.8379 % |
| Concentration per Run 3 | 0.4989 ppm | 99.0413 % | 99.2936 % | 101.0184 % | 100.6994 % | 99.5492 % | 101.4017 % |
| Recovery Percentage 1 | 100.857 % | | | | | | |
| Concentration RSD | 1.6 % | 0.9 % | 0.4 % | 1.1 % | 0.9 % | 1.3 % | 0.4 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: ICB
Analysis started at: 3/12/2025 06:50:08
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0013 ppm | -0.0001 ppm | 0.0008 ppm | 0.0001 ppm | 0.0001 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0011 ppm | -0.0010 ppm | 0.0011 ppm | 0.0001 ppm | 0.0001 ppm | 0.0013 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0037 ppm | -0.0003 ppm | 0.0006 ppm | 0.0002 ppm | 0.0001 ppm | -0.0014 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0009 ppm | 0.0012 ppm | 0.0007 ppm | 0.0002 ppm | 0.0001 ppm | 0.0032 ppm |
| Recovery Percentage 1 | 3.113 % | 1.325 % | -1.277 % | 2.703 % | 1.394 % | 1.979 % | 1.042 % |
| Concentration RSD | 55.4 % | 174.7 % | 1,751.0 % | 35.4 % | 42.6 % | 20.5 % | 221.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0001 ppm | 0.0003 ppm | 0.0004 ppm | 0.0019 ppm | 0.0032 ppm | -0.0006 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0003 ppm | 0.0000 ppm | 0.0005 ppm | 0.0034 ppm | 0.0109 ppm | -0.0006 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0003 ppm | 0.0007 ppm | 0.0002 ppm | 0.0016 ppm | 0.0014 ppm | -0.0011 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0001 ppm | 0.0003 ppm | 0.0006 ppm | 0.0008 ppm | -0.0027 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 4.221 % | 0.719 % | 3.214 % | 4.220 % | 3.875 % | 0.127 % | -5.593 % |
| Concentration RSD | 25.8 % | 167.6 % | 103.5 % | 44.4 % | 67.3 % | 219.9 % | 91.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0000 ppm | 0.0009 ppm | 0.0002 ppm | 0.0002 ppm | -0.0003 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0015 ppm | 0.0000 ppm | 0.0011 ppm | 0.0015 ppm | 0.0005 ppm | -0.0003 ppm | 0.0018 ppm |
| Concentration per Run 2 | 0.0011 ppm | -0.0001 ppm | 0.0009 ppm | -0.0008 ppm | 0.0002 ppm | -0.0007 ppm | -0.0013 ppm |
| Concentration per Run 3 | 0.0008 ppm | -0.0001 ppm | 0.0005 ppm | 0.0000 ppm | -0.0003 ppm | 0.0001 ppm | 0.0001 ppm |
| Recovery Percentage 1 | 0.144 % | -0.398 % | 1.726 % | 0.012 % | 0.642 % | -2.913 % | 0.413 % |
| Concentration RSD | 992.6 % | 161.4 % | 35.7 % | 481.0 % | 240.3 % | 141.3 % | 730.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 0.0003 ppm | -0.0007 ppm | 0.0001 ppm | 0.0004 ppm | 0.0003 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0019 ppm | -0.0010 ppm | 0.0001 ppm | 0.0004 ppm | 0.0008 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0022 ppm | -0.0005 ppm | -0.0008 ppm | 0.0001 ppm | 0.0006 ppm | -0.0006 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0004 ppm | -0.0005 ppm | -0.0003 ppm | 0.0001 ppm | 0.0003 ppm | 0.0008 ppm | 0.0004 ppm |
| Recovery Percentage 1 | -6.966 % | 0.064 % | -1.380 % | 0.994 % | 4.310 % | 1.657 % | 2.830 % |
| Concentration RSD | 197.5 % | 424.4 % | 46.5 % | 32.3 % | 31.7 % | 233.8 % | 45.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 100.1276 % | 98.8120 % | 101.0485 % | 100.4083 % | 100.0601 % | 99.4745 % |
| Concentration per Run 1 | 0.0003 ppm | 101.2335 % | 96.3266 % | 101.1349 % | 101.6846 % | 100.1119 % | 96.7512 % |
| Concentration per Run 2 | 0.0002 ppm | 99.2476 % | 100.1333 % | 100.9873 % | 99.5049 % | 99.9955 % | 101.0079 % |
| Concentration per Run 3 | 0.0001 ppm | 99.9018 % | 99.9760 % | 101.0233 % | 100.0354 % | 100.0728 % | 100.6643 % |
| Recovery Percentage 1 | 3.608 % | | | | | | |
| Concentration RSD | 53.6 % | 1.0 % | 2.2 % | 0.1 % | 1.1 % | 0.1 % | 2.4 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: ICV
Analysis started at: 3/12/2025 06:55:21
Comments <Comment>
Rack: 0
Vial: 10

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4762 ppm | 0.5033 ppm | 0.5001 ppm | 0.4907 ppm | 0.4827 ppm | 0.5031 ppm | 0.4965 ppm |
| Concentration per Run 1 | 0.4763 ppm | 0.4991 ppm | 0.4988 ppm | 0.4887 ppm | 0.4769 ppm | 0.4978 ppm | 0.4963 ppm |
| Concentration per Run 2 | 0.4749 ppm | 0.5017 ppm | 0.5072 ppm | 0.4987 ppm | 0.4856 ppm | 0.5051 ppm | 0.4937 ppm |
| Concentration per Run 3 | 0.4775 ppm | 0.5091 ppm | 0.4942 ppm | 0.4847 ppm | 0.4855 ppm | 0.5064 ppm | 0.4995 ppm |
| Recovery Percentage 1 | 95.249 % | 100.660 % | 100.014 % | 98.142 % | 96.538 % | 100.621 % | 99.295 % |
| Concentration RSD | 0.3 % | 1.0 % | 1.3 % | 1.5 % | 1.0 % | 0.9 % | 0.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5029 ppm | 0.5011 ppm | 0.4909 ppm | 0.4794 ppm | 0.5119 ppm | 5.1535 ppm | 0.4927 ppm |
| Concentration per Run 1 | 0.5014 ppm | 0.5000 ppm | 0.4898 ppm | 0.4799 ppm | 0.5053 ppm | 5.0970 ppm | 0.4860 ppm |
| Concentration per Run 2 | 0.5107 ppm | 0.5092 ppm | 0.4911 ppm | 0.4781 ppm | 0.5163 ppm | 5.1970 ppm | 0.4960 ppm |
| Concentration per Run 3 | 0.4966 ppm | 0.4941 ppm | 0.4917 ppm | 0.4802 ppm | 0.5142 ppm | 5.1666 ppm | 0.4961 ppm |
| Recovery Percentage 1 | 100.578 % | 100.220 % | 98.178 % | 95.883 % | 102.387 % | 103.071 % | 98.543 % |
| Concentration RSD | 1.4 % | 1.5 % | 0.2 % | 0.2 % | 1.1 % | 1.0 % | 1.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5009 ppm | 0.4946 ppm | 0.4893 ppm | 9.9355 ppm | 0.4954 ppm | 0.4905 ppm | 0.5078 ppm |
| Concentration per Run 1 | 0.5013 ppm | 0.4894 ppm | 0.4869 ppm | 9.8175 ppm | 0.4941 ppm | 0.4894 ppm | 0.5059 ppm |
| Concentration per Run 2 | 0.4993 ppm | 0.4963 ppm | 0.4968 ppm | 9.9993 ppm | 0.5029 ppm | 0.4976 ppm | 0.5172 ppm |
| Concentration per Run 3 | 0.5022 ppm | 0.4981 ppm | 0.4841 ppm | 9.9897 ppm | 0.4891 ppm | 0.4844 ppm | 0.5002 ppm |
| Recovery Percentage 1 | 100.186 % | 98.917 % | 97.855 % | 99.355 % | 99.074 % | 98.094 % | 101.556 % |
| Concentration RSD | 0.3 % | 0.9 % | 1.4 % | 1.0 % | 1.4 % | 1.4 % | 1.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5009 ppm | 5.6098 ppm | 0.4874 ppm | 0.4933 ppm | 0.4910 ppm | 0.4787 ppm | 0.4867 ppm |
| Concentration per Run 1 | 0.4975 ppm | 5.5900 ppm | 0.4860 ppm | 0.4871 ppm | 0.4911 ppm | 0.4775 ppm | 0.4855 ppm |
| Concentration per Run 2 | 0.5106 ppm | 5.6999 ppm | 0.4954 ppm | 0.4967 ppm | 0.4896 ppm | 0.4857 ppm | 0.4871 ppm |
| Concentration per Run 3 | 0.4946 ppm | 5.5395 ppm | 0.4807 ppm | 0.4962 ppm | 0.4923 ppm | 0.4729 ppm | 0.4874 ppm |
| Recovery Percentage 1 | 100.179 % | 106.854 % | 97.476 % | 98.670 % | 98.200 % | 95.735 % | 97.332 % |
| Concentration RSD | 1.7 % | 1.5 % | 1.5 % | 1.1 % | 0.3 % | 1.3 % | 0.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5072 ppm | 99.6623 % | 99.1050 % | 100.3208 % | 101.4307 % | 97.8053 % | 101.2038 % |
| Concentration per Run 1 | 0.5054 ppm | 100.7466 % | 99.3582 % | 100.9452 % | 102.5910 % | 98.2306 % | 101.5229 % |
| Concentration per Run 2 | 0.5149 ppm | 99.4954 % | 98.9637 % | 99.1452 % | 101.1614 % | 96.3635 % | 101.1306 % |
| Concentration per Run 3 | 0.5013 ppm | 98.7450 % | 98.9932 % | 100.8720 % | 100.5396 % | 98.8218 % | 100.9580 % |
| Recovery Percentage 1 | 101.440 % | | | | | | |
| Concentration RSD | 1.4 % | 1.0 % | 0.2 % | 1.0 % | 1.0 % | 1.3 % | 0.3 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: ICB
Analysis started at: 3/12/2025 07:00:17
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0038 ppm | 0.0001 ppm | 0.0010 ppm | 0.0001 ppm | 0.0001 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0060 ppm | -0.0006 ppm | 0.0007 ppm | 0.0002 ppm | 0.0002 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0025 ppm | 0.0008 ppm | 0.0013 ppm | 0.0001 ppm | 0.0001 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0030 ppm | 0.0001 ppm | 0.0010 ppm | 0.0002 ppm | 0.0001 ppm | -0.0011 ppm |
| Recovery Percentage 1 | 4.352 % | 3.810 % | 2.247 % | 3.286 % | 1.488 % | 2.759 % | -0.102 % |
| Concentration RSD | 33.8 % | 49.1 % | 621.4 % | 32.2 % | 34.6 % | 20.0 % | 906.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0003 ppm | 0.0003 ppm | 0.0003 ppm | 0.0016 ppm | -0.0105 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0004 ppm | 0.0002 ppm | 0.0003 ppm | 0.0010 ppm | -0.0015 ppm | -0.0009 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0004 ppm | 0.0004 ppm | 0.0003 ppm | 0.0024 ppm | -0.0060 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0001 ppm | 0.0002 ppm | 0.0003 ppm | 0.0016 ppm | -0.0241 ppm | 0.0001 ppm |
| Recovery Percentage 1 | 5.120 % | 1.534 % | 2.740 % | 3.164 % | 3.295 % | -0.422 % | -2.665 % |
| Concentration RSD | 17.4 % | 57.6 % | 44.3 % | 13.8 % | 43.1 % | 113.4 % | 210.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0000 ppm | 0.0010 ppm | 0.0001 ppm | 0.0004 ppm | 0.0002 ppm | -0.0004 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0001 ppm | 0.0011 ppm | 0.0002 ppm | 0.0005 ppm | 0.0006 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0000 ppm | 0.0010 ppm | 0.0010 ppm | 0.0004 ppm | -0.0003 ppm | -0.0007 ppm |
| Concentration per Run 3 | -0.0005 ppm | -0.0002 ppm | 0.0010 ppm | -0.0009 ppm | 0.0002 ppm | 0.0004 ppm | -0.0003 ppm |
| Recovery Percentage 1 | 0.180 % | -0.017 % | 2.068 % | 0.006 % | 1.507 % | 2.439 % | -0.768 % |
| Concentration RSD | 475.2 % | 8,594.9 % | 4.5 % | 748.7 % | 41.8 % | 183.4 % | 61.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0012 ppm | -0.0009 ppm | 0.0001 ppm | 0.0005 ppm | 0.0024 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0011 ppm | -0.0016 ppm | 0.0001 ppm | 0.0005 ppm | 0.0045 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0015 ppm | 0.0002 ppm | 0.0001 ppm | 0.0004 ppm | 0.0024 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0010 ppm | -0.0013 ppm | 0.0001 ppm | 0.0005 ppm | 0.0002 ppm | 0.0004 ppm |
| Recovery Percentage 1 | 4.895 % | 0.239 % | -1.765 % | 1.117 % | 4.729 % | 11.844 % | 3.522 % |
| Concentration RSD | 80.4 % | 25.9 % | 109.9 % | 13.3 % | 8.9 % | 91.2 % | 24.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 99.7095 % | 99.7459 % | 99.8575 % | 99.9068 % | 98.9459 % | 100.4461 % |
| Concentration per Run 1 | 0.0002 ppm | 100.8355 % | 99.7633 % | 100.7141 % | 101.1018 % | 99.2770 % | 100.5135 % |
| Concentration per Run 2 | 0.0005 ppm | 99.5206 % | 99.6827 % | 99.3015 % | 99.7415 % | 98.6790 % | 100.3331 % |
| Concentration per Run 3 | 0.0001 ppm | 98.7724 % | 99.7918 % | 99.5569 % | 98.8770 % | 98.8816 % | 100.4918 % |
| Recovery Percentage 1 | 4.957 % | | | | | | |
| Concentration RSD | 86.8 % | 1.0 % | 0.1 % | 0.8 % | 1.1 % | 0.3 % | 0.1 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: LLOQ
Analysis started at: 3/12/2025 07:05:29
Comments <Comment>
Rack: 0
Vial: 5

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0050 ppm | 0.1096 ppm | 0.0038 ppm | 0.0317 ppm | 0.0099 ppm | 0.0051 ppm | 0.1040 ppm |
| Concentration per Run 1 | 0.0047 ppm | 0.1091 ppm | 0.0053 ppm | 0.0323 ppm | 0.0098 ppm | 0.0051 ppm | 0.1026 ppm |
| Concentration per Run 2 | 0.0051 ppm | 0.1093 ppm | 0.0023 ppm | 0.0314 ppm | 0.0100 ppm | 0.0051 ppm | 0.1064 ppm |
| Concentration per Run 3 | 0.0050 ppm | 0.1105 ppm | 0.0038 ppm | 0.0312 ppm | 0.0099 ppm | 0.0052 ppm | 0.1030 ppm |
| Recovery Percentage 1 | 99.006 % | 109.628 % | 76.043 % | 105.532 % | 98.778 % | 102.912 % | 103.986 % |
| Concentration RSD | 4.2 % | 0.7 % | 39.3 % | 1.9 % | 0.8 % | 0.7 % | 2.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0042 ppm | 0.0098 ppm | 0.0101 ppm | 0.0102 ppm | 0.0563 ppm | 2.6328 ppm | 0.0097 ppm |
| Concentration per Run 1 | 0.0044 ppm | 0.0100 ppm | 0.0102 ppm | 0.0103 ppm | 0.0547 ppm | 2.6137 ppm | 0.0095 ppm |
| Concentration per Run 2 | 0.0042 ppm | 0.0098 ppm | 0.0101 ppm | 0.0101 ppm | 0.0575 ppm | 2.6568 ppm | 0.0095 ppm |
| Concentration per Run 3 | 0.0041 ppm | 0.0097 ppm | 0.0101 ppm | 0.0101 ppm | 0.0567 ppm | 2.6279 ppm | 0.0102 ppm |
| Recovery Percentage 1 | 105.660 % | 97.956 % | 101.339 % | 101.759 % | 112.583 % | 105.312 % | 97.278 % |
| Concentration RSD | 3.6 % | 1.4 % | 0.8 % | 0.7 % | 2.6 % | 0.8 % | 4.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1043 ppm | 0.0101 ppm | 0.0507 ppm | 2.0433 ppm | 0.0191 ppm | 0.0089 ppm | 0.0531 ppm |
| Concentration per Run 1 | 0.1041 ppm | 0.0100 ppm | 0.0510 ppm | 2.0204 ppm | 0.0194 ppm | 0.0096 ppm | 0.0543 ppm |
| Concentration per Run 2 | 0.1033 ppm | 0.0103 ppm | 0.0507 ppm | 2.0515 ppm | 0.0191 ppm | 0.0078 ppm | 0.0529 ppm |
| Concentration per Run 3 | 0.1055 ppm | 0.0102 ppm | 0.0505 ppm | 2.0581 ppm | 0.0189 ppm | 0.0092 ppm | 0.0521 ppm |
| Recovery Percentage 1 | 104.274 % | 101.439 % | 101.465 % | 102.166 % | 76.460 % | 88.665 % | 106.216 % |
| Concentration RSD | 1.1 % | 1.5 % | 0.5 % | 1.0 % | 1.4 % | 10.7 % | 2.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0091 ppm | 0.5532 ppm | 0.0518 ppm | 0.0102 ppm | 0.0102 ppm | 0.0135 ppm | 0.0101 ppm |
| Concentration per Run 1 | 0.0103 ppm | 0.5568 ppm | 0.0523 ppm | 0.0101 ppm | 0.0101 ppm | 0.0141 ppm | 0.0102 ppm |
| Concentration per Run 2 | 0.0087 ppm | 0.5522 ppm | 0.0510 ppm | 0.0102 ppm | 0.0101 ppm | 0.0125 ppm | 0.0100 ppm |
| Concentration per Run 3 | 0.0084 ppm | 0.5506 ppm | 0.0521 ppm | 0.0102 ppm | 0.0104 ppm | 0.0139 ppm | 0.0101 ppm |
| Recovery Percentage 1 | 91.274 % | 110.638 % | 103.565 % | 101.788 % | 102.112 % | 67.544 % | 101.125 % |
| Concentration RSD | 10.9 % | 0.6 % | 1.3 % | 0.5 % | 1.5 % | 6.6 % | 0.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0059 ppm | 100.1654 % | 99.9319 % | 100.1093 % | 101.3539 % | 97.0739 % | 101.8632 % |
| Concentration per Run 1 | 0.0060 ppm | 100.9426 % | 99.6454 % | 99.6275 % | 102.3234 % | 96.5580 % | 101.5845 % |
| Concentration per Run 2 | 0.0058 ppm | 99.4375 % | 100.0612 % | 100.3078 % | 100.5100 % | 97.0755 % | 102.0188 % |
| Concentration per Run 3 | 0.0060 ppm | 100.1161 % | 100.0890 % | 100.3928 % | 101.2283 % | 97.5882 % | 101.9863 % |
| Recovery Percentage 1 | 118.395 % | | | | | | |
| Concentration RSD | 2.5 % | 0.8 % | 0.2 % | 0.4 % | 0.9 % | 0.5 % | 0.2 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: ICSA
Analysis started at: 3/12/2025 07:10:39
Comments <Comment>
Rack: 0
Vial: 6

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 514.4987 [SIC 500] | 0.0001 ppm | -0.0013 ppm | 0.0013 ppm | 0.0000 ppm | 458.4338 ppm |
| Concentration per Run 1 | -0.0001 ppm | 510.2833 ppm | 0.0004 ppm | -0.0002 ppm | 0.0014 ppm | 0.0000 ppm | 457.4266 ppm |
| Concentration per Run 2 | 0.0005 ppm | 517.4341 ppm | 0.0011 ppm | -0.0019 ppm | 0.0013 ppm | 0.0000 ppm | 461.6341 ppm |
| Concentration per Run 3 | 0.0004 ppm | 515.7787 ppm | -0.0011 ppm | -0.0018 ppm | 0.0014 ppm | 0.0000 ppm | 456.2408 ppm |
| Recovery Percentage 1 | 5.240 % | 514,498.682 % | 2.913 % | -4.417 % | 13.412 % | 0.015 % | 458,433.840 % |
| Concentration RSD | 125.9 % | 0.7 % | 784.6 % | 73.1 % | 3.3 % | 1,520.6 % | 0.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0069 ppm | 0.0005 ppm | -0.0012 ppm | -0.0011 ppm | 178.7105 ppm | 0.0044 ppm | -0.0079 ppm |
| Concentration per Run 1 | -0.0069 ppm | 0.0009 ppm | -0.0013 ppm | -0.0014 ppm | 177.9719 ppm | -0.0068 ppm | -0.0078 ppm |
| Concentration per Run 2 | -0.0070 ppm | 0.0000 ppm | -0.0011 ppm | -0.0009 ppm | 179.3545 ppm | -0.0019 ppm | -0.0081 ppm |
| Concentration per Run 3 | -0.0068 ppm | 0.0007 ppm | -0.0013 ppm | -0.0011 ppm | 178.8052 ppm | 0.0220 ppm | -0.0079 ppm |
| Recovery Percentage 1 | -171.935 % | 2.546 % | -12.351 % | -11.491 % | 357,421.046 % | 0.178 % | -79.425 % |
| Concentration RSD | 1.7 % | 92.5 % | 6.3 % | 21.8 % | 0.4 % | 347.2 % | 1.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 479.3470 ppm | 0.0017 ppm | -0.0026 ppm | 0.0185 ppm | -0.0049 ppm | -0.0019 ppm | -0.0187 ppm |
| Concentration per Run 1 | 479.0212 ppm | 0.0018 ppm | -0.0025 ppm | 0.0178 ppm | -0.0048 ppm | -0.0002 ppm | -0.0167 ppm |
| Concentration per Run 2 | 479.6528 ppm | 0.0018 ppm | -0.0029 ppm | 0.0171 ppm | -0.0055 ppm | -0.0038 ppm | -0.0195 ppm |
| Concentration per Run 3 | 479.3669 ppm | 0.0015 ppm | -0.0025 ppm | 0.0207 ppm | -0.0044 ppm | -0.0018 ppm | -0.0198 ppm |
| Recovery Percentage 1 | 479,346.963 % | 16.880 % | -5.288 % | 0.926 % | -19.665 % | -19.358 % | -37.379 % |
| Concentration RSD | 0.1 % | 7.9 % | 8.2 % | 10.3 % | 11.8 % | 94.3 % | 9.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0013 ppm | 0.0041 ppm | 0.0057 ppm | 0.0009 ppm | -0.0073 ppm | 0.0012 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0009 ppm | 0.0032 ppm | 0.0058 ppm | 0.0009 ppm | -0.0088 ppm | 0.0010 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0011 ppm | 0.0049 ppm | 0.0057 ppm | 0.0009 ppm | -0.0058 ppm | 0.0013 ppm |
| Concentration per Run 3 | 0.0018 ppm | 0.0019 ppm | 0.0043 ppm | 0.0057 ppm | 0.0009 ppm | -0.0074 ppm | 0.0012 ppm |
| Recovery Percentage 1 | 10.496 % | 0.261 % | 8.209 % | 57.317 % | 9.009 % | -36.643 % | 11.792 % |
| Concentration RSD | 60.6 % | 37.7 % | 21.3 % | 1.0 % | 2.7 % | 20.5 % | 16.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0022 ppm | 93.5286 % | 86.9762 % | 90.1489 % | 94.4236 % | 86.0271 % | 88.5514 % |
| Concentration per Run 1 | -0.0021 ppm | 93.5351 % | 87.1789 % | 90.2665 % | 94.5138 % | 86.0773 % | 88.7982 % |
| Concentration per Run 2 | -0.0024 ppm | 93.4263 % | 86.7334 % | 89.9428 % | 94.2784 % | 85.6754 % | 88.3436 % |
| Concentration per Run 3 | -0.0020 ppm | 93.6245 % | 87.0163 % | 90.2373 % | 94.4787 % | 86.3285 % | 88.5125 % |
| Recovery Percentage 1 | -43.780 % | | | | | | |
| Concentration RSD | 9.7 % | 0.1 % | 0.3 % | 0.2 % | 0.1 % | 0.4 % | 0.3 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: SIC Multi
Analysis started at: 3/12/2025 07:33:57
Comments <Comment>
Rack: 0
Vial: 7

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0027 ppm | -0.0458 ppm | -0.0031 ppm | 0.0013 ppm | 0.0002 ppm | -0.0019 ppm | -0.0006 ppm |
| Concentration per Run 1 | -0.0027 ppm | -0.0490 ppm | -0.0024 ppm | 0.0010 ppm | 0.0002 ppm | -0.0019 ppm | 0.0023 ppm |
| Concentration per Run 2 | -0.0025 ppm | -0.0426 ppm | -0.0022 ppm | 0.0016 ppm | 0.0001 ppm | -0.0020 ppm | -0.0037 ppm |
| Concentration per Run 3 | -0.0027 ppm | -0.0457 ppm | -0.0046 ppm | 0.0014 ppm | 0.0002 ppm | -0.0019 ppm | -0.0004 ppm |
| Recovery Percentage 1 | -53.224 % | -45.769 % | -61.362 % | 4.461 % | 1.608 % | -38.871 % | -0.591 % |
| Concentration RSD | 3.7 % | 7.1 % | 43.8 % | 21.1 % | 18.5 % | 2.9 % | 508.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0018 ppm | -0.0106 ppm | **18.9003 ppm** | 0.0023 ppm | -0.0046 ppm | -0.0025 ppm | -0.0009 ppm |
| Concentration per Run 1 | -0.0019 ppm | -0.0109 ppm | 18.8859 ppm | 0.0024 ppm | -0.0046 ppm | -0.0017 ppm | -0.0006 ppm |
| Concentration per Run 2 | -0.0017 ppm | -0.0104 ppm | 18.8966 ppm | 0.0024 ppm | -0.0050 ppm | 0.0056 ppm | -0.0006 ppm |
| Concentration per Run 3 | -0.0018 ppm | -0.0105 ppm | 18.9183 ppm | 0.0021 ppm | -0.0042 ppm | -0.0115 ppm | -0.0015 ppm |
| Recovery Percentage 1 | -44.999 % | -53.013 % | 189,002.846 % | 22.818 % | -9.209 % | -0.101 % | -9.214 % |
| Concentration RSD | 5.7 % | 2.5 % | **0.1 %** | 6.5 % | 7.8 % | 337.2 % | 58.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0094 ppm | **19.7616 ppm** | -0.0039 ppm | 0.0044 ppm | 0.0001 ppm | 0.0013 ppm | -0.0118 ppm |
| Concentration per Run 1 | -0.0112 ppm | 19.5704 ppm | -0.0040 ppm | 0.0057 ppm | 0.0001 ppm | 0.0021 ppm | -0.0105 ppm |
| Concentration per Run 2 | -0.0086 ppm | 19.8818 ppm | -0.0039 ppm | 0.0033 ppm | 0.0002 ppm | 0.0015 ppm | -0.0136 ppm |
| Concentration per Run 3 | -0.0082 ppm | 19.8327 ppm | -0.0039 ppm | 0.0042 ppm | 0.0000 ppm | 0.0003 ppm | -0.0113 ppm |
| Recovery Percentage 1 | -9.365 % | 197,616.076 % | -7.815 % | 0.220 % | 0.446 % | 12.945 % | -23.590 % |
| Concentration RSD | 17.6 % | **0.8 %** | 1.9 % | 28.2 % | 102.1 % | 69.4 % | 13.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0035 ppm | 0.2165 ppm | -0.0019 ppm | 0.0002 ppm | **18.6177 ppm** | **0.0187 ppm** | **9.7774 ppm** |
| Concentration per Run 1 | -0.0027 ppm | 0.2202 ppm | -0.0017 ppm | 0.0002 ppm | 18.7295 ppm | 0.0183 ppm | 9.7897 ppm |
| Concentration per Run 2 | -0.0033 ppm | 0.2158 ppm | -0.0023 ppm | 0.0002 ppm | 18.5526 ppm | 0.0221 ppm | 9.7724 ppm |
| Concentration per Run 3 | -0.0043 ppm | 0.2135 ppm | -0.0017 ppm | 0.0002 ppm | 18.5711 ppm | 0.0156 ppm | 9.7701 ppm |
| Recovery Percentage 1 | -34.595 % | 43.301 % | -3.785 % | 2.331 % | 186,177.439 % | 93.423 % | 97,774.074 % |
| Concentration RSD | 23.2 % | 1.6 % | 19.0 % | 3.2 % | **0.5 %** | **17.6 %** | **0.1 %** |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0056 ppm | 99.6154 % | 98.6640 % | 101.3528 % | 102.2432 % | 96.1657 % | 102.4931 % |
| Concentration per Run 1 | -0.0056 ppm | 100.2360 % | 98.5097 % | 101.3140 % | 103.0942 % | 96.4065 % | 102.3844 % |
| Concentration per Run 2 | -0.0057 ppm | 99.3749 % | 98.8576 % | 101.4307 % | 101.9178 % | 96.0580 % | 102.6370 % |
| Concentration per Run 3 | -0.0055 ppm | 99.2354 % | 98.6248 % | 101.3137 % | 101.7176 % | 96.0325 % | 102.4578 % |
| Recovery Percentage 1 | -112.018 % | | | | | | |
| Concentration RSD | 2.3 % | 0.5 % | 0.2 % | 0.1 % | 0.7 % | 0.2 % | 0.1 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: LDR Check
Analysis started at: 3/12/2025 07:39:33
Comments <Comment>
Rack: 0
Vial: 8

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0025 ppm | 0.2143 ppm | 16.6511 ppm | 17.1534 ppm | 18.0993 ppm | 4.7137 ppm | 0.0240 ppm |
| Concentration per Run 1 | 0.0021 ppm | 0.2132 ppm | 16.6847 ppm | 17.1870 ppm | 18.1372 ppm | 4.6756 ppm | 0.0197 ppm |
| Concentration per Run 2 | 0.0029 ppm | 0.2138 ppm | 16.6499 ppm | 17.1220 ppm | 17.8515 ppm | 4.7176 ppm | 0.0259 ppm |
| Concentration per Run 3 | 0.0026 ppm | 0.2160 ppm | 16.6187 ppm | 17.1511 ppm | 18.3091 ppm | 4.7479 ppm | 0.0263 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 83.256 % | 85.767 % | 90.496 % | 94.274 % | 0.000 % |
| Concentration RSD | 16.4 % | 0.7 % | 0.2 % | 0.2 % | 1.3 % | 0.8 % | 15.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.2426 ppm | 4.3640 ppm | 0.0038 ppm | 19.7206 ppm | -0.0225 ppm | 432.2951 ppm | 18.9088 ppm |
| Concentration per Run 1 | 4.2584 ppm | 4.3791 ppm | 0.0032 ppm | 20.1770 ppm | -0.0243 ppm | 456.8013 ppm | 18.9931 ppm |
| Concentration per Run 2 | 4.2424 ppm | 4.3613 ppm | 0.0043 ppm | 19.4176 ppm | -0.0213 ppm | 421.1711 ppm | 18.7910 ppm |
| Concentration per Run 3 | 4.2269 ppm | 4.3517 ppm | 0.0040 ppm | 19.5672 ppm | -0.0220 ppm | 418.9128 ppm | 18.9422 ppm |
| Recovery Percentage 1 | 84.852 % | 87.280 % | 0.000 % | 98.603 % | 0.000 % | 86.459 % | 94.544 % |
| Concentration RSD | 0.4 % | 0.3 % | 14.6 % | 2.0 % | 7.0 % | 4.9 % | 0.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0322 ppm | 0.0016 ppm | 4.2488 ppm | 387.0068 [SIC 500] | 8.3698 ppm | 45.7472 ppm | 4.4240 ppm |
| Concentration per Run 1 | -0.0374 ppm | 0.0008 ppm | 4.2570 ppm | 397.0610 ppm | 8.3966 ppm | 45.8975 ppm | 4.4329 ppm |
| Concentration per Run 2 | -0.0290 ppm | 0.0022 ppm | 4.2453 ppm | 385.6440 ppm | 8.3638 ppm | 45.7198 ppm | 4.4223 ppm |
| Concentration per Run 3 | -0.0303 ppm | 0.0017 ppm | 4.2442 ppm | 378.3154 ppm | 8.3488 ppm | 45.6242 ppm | 4.4169 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 84.977 % | 77.401 % | 83.698 % | 91.494 % | 88.481 % |
| Concentration RSD | 14.0 % | 45.6 % | 0.2 % | 2.4 % | 0.3 % | 0.3 % | 0.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.1227 ppm | 19.3462 ppm | 8.6880 ppm | 4.8096 ppm | 0.0052 ppm | 4.6654 ppm | -0.0068 ppm |
| Concentration per Run 1 | 4.1238 ppm | 19.3822 ppm | 8.7052 ppm | 4.7571 ppm | 0.0045 ppm | 4.6669 ppm | -0.0078 ppm |
| Concentration per Run 2 | 4.1179 ppm | 19.3153 ppm | 8.6919 ppm | 4.8243 ppm | 0.0053 ppm | 4.6617 ppm | -0.0061 ppm |
| Concentration per Run 3 | 4.1265 ppm | 19.3412 ppm | 8.6668 ppm | 4.8475 ppm | 0.0057 ppm | 4.6674 ppm | -0.0065 ppm |
| Recovery Percentage 1 | 82.454 % | 96.731 % | 86.880 % | 96.192 % | 0.000 % | 93.307 % | 0.000 % |
| Concentration RSD | 0.1 % | 0.2 % | 0.2 % | 1.0 % | 11.9 % | 0.1 % | 13.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 16.3397 ppm | 95.2452 % | 87.7009 % | 100.0922 % | 97.9365 % | 111.9359 % | 90.5027 % |
| Concentration per Run 1 | 16.4070 ppm | 95.3630 % | 86.1388 % | 99.9363 % | 98.0100 % | 111.6391 % | 89.0220 % |
| Concentration per Run 2 | 16.3517 ppm | 95.7192 % | 88.5766 % | 99.9903 % | 98.3610 % | 112.1414 % | 91.3752 % |
| Concentration per Run 3 | 16.2604 ppm | 94.6534 % | 88.3873 % | 100.3500 % | 97.4385 % | 112.0273 % | 91.1111 % |
| Recovery Percentage 1 | 81.699 % | | | | | | |
| Concentration RSD | 0.5 % | 0.6 % | 1.5 % | 0.2 % | 0.5 % | 0.2 % | 1.4 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: LLOQ 0.005ppm As
Analysis started at: 3/12/2025 08:13:50
Comments <Comment>
Rack: 1
Vial: 1

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0048 ppm | 0.0054 ppm | 0.0040 ppm | 0.0086 ppm | 0.0050 ppm | 0.0050 ppm | 0.0098 ppm |
| Concentration per Run 1 | 0.0048 ppm | 0.0032 ppm | 0.0033 ppm | 0.0084 ppm | 0.0049 ppm | 0.0050 ppm | 0.0093 ppm |
| Concentration per Run 2 | 0.0050 ppm | 0.0063 ppm | 0.0050 ppm | 0.0088 ppm | 0.0049 ppm | 0.0051 ppm | 0.0105 ppm |
| Concentration per Run 3 | 0.0046 ppm | 0.0066 ppm | 0.0038 ppm | 0.0084 ppm | 0.0050 ppm | 0.0051 ppm | 0.0095 ppm |
| Recovery Percentage 1 | 96.517 % | 107.295 % | 80.803 % | 171.011 % | 99.042 % | 100.864 % | 0.000 % |
| Concentration RSD | 4.0 % | 35.2 % | 21.4 % | 3.1 % | 1.1 % | 0.9 % | 6.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0053 ppm | 0.0051 ppm | 0.0049 ppm | 0.0054 ppm | 0.0064 ppm | 0.0996 ppm | 0.0051 ppm |
| Concentration per Run 1 | 0.0054 ppm | 0.0052 ppm | 0.0049 ppm | 0.0053 ppm | 0.0065 ppm | 0.0765 ppm | 0.0044 ppm |
| Concentration per Run 2 | 0.0054 ppm | 0.0048 ppm | 0.0048 ppm | 0.0054 ppm | 0.0069 ppm | 0.0971 ppm | 0.0056 ppm |
| Concentration per Run 3 | 0.0052 ppm | 0.0052 ppm | 0.0050 ppm | 0.0054 ppm | 0.0059 ppm | 0.1253 ppm | 0.0054 ppm |
| Recovery Percentage 1 | 106.826 % | 101.367 % | 97.909 % | 107.120 % | 128.075 % | 0.000 % | 0.000 % |
| Concentration RSD | 1.5 % | 4.2 % | 2.3 % | 1.4 % | 7.9 % | 24.6 % | 12.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0058 ppm | 0.0052 ppm | 0.0053 ppm | 0.1183 ppm | 0.0053 ppm | 0.0055 ppm | 0.0046 ppm |
| Concentration per Run 1 | 0.0063 ppm | 0.0050 ppm | 0.0054 ppm | 0.1175 ppm | 0.0055 ppm | 0.0062 ppm | 0.0038 ppm |
| Concentration per Run 2 | 0.0044 ppm | 0.0052 ppm | 0.0052 ppm | 0.1179 ppm | 0.0052 ppm | 0.0054 ppm | 0.0051 ppm |
| Concentration per Run 3 | 0.0067 ppm | 0.0054 ppm | 0.0052 ppm | 0.1195 ppm | 0.0052 ppm | 0.0051 ppm | 0.0050 ppm |
| Recovery Percentage 1 | 0.000 % | 104.085 % | 105.889 % | 0.000 % | 105.659 % | 110.805 % | 92.457 % |
| Concentration RSD | 21.7 % | 3.7 % | 1.8 % | 0.9 % | 3.7 % | 9.9 % | 16.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0044 ppm | 0.0568 ppm | 0.0044 ppm | 0.0050 ppm | 0.0051 ppm | 0.0024 ppm | 0.0049 ppm |
| Concentration per Run 1 | 0.0045 ppm | 0.0562 ppm | 0.0053 ppm | 0.0050 ppm | 0.0052 ppm | 0.0013 ppm | 0.0048 ppm |
| Concentration per Run 2 | 0.0038 ppm | 0.0576 ppm | 0.0037 ppm | 0.0051 ppm | 0.0052 ppm | 0.0016 ppm | 0.0049 ppm |
| Concentration per Run 3 | 0.0050 ppm | 0.0567 ppm | 0.0040 ppm | 0.0050 ppm | 0.0049 ppm | 0.0042 ppm | 0.0048 ppm |
| Recovery Percentage 1 | 88.942 % | 1,136.702 % | 87.453 % | 100.368 % | 102.091 % | 47.324 % | 97.131 % |
| Concentration RSD | 13.5 % | 1.2 % | 19.6 % | 1.5 % | 2.7 % | 67.6 % | 0.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0056 ppm | 99.6715 % | 99.2483 % | 101.5291 % | 101.6736 % | 97.5343 % | 102.7874 % |
| Concentration per Run 1 | 0.0054 ppm | 100.3361 % | 99.4919 % | 101.7196 % | 102.5307 % | 97.7413 % | 103.0740 % |
| Concentration per Run 2 | 0.0057 ppm | 99.9386 % | 99.0816 % | 101.0955 % | 101.7507 % | 96.8570 % | 102.5903 % |
| Concentration per Run 3 | 0.0055 ppm | 98.7398 % | 99.1712 % | 101.7722 % | 100.7394 % | 98.0044 % | 102.6977 % |
| Recovery Percentage 1 | 111.361 % | | | | | | |
| Concentration RSD | 2.6 % | 0.8 % | 0.2 % | 0.4 % | 0.9 % | 0.6 % | 0.2 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: LLOQ 0.01ppm Ni
Analysis started at: 3/12/2025 08:19:00
Comments <Comment>
Rack: 1
Vial: 2

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0099 ppm | 0.0114 ppm | 0.0092 ppm | **0.0136 ppm** | 0.0098 ppm | 0.0099 ppm | 0.0184 ppm |
| Concentration per Run 1 | 0.0096 ppm | 0.0110 ppm | 0.0084 ppm | 0.0136 ppm | 0.0097 ppm | 0.0099 ppm | 0.0163 ppm |
| Concentration per Run 2 | 0.0103 ppm | 0.0117 ppm | 0.0101 ppm | 0.0138 ppm | 0.0097 ppm | 0.0100 ppm | 0.0208 ppm |
| Concentration per Run 3 | 0.0096 ppm | 0.0114 ppm | 0.0092 ppm | 0.0134 ppm | 0.0099 ppm | 0.0100 ppm | 0.0180 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 92.231 % | 135.888 % | 97.502 % | 0.000 % | 0.000 % |
| Concentration RSD | 4.1 % | 3.0 % | 9.4 % | **1.3 %** | 1.4 % | 0.6 % | 12.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0105 ppm | 0.0102 ppm | 0.0096 ppm | 0.0101 ppm | 0.0122 ppm | 0.1323 ppm | 0.0098 ppm |
| Concentration per Run 1 | 0.0106 ppm | 0.0105 ppm | 0.0094 ppm | 0.0100 ppm | 0.0123 ppm | 0.1374 ppm | 0.0091 ppm |
| Concentration per Run 2 | 0.0104 ppm | 0.0101 ppm | 0.0096 ppm | 0.0101 ppm | 0.0120 ppm | 0.1330 ppm | 0.0103 ppm |
| Concentration per Run 3 | 0.0105 ppm | 0.0099 ppm | 0.0097 ppm | 0.0103 ppm | 0.0123 ppm | 0.1263 ppm | 0.0102 ppm |
| Recovery Percentage 1 | 0.000 % | 101.612 % | 95.899 % | 101.216 % | 0.000 % | 0.000 % | 98.495 % |
| Concentration RSD | 0.9 % | 2.9 % | 1.3 % | 1.5 % | 1.3 % | 4.2 % | 6.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0125 ppm | 0.0102 ppm | 0.0097 ppm | 0.2142 ppm | 0.0102 ppm | 0.0107 ppm | 0.0104 ppm |
| Concentration per Run 1 | 0.0117 ppm | 0.0102 ppm | 0.0100 ppm | 0.2084 ppm | 0.0103 ppm | 0.0117 ppm | 0.0102 ppm |
| Concentration per Run 2 | 0.0121 ppm | 0.0100 ppm | 0.0095 ppm | 0.2168 ppm | 0.0099 ppm | 0.0115 ppm | 0.0099 ppm |
| Concentration per Run 3 | 0.0137 ppm | 0.0104 ppm | 0.0097 ppm | 0.2175 ppm | 0.0104 ppm | 0.0089 ppm | 0.0112 ppm |
| Recovery Percentage 1 | 0.000 % | 102.065 % | 97.205 % | 0.000 % | 102.051 % | 107.060 % | 0.000 % |
| Concentration RSD | 8.6 % | 1.6 % | 2.9 % | 2.4 % | 2.3 % | 14.4 % | 6.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0108 ppm | 0.1142 ppm | 0.0100 ppm | 0.0100 ppm | 0.0098 ppm | **0.0075 ppm** | 0.0097 ppm |
| Concentration per Run 1 | 0.0119 ppm | 0.1155 ppm | 0.0107 ppm | 0.0099 ppm | 0.0097 ppm | 0.0063 ppm | 0.0096 ppm |
| Concentration per Run 2 | 0.0108 ppm | 0.1133 ppm | 0.0105 ppm | 0.0101 ppm | 0.0099 ppm | 0.0080 ppm | 0.0098 ppm |
| Concentration per Run 3 | 0.0098 ppm | 0.1137 ppm | 0.0088 ppm | 0.0101 ppm | 0.0100 ppm | 0.0081 ppm | 0.0097 ppm |
| Recovery Percentage 1 | 108.072 % | 0.000 % | 100.062 % | 100.300 % | 98.318 % | 74.904 % | 97.206 % |
| Concentration RSD | 9.7 % | 1.0 % | 10.2 % | 1.3 % | 1.7 % | **13.6 %** | 0.9 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0109 ppm | 99.7876 % | 99.3479 % | 101.1029 % | 101.9476 % | 96.8639 % | 102.8565 % |
| Concentration per Run 1 | 0.0111 ppm | 100.3782 % | 99.6215 % | 100.6020 % | 102.8175 % | 96.1657 % | 103.1128 % |
| Concentration per Run 2 | 0.0105 ppm | 99.5172 % | 99.3448 % | 101.1256 % | 101.6841 % | 97.3195 % | 102.8373 % |
| Concentration per Run 3 | 0.0111 ppm | 99.4672 % | 99.0773 % | 101.5810 % | 101.3413 % | 97.1066 % | 102.6194 % |
| Recovery Percentage 1 | 109.021 % | | | | | | |
| Concentration RSD | 2.9 % | 0.5 % | 0.3 % | 0.5 % | 0.8 % | 0.6 % | 0.2 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: LDR 200 Fe
Analysis started at: 3/12/2025 08:24:09
Comments <Comment>
Rack: 1
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0010 ppm | -0.0015 ppm | 0.0032 ppm | 0.0002 ppm | 0.0000 ppm | 0.0041 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0028 ppm | -0.0001 ppm | 0.0033 ppm | 0.0002 ppm | 0.0001 ppm | 0.0039 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0015 ppm | -0.0021 ppm | 0.0032 ppm | 0.0002 ppm | 0.0001 ppm | 0.0030 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0012 ppm | -0.0022 ppm | 0.0032 ppm | 0.0003 ppm | 0.0000 ppm | 0.0054 ppm |
| Recovery Percentage 1 | 0.811 % | -1.027 % | -29.404 % | 10.773 % | 2.359 % | 0.958 % | 4.115 % |
| Concentration RSD | 340.1 % | 194.5 % | 81.7 % | 1.7 % | 11.3 % | 37.8 % | 29.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0001 ppm | -0.0020 ppm | -0.0035 ppm | **182.1355 ppm** | -0.0230 ppm | -0.0005 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0002 ppm | -0.0021 ppm | -0.0033 ppm | 179.8933 ppm | -0.0185 ppm | -0.0011 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0000 ppm | -0.0020 ppm | -0.0036 ppm | 183.6555 ppm | -0.0337 ppm | -0.0007 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0000 ppm | -0.0018 ppm | -0.0037 ppm | 182.8577 ppm | -0.0169 ppm | 0.0001 ppm |
| Recovery Percentage 1 | 5.964 % | 0.302 % | -19.863 % | -35.336 % | 364,271.015 % | -0.921 % | -5.483 % |
| Concentration RSD | 1.4 % | 149.4 % | 7.3 % | 5.2 % | **1.1 %** | 40.3 % | 108.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0092 ppm | 0.0002 ppm | -0.0017 ppm | 0.0116 ppm | -0.0066 ppm | 0.0004 ppm | -0.0091 ppm |
| Concentration per Run 1 | 0.0094 ppm | 0.0002 ppm | -0.0020 ppm | 0.0067 ppm | -0.0060 ppm | 0.0004 ppm | -0.0109 ppm |
| Concentration per Run 2 | 0.0089 ppm | 0.0003 ppm | -0.0016 ppm | 0.0109 ppm | -0.0067 ppm | 0.0004 ppm | -0.0087 ppm |
| Concentration per Run 3 | 0.0094 ppm | 0.0001 ppm | -0.0016 ppm | 0.0172 ppm | -0.0071 ppm | 0.0006 ppm | -0.0075 ppm |
| Recovery Percentage 1 | 9.204 % | 2.072 % | -3.460 % | 0.581 % | -26.320 % | 4.423 % | -18.108 % |
| Concentration RSD | 3.3 % | 62.3 % | 11.6 % | 45.6 % | 8.3 % | 30.4 % | 18.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0008 ppm | 0.0013 ppm | 0.0002 ppm | 0.0000 ppm | -0.0006 ppm | 0.0019 ppm |
| Concentration per Run 1 | 0.0026 ppm | 0.0007 ppm | -0.0008 ppm | 0.0002 ppm | 0.0001 ppm | -0.0025 ppm | 0.0019 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0015 ppm | 0.0032 ppm | 0.0002 ppm | 0.0000 ppm | -0.0005 ppm | 0.0021 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0003 ppm | 0.0015 ppm | 0.0002 ppm | -0.0001 ppm | 0.0011 ppm | 0.0017 ppm |
| Recovery Percentage 1 | 10.409 % | 0.167 % | 2.577 % | 1.571 % | 0.379 % | -3.068 % | 19.092 % |
| Concentration RSD | 131.3 % | 72.0 % | 156.5 % | 3.8 % | 260.5 % | 294.1 % | 10.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0018 ppm | 99.5335 % | 96.3541 % | 101.4506 % | 103.0390 % | 97.5332 % | 101.1720 % |
| Concentration per Run 1 | -0.0018 ppm | 100.1523 % | 97.7795 % | 101.2516 % | 103.8661 % | 97.6959 % | 102.7591 % |
| Concentration per Run 2 | -0.0018 ppm | 99.3452 % | 92.7495 % | 101.7021 % | 102.8740 % | 97.1776 % | 97.3978 % |
| Concentration per Run 3 | -0.0018 ppm | 99.1029 % | 98.5332 % | 101.3980 % | 102.3768 % | 97.7262 % | 103.3591 % |
| Recovery Percentage 1 | -35.926 % | | | | | | |
| Concentration RSD | 2.3 % | 0.6 % | 3.3 % | 0.2 % | 0.7 % | 0.3 % | 3.2 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: LDR 10 Ni pass
Analysis started at: 3/12/2025 08:29:28
Comments <Comment>
Rack: 1
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0011 ppm | -0.0005 ppm | 0.0029 ppm | 0.0001 ppm | 0.0001 ppm | 0.0101 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0018 ppm | -0.0015 ppm | 0.0029 ppm | 0.0000 ppm | 0.0000 ppm | 0.0089 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0009 ppm | 0.0001 ppm | 0.0032 ppm | 0.0001 ppm | 0.0001 ppm | 0.0105 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0004 ppm | 0.0000 ppm | 0.0026 ppm | 0.0001 ppm | 0.0000 ppm | 0.0110 ppm |
| Concentration RSD | 81.5 % | 66.4 % | 191.8 % | 9.8 % | 40.9 % | 30.2 % | 10.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0014 ppm | 0.0002 ppm | 0.0004 ppm | 0.0031 ppm | 0.0205 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0015 ppm | 0.0002 ppm | 0.0004 ppm | 0.0053 ppm | 0.0102 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0013 ppm | 0.0002 ppm | 0.0005 ppm | 0.0031 ppm | 0.0184 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0013 ppm | 0.0002 ppm | 0.0004 ppm | 0.0010 ppm | 0.0330 ppm | 0.0002 ppm |
| Concentration RSD | 565.6 % | 8.8 % | 16.3 % | 11.7 % | 69.4 % | 56.1 % | 213.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0002 ppm | 0.0007 ppm | 0.0129 ppm | **10.0243 [SIC 20]** | 0.0013 ppm | -0.0175 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0001 ppm | 0.0005 ppm | 0.0087 ppm | 10.0682 ppm | 0.0005 ppm | -0.0175 ppm |
| Concentration per Run 2 | -0.0014 ppm | 0.0003 ppm | 0.0012 ppm | 0.0118 ppm | 10.0441 ppm | 0.0024 ppm | -0.0170 ppm |
| Concentration per Run 3 | 0.0033 ppm | 0.0003 ppm | 0.0004 ppm | 0.0182 ppm | 9.9607 ppm | 0.0012 ppm | -0.0180 ppm |
| Concentration RSD | 248.9 % | 43.5 % | 60.7 % | 37.6 % | 0.6 % | 72.9 % | 3.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0020 ppm | 0.0009 ppm | -0.0002 ppm | 0.0000 ppm | 0.0001 ppm | -0.0028 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0033 ppm | 0.0012 ppm | -0.0007 ppm | 0.0000 ppm | 0.0001 ppm | -0.0008 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0015 ppm | 0.0015 ppm | 0.0005 ppm | 0.0000 ppm | 0.0001 ppm | -0.0033 ppm | 0.0002 ppm |
| Concentration per Run 3 | -0.0012 ppm | 0.0000 ppm | -0.0004 ppm | 0.0001 ppm | -0.0001 ppm | -0.0043 ppm | 0.0003 ppm |
| Concentration RSD | 58.3 % | 89.2 % | 348.3 % | 52.1 % | 172.9 % | 65.5 % | 17.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 99.9362 % | 99.0893 % | 100.8807 % | 101.7867 % | 96.2960 % | 102.3265 % |
| Concentration per Run 1 | 0.0005 ppm | 100.6533 % | 99.7525 % | 100.2923 % | 102.8408 % | 95.8980 % | 103.0503 % |
| Concentration per Run 2 | 0.0004 ppm | 99.8872 % | 98.0652 % | 101.0824 % | 101.5800 % | 96.0645 % | 101.0312 % |
| Concentration per Run 3 | 0.0004 ppm | 99.2682 % | 99.4500 % | 101.2673 % | 100.9393 % | 96.9255 % | 102.8980 % |
| Concentration RSD | 16.3 % | 0.7 % | 0.9 % | 0.5 % | 1.0 % | 0.6 % | 1.1 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: LDR 20 Zn pass
Analysis started at: 3/12/2025 08:34:39
Comments <Comment>
Rack: 1
Vial: 5

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0009 ppm | 0.0002 ppm | 0.0025 ppm | 0.0005 ppm | 0.0000 ppm | 0.0021 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0039 ppm | 0.0003 ppm | 0.0026 ppm | 0.0005 ppm | 0.0001 ppm | 0.0046 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0053 ppm | -0.0005 ppm | 0.0025 ppm | 0.0005 ppm | 0.0000 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0039 ppm | 0.0006 ppm | 0.0024 ppm | 0.0004 ppm | 0.0000 ppm | 0.0006 ppm |
| Concentration RSD | 150.4 % | 624.5 % | 339.9 % | 5.0 % | 10.7 % | 53.7 % | 104.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | 0.0001 ppm | 0.0005 ppm | 0.0051 ppm | 0.0221 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0002 ppm | -0.0002 ppm | 0.0004 ppm | 0.0057 ppm | 0.0233 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0002 ppm | 0.0002 ppm | 0.0006 ppm | 0.0054 ppm | 0.0284 ppm | -0.0005 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | 0.0005 ppm | 0.0043 ppm | 0.0145 ppm | -0.0002 ppm |
| Concentration RSD | 919.9 % | 123.0 % | 502.2 % | 20.9 % | 13.7 % | 31.8 % | 139.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | 0.0002 ppm | 0.0007 ppm | 0.0107 ppm | 0.0018 ppm | -0.0011 ppm | -0.0034 ppm |
| Concentration per Run 1 | 0.0024 ppm | 0.0001 ppm | 0.0006 ppm | 0.0111 ppm | 0.0017 ppm | -0.0012 ppm | -0.0022 ppm |
| Concentration per Run 2 | 0.0015 ppm | 0.0001 ppm | 0.0008 ppm | 0.0062 ppm | 0.0020 ppm | -0.0013 ppm | -0.0045 ppm |
| Concentration per Run 3 | 0.0023 ppm | 0.0004 ppm | 0.0007 ppm | 0.0149 ppm | 0.0016 ppm | -0.0008 ppm | -0.0036 ppm |
| Concentration RSD | 24.6 % | 63.6 % | 15.0 % | 40.7 % | 10.5 % | 24.6 % | 33.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | -0.0009 ppm | -0.0007 ppm | 0.0000 ppm | 0.0002 ppm | -0.0002 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0004 ppm | -0.0015 ppm | -0.0003 ppm | 0.0000 ppm | 0.0003 ppm | 0.0001 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0005 ppm | -0.0017 ppm | -0.0011 ppm | 0.0001 ppm | 0.0002 ppm | -0.0011 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0004 ppm | -0.0008 ppm | -0.0001 ppm | 0.0002 ppm | 0.0005 ppm | 0.0001 ppm |
| Concentration RSD | 34.2 % | 126.2 % | 60.9 % | 15,896.6 % | 24.1 % | 516.6 % | 2,115.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 19.9269 ppm | 100.1951 % | 99.6523 % | 101.3027 % | 101.9001 % | 97.2680 % | 102.8565 % |
| Concentration per Run 1 | 19.9282 ppm | 100.5077 % | 99.7796 % | 101.2755 % | 102.2960 % | 97.5108 % | 102.9032 % |
| Concentration per Run 2 | 19.8749 ppm | 100.2236 % | 99.4273 % | 101.1970 % | 101.8514 % | 97.2690 % | 102.7125 % |
| Concentration per Run 3 | 19.9775 ppm | 99.8540 % | 99.7501 % | 101.4356 % | 101.5527 % | 97.0241 % | 102.9538 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.2 % | 0.1 % | 0.4 % | 0.3 % | 0.1 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: LDR 400 K pass
Analysis started at: 3/12/2025 08:39:50
Comments <Comment>
Rack: 1
Vial: 6

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0037 ppm | -0.0004 ppm | 0.0025 ppm | 0.0001 ppm | 0.0000 ppm | 0.0101 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0005 ppm | -0.0009 ppm | 0.0028 ppm | 0.0001 ppm | 0.0000 ppm | 0.0118 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0045 ppm | -0.0022 ppm | 0.0026 ppm | 0.0001 ppm | 0.0000 ppm | 0.0052 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0070 ppm | 0.0018 ppm | 0.0022 ppm | 0.0001 ppm | 0.0000 ppm | 0.0134 ppm |
| Concentration RSD | 91.4 % | 103.9 % | 483.3 % | 11.4 % | 30.4 % | 13.4 % | 42.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0001 ppm | 0.0002 ppm | 0.0009 ppm | 0.0073 ppm | 385.1664 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0002 ppm | 0.0003 ppm | 0.0010 ppm | 0.0092 ppm | 386.9322 ppm | -0.0007 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0003 ppm | 0.0008 ppm | 0.0068 ppm | 386.4738 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0002 ppm | 0.0000 ppm | 0.0008 ppm | 0.0060 ppm | 382.0931 ppm | 0.0009 ppm |
| Concentration RSD | 32.7 % | 107.1 % | 73.3 % | 14.3 % | 22.6 % | 0.7 % | 3,151.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0159 ppm | 0.0001 ppm | 0.0003 ppm | 0.0142 ppm | 0.0010 ppm | 0.0008 ppm | -0.0007 ppm |
| Concentration per Run 1 | -0.0166 ppm | -0.0001 ppm | 0.0002 ppm | 0.0096 ppm | 0.0008 ppm | 0.0008 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0167 ppm | 0.0002 ppm | 0.0003 ppm | 0.0158 ppm | 0.0012 ppm | 0.0019 ppm | -0.0008 ppm |
| Concentration per Run 3 | -0.0143 ppm | 0.0002 ppm | 0.0006 ppm | 0.0172 ppm | 0.0008 ppm | -0.0004 ppm | -0.0014 ppm |
| Concentration RSD | 8.7 % | 173.9 % | 54.1 % | 28.7 % | 26.8 % | 150.9 % | 97.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0000 ppm | 0.0005 ppm | 0.0001 ppm | 0.0003 ppm | 0.0005 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0005 ppm | -0.0009 ppm | -0.0003 ppm | 0.0001 ppm | 0.0004 ppm | 0.0007 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0001 ppm | -0.0008 ppm | 0.0000 ppm | 0.0001 ppm | 0.0013 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0009 ppm | 0.0010 ppm | 0.0026 ppm | 0.0001 ppm | 0.0003 ppm | -0.0005 ppm | 0.0001 ppm |
| Concentration RSD | 237.4 % | 2,647.8 % | 366.9 % | 45.7 % | 49.9 % | 181.3 % | 951.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0051 ppm | 97.6093 % | 93.0957 % | 104.8341 % | 101.5245 % | 104.0105 % | 97.9262 % |
| Concentration per Run 1 | 0.0044 ppm | 97.8878 % | 92.7900 % | 104.8759 % | 102.1025 % | 103.8604 % | 97.5785 % |
| Concentration per Run 2 | 0.0054 ppm | 97.4832 % | 92.9163 % | 104.5992 % | 101.2920 % | 104.0637 % | 97.7249 % |
| Concentration per Run 3 | 0.0054 ppm | 97.4570 % | 93.5807 % | 105.0272 % | 101.1791 % | 104.1075 % | 98.4751 % |
| Concentration RSD | 12.0 % | 0.2 % | 0.5 % | 0.2 % | 0.5 % | 0.1 % | 0.5 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: xLDR 400 Na
Analysis started at: 3/12/2025 08:45:10
Comments <Comment>
Rack: 1
Vial: 7

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0062 ppm | -0.0014 ppm | 0.0021 ppm | 0.0001 ppm | 0.0000 ppm | 0.0059 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0076 ppm | -0.0016 ppm | 0.0020 ppm | 0.0000 ppm | 0.0000 ppm | 0.0067 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0018 ppm | -0.0032 ppm | 0.0021 ppm | 0.0000 ppm | 0.0000 ppm | 0.0042 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0092 ppm | 0.0006 ppm | 0.0021 ppm | 0.0001 ppm | 0.0000 ppm | 0.0069 ppm |
| Concentration RSD | 92.2 % | 63.1 % | 133.9 % | 1.8 % | 66.9 % | 25.9 % | 25.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0001 ppm | 0.0003 ppm | 0.0009 ppm | -0.0082 ppm | 0.5076 ppm | 0.0014 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0004 ppm | 0.0002 ppm | 0.0008 ppm | -0.0082 ppm | 0.4681 ppm | 0.0013 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0001 ppm | 0.0002 ppm | 0.0007 ppm | -0.0077 ppm | 0.5103 ppm | 0.0013 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0000 ppm | 0.0004 ppm | 0.0011 ppm | -0.0087 ppm | 0.5445 ppm | 0.0018 ppm |
| Concentration RSD | 19.6 % | 233.4 % | 38.8 % | 23.1 % | 6.2 % | 7.5 % | 18.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0020 ppm | 0.0001 ppm | 0.0004 ppm | 341.5518 [SIC 500] | 0.0001 ppm | 0.0003 ppm | -0.0005 ppm |
| Concentration per Run 1 | 0.0046 ppm | -0.0002 ppm | 0.0004 ppm | 342.7836 ppm | -0.0002 ppm | 0.0002 ppm | -0.0010 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0002 ppm | 0.0002 ppm | 342.2134 ppm | 0.0003 ppm | 0.0003 ppm | 0.0012 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0002 ppm | 0.0007 ppm | 339.6585 ppm | 0.0002 ppm | 0.0003 ppm | -0.0017 ppm |
| Concentration RSD | 116.8 % | 223.9 % | 55.1 % | 0.5 % | 343.1 % | 18.5 % | 323.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0014 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm | 0.0004 ppm | 0.0009 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0006 ppm | -0.0004 ppm | 0.0003 ppm | 0.0000 ppm | 0.0003 ppm | 0.0019 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0027 ppm | 0.0001 ppm | -0.0002 ppm | 0.0000 ppm | 0.0005 ppm | -0.0017 ppm | 0.0002 ppm |
| Concentration per Run 3 | -0.0008 ppm | 0.0007 ppm | 0.0000 ppm | 0.0001 ppm | 0.0004 ppm | 0.0026 ppm | -0.0001 ppm |
| Concentration RSD | 85.9 % | 489.1 % | 793.2 % | 445.5 % | 21.3 % | 255.2 % | 293.5 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 97.3462 % | 90.4118 % | 104.4871 % | 101.3735 % | 103.1297 % | 95.1219 % |
| Concentration per Run 1 | 0.0010 ppm | 97.7309 % | 91.6725 % | 104.5930 % | 101.8421 % | 103.4417 % | 96.4405 % |
| Concentration per Run 2 | 0.0015 ppm | 96.8109 % | 91.6365 % | 104.7210 % | 100.7764 % | 103.4362 % | 96.5628 % |
| Concentration per Run 3 | 0.0011 ppm | 97.4968 % | 87.9263 % | 104.1472 % | 101.5020 % | 102.5112 % | 92.3624 % |
| Concentration RSD | 24.2 % | 0.5 % | 2.4 % | 0.3 % | 0.5 % | 0.5 % | 2.5 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: LLOQ 0.01ppm Tl
Analysis started at: 3/12/2025 09:11:12
Comments <Comment>
Rack: 1
Vial: 8

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0099 ppm | 0.0108 ppm | 0.0090 ppm | 0.0111 ppm | 0.0095 ppm | 0.0098 ppm | 0.0083 ppm |
| Concentration per Run 1 | 0.0101 ppm | 0.0095 ppm | 0.0083 ppm | 0.0113 ppm | 0.0094 ppm | 0.0097 ppm | 0.0083 ppm |
| Concentration per Run 2 | 0.0097 ppm | 0.0120 ppm | 0.0090 ppm | 0.0111 ppm | 0.0096 ppm | 0.0098 ppm | 0.0107 ppm |
| Concentration per Run 3 | 0.0100 ppm | 0.0108 ppm | 0.0096 ppm | 0.0109 ppm | 0.0096 ppm | 0.0098 ppm | 0.0059 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 89.560 % | 110.955 % | 95.151 % | 0.000 % | 0.000 % |
| Concentration RSD | 1.7 % | 11.3 % | 7.5 % | 2.2 % | 0.9 % | 0.5 % | 29.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0106 ppm | 0.0100 ppm | 0.0097 ppm | 0.0101 ppm | 0.0135 ppm | 0.1173 ppm | 0.0096 ppm |
| Concentration per Run 1 | 0.0106 ppm | 0.0103 ppm | 0.0096 ppm | 0.0101 ppm | 0.0133 ppm | 0.1096 ppm | 0.0096 ppm |
| Concentration per Run 2 | 0.0106 ppm | 0.0098 ppm | 0.0096 ppm | 0.0100 ppm | 0.0141 ppm | 0.1194 ppm | 0.0097 ppm |
| Concentration per Run 3 | 0.0106 ppm | 0.0099 ppm | 0.0099 ppm | 0.0102 ppm | 0.0132 ppm | 0.1228 ppm | 0.0096 ppm |
| Recovery Percentage 1 | 0.000 % | 99.896 % | 97.033 % | 101.002 % | 0.000 % | 0.000 % | 96.264 % |
| Concentration RSD | 0.3 % | 2.7 % | 2.0 % | 0.6 % | 3.6 % | 5.8 % | 0.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0105 ppm | 0.0096 ppm | 0.0098 ppm | 0.2048 ppm | 0.0097 ppm | 0.0098 ppm | 0.0083 ppm |
| Concentration per Run 1 | 0.0107 ppm | 0.0094 ppm | 0.0098 ppm | 0.2043 ppm | 0.0102 ppm | 0.0090 ppm | 0.0079 ppm |
| Concentration per Run 2 | 0.0090 ppm | 0.0098 ppm | 0.0096 ppm | 0.2030 ppm | 0.0091 ppm | 0.0094 ppm | 0.0091 ppm |
| Concentration per Run 3 | 0.0117 ppm | 0.0096 ppm | 0.0099 ppm | 0.2071 ppm | 0.0099 ppm | 0.0109 ppm | 0.0080 ppm |
| Recovery Percentage 1 | 0.000 % | 96.040 % | 97.796 % | 0.000 % | 97.387 % | 97.672 % | 0.000 % |
| Concentration RSD | 12.8 % | 1.9 % | 1.5 % | 1.0 % | 6.0 % | 10.7 % | 7.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0106 ppm | 0.1126 ppm | 0.0095 ppm | 0.0098 ppm | 0.0096 ppm | 0.0111 ppm | 0.0093 ppm |
| Concentration per Run 1 | 0.0105 ppm | 0.1130 ppm | 0.0105 ppm | 0.0097 ppm | 0.0096 ppm | 0.0122 ppm | 0.0090 ppm |
| Concentration per Run 2 | 0.0118 ppm | 0.1129 ppm | 0.0082 ppm | 0.0099 ppm | 0.0098 ppm | 0.0113 ppm | 0.0096 ppm |
| Concentration per Run 3 | 0.0094 ppm | 0.1119 ppm | 0.0099 ppm | 0.0099 ppm | 0.0093 ppm | 0.0098 ppm | 0.0094 ppm |
| Recovery Percentage 1 | 105.925 % | 0.000 % | 95.397 % | 98.427 % | 95.514 % | 111.136 % | 93.429 % |
| Concentration RSD | 11.2 % | 0.5 % | 12.2 % | 1.0 % | 2.6 % | 10.7 % | 3.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0102 ppm | 100.8097 % | 99.4266 % | 102.1705 % | 104.4094 % | 97.0412 % | 105.0795 % |
| Concentration per Run 1 | 0.0101 ppm | 101.4721 % | 99.5724 % | 101.8343 % | 105.2209 % | 96.8809 % | 105.2387 % |
| Concentration per Run 2 | 0.0103 ppm | 100.1131 % | 99.2616 % | 102.3566 % | 103.7693 % | 96.8427 % | 104.9844 % |
| Concentration per Run 3 | 0.0102 ppm | 100.8438 % | 99.4458 % | 102.3208 % | 104.2379 % | 97.4000 % | 105.0153 % |
| Recovery Percentage 1 | 101.904 % | | | | | | |
| Concentration RSD | 0.6 % | 0.7 % | 0.2 % | 0.3 % | 0.7 % | 0.3 % | 0.1 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: CCV
Analysis started at: 3/12/2025 09:31:03
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4710 ppm | 0.5101 ppm | 0.4889 ppm | 0.4923 ppm | 0.4763 ppm | 0.4867 ppm | 0.4589 ppm |
| Concentration per Run 1 | 0.4714 ppm | 0.5029 ppm | 0.4927 ppm | 0.4968 ppm | 0.4680 ppm | 0.4790 ppm | 0.4559 ppm |
| Concentration per Run 2 | 0.4699 ppm | 0.5142 ppm | 0.4897 ppm | 0.4913 ppm | 0.4823 ppm | 0.4924 ppm | 0.4623 ppm |
| Concentration per Run 3 | 0.4718 ppm | 0.5131 ppm | 0.4843 ppm | 0.4889 ppm | 0.4785 ppm | 0.4887 ppm | 0.4585 ppm |
| Recovery Percentage 1 | 94.207 % | 102.015 % | 97.784 % | 98.468 % | 95.254 % | 97.342 % | 91.782 % |
| Concentration RSD | 0.2 % | 1.2 % | 0.9 % | 0.8 % | 1.6 % | 1.4 % | 0.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5250 ppm | 0.5087 ppm | 0.4606 ppm | 0.4750 ppm | 0.4790 ppm | 4.9869 ppm | 0.4662 ppm |
| Concentration per Run 1 | 0.5290 ppm | 0.5121 ppm | 0.4606 ppm | 0.4755 ppm | 0.4703 ppm | 4.9134 ppm | 0.4576 ppm |
| Concentration per Run 2 | 0.5246 ppm | 0.5082 ppm | 0.4592 ppm | 0.4743 ppm | 0.4863 ppm | 5.0362 ppm | 0.4726 ppm |
| Concentration per Run 3 | 0.5214 ppm | 0.5057 ppm | 0.4620 ppm | 0.4751 ppm | 0.4806 ppm | 5.0111 ppm | 0.4682 ppm |
| Recovery Percentage 1 | 105.004 % | 101.731 % | 92.118 % | 94.992 % | 95.810 % | 99.738 % | 93.234 % |
| Concentration RSD | 0.7 % | 0.6 % | 0.3 % | 0.1 % | 1.7 % | 1.3 % | 1.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4939 ppm | 0.4815 ppm | 0.4709 ppm | 9.5041 ppm | 0.4899 ppm | 0.4863 ppm | 0.5030 ppm |
| Concentration per Run 1 | 0.4921 ppm | 0.4736 ppm | 0.4731 ppm | 9.3515 ppm | 0.4929 ppm | 0.4876 ppm | 0.5053 ppm |
| Concentration per Run 2 | 0.4937 ppm | 0.4878 ppm | 0.4709 ppm | 9.6290 ppm | 0.4911 ppm | 0.4866 ppm | 0.5039 ppm |
| Concentration per Run 3 | 0.4959 ppm | 0.4832 ppm | 0.4686 ppm | 9.5319 ppm | 0.4857 ppm | 0.4848 ppm | 0.4997 ppm |
| Recovery Percentage 1 | 98.784 % | 96.308 % | 94.171 % | 95.041 % | 97.983 % | 97.269 % | 100.594 % |
| Concentration RSD | 0.4 % | 1.5 % | 0.5 % | 1.5 % | 0.8 % | 0.3 % | 0.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4827 ppm | 5.6532 ppm | 0.5079 ppm | 0.4837 ppm | 0.4604 ppm | 0.4822 ppm | 0.4604 ppm |
| Concentration per Run 1 | 0.4841 ppm | 5.6908 ppm | 0.5112 ppm | 0.4756 ppm | 0.4610 ppm | 0.4860 ppm | 0.4597 ppm |
| Concentration per Run 2 | 0.4852 ppm | 5.6534 ppm | 0.5104 ppm | 0.4897 ppm | 0.4595 ppm | 0.4814 ppm | 0.4602 ppm |
| Concentration per Run 3 | 0.4787 ppm | 5.6154 ppm | 0.5020 ppm | 0.4857 ppm | 0.4607 ppm | 0.4790 ppm | 0.4611 ppm |
| Recovery Percentage 1 | 96.531 % | 107.680 % | 101.572 % | 96.734 % | 92.081 % | 96.432 % | 92.070 % |
| Concentration RSD | 0.7 % | 0.7 % | 1.0 % | 1.5 % | 0.2 % | 0.7 % | 0.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5067 ppm | 99.8227 % | 98.0883 % | 103.1525 % | 104.4843 % | 97.3937 % | 104.9018 % |
| Concentration per Run 1 | 0.5103 ppm | 100.6431 % | 98.0301 % | 102.6608 % | 105.6560 % | 96.7740 % | 104.9231 % |
| Concentration per Run 2 | 0.5062 ppm | 98.9893 % | 98.2254 % | 103.2742 % | 103.3862 % | 97.4228 % | 104.9800 % |
| Concentration per Run 3 | 0.5038 ppm | 99.8356 % | 98.0095 % | 103.5224 % | 104.4107 % | 97.9842 % | 104.8022 % |
| Recovery Percentage 1 | 101.347 % | | | | | | |
| Concentration RSD | 0.6 % | 0.8 % | 0.1 % | 0.4 % | 1.1 % | 0.6 % | 0.1 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: CCB
Analysis started at: 3/12/2025 09:35:56
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0055 ppm | 0.0007 ppm | 0.0014 ppm | 0.0001 ppm | 0.0002 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0051 ppm | 0.0014 ppm | 0.0013 ppm | 0.0002 ppm | 0.0002 ppm | -0.0011 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0042 ppm | 0.0019 ppm | 0.0013 ppm | 0.0002 ppm | 0.0002 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0071 ppm | -0.0012 ppm | 0.0016 ppm | 0.0001 ppm | 0.0001 ppm | 0.0008 ppm |
| Recovery Percentage 1 | 6.537 % | 5.478 % | 13.577 % | 4.625 % | 1.412 % | 3.325 % | 0.177 % |
| Concentration RSD | 27.5 % | 26.7 % | 244.5 % | 12.5 % | 21.1 % | 11.4 % | 639.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0002 ppm | 0.0003 ppm | 0.0010 ppm | 0.0018 ppm | 0.0313 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0005 ppm | 0.0002 ppm | 0.0010 ppm | 0.0004 ppm | 0.0220 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0002 ppm | -0.0001 ppm | 0.0002 ppm | 0.0009 ppm | 0.0026 ppm | 0.0258 ppm | -0.0005 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0003 ppm | 0.0004 ppm | 0.0009 ppm | 0.0024 ppm | 0.0461 ppm | 0.0003 ppm |
| Recovery Percentage 1 | 6.941 % | 1.177 % | 2.827 % | 9.515 % | 3.617 % | 1.252 % | -0.172 % |
| Concentration RSD | 22.4 % | 117.1 % | 31.6 % | 8.7 % | 65.7 % | 41.4 % | 2,656.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 0.0000 ppm | 0.0008 ppm | 0.0100 ppm | 0.0014 ppm | -0.0001 ppm | -0.0007 ppm |
| Concentration per Run 1 | 0.0019 ppm | 0.0002 ppm | 0.0008 ppm | 0.0109 ppm | 0.0021 ppm | 0.0009 ppm | -0.0002 ppm |
| Concentration per Run 2 | -0.0006 ppm | 0.0000 ppm | 0.0007 ppm | 0.0109 ppm | 0.0012 ppm | -0.0007 ppm | -0.0005 ppm |
| Concentration per Run 3 | 0.0033 ppm | -0.0001 ppm | 0.0008 ppm | 0.0083 ppm | 0.0009 ppm | -0.0004 ppm | -0.0014 ppm |
| Recovery Percentage 1 | 1.550 % | 0.093 % | 1.521 % | 0.500 % | 5.603 % | -0.682 % | -1.433 % |
| Concentration RSD | 125.6 % | 1,399.8 % | 12.6 % | 15.1 % | 44.0 % | 1,185.5 % | 88.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 0.0004 ppm | 0.0000 ppm | 0.0001 ppm | 0.0005 ppm | 0.0014 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0016 ppm | -0.0001 ppm | -0.0003 ppm | 0.0002 ppm | 0.0006 ppm | 0.0002 ppm | 0.0004 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0008 ppm | 0.0000 ppm | 0.0001 ppm | 0.0006 ppm | 0.0020 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0006 ppm | 0.0004 ppm | 0.0001 ppm | 0.0003 ppm | 0.0018 ppm | 0.0003 ppm |
| Recovery Percentage 1 | -5.225 % | 0.086 % | 0.086 % | 1.293 % | 5.053 % | 6.782 % | 3.573 % |
| Concentration RSD | 190.0 % | 114.3 % | 813.7 % | 17.9 % | 35.8 % | 73.8 % | 27.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 100.1052 % | 98.3989 % | 102.5936 % | 102.9844 % | 97.9555 % | 103.0109 % |
| Concentration per Run 1 | 0.0002 ppm | 100.3725 % | 98.1275 % | 102.9647 % | 103.3652 % | 98.2827 % | 102.7281 % |
| Concentration per Run 2 | 0.0002 ppm | 99.8426 % | 98.6981 % | 102.4365 % | 102.7618 % | 97.9048 % | 103.3776 % |
| Concentration per Run 3 | 0.0003 ppm | 100.1007 % | 98.3711 % | 102.3795 % | 102.8261 % | 97.6791 % | 102.9271 % |
| Recovery Percentage 1 | 4.468 % | | | | | | |
| Concentration RSD | 36.0 % | 0.3 % | 0.3 % | 0.3 % | 0.3 % | 0.3 % | 0.3 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: CCV
Analysis started at: 3/12/2025 09:41:08
Comments <Comment>
Rack: 0
Vial: 10

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4723 ppm | 0.5106 ppm | 0.4934 ppm | 0.4982 ppm | 0.4799 ppm | 0.4899 ppm | 0.4620 ppm |
| Concentration per Run 1 | 0.4729 ppm | 0.5089 ppm | 0.4930 ppm | 0.4989 ppm | 0.4753 ppm | 0.4853 ppm | 0.4594 ppm |
| Concentration per Run 2 | 0.4722 ppm | 0.5140 ppm | 0.4946 ppm | 0.4987 ppm | 0.4822 ppm | 0.4929 ppm | 0.4654 ppm |
| Concentration per Run 3 | 0.4718 ppm | 0.5089 ppm | 0.4925 ppm | 0.4969 ppm | 0.4821 ppm | 0.4915 ppm | 0.4613 ppm |
| Recovery Percentage 1 | 94.461 % | 102.119 % | 98.675 % | 99.634 % | 95.974 % | 97.986 % | 92.408 % |
| Concentration RSD | 0.1 % | 0.6 % | 0.2 % | 0.2 % | 0.8 % | 0.8 % | 0.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5274 ppm | 0.5129 ppm | 0.4640 ppm | 0.4751 ppm | 0.4876 ppm | 5.0106 ppm | 0.4669 ppm |
| Concentration per Run 1 | 0.5286 ppm | 0.5140 ppm | 0.4644 ppm | 0.4763 ppm | 0.4836 ppm | 4.9771 ppm | 0.4622 ppm |
| Concentration per Run 2 | 0.5278 ppm | 0.5136 ppm | 0.4641 ppm | 0.4746 ppm | 0.4903 ppm | 5.0222 ppm | 0.4687 ppm |
| Concentration per Run 3 | 0.5258 ppm | 0.5110 ppm | 0.4636 ppm | 0.4744 ppm | 0.4889 ppm | 5.0326 ppm | 0.4698 ppm |
| Recovery Percentage 1 | 105.482 % | 102.574 % | 92.806 % | 95.016 % | 97.521 % | 100.213 % | 93.380 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.1 % | 0.2 % | 0.7 % | 0.6 % | 0.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4948 ppm | 0.4859 ppm | 0.4773 ppm | 9.6328 ppm | 0.4954 ppm | 0.4922 ppm | 0.5080 ppm |
| Concentration per Run 1 | 0.4965 ppm | 0.4816 ppm | 0.4769 ppm | 9.5531 ppm | 0.4957 ppm | 0.4926 ppm | 0.5089 ppm |
| Concentration per Run 2 | 0.4939 ppm | 0.4882 ppm | 0.4786 ppm | 9.6834 ppm | 0.4974 ppm | 0.4933 ppm | 0.5079 ppm |
| Concentration per Run 3 | 0.4941 ppm | 0.4880 ppm | 0.4764 ppm | 9.6619 ppm | 0.4930 ppm | 0.4906 ppm | 0.5072 ppm |
| Recovery Percentage 1 | 98.969 % | 97.185 % | 95.461 % | 96.328 % | 99.077 % | 98.440 % | 101.598 % |
| Concentration RSD | 0.3 % | 0.8 % | 0.2 % | 0.7 % | 0.5 % | 0.3 % | 0.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4901 ppm | 5.6622 ppm | 0.4935 ppm | 0.4826 ppm | 0.4644 ppm | 0.4862 ppm | 0.4629 ppm |
| Concentration per Run 1 | 0.4924 ppm | 5.6685 ppm | 0.4945 ppm | 0.4776 ppm | 0.4643 ppm | 0.4879 ppm | 0.4642 ppm |
| Concentration per Run 2 | 0.4908 ppm | 5.6717 ppm | 0.4944 ppm | 0.4850 ppm | 0.4644 ppm | 0.4878 ppm | 0.4626 ppm |
| Concentration per Run 3 | 0.4872 ppm | 5.6465 ppm | 0.4916 ppm | 0.4850 ppm | 0.4644 ppm | 0.4830 ppm | 0.4619 ppm |
| Recovery Percentage 1 | 98.029 % | 107.852 % | 98.696 % | 96.510 % | 92.870 % | 97.244 % | 92.575 % |
| Concentration RSD | 0.5 % | 0.2 % | 0.3 % | 0.9 % | 0.0 % | 0.6 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5110 ppm | 99.4645 % | 98.4335 % | 102.1798 % | 103.8402 % | 96.6617 % | 104.5749 % |
| Concentration per Run 1 | 0.5115 ppm | 100.2194 % | 98.3917 % | 102.3562 % | 104.7277 % | 96.5923 % | 104.5350 % |
| Concentration per Run 2 | 0.5114 ppm | 98.9963 % | 98.4705 % | 102.0535 % | 103.3412 % | 96.4946 % | 104.6146 % |
| Concentration per Run 3 | 0.5100 ppm | 99.1776 % | 98.4382 % | 102.1295 % | 103.4516 % | 96.8983 % | 104.5749 % |
| Recovery Percentage 1 | 102.191 % | | | | | | |
| Concentration RSD | 0.2 % | 0.7 % | 0.0 % | 0.2 % | 0.7 % | 0.2 % | 0.0 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: CCB
Analysis started at: 3/12/2025 09:46:04
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0043 ppm | 0.0004 ppm | 0.0014 ppm | 0.0003 ppm | 0.0002 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0015 ppm | -0.0001 ppm | 0.0012 ppm | 0.0003 ppm | 0.0002 ppm | -0.0019 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0048 ppm | 0.0007 ppm | 0.0015 ppm | 0.0002 ppm | 0.0002 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0065 ppm | 0.0006 ppm | 0.0016 ppm | 0.0002 ppm | 0.0002 ppm | 0.0010 ppm |
| Recovery Percentage 1 | 10.202 % | 4.274 % | 8.111 % | 4.733 % | 2.523 % | 4.613 % | -0.377 % |
| Concentration RSD | 43.7 % | 59.2 % | 112.3 % | 11.1 % | 21.7 % | 7.0 % | 381.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0004 ppm | 0.0001 ppm | 0.0009 ppm | 0.0027 ppm | 0.0287 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0005 ppm | 0.0002 ppm | 0.0008 ppm | 0.0029 ppm | 0.0289 ppm | -0.0005 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0003 ppm | 0.0001 ppm | 0.0008 ppm | 0.0030 ppm | 0.0278 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0003 ppm | 0.0000 ppm | 0.0010 ppm | 0.0022 ppm | 0.0294 ppm | 0.0002 ppm |
| Recovery Percentage 1 | 7.647 % | 1.874 % | 1.127 % | 8.739 % | 5.359 % | 1.148 % | -0.497 % |
| Concentration RSD | 30.5 % | 36.4 % | 95.8 % | 9.9 % | 15.7 % | 2.9 % | 796.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0030 ppm | 0.0001 ppm | 0.0007 ppm | 0.0110 ppm | 0.0009 ppm | -0.0006 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0001 ppm | 0.0004 ppm | 0.0128 ppm | 0.0012 ppm | -0.0004 ppm | -0.0012 ppm |
| Concentration per Run 2 | 0.0043 ppm | 0.0000 ppm | 0.0009 ppm | 0.0100 ppm | 0.0008 ppm | -0.0016 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0044 ppm | 0.0001 ppm | 0.0007 ppm | 0.0102 ppm | 0.0006 ppm | 0.0000 ppm | -0.0005 ppm |
| Recovery Percentage 1 | 2.951 % | 0.584 % | 1.395 % | 0.552 % | 3.496 % | -6.300 % | -0.843 % |
| Concentration RSD | 82.7 % | 110.2 % | 37.8 % | 14.0 % | 38.7 % | 131.4 % | 195.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0016 ppm | -0.0007 ppm | 0.0002 ppm | 0.0005 ppm | 0.0006 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0017 ppm | 0.0011 ppm | 0.0000 ppm | 0.0002 ppm | 0.0005 ppm | 0.0019 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0019 ppm | -0.0013 ppm | 0.0002 ppm | 0.0005 ppm | -0.0010 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0012 ppm | 0.0019 ppm | -0.0008 ppm | 0.0001 ppm | 0.0005 ppm | 0.0010 ppm | 0.0003 ppm |
| Recovery Percentage 1 | 9.497 % | 0.323 % | -1.361 % | 1.818 % | 4.772 % | 3.193 % | 3.062 % |
| Concentration RSD | 97.2 % | 30.0 % | 95.4 % | 26.3 % | 2.8 % | 236.1 % | 13.5 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 99.7234 % | 98.8670 % | 102.3007 % | 102.6283 % | 98.2452 % | 103.8224 % |
| Concentration per Run 1 | 0.0003 ppm | 99.9203 % | 98.0309 % | 103.0518 % | 102.9391 % | 98.7954 % | 102.9306 % |
| Concentration per Run 2 | 0.0005 ppm | 99.9881 % | 99.4209 % | 101.3251 % | 102.7962 % | 97.1002 % | 104.3487 % |
| Concentration per Run 3 | 0.0005 ppm | 99.2618 % | 99.1492 % | 102.5251 % | 102.1497 % | 98.8401 % | 104.1880 % |
| Recovery Percentage 1 | 8.467 % | | | | | | |
| Concentration RSD | 29.5 % | 0.4 % | 0.7 % | 0.9 % | 0.4 % | 1.0 % | 0.7 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2039342-1 WG2039342
Analysis started at: 3/12/2025 10:05:31
Comments <Comment>
Rack: 1
Vial: 10

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0045 ppm | -0.0032 ppm | 0.0017 ppm | 0.0001 ppm | 0.0000 ppm | 0.0074 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0022 ppm | -0.0046 ppm | 0.0019 ppm | 0.0002 ppm | 0.0000 ppm | 0.0053 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0095 ppm | -0.0022 ppm | 0.0015 ppm | 0.0001 ppm | 0.0000 ppm | 0.0087 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0017 ppm | -0.0027 ppm | 0.0017 ppm | 0.0000 ppm | 0.0000 ppm | 0.0084 ppm |
| Concentration RSD | 45.2 % | 97.8 % | 39.8 % | 11.6 % | 83.2 % | 46.6 % | 25.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0005 ppm | 0.0003 ppm | 0.0007 ppm | 0.0108 ppm | 0.0352 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0006 ppm | 0.0004 ppm | 0.0007 ppm | 0.0111 ppm | 0.0245 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0003 ppm | 0.0002 ppm | 0.0007 ppm | 0.0113 ppm | 0.0313 ppm | -0.0005 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0007 ppm | 0.0002 ppm | 0.0007 ppm | 0.0100 ppm | 0.0499 ppm | 0.0002 ppm |
| Concentration RSD | 37.6 % | 37.5 % | 27.2 % | 1.1 % | 6.6 % | 37.5 % | 520.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0002 ppm | 0.0008 ppm | 0.0122 ppm | -0.0001 ppm | -0.0009 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0015 ppm | 0.0002 ppm | 0.0010 ppm | 0.0077 ppm | -0.0001 ppm | -0.0001 ppm | 0.0018 ppm |
| Concentration per Run 2 | 0.0014 ppm | 0.0001 ppm | 0.0009 ppm | 0.0147 ppm | -0.0005 ppm | -0.0029 ppm | -0.0014 ppm |
| Concentration per Run 3 | -0.0010 ppm | 0.0001 ppm | 0.0005 ppm | 0.0141 ppm | 0.0003 ppm | 0.0003 ppm | -0.0008 ppm |
| Concentration RSD | 221.7 % | 31.7 % | 35.9 % | 32.0 % | 441.7 % | 193.3 % | 1,002.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0114 ppm | 0.0053 ppm | 0.0000 ppm | 0.0002 ppm | -0.0105 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0110 ppm | 0.0034 ppm | 0.0000 ppm | 0.0003 ppm | -0.0111 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0005 ppm | 0.0113 ppm | 0.0047 ppm | 0.0000 ppm | 0.0003 ppm | -0.0097 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0011 ppm | 0.0119 ppm | 0.0078 ppm | 0.0000 ppm | 0.0001 ppm | -0.0107 ppm | 0.0001 ppm |
| Concentration RSD | 316.3 % | 3.9 % | 43.1 % | 227.1 % | 43.5 % | 6.8 % | 423.9 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 99.5149 % | 99.1997 % | 102.0216 % | 101.7831 % | 96.0474 % | 103.1198 % |
| Concentration per Run 1 | 0.0016 ppm | 100.3471 % | 99.1088 % | 101.3266 % | 102.7827 % | 95.3412 % | 102.9947 % |
| Concentration per Run 2 | 0.0015 ppm | 99.0088 % | 99.4373 % | 101.9641 % | 101.2646 % | 96.1338 % | 103.4169 % |
| Concentration per Run 3 | 0.0015 ppm | 99.1888 % | 99.0530 % | 102.7740 % | 101.3019 % | 96.6672 % | 102.9477 % |
| Concentration RSD | 2.0 % | 0.7 % | 0.2 % | 0.7 % | 0.9 % | 0.7 % | 0.3 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2038690-2 WG2038690
Analysis started at: 3/12/2025 10:10:44
Comments <Comment>
Rack: 1
Vial: 9

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0501 ppm | 2.1113 ppm | 0.1120 ppm | 0.9737 ppm | 1.9989 ppm | 0.0502 ppm | 9.3752 ppm |
| Concentration per Run 1 | 0.0502 ppm | 2.0926 ppm | 0.1120 ppm | 0.9736 ppm | 1.9612 ppm | 0.0498 ppm | 9.3133 ppm |
| Concentration per Run 2 | 0.0507 ppm | 2.1245 ppm | 0.1122 ppm | 0.9722 ppm | 2.0148 ppm | 0.0505 ppm | 9.4121 ppm |
| Concentration per Run 3 | 0.0495 ppm | 2.1169 ppm | 0.1116 ppm | 0.9753 ppm | 2.0207 ppm | 0.0503 ppm | 9.4001 ppm |
| Concentration RSD | 1.3 % | 0.8 % | 0.3 % | 0.2 % | 1.6 % | 0.7 % | 0.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0555 ppm | 0.5007 ppm | 0.1937 ppm | 0.2551 ppm | 1.0115 ppm | 10.2404 ppm | -0.0014 ppm |
| Concentration per Run 1 | 0.0556 ppm | 0.5005 ppm | 0.1924 ppm | 0.2528 ppm | 1.0030 ppm | 10.1401 ppm | -0.0019 ppm |
| Concentration per Run 2 | 0.0555 ppm | 0.5006 ppm | 0.1976 ppm | 0.2593 ppm | 1.0157 ppm | 10.3018 ppm | -0.0013 ppm |
| Concentration per Run 3 | 0.0556 ppm | 0.5011 ppm | 0.1911 ppm | 0.2530 ppm | 1.0159 ppm | 10.2792 ppm | -0.0010 ppm |
| Concentration RSD | 0.1 % | 0.1 % | 1.8 % | 1.5 % | 0.7 % | 0.9 % | 34.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.2299 ppm | 0.5101 ppm | 0.9373 ppm | 10.1869 ppm | 0.4905 ppm | 0.5178 ppm | 0.4752 ppm |
| Concentration per Run 1 | 10.1526 ppm | 0.5084 ppm | 0.9369 ppm | 10.1012 ppm | 0.4911 ppm | 0.5167 ppm | 0.4720 ppm |
| Concentration per Run 2 | 10.4215 ppm | 0.5113 ppm | 0.9381 ppm | 10.2351 ppm | 0.4893 ppm | 0.5184 ppm | 0.4746 ppm |
| Concentration per Run 3 | 10.1158 ppm | 0.5106 ppm | 0.9369 ppm | 10.2245 ppm | 0.4912 ppm | 0.5182 ppm | 0.4791 ppm |
| Concentration RSD | 1.6 % | 0.3 % | 0.1 % | 0.7 % | 0.2 % | 0.2 % | 0.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1100 ppm | 1.0633 ppm | 0.9806 ppm | 0.9790 ppm | 0.9541 ppm | 0.1080 ppm | 0.4822 ppm |
| Concentration per Run 1 | 0.1108 ppm | 1.0635 ppm | 0.9848 ppm | 0.9715 ppm | 0.9465 ppm | 0.1112 ppm | 0.4796 ppm |
| Concentration per Run 2 | 0.1081 ppm | 1.0625 ppm | 0.9766 ppm | 0.9827 ppm | 0.9701 ppm | 0.1055 ppm | 0.4906 ppm |
| Concentration per Run 3 | 0.1110 ppm | 1.0639 ppm | 0.9804 ppm | 0.9827 ppm | 0.9458 ppm | 0.1073 ppm | 0.4765 ppm |
| Concentration RSD | 1.5 % | 0.1 % | 0.4 % | 0.7 % | 1.5 % | 2.7 % | 1.5 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5098 ppm | 100.7596 % | 98.6884 % | 102.8905 % | 103.6622 % | 99.2862 % | 103.1655 % |
| Concentration per Run 1 | 0.5098 ppm | 101.3065 % | 99.5434 % | 102.8085 % | 104.5565 % | 99.2398 % | 104.0112 % |
| Concentration per Run 2 | 0.5097 ppm | 100.1219 % | 97.0340 % | 102.7991 % | 103.0054 % | 99.3358 % | 101.4672 % |
| Concentration per Run 3 | 0.5100 ppm | 100.8503 % | 99.4878 % | 103.0640 % | 103.4246 % | 99.2829 % | 104.0182 % |
| Concentration RSD | 0.0 % | 0.6 % | 1.5 % | 0.1 % | 0.8 % | 0.0 % | 1.4 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2039342-2D2 WG2039342
Analysis started at: 3/12/2025 10:15:45
Comments <Comment>
Rack: 1
Vial: 11

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0544 ppm | 2.3296 ppm | 0.1156 ppm | 1.0388 ppm | 2.2180 ppm | 0.0566 ppm | 10.3101 ppm |
| Concentration per Run 1 | 0.0544 ppm | 2.3150 ppm | 0.1175 ppm | 1.0494 ppm | 2.2198 ppm | 0.0565 ppm | 10.2838 ppm |
| Concentration per Run 2 | 0.0537 ppm | 2.3392 ppm | 0.1160 ppm | 1.0512 ppm | 2.2032 ppm | 0.0568 ppm | 10.3337 ppm |
| Concentration per Run 3 | 0.0550 ppm | 2.3347 ppm | 0.1134 ppm | 1.0159 ppm | 2.2309 ppm | 0.0564 ppm | 10.3129 ppm |
| Concentration RSD | 1.2 % | 0.6 % | 1.8 % | 1.9 % | 0.6 % | 0.3 % | 0.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0589 ppm | 0.5396 ppm | 0.2391 ppm | 0.2790 ppm | 1.8818 ppm | 11.1831 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0598 ppm | 0.5470 ppm | 0.2510 ppm | 0.2785 ppm | 2.2459 ppm | 11.1331 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0597 ppm | 0.5453 ppm | 0.2336 ppm | 0.2762 ppm | 1.8384 ppm | 11.2109 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0574 ppm | 0.5264 ppm | 0.2327 ppm | 0.2824 ppm | 1.5610 ppm | 11.2054 ppm | -0.0002 ppm |
| Concentration RSD | 2.3 % | 2.1 % | 4.3 % | 1.1 % | 18.3 % | 0.4 % | 188.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.9997 ppm | 0.5747 ppm | 1.0004 ppm | 11.1056 ppm | 0.5286 ppm | 0.5463 ppm | 0.5426 ppm |
| Concentration per Run 1 | 10.9346 ppm | 0.5794 ppm | 1.0119 ppm | 11.0494 ppm | 0.5350 ppm | 0.5536 ppm | 0.5488 ppm |
| Concentration per Run 2 | 10.8910 ppm | 0.5752 ppm | 1.0117 ppm | 11.1619 ppm | 0.5343 ppm | 0.5504 ppm | 0.5472 ppm |
| Concentration per Run 3 | 11.1736 ppm | 0.5695 ppm | 0.9775 ppm | 11.1056 ppm | 0.5164 ppm | 0.5348 ppm | 0.5317 ppm |
| Concentration RSD | 1.4 % | 0.9 % | 2.0 % | 0.5 % | 2.0 % | 1.8 % | 1.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1145 ppm | 1.1527 ppm | 1.0464 ppm | 1.0766 ppm | 1.0323 ppm | 0.1139 ppm | 0.5282 ppm |
| Concentration per Run 1 | 0.1175 ppm | 1.1640 ppm | 1.0608 ppm | 1.0702 ppm | 1.0282 ppm | 0.1155 ppm | 0.5252 ppm |
| Concentration per Run 2 | 0.1159 ppm | 1.1658 ppm | 1.0581 ppm | 1.0832 ppm | 1.0224 ppm | 0.1142 ppm | 0.5244 ppm |
| Concentration per Run 3 | 0.1099 ppm | 1.1284 ppm | 1.0202 ppm | 1.0766 ppm | 1.0464 ppm | 0.1121 ppm | 0.5351 ppm |
| Concentration RSD | 3.5 % | 1.8 % | 2.2 % | 0.6 % | 1.2 % | 1.5 % | 1.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5451 ppm | 99.2781 % | 97.6424 % | 102.1670 % | 102.4873 % | 98.0072 % | 102.3571 % |
| Concentration per Run 1 | 0.5531 ppm | 99.5297 % | 98.5865 % | 102.7198 % | 102.9151 % | 98.7899 % | 103.3134 % |
| Concentration per Run 2 | 0.5508 ppm | 99.2290 % | 98.3965 % | 101.3127 % | 102.5681 % | 97.1723 % | 103.1432 % |
| Concentration per Run 3 | 0.5315 ppm | 99.0757 % | 95.9442 % | 102.4684 % | 101.9786 % | 98.0593 % | 100.6147 % |
| Concentration RSD | 2.2 % | 0.2 % | 1.5 % | 0.7 % | 0.5 % | 0.8 % | 1.5 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: L2513681-02D2 WG2039342
Analysis started at: 3/12/2025 10:20:47
Comments <Comment>
Rack: 1
Vial: 17

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 44.6543 ppm | 0.0166 ppm | -0.0015 ppm | 0.2036 ppm | 0.0014 ppm | 6.5849 ppm |
| Concentration per Run 1 | -0.0003 ppm | 44.3150 ppm | 0.0176 ppm | -0.0013 ppm | 0.2020 ppm | 0.0014 ppm | 6.5522 ppm |
| Concentration per Run 2 | -0.0006 ppm | 44.7737 ppm | 0.0176 ppm | -0.0014 ppm | 0.2041 ppm | 0.0014 ppm | 6.5959 ppm |
| Concentration per Run 3 | -0.0001 ppm | 44.8741 ppm | 0.0148 ppm | -0.0017 ppm | 0.2048 ppm | 0.0014 ppm | 6.6066 ppm |
| Concentration RSD | 76.3 % | 0.7 % | 9.8 % | 12.9 % | 0.7 % | 1.6 % | 0.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0198 ppm | 0.0513 ppm | 0.0354 ppm | 40.7447 ppm | 10.9060 ppm | 0.1027 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0208 ppm | 0.0532 ppm | 0.0367 ppm | 40.4646 ppm | 10.8292 ppm | 0.1015 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0194 ppm | 0.0508 ppm | 0.0348 ppm | 40.8319 ppm | 10.9597 ppm | 0.1040 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0194 ppm | 0.0499 ppm | 0.0347 ppm | 40.9376 ppm | 10.9290 ppm | 0.1025 ppm |
| Concentration RSD | 5.2 % | 4.0 % | 3.3 % | 3.1 % | 0.6 % | 0.6 % | 1.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.1388 ppm | 0.5487 ppm | 0.0025 ppm | 1.2946 ppm | 0.0488 ppm | 0.0399 ppm | -0.0014 ppm |
| Concentration per Run 1 | 10.4530 ppm | 0.5450 ppm | 0.0026 ppm | 1.2813 ppm | 0.0498 ppm | 0.0399 ppm | -0.0015 ppm |
| Concentration per Run 2 | 10.0238 ppm | 0.5494 ppm | 0.0022 ppm | 1.2956 ppm | 0.0488 ppm | 0.0402 ppm | -0.0007 ppm |
| Concentration per Run 3 | 9.9397 ppm | 0.5518 ppm | 0.0026 ppm | 1.3070 ppm | 0.0478 ppm | 0.0397 ppm | -0.0021 ppm |
| Concentration RSD | 2.7 % | 0.6 % | 8.3 % | 1.0 % | 2.1 % | 0.7 % | 46.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 24.7158 [SIC 50] | 0.0076 ppm | 0.0300 ppm | 2.3266 ppm | -0.0071 ppm | 0.0673 ppm |
| Concentration per Run 1 | -0.0013 ppm | 25.3812 ppm | 0.0082 ppm | 0.0298 ppm | 2.3996 ppm | -0.0050 ppm | 0.0695 ppm |
| Concentration per Run 2 | -0.0012 ppm | 24.6162 ppm | 0.0075 ppm | 0.0301 ppm | 2.3072 ppm | -0.0093 ppm | 0.0666 ppm |
| Concentration per Run 3 | 0.0007 ppm | 24.1502 ppm | 0.0070 ppm | 0.0302 ppm | 2.2730 ppm | -0.0070 ppm | 0.0659 ppm |
| Concentration RSD | 195.4 % | 2.5 % | 8.0 % | 0.7 % | 2.8 % | 30.4 % | 2.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1574 ppm | 106.3307 % | 104.2996 % | 108.1052 % | 105.3525 % | 97.2713 % | 104.8679 % |
| Concentration per Run 1 | 0.1614 ppm | 106.6877 % | 102.1647 % | 108.1621 % | 105.8910 % | 96.8350 % | 102.6023 % |
| Concentration per Run 2 | 0.1573 ppm | 106.1522 % | 105.4489 % | 108.0999 % | 105.2110 % | 97.6026 % | 106.0224 % |
| Concentration per Run 3 | 0.1536 ppm | 106.1522 % | 105.2851 % | 108.0538 % | 104.9555 % | 97.3762 % | 105.9791 % |
| Concentration RSD | 2.5 % | 0.3 % | 1.8 % | 0.1 % | 0.5 % | 0.4 % | 1.9 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: L2513681-03D2 WG2039342
Analysis started at: 3/12/2025 10:25:50
Comments <Comment>
Rack: 1
Vial: 18

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0026 ppm | 28.6970 ppm | 0.0526 ppm | 0.0015 ppm | 0.1423 ppm | 0.0156 ppm | 22.7471 ppm |
| Concentration per Run 1 | -0.0026 ppm | 28.6195 ppm | 0.0522 ppm | 0.0012 ppm | 0.1424 ppm | 0.0160 ppm | 22.7241 ppm |
| Concentration per Run 2 | -0.0025 ppm | 28.8556 ppm | 0.0549 ppm | 0.0019 ppm | 0.1428 ppm | 0.0155 ppm | 22.9161 ppm |
| Concentration per Run 3 | -0.0027 ppm | 28.6160 ppm | 0.0507 ppm | 0.0015 ppm | 0.1417 ppm | 0.0153 ppm | 22.6010 ppm |
| Concentration RSD | 5.3 % | 0.5 % | 4.0 % | 23.1 % | 0.4 % | 2.5 % | 0.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0295 ppm | 0.0212 ppm | 0.0954 ppm | 125.8396 ppm | 10.4919 ppm | 0.2364 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0301 ppm | 0.0216 ppm | 0.0958 ppm | 124.8957 ppm | 10.5032 ppm | 0.2355 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0292 ppm | 0.0210 ppm | 0.0957 ppm | 126.8668 ppm | 10.5381 ppm | 0.2375 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0291 ppm | 0.0211 ppm | 0.0947 ppm | 125.7563 ppm | 10.4343 ppm | 0.2362 ppm |
| Concentration RSD | 15.8 % | 2.0 % | 1.5 % | 0.6 % | 0.8 % | 0.5 % | 0.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 13.9258 ppm | 4.6364 ppm | 0.0034 ppm | 0.9119 ppm | 0.0182 ppm | 0.1602 ppm | -0.0055 ppm |
| Concentration per Run 1 | 14.0425 ppm | 4.6361 ppm | 0.0033 ppm | 0.9070 ppm | 0.0178 ppm | 0.1618 ppm | -0.0052 ppm |
| Concentration per Run 2 | 13.8932 ppm | 4.6628 ppm | 0.0035 ppm | 0.9236 ppm | 0.0178 ppm | 0.1599 ppm | -0.0068 ppm |
| Concentration per Run 3 | 13.8417 ppm | 4.6104 ppm | 0.0034 ppm | 0.9051 ppm | 0.0190 ppm | 0.1590 ppm | -0.0043 ppm |
| Concentration RSD | 0.7 % | 0.6 % | 3.2 % | 1.1 % | 4.0 % | 0.9 % | 23.0 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 10.2111 ppm | 0.0098 ppm | 0.1419 ppm | 1.3096 ppm | -0.0047 ppm | 0.0607 ppm |
| Concentration per Run 1 | 0.0004 ppm | 10.4728 ppm | 0.0106 ppm | 0.1419 ppm | 1.3226 ppm | -0.0066 ppm | 0.0609 ppm |
| Concentration per Run 2 | 0.0003 ppm | 10.1797 ppm | 0.0104 ppm | 0.1425 ppm | 1.3051 ppm | -0.0028 ppm | 0.0610 ppm |
| Concentration per Run 3 | -0.0002 ppm | 9.9807 ppm | 0.0085 ppm | 0.1413 ppm | 1.3010 ppm | -0.0046 ppm | 0.0602 ppm |
| Concentration RSD | 205.8 % | 2.4 % | 11.4 % | 0.4 % | 0.9 % | 41.2 % | 0.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6378 ppm | 123.0056 % | 120.6129 % | 124.3482 % | 105.8322 % | 97.5199 % | 105.6775 % |
| Concentration per Run 1 | 0.6471 ppm | 123.3743 % | 120.5667 % | 124.9935 % | 106.2863 % | 97.4462 % | 105.5424 % |
| Concentration per Run 2 | 0.6371 ppm | 122.7620 % | 120.7956 % | 124.3875 % | 105.2686 % | 97.7903 % | 105.7464 % |
| Concentration per Run 3 | 0.6293 ppm | 122.8804 % | 120.4762 % | 123.6636 % | 105.9418 % | 97.3231 % | 105.7435 % |
| Concentration RSD | 1.4 % | 0.3 % | 0.1 % | 0.5 % | 0.5 % | 0.2 % | 0.1 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: L2513681-01D2 WG2039342
Analysis started at: 3/12/2025 10:31:01
Comments <Comment>
Rack: 1
Vial: 12

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 74.7615 ppm | 0.0668 ppm | 0.0018 ppm | 0.3511 ppm | 0.0031 ppm | 21.7138 ppm |
| Concentration per Run 1 | -0.0007 ppm | 73.8696 ppm | 0.0700 ppm | 0.0018 ppm | 0.3471 ppm | 0.0030 ppm | 21.4724 ppm |
| Concentration per Run 2 | -0.0008 ppm | 75.1027 ppm | 0.0634 ppm | 0.0017 ppm | 0.3528 ppm | 0.0031 ppm | 21.8009 ppm |
| Concentration per Run 3 | -0.0008 ppm | 75.3121 ppm | 0.0670 ppm | 0.0017 ppm | 0.3533 ppm | 0.0033 ppm | 21.8681 ppm |
| Concentration RSD | 11.2 % | 1.0 % | 4.9 % | 2.5 % | 1.0 % | 3.7 % | 1.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0366 ppm | 0.1183 ppm | 0.0806 ppm | 73.0279 ppm | 13.4345 ppm | 0.1356 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0375 ppm | 0.1180 ppm | 0.0806 ppm | 72.2389 ppm | 13.2516 ppm | 0.1336 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0366 ppm | 0.1183 ppm | 0.0805 ppm | 73.2893 ppm | 13.5100 ppm | 0.1361 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0357 ppm | 0.1186 ppm | 0.0807 ppm | 73.5555 ppm | 13.5420 ppm | 0.1371 ppm |
| Concentration RSD | 21.2 % | 2.5 % | 0.3 % | 0.1 % | 1.0 % | 1.2 % | 1.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 19.7034 ppm | 1.0797 ppm | 0.0031 ppm | 2.0713 ppm | 0.0909 ppm | 0.0836 ppm | -0.0036 ppm |
| Concentration per Run 1 | 19.6825 ppm | 1.0680 ppm | 0.0035 ppm | 2.0536 ppm | 0.0923 ppm | 0.0853 ppm | -0.0028 ppm |
| Concentration per Run 2 | 19.6518 ppm | 1.0842 ppm | 0.0032 ppm | 2.0741 ppm | 0.0915 ppm | 0.0831 ppm | -0.0042 ppm |
| Concentration per Run 3 | 19.7759 ppm | 1.0868 ppm | 0.0025 ppm | 2.0862 ppm | 0.0889 ppm | 0.0824 ppm | -0.0039 ppm |
| Concentration RSD | 0.3 % | 0.9 % | 16.5 % | 0.8 % | 1.9 % | 1.8 % | 20.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 16.6318 ppm | 0.0103 ppm | 0.0807 ppm | 3.7345 ppm | -0.0074 ppm | 0.1319 ppm |
| Concentration per Run 1 | 0.0029 ppm | 17.0736 ppm | 0.0094 ppm | 0.0797 ppm | 3.7336 ppm | -0.0061 ppm | 0.1321 ppm |
| Concentration per Run 2 | 0.0013 ppm | 16.6001 ppm | 0.0105 ppm | 0.0811 ppm | 3.7334 ppm | -0.0080 ppm | 0.1314 ppm |
| Concentration per Run 3 | 0.0007 ppm | 16.2216 ppm | 0.0109 ppm | 0.0813 ppm | 3.7366 ppm | -0.0080 ppm | 0.1323 ppm |
| Concentration RSD | 68.6 % | 2.6 % | 7.9 % | 1.1 % | 0.0 % | 14.5 % | 0.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2699 ppm | 112.2489 % | 109.5564 % | 113.5857 % | 106.6531 % | 97.7775 % | 105.7366 % |
| Concentration per Run 1 | 0.2758 ppm | 112.6192 % | 109.8036 % | 112.9705 % | 107.4231 % | 96.5006 % | 105.8887 % |
| Concentration per Run 2 | 0.2695 ppm | 112.3358 % | 109.8746 % | 113.7981 % | 106.6124 % | 98.1530 % | 106.0349 % |
| Concentration per Run 3 | 0.2643 ppm | 111.7919 % | 108.9909 % | 113.9884 % | 105.9238 % | 98.6789 % | 105.2861 % |
| Concentration RSD | 2.1 % | 0.4 % | 0.4 % | 0.5 % | 0.7 % | 1.2 % | 0.4 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2039342-3D2 WG2039342
Analysis started at: 3/12/2025 10:36:06
Comments <Comment>
Rack: 1
Vial: 13

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0484 ppm | 71.5083 ppm | 0.1543 ppm | 0.9662 ppm | 2.3241 ppm | 0.0545 ppm | 17.8831 ppm |
| Concentration per Run 1 | 0.0484 ppm | 71.2701 ppm | 0.1556 ppm | 0.9816 ppm | 2.3165 ppm | 0.0544 ppm | 17.9073 ppm |
| Concentration per Run 2 | 0.0485 ppm | 71.7031 ppm | 0.1559 ppm | 0.9673 ppm | 2.3271 ppm | 0.0546 ppm | 17.9561 ppm |
| Concentration per Run 3 | 0.0483 ppm | 71.5517 ppm | 0.1513 ppm | 0.9496 ppm | 2.3286 ppm | 0.0544 ppm | 17.7858 ppm |
| Concentration RSD | 0.2 % | 0.3 % | 1.7 % | 1.7 % | 0.3 % | 0.2 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0549 ppm | 0.5433 ppm | 0.2869 ppm | 0.3379 ppm | 67.7495 ppm | 22.9021 ppm | 0.1289 ppm |
| Concentration per Run 1 | 0.0559 ppm | 0.5539 ppm | 0.2883 ppm | 0.3396 ppm | 67.6642 ppm | 22.8061 ppm | 0.1282 ppm |
| Concentration per Run 2 | 0.0550 ppm | 0.5443 ppm | 0.2864 ppm | 0.3392 ppm | 67.9523 ppm | 22.9968 ppm | 0.1294 ppm |
| Concentration per Run 3 | 0.0537 ppm | 0.5317 ppm | 0.2859 ppm | 0.3347 ppm | 67.6319 ppm | 22.9034 ppm | 0.1292 ppm |
| Concentration RSD | 2.0 % | 2.0 % | 0.4 % | 0.8 % | 0.3 % | 0.4 % | 0.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 26.6171 ppm | 1.3487 ppm | 0.9275 ppm | 12.2525 ppm | 0.5724 ppm | 0.5835 ppm | 0.3287 ppm |
| Concentration per Run 1 | 26.7793 ppm | 1.3474 ppm | 0.9449 ppm | 12.1991 ppm | 0.5811 ppm | 0.5960 ppm | 0.3327 ppm |
| Concentration per Run 2 | 26.5546 ppm | 1.3526 ppm | 0.9294 ppm | 12.2989 ppm | 0.5738 ppm | 0.5836 ppm | 0.3285 ppm |
| Concentration per Run 3 | 26.5172 ppm | 1.3461 ppm | 0.9083 ppm | 12.2595 ppm | 0.5623 ppm | 0.5709 ppm | 0.3249 ppm |
| Concentration RSD | 0.5 % | 0.3 % | 2.0 % | 0.4 % | 1.7 % | 2.2 % | 1.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1077 ppm | 15.7566 ppm | 0.9613 ppm | 1.0195 ppm | 4.7475 ppm | 0.1083 ppm | 0.6065 ppm |
| Concentration per Run 1 | 0.1103 ppm | 16.0683 ppm | 0.9806 ppm | 1.0154 ppm | 4.7710 ppm | 0.1112 ppm | 0.6108 ppm |
| Concentration per Run 2 | 0.1068 ppm | 15.7536 ppm | 0.9573 ppm | 1.0217 ppm | 4.7546 ppm | 0.1080 ppm | 0.6055 ppm |
| Concentration per Run 3 | 0.1059 ppm | 15.4479 ppm | 0.9460 ppm | 1.0215 ppm | 4.7169 ppm | 0.1058 ppm | 0.6031 ppm |
| Concentration RSD | 2.2 % | 2.0 % | 1.8 % | 0.4 % | 0.6 % | 2.5 % | 0.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7295 ppm | 111.4613 % | 108.8779 % | 113.6990 % | 106.0111 % | 99.3687 % | 105.3014 % |
| Concentration per Run 1 | 0.7450 ppm | 111.0558 % | 108.9033 % | 113.9477 % | 105.8653 % | 99.2840 % | 105.2894 % |
| Concentration per Run 2 | 0.7315 ppm | 111.2723 % | 108.9445 % | 114.0016 % | 105.7458 % | 99.3244 % | 105.2015 % |
| Concentration per Run 3 | 0.7119 ppm | 112.0556 % | 108.7859 % | 113.1476 % | 106.4222 % | 99.4976 % | 105.4135 % |
| Concentration RSD | 2.3 % | 0.5 % | 0.1 % | 0.4 % | 0.3 % | 0.1 % | 0.1 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2039342-4D2 WG2039342
Analysis started at: 3/12/2025 10:41:04
Comments <Comment>
Rack: 1
Vial: 14

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | 78.2062 ppm | 0.0647 ppm | 0.0009 ppm | 0.3757 ppm | 0.0032 ppm | 39.8658 ppm |
| Concentration per Run 1 | -0.0007 ppm | 77.0508 ppm | 0.0633 ppm | 0.0011 ppm | 0.3700 ppm | 0.0032 ppm | 39.4314 ppm |
| Concentration per Run 2 | -0.0009 ppm | 79.3793 ppm | 0.0689 ppm | 0.0008 ppm | 0.3815 ppm | 0.0033 ppm | 40.4487 ppm |
| Concentration per Run 3 | -0.0010 ppm | 78.1885 ppm | 0.0619 ppm | 0.0009 ppm | 0.3756 ppm | 0.0032 ppm | 39.7172 ppm |
| Concentration RSD | 17.4 % | 1.5 % | 5.8 % | 19.7 % | 1.5 % | 2.1 % | 1.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 0.0364 ppm | 0.1270 ppm | 0.0879 ppm | 75.9318 ppm | 14.8794 ppm | 0.1364 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0371 ppm | 0.1281 ppm | 0.0888 ppm | 74.9784 ppm | 14.6865 ppm | 0.1341 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0361 ppm | 0.1269 ppm | 0.0876 ppm | 77.0648 ppm | 15.0807 ppm | 0.1389 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0360 ppm | 0.1259 ppm | 0.0872 ppm | 75.7522 ppm | 14.8711 ppm | 0.1363 ppm |
| Concentration RSD | 18.2 % | 1.7 % | 0.9 % | 0.9 % | 1.4 % | 1.3 % | 1.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 21.1949 ppm | 1.0191 ppm | 0.0031 ppm | 2.1140 ppm | 0.0946 ppm | 0.0703 ppm | -0.0041 ppm |
| Concentration per Run 1 | 21.3679 ppm | 1.0061 ppm | 0.0033 ppm | 2.0840 ppm | 0.0954 ppm | 0.0721 ppm | -0.0048 ppm |
| Concentration per Run 2 | 21.2078 ppm | 1.0351 ppm | 0.0030 ppm | 2.1452 ppm | 0.0954 ppm | 0.0705 ppm | -0.0021 ppm |
| Concentration per Run 3 | 21.0089 ppm | 1.0161 ppm | 0.0030 ppm | 2.1128 ppm | 0.0931 ppm | 0.0682 ppm | -0.0054 ppm |
| Concentration RSD | 0.8 % | 1.4 % | 5.6 % | 1.4 % | 1.4 % | 2.8 % | 42.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 19.1218 ppm | 0.0106 ppm | 0.0875 ppm | 4.0044 ppm | -0.0069 ppm | 0.1377 ppm |
| Concentration per Run 1 | 0.0039 ppm | 19.5489 ppm | 0.0097 ppm | 0.0864 ppm | 4.0413 ppm | -0.0061 ppm | 0.1386 ppm |
| Concentration per Run 2 | -0.0011 ppm | 19.0527 ppm | 0.0107 ppm | 0.0888 ppm | 4.0012 ppm | -0.0069 ppm | 0.1380 ppm |
| Concentration per Run 3 | -0.0011 ppm | 18.7637 ppm | 0.0114 ppm | 0.0874 ppm | 3.9707 ppm | -0.0078 ppm | 0.1365 ppm |
| Concentration RSD | 504.2 % | 2.1 % | 8.4 % | 1.4 % | 0.9 % | 12.2 % | 0.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2812 ppm | 113.2505 % | 110.2043 % | 114.3073 % | 106.6282 % | 97.1991 % | 105.6167 % |
| Concentration per Run 1 | 0.2861 ppm | 114.3228 % | 110.0526 % | 114.2438 % | 107.8480 % | 97.0785 % | 105.2644 % |
| Concentration per Run 2 | 0.2812 ppm | 112.2338 % | 109.9949 % | 114.4255 % | 105.5336 % | 97.3616 % | 105.5412 % |
| Concentration per Run 3 | 0.2763 ppm | 113.1948 % | 110.5655 % | 114.2525 % | 106.5029 % | 97.1571 % | 106.0445 % |
| Concentration RSD | 1.7 % | 0.9 % | 0.3 % | 0.1 % | 1.1 % | 0.2 % | 0.4 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2039342-5D2 WG2039342
Analysis started at: 3/12/2025 10:46:05
Comments <Comment>
Rack: 1
Vial: 15

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0349 ppm | 71.4772 ppm | 0.1821 ppm | 0.9788 ppm | 2.1716 ppm | 0.0502 ppm | 29.0760 ppm |
| Concentration per Run 1 | 0.0345 ppm | 71.1705 ppm | 0.1849 ppm | 0.9863 ppm | 2.1555 ppm | 0.0501 ppm | 29.1054 ppm |
| Concentration per Run 2 | 0.0354 ppm | 71.5601 ppm | 0.1809 ppm | 0.9749 ppm | 2.1683 ppm | 0.0503 ppm | 29.0841 ppm |
| Concentration per Run 3 | 0.0348 ppm | 71.7009 ppm | 0.1805 ppm | 0.9754 ppm | 2.1910 ppm | 0.0503 ppm | 29.0383 ppm |
| Concentration RSD | 1.4 % | 0.4 % | 1.3 % | 0.7 % | 0.8 % | 0.2 % | 0.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0542 ppm | 0.5326 ppm | 0.2869 ppm | 0.3193 ppm | 68.7504 ppm | 22.4330 ppm | 0.1266 ppm |
| Concentration per Run 1 | 0.0548 ppm | 0.5372 ppm | 0.2861 ppm | 0.3176 ppm | 68.6762 ppm | 22.3536 ppm | 0.1259 ppm |
| Concentration per Run 2 | 0.0538 ppm | 0.5305 ppm | 0.2902 ppm | 0.3236 ppm | 68.8234 ppm | 22.4822 ppm | 0.1266 ppm |
| Concentration per Run 3 | 0.0539 ppm | 0.5302 ppm | 0.2843 ppm | 0.3167 ppm | 68.7515 ppm | 22.4632 ppm | 0.1271 ppm |
| Concentration RSD | 0.9 % | 0.7 % | 1.1 % | 1.2 % | 0.1 % | 0.3 % | 0.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 27.9378 ppm | 1.4620 ppm | 0.9325 ppm | 11.5603 ppm | 0.5694 ppm | 0.6114 ppm | 0.4856 ppm |
| Concentration per Run 1 | 27.7498 ppm | 1.4606 ppm | 0.9418 ppm | 11.5101 ppm | 0.5741 ppm | 0.6151 ppm | 0.4890 ppm |
| Concentration per Run 2 | 28.2877 ppm | 1.4630 ppm | 0.9280 ppm | 11.5775 ppm | 0.5667 ppm | 0.6067 ppm | 0.4817 ppm |
| Concentration per Run 3 | 27.7758 ppm | 1.4624 ppm | 0.9278 ppm | 11.5932 ppm | 0.5675 ppm | 0.6122 ppm | 0.4861 ppm |
| Concentration RSD | 1.1 % | 0.1 % | 0.9 % | 0.4 % | 0.7 % | 0.7 % | 0.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1182 ppm | 16.4880 ppm | 1.0019 ppm | 1.0118 ppm | 4.3681 ppm | 0.1197 ppm | 0.5705 ppm |
| Concentration per Run 1 | 0.1204 ppm | 16.6327 ppm | 1.0105 ppm | 1.0076 ppm | 4.3412 ppm | 0.1191 ppm | 0.5667 ppm |
| Concentration per Run 2 | 0.1153 ppm | 16.4036 ppm | 0.9967 ppm | 1.0127 ppm | 4.4217 ppm | 0.1215 ppm | 0.5783 ppm |
| Concentration per Run 3 | 0.1191 ppm | 16.4278 ppm | 0.9983 ppm | 1.0150 ppm | 4.3414 ppm | 0.1184 ppm | 0.5665 ppm |
| Concentration RSD | 2.2 % | 0.8 % | 0.8 % | 0.4 % | 1.1 % | 1.4 % | 1.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7364 ppm | 111.2474 % | 107.9171 % | 112.6738 % | 106.6273 % | 98.6707 % | 105.1875 % |
| Concentration per Run 1 | 0.7447 ppm | 111.1588 % | 108.2930 % | 111.4486 % | 106.5014 % | 97.9377 % | 105.6548 % |
| Concentration per Run 2 | 0.7325 ppm | 111.3077 % | 106.8534 % | 113.2307 % | 106.6246 % | 99.0987 % | 104.0314 % |
| Concentration per Run 3 | 0.7319 ppm | 111.2757 % | 108.6051 % | 113.3420 % | 106.7560 % | 98.9756 % | 105.8763 % |
| Concentration RSD | 1.0 % | 0.1 % | 0.9 % | 0.9 % | 0.1 % | 0.6 % | 1.0 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2039342-6D10 WG2039342
Analysis started at: 3/12/2025 10:51:03
Comments <Comment>
Rack: 1
Vial: 16

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 14.5179 ppm | 0.0139 ppm | 0.0016 ppm | 0.0689 ppm | 0.0006 ppm | 4.3470 ppm |
| Concentration per Run 1 | 0.0001 ppm | 14.4742 ppm | 0.0160 ppm | 0.0017 ppm | 0.0685 ppm | 0.0006 ppm | 4.3332 ppm |
| Concentration per Run 2 | -0.0002 ppm | 14.4908 ppm | 0.0122 ppm | 0.0019 ppm | 0.0688 ppm | 0.0006 ppm | 4.3275 ppm |
| Concentration per Run 3 | -0.0002 ppm | 14.5887 ppm | 0.0134 ppm | 0.0012 ppm | 0.0694 ppm | 0.0007 ppm | 4.3804 ppm |
| Concentration RSD | 250.3 % | 0.4 % | 14.0 % | 23.7 % | 0.7 % | 1.2 % | 0.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0073 ppm | 0.0234 ppm | 0.0161 ppm | 14.6607 ppm | 2.6457 ppm | 0.0266 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0075 ppm | 0.0235 ppm | 0.0162 ppm | 14.6021 ppm | 2.6272 ppm | 0.0264 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0072 ppm | 0.0234 ppm | 0.0161 ppm | 14.6263 ppm | 2.6505 ppm | 0.0267 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0074 ppm | 0.0233 ppm | 0.0159 ppm | 14.7537 ppm | 2.6594 ppm | 0.0266 ppm |
| Concentration RSD | 129.7 % | 2.3 % | 0.4 % | 0.8 % | 0.6 % | 0.6 % | 0.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.9472 ppm | 0.2168 ppm | 0.0016 ppm | 0.4072 ppm | 0.0185 ppm | 0.0160 ppm | -0.0016 ppm |
| Concentration per Run 1 | 3.9683 ppm | 0.2161 ppm | 0.0018 ppm | 0.4072 ppm | 0.0181 ppm | 0.0149 ppm | -0.0027 ppm |
| Concentration per Run 2 | 3.9420 ppm | 0.2167 ppm | 0.0017 ppm | 0.4083 ppm | 0.0189 ppm | 0.0163 ppm | -0.0021 ppm |
| Concentration per Run 3 | 3.9313 ppm | 0.2175 ppm | 0.0014 ppm | 0.4059 ppm | 0.0186 ppm | 0.0168 ppm | 0.0000 ppm |
| Concentration RSD | 0.5 % | 0.3 % | 11.1 % | 0.3 % | 2.2 % | 6.0 % | 87.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 2.9178 ppm | 0.0025 ppm | 0.0162 ppm | 0.7216 ppm | -0.0006 ppm | 0.0263 ppm |
| Concentration per Run 1 | 0.0007 ppm | 2.9493 ppm | 0.0026 ppm | 0.0161 ppm | 0.7239 ppm | -0.0016 ppm | 0.0261 ppm |
| Concentration per Run 2 | -0.0010 ppm | 2.8938 ppm | 0.0033 ppm | 0.0161 ppm | 0.7233 ppm | 0.0008 ppm | 0.0264 ppm |
| Concentration per Run 3 | 0.0003 ppm | 2.9103 ppm | 0.0016 ppm | 0.0163 ppm | 0.7178 ppm | -0.0010 ppm | 0.0263 ppm |
| Concentration RSD | 4,966.4 % | 1.0 % | 34.9 % | 0.5 % | 0.5 % | 219.2 % | 0.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0546 ppm | 104.2857 % | 103.5053 % | 106.4008 % | 106.5313 % | 97.9024 % | 108.0020 % |
| Concentration per Run 1 | 0.0546 ppm | 104.3189 % | 103.3648 % | 106.2241 % | 106.5037 % | 97.8800 % | 107.8009 % |
| Concentration per Run 2 | 0.0546 ppm | 104.6192 % | 103.3360 % | 106.4953 % | 107.0810 % | 98.0056 % | 107.9086 % |
| Concentration per Run 3 | 0.0546 ppm | 103.9190 % | 103.8152 % | 106.4829 % | 106.0092 % | 97.8217 % | 108.2965 % |
| Concentration RSD | 0.0 % | 0.3 % | 0.3 % | 0.1 % | 0.5 % | 0.1 % | 0.2 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: CCV
Analysis started at: 3/12/2025 10:56:09
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4605 ppm | 0.4971 ppm | 0.4800 ppm | 0.4852 ppm | 0.4654 ppm | 0.4745 ppm | 0.4648 ppm |
| Concentration per Run 1 | 0.4622 ppm | 0.4919 ppm | 0.4846 ppm | 0.4906 ppm | 0.4606 ppm | 0.4689 ppm | 0.4652 ppm |
| Concentration per Run 2 | 0.4602 ppm | 0.4938 ppm | 0.4784 ppm | 0.4835 ppm | 0.4676 ppm | 0.4769 ppm | 0.4621 ppm |
| Concentration per Run 3 | 0.4593 ppm | 0.5056 ppm | 0.4769 ppm | 0.4814 ppm | 0.4681 ppm | 0.4776 ppm | 0.4670 ppm |
| Recovery Percentage 1 | 92.107 % | 99.424 % | 95.990 % | 97.030 % | 93.084 % | 94.892 % | 92.956 % |
| Concentration RSD | 0.3 % | 1.5 % | 0.9 % | 1.0 % | 0.9 % | 1.0 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5159 ppm | 0.5023 ppm | 0.4757 ppm | 0.4635 ppm | 0.4709 ppm | 4.8778 ppm | 0.4583 ppm |
| Concentration per Run 1 | 0.5215 ppm | 0.5071 ppm | 0.4776 ppm | 0.4644 ppm | 0.4680 ppm | 4.8227 ppm | 0.4552 ppm |
| Concentration per Run 2 | 0.5156 ppm | 0.5014 ppm | 0.4747 ppm | 0.4630 ppm | 0.4725 ppm | 4.9199 ppm | 0.4599 ppm |
| Concentration per Run 3 | 0.5107 ppm | 0.4985 ppm | 0.4749 ppm | 0.4631 ppm | 0.4722 ppm | 4.8909 ppm | 0.4598 ppm |
| Recovery Percentage 1 | 103.182 % | 100.463 % | 95.149 % | 92.697 % | 94.178 % | 97.557 % | 91.662 % |
| Concentration RSD | 1.1 % | 0.9 % | 0.3 % | 0.2 % | 0.5 % | 1.0 % | 0.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4845 ppm | 0.4685 ppm | 0.4642 ppm | 9.3125 ppm | 0.4834 ppm | 0.4804 ppm | 0.4962 ppm |
| Concentration per Run 1 | 0.4851 ppm | 0.4636 ppm | 0.4684 ppm | 9.2165 ppm | 0.4885 ppm | 0.4862 ppm | 0.5003 ppm |
| Concentration per Run 2 | 0.4832 ppm | 0.4714 ppm | 0.4629 ppm | 9.3579 ppm | 0.4827 ppm | 0.4801 ppm | 0.4955 ppm |
| Concentration per Run 3 | 0.4851 ppm | 0.4704 ppm | 0.4615 ppm | 9.3631 ppm | 0.4789 ppm | 0.4749 ppm | 0.4929 ppm |
| Recovery Percentage 1 | 96.893 % | 93.692 % | 92.847 % | 93.125 % | 96.674 % | 96.083 % | 99.250 % |
| Concentration RSD | 0.2 % | 0.9 % | 0.8 % | 0.9 % | 1.0 % | 1.2 % | 0.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4770 ppm | 5.5755 ppm | 0.4988 ppm | 0.4738 ppm | 0.4509 ppm | 0.4730 ppm | 0.4506 ppm |
| Concentration per Run 1 | 0.4828 ppm | 5.6431 ppm | 0.5020 ppm | 0.4685 ppm | 0.4518 ppm | 0.4765 ppm | 0.4518 ppm |
| Concentration per Run 2 | 0.4744 ppm | 5.5524 ppm | 0.4982 ppm | 0.4765 ppm | 0.4499 ppm | 0.4713 ppm | 0.4500 ppm |
| Concentration per Run 3 | 0.4739 ppm | 5.5311 ppm | 0.4960 ppm | 0.4762 ppm | 0.4511 ppm | 0.4712 ppm | 0.4500 ppm |
| Recovery Percentage 1 | 95.408 % | 106.201 % | 99.750 % | 94.751 % | 90.188 % | 94.601 % | 90.118 % |
| Concentration RSD | 1.0 % | 1.1 % | 0.6 % | 1.0 % | 0.2 % | 0.6 % | 0.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4981 ppm | 102.0398 % | 100.5522 % | 104.4860 % | 106.8465 % | 98.7394 % | 107.4106 % |
| Concentration per Run 1 | 0.5027 ppm | 102.9732 % | 100.5544 % | 103.4664 % | 107.8427 % | 97.7807 % | 107.3793 % |
| Concentration per Run 2 | 0.4979 ppm | 101.5335 % | 100.6609 % | 104.9938 % | 106.3050 % | 99.0700 % | 107.5077 % |
| Concentration per Run 3 | 0.4938 ppm | 101.6128 % | 100.4413 % | 104.9979 % | 106.3920 % | 99.3674 % | 107.3448 % |
| Recovery Percentage 1 | 99.630 % | | | | | | |
| Concentration RSD | 0.9 % | 0.8 % | 0.1 % | 0.8 % | 0.8 % | 0.9 % | 0.1 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: CCB
Analysis started at: 3/12/2025 11:01:01
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0066 ppm | 0.0015 ppm | 0.0018 ppm | 0.0003 ppm | 0.0003 ppm | -0.0013 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0074 ppm | 0.0020 ppm | 0.0018 ppm | 0.0003 ppm | 0.0003 ppm | -0.0026 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0056 ppm | 0.0034 ppm | 0.0017 ppm | 0.0003 ppm | 0.0003 ppm | -0.0026 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0068 ppm | -0.0010 ppm | 0.0018 ppm | 0.0003 ppm | 0.0003 ppm | 0.0013 ppm |
| Recovery Percentage 1 | 11.742 % | 6.592 % | 29.575 % | 5.917 % | 2.820 % | 5.565 % | -1.307 % |
| Concentration RSD | 49.8 % | 14.2 % | 154.3 % | 5.3 % | 10.7 % | 9.5 % | 171.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0004 ppm | 0.0004 ppm | 0.0009 ppm | 0.0032 ppm | 0.0017 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0006 ppm | 0.0002 ppm | 0.0009 ppm | 0.0036 ppm | 0.0001 ppm | -0.0004 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0006 ppm | 0.0005 ppm | 0.0009 ppm | 0.0037 ppm | 0.0035 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0001 ppm | 0.0004 ppm | 0.0010 ppm | 0.0024 ppm | 0.0016 ppm | 0.0003 ppm |
| Recovery Percentage 1 | 11.276 % | 2.218 % | 3.855 % | 9.126 % | 6.448 % | 0.069 % | -0.216 % |
| Concentration RSD | 34.5 % | 63.0 % | 37.1 % | 7.6 % | 21.9 % | 100.0 % | 1,574.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.0002 ppm | 0.0010 ppm | 0.0056 ppm | 0.0012 ppm | -0.0004 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0002 ppm | 0.0011 ppm | 0.0052 ppm | 0.0017 ppm | -0.0007 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0022 ppm | 0.0000 ppm | 0.0006 ppm | 0.0063 ppm | 0.0011 ppm | 0.0012 ppm | -0.0006 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0003 ppm | 0.0012 ppm | 0.0053 ppm | 0.0007 ppm | -0.0018 ppm | -0.0004 ppm |
| Recovery Percentage 1 | 1.102 % | 1.544 % | 1.983 % | 0.279 % | 4.682 % | -4.190 % | -0.129 % |
| Concentration RSD | 88.1 % | 77.7 % | 30.6 % | 10.7 % | 42.3 % | 360.6 % | 1,109.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 0.0074 ppm | -0.0002 ppm | 0.0003 ppm | 0.0008 ppm | 0.0001 ppm | 0.0005 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0104 ppm | 0.0007 ppm | 0.0003 ppm | 0.0006 ppm | -0.0008 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0068 ppm | -0.0011 ppm | 0.0002 ppm | 0.0009 ppm | 0.0006 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0031 ppm | 0.0049 ppm | -0.0002 ppm | 0.0003 ppm | 0.0008 ppm | 0.0005 ppm | 0.0007 ppm |
| Recovery Percentage 1 | 13.835 % | 1.473 % | -0.377 % | 2.723 % | 7.887 % | 0.413 % | 4.888 % |
| Concentration RSD | 117.5 % | 37.5 % | 464.4 % | 10.2 % | 19.1 % | 961.8 % | 43.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 102.7739 % | 101.4344 % | 104.3861 % | 106.1183 % | 99.5351 % | 106.8442 % |
| Concentration per Run 1 | 0.0005 ppm | 103.7781 % | 101.2334 % | 104.0073 % | 107.5666 % | 99.1742 % | 106.7818 % |
| Concentration per Run 2 | 0.0005 ppm | 102.1219 % | 101.4941 % | 104.5489 % | 105.2867 % | 99.5888 % | 106.8006 % |
| Concentration per Run 3 | 0.0002 ppm | 102.4217 % | 101.5758 % | 104.6020 % | 105.5017 % | 99.8424 % | 106.9502 % |
| Recovery Percentage 1 | 7.473 % | | | | | | |
| Concentration RSD | 46.8 % | 0.9 % | 0.2 % | 0.3 % | 1.2 % | 0.3 % | 0.1 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2039454-1 WG2039454
Analysis started at: 3/12/2025 11:14:32
Comments <Comment>
Rack: 1
Vial: 20

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0075 ppm | -0.0027 ppm | 0.0013 ppm | 0.0000 ppm | 0.0000 ppm | 0.0106 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0073 ppm | -0.0035 ppm | 0.0011 ppm | 0.0000 ppm | 0.0000 ppm | 0.0100 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0072 ppm | -0.0039 ppm | 0.0018 ppm | 0.0001 ppm | 0.0000 ppm | 0.0108 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0080 ppm | -0.0008 ppm | 0.0010 ppm | 0.0001 ppm | 0.0000 ppm | 0.0110 ppm |
| Concentration RSD | 391.5 % | 5.5 % | 62.8 % | 33.0 % | 132.4 % | 30.2 % | 4.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0002 ppm | 0.0003 ppm | 0.0007 ppm | 0.0178 ppm | 0.0159 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0001 ppm | 0.0002 ppm | 0.0007 ppm | 0.0175 ppm | 0.0228 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0004 ppm | 0.0005 ppm | 0.0180 ppm | 0.0037 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0007 ppm | 0.0003 ppm | 0.0008 ppm | 0.0180 ppm | 0.0214 ppm | 0.0003 ppm |
| Concentration RSD | 135.9 % | 175.3 % | 32.9 % | 16.7 % | 1.4 % | 66.6 % | 64.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0035 ppm | 0.0003 ppm | 0.0010 ppm | 0.0066 ppm | 0.0006 ppm | -0.0007 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0026 ppm | 0.0003 ppm | 0.0009 ppm | 0.0080 ppm | 0.0006 ppm | -0.0007 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0042 ppm | 0.0003 ppm | 0.0011 ppm | 0.0069 ppm | 0.0009 ppm | -0.0005 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0038 ppm | 0.0004 ppm | 0.0010 ppm | 0.0050 ppm | 0.0003 ppm | -0.0009 ppm | -0.0011 ppm |
| Concentration RSD | 23.4 % | 26.9 % | 10.1 % | 22.8 % | 52.4 % | 32.0 % | 393.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0115 ppm | 0.0040 ppm | 0.0000 ppm | 0.0004 ppm | -0.0065 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0117 ppm | 0.0038 ppm | 0.0000 ppm | 0.0005 ppm | -0.0055 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0116 ppm | 0.0033 ppm | 0.0000 ppm | 0.0003 ppm | -0.0072 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0113 ppm | 0.0050 ppm | 0.0000 ppm | 0.0004 ppm | -0.0068 ppm | 0.0000 ppm |
| Concentration RSD | 60.6 % | 2.0 % | 21.8 % | 80.6 % | 28.0 % | 13.2 % | 93.9 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0020 ppm | 102.9966 % | 101.8851 % | 103.5167 % | 107.4288 % | 95.7489 % | 108.8279 % |
| Concentration per Run 1 | 0.0020 ppm | 103.2577 % | 102.1312 % | 103.8011 % | 107.6641 % | 95.9998 % | 108.9924 % |
| Concentration per Run 2 | 0.0019 ppm | 103.0997 % | 101.8011 % | 102.9346 % | 107.5806 % | 94.9210 % | 108.7235 % |
| Concentration per Run 3 | 0.0020 ppm | 102.6324 % | 101.7229 % | 103.8145 % | 107.0418 % | 96.3260 % | 108.7678 % |
| Concentration RSD | 2.8 % | 0.3 % | 0.2 % | 0.5 % | 0.3 % | 0.8 % | 0.1 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2039454-2D2 WG2039454
Analysis started at: 3/12/2025 11:19:44
Comments <Comment>
Rack: 1
Vial: 21

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0475 ppm | 1.9907 ppm | 0.1070 ppm | 0.9484 ppm | 1.8776 ppm | 0.0480 ppm | 9.0785 ppm |
| Concentration per Run 1 | 0.0477 ppm | 1.9888 ppm | 0.1070 ppm | 0.9574 ppm | 1.8537 ppm | 0.0479 ppm | 9.0832 ppm |
| Concentration per Run 2 | 0.0473 ppm | 1.9965 ppm | 0.1090 ppm | 0.9478 ppm | 1.8810 ppm | 0.0480 ppm | 9.0598 ppm |
| Concentration per Run 3 | 0.0475 ppm | 1.9869 ppm | 0.1049 ppm | 0.9402 ppm | 1.8982 ppm | 0.0480 ppm | 9.0924 ppm |
| Concentration RSD | 0.4 % | 0.3 % | 1.9 % | 0.9 % | 1.2 % | 0.1 % | 0.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0542 ppm | 0.4954 ppm | 0.1905 ppm | 0.2424 ppm | 1.0874 ppm | 9.6942 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0548 ppm | 0.5012 ppm | 0.1917 ppm | 0.2425 ppm | 1.0984 ppm | 9.6957 ppm | -0.0010 ppm |
| Concentration per Run 2 | 0.0540 ppm | 0.4937 ppm | 0.1901 ppm | 0.2421 ppm | 1.0847 ppm | 9.6937 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0539 ppm | 0.4912 ppm | 0.1899 ppm | 0.2427 ppm | 1.0790 ppm | 9.6931 ppm | -0.0003 ppm |
| Concentration RSD | 0.9 % | 1.0 % | 0.5 % | 0.1 % | 0.9 % | 0.0 % | 132.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.4802 ppm | 0.4778 ppm | 0.9081 ppm | 9.4715 ppm | 0.4811 ppm | 0.5004 ppm | 0.4808 ppm |
| Concentration per Run 1 | 9.4970 ppm | 0.4776 ppm | 0.9168 ppm | 9.4463 ppm | 0.4865 ppm | 0.5060 ppm | 0.4827 ppm |
| Concentration per Run 2 | 9.4403 ppm | 0.4777 ppm | 0.9054 ppm | 9.4945 ppm | 0.4798 ppm | 0.4998 ppm | 0.4780 ppm |
| Concentration per Run 3 | 9.5033 ppm | 0.4780 ppm | 0.9022 ppm | 9.4738 ppm | 0.4772 ppm | 0.4955 ppm | 0.4817 ppm |
| Concentration RSD | 0.4 % | 0.0 % | 0.8 % | 0.3 % | 1.0 % | 1.0 % | 0.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1055 ppm | 1.0581 ppm | 0.9610 ppm | 0.9287 ppm | 0.8874 ppm | 0.1050 ppm | 0.4561 ppm |
| Concentration per Run 1 | 0.1064 ppm | 1.0684 ppm | 0.9737 ppm | 0.9258 ppm | 0.8886 ppm | 0.1084 ppm | 0.4570 ppm |
| Concentration per Run 2 | 0.1058 ppm | 1.0572 ppm | 0.9560 ppm | 0.9313 ppm | 0.8858 ppm | 0.1038 ppm | 0.4559 ppm |
| Concentration per Run 3 | 0.1044 ppm | 1.0486 ppm | 0.9534 ppm | 0.9291 ppm | 0.8877 ppm | 0.1029 ppm | 0.4553 ppm |
| Concentration RSD | 1.0 % | 0.9 % | 1.1 % | 0.3 % | 0.2 % | 2.8 % | 0.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4972 ppm | 101.3825 % | 99.6588 % | 103.9102 % | 106.0953 % | 98.6344 % | 106.1443 % |
| Concentration per Run 1 | 0.5032 ppm | 101.4294 % | 99.4605 % | 102.7563 % | 106.3212 % | 97.8529 % | 105.9671 % |
| Concentration per Run 2 | 0.4950 ppm | 101.6396 % | 99.8903 % | 104.2185 % | 106.3477 % | 98.7646 % | 106.3854 % |
| Concentration per Run 3 | 0.4933 ppm | 101.0786 % | 99.6256 % | 104.7560 % | 105.6169 % | 99.2857 % | 106.0805 % |
| Concentration RSD | 1.1 % | 0.3 % | 0.2 % | 1.0 % | 0.4 % | 0.7 % | 0.2 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: L2513681-04D2 WG2039342
Analysis started at: 3/12/2025 11:24:45
Comments <Comment>
Rack: 1
Vial: 19

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 76.0366 ppm | 0.0374 ppm | 0.0035 ppm | 0.3749 ppm | 0.0033 ppm | 5.7888 ppm |
| Concentration per Run 1 | -0.0003 ppm | 75.2504 ppm | 0.0399 ppm | 0.0037 ppm | 0.3712 ppm | 0.0033 ppm | 5.7632 ppm |
| Concentration per Run 2 | -0.0001 ppm | 76.2917 ppm | 0.0360 ppm | 0.0036 ppm | 0.3766 ppm | 0.0033 ppm | 5.8089 ppm |
| Concentration per Run 3 | -0.0002 ppm | 76.5677 ppm | 0.0364 ppm | 0.0031 ppm | 0.3770 ppm | 0.0034 ppm | 5.7944 ppm |
| Concentration RSD | 57.8 % | 0.9 % | 5.8 % | 8.8 % | 0.9 % | 1.2 % | 0.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0283 ppm | 0.0831 ppm | 0.0518 ppm | 72.4997 ppm | 13.0586 ppm | 0.1271 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0296 ppm | 0.0833 ppm | 0.0519 ppm | 71.8925 ppm | 12.9482 ppm | 0.1261 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0281 ppm | 0.0834 ppm | 0.0517 ppm | 72.7432 ppm | 13.0975 ppm | 0.1274 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0272 ppm | 0.0824 ppm | 0.0518 ppm | 72.8635 ppm | 13.1300 ppm | 0.1279 ppm |
| Concentration RSD | 75.7 % | 4.3 % | 0.7 % | 0.2 % | 0.7 % | 0.7 % | 0.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 14.7395 ppm | 0.7812 ppm | 0.0042 ppm | 1.9097 ppm | 0.0623 ppm | 0.0660 ppm | -0.0020 ppm |
| Concentration per Run 1 | 14.7869 ppm | 0.7747 ppm | 0.0047 ppm | 1.8968 ppm | 0.0643 ppm | 0.0679 ppm | 0.0000 ppm |
| Concentration per Run 2 | 14.7829 ppm | 0.7838 ppm | 0.0041 ppm | 1.9151 ppm | 0.0621 ppm | 0.0654 ppm | -0.0035 ppm |
| Concentration per Run 3 | 14.6487 ppm | 0.7851 ppm | 0.0039 ppm | 1.9173 ppm | 0.0604 ppm | 0.0649 ppm | -0.0026 ppm |
| Concentration RSD | 0.5 % | 0.7 % | 10.1 % | 0.6 % | 3.2 % | 2.4 % | 89.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 14.2048 ppm | 0.0074 ppm | 0.0441 ppm | 2.9990 ppm | -0.0079 ppm | 0.1232 ppm |
| Concentration per Run 1 | 0.0017 ppm | 14.7035 ppm | 0.0077 ppm | 0.0436 ppm | 3.0128 ppm | -0.0082 ppm | 0.1238 ppm |
| Concentration per Run 2 | 0.0015 ppm | 14.2325 ppm | 0.0074 ppm | 0.0443 ppm | 3.0065 ppm | -0.0079 ppm | 0.1238 ppm |
| Concentration per Run 3 | 0.0001 ppm | 13.6784 ppm | 0.0071 ppm | 0.0443 ppm | 2.9778 ppm | -0.0077 ppm | 0.1220 ppm |
| Concentration RSD | 78.3 % | 3.6 % | 4.0 % | 0.9 % | 0.6 % | 3.5 % | 0.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2017 ppm | 109.1433 % | 106.4561 % | 109.1696 % | 108.4472 % | 96.8541 % | 107.6643 % |
| Concentration per Run 1 | 0.2067 ppm | 109.9699 % | 106.4719 % | 109.2296 % | 109.4439 % | 96.6883 % | 107.6694 % |
| Concentration per Run 2 | 0.2008 ppm | 108.9639 % | 106.1508 % | 108.9984 % | 108.1732 % | 96.9577 % | 107.4059 % |
| Concentration per Run 3 | 0.1975 ppm | 108.4960 % | 106.7456 % | 109.2807 % | 107.7244 % | 96.9163 % | 107.9176 % |
| Concentration RSD | 2.3 % | 0.7 % | 0.3 % | 0.1 % | 0.8 % | 0.1 % | 0.2 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: L2513827-02D2 WG2039454
Analysis started at: 3/12/2025 11:29:51
Comments <Comment>
Rack: 1
Vial: 27

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 29.1671 ppm | 0.0159 ppm | 0.0118 ppm | 0.2034 ppm | 0.0030 ppm | 2.9120 ppm |
| Concentration per Run 1 | 0.0001 ppm | 28.7350 ppm | 0.0167 ppm | 0.0114 ppm | 0.2002 ppm | 0.0030 ppm | 2.8786 ppm |
| Concentration per Run 2 | 0.0002 ppm | 29.6280 ppm | 0.0152 ppm | 0.0117 ppm | 0.2067 ppm | 0.0030 ppm | 2.9518 ppm |
| Concentration per Run 3 | 0.0002 ppm | 29.1382 ppm | 0.0159 ppm | 0.0122 ppm | 0.2034 ppm | 0.0029 ppm | 2.9057 ppm |
| Concentration RSD | 61.9 % | 1.5 % | 4.8 % | 3.7 % | 1.6 % | 1.7 % | 1.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0314 ppm | 0.0486 ppm | 0.0889 ppm | 69.7149 ppm | 3.9470 ppm | 0.0351 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0311 ppm | 0.0483 ppm | 0.0883 ppm | 68.5452 ppm | 3.8925 ppm | 0.0342 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0312 ppm | 0.0488 ppm | 0.0893 ppm | 70.8432 ppm | 4.0224 ppm | 0.0354 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0319 ppm | 0.0487 ppm | 0.0890 ppm | 69.7563 ppm | 3.9261 ppm | 0.0356 ppm |
| Concentration RSD | 5.5 % | 1.4 % | 0.6 % | 0.6 % | 1.6 % | 1.7 % | 2.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.9965 ppm | 0.3475 ppm | 0.0017 ppm | 0.1887 ppm | 0.0528 ppm | 0.0690 ppm | -0.0016 ppm |
| Concentration per Run 1 | 5.9740 ppm | 0.3412 ppm | 0.0016 ppm | 0.1847 ppm | 0.0520 ppm | 0.0684 ppm | -0.0011 ppm |
| Concentration per Run 2 | 6.0063 ppm | 0.3539 ppm | 0.0015 ppm | 0.1935 ppm | 0.0530 ppm | 0.0694 ppm | -0.0018 ppm |
| Concentration per Run 3 | 6.0093 ppm | 0.3474 ppm | 0.0018 ppm | 0.1880 ppm | 0.0534 ppm | 0.0693 ppm | -0.0017 ppm |
| Concentration RSD | 0.3 % | 1.8 % | 10.4 % | 2.4 % | 1.4 % | 0.8 % | 24.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 17.5468 ppm | 0.0058 ppm | 0.0189 ppm | 0.7269 ppm | -0.0042 ppm | 0.0722 ppm |
| Concentration per Run 1 | 0.0017 ppm | 17.5028 ppm | 0.0062 ppm | 0.0185 ppm | 0.7453 ppm | -0.0058 ppm | 0.0717 ppm |
| Concentration per Run 2 | -0.0006 ppm | 17.5241 ppm | 0.0057 ppm | 0.0194 ppm | 0.7162 ppm | -0.0050 ppm | 0.0725 ppm |
| Concentration per Run 3 | 0.0017 ppm | 17.6134 ppm | 0.0055 ppm | 0.0187 ppm | 0.7192 ppm | -0.0018 ppm | 0.0722 ppm |
| Concentration RSD | 136.1 % | 0.3 % | 6.7 % | 2.5 % | 2.2 % | 51.1 % | 0.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2837 ppm | 109.5344 % | 108.4425 % | 110.5813 % | 108.9743 % | 98.3574 % | 109.9965 % |
| Concentration per Run 1 | 0.2826 ppm | 110.6606 % | 108.8953 % | 110.9601 % | 110.6129 % | 98.9326 % | 110.4493 % |
| Concentration per Run 2 | 0.2831 ppm | 108.2233 % | 108.1641 % | 110.8431 % | 107.4052 % | 98.5321 % | 109.7916 % |
| Concentration per Run 3 | 0.2853 ppm | 109.7194 % | 108.2682 % | 109.9407 % | 108.9047 % | 97.6074 % | 109.7486 % |
| Concentration RSD | 0.5 % | 1.1 % | 0.4 % | 0.5 % | 1.5 % | 0.7 % | 0.4 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: L2513827-03D2 WG2039454
Analysis started at: 3/12/2025 11:34:55
Comments <Comment>
Rack: 1
Vial: 28

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 91.2820 ppm | 0.0511 ppm | 0.0120 ppm | 0.7921 ppm | 0.0049 ppm | 28.6249 ppm |
| Concentration per Run 1 | -0.0005 ppm | 90.8082 ppm | 0.0512 ppm | 0.0125 ppm | 0.7886 ppm | 0.0049 ppm | 28.4857 ppm |
| Concentration per Run 2 | -0.0007 ppm | 91.6365 ppm | 0.0511 ppm | 0.0115 ppm | 0.7943 ppm | 0.0050 ppm | 28.7784 ppm |
| Concentration per Run 3 | -0.0003 ppm | 91.4013 ppm | 0.0510 ppm | 0.0118 ppm | 0.7932 ppm | 0.0049 ppm | 28.6106 ppm |
| Concentration RSD | 37.2 % | 0.5 % | 0.2 % | 4.3 % | 0.4 % | 0.9 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0810 ppm | 0.0860 ppm | 0.2306 ppm | 150.7002 ppm | 9.3793 ppm | 0.1199 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.0816 ppm | 0.0864 ppm | 0.2308 ppm | 149.3671 ppm | 9.2888 ppm | 0.1188 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0807 ppm | 0.0864 ppm | 0.2309 ppm | 151.1130 ppm | 9.4630 ppm | 0.1201 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0806 ppm | 0.0852 ppm | 0.2302 ppm | 151.6206 ppm | 9.3862 ppm | 0.1208 ppm |
| Concentration RSD | 4.0 % | 0.7 % | 0.8 % | 0.2 % | 0.8 % | 0.9 % | 0.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 24.5560 ppm | 3.8643 ppm | 0.0023 ppm | 0.5306 ppm | 0.1308 ppm | 0.3188 ppm | -0.0072 ppm |
| Concentration per Run 1 | 24.5749 ppm | 3.8529 ppm | 0.0021 ppm | 0.5372 ppm | 0.1313 ppm | 0.3221 ppm | -0.0064 ppm |
| Concentration per Run 2 | 24.5727 ppm | 3.8763 ppm | 0.0025 ppm | 0.5413 ppm | 0.1306 ppm | 0.3184 ppm | -0.0062 ppm |
| Concentration per Run 3 | 24.5203 ppm | 3.8637 ppm | 0.0024 ppm | 0.5134 ppm | 0.1306 ppm | 0.3158 ppm | -0.0090 ppm |
| Concentration RSD | 0.1 % | 0.3 % | 9.4 % | 2.8 % | 0.3 % | 1.0 % | 21.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 38.7990 [SIC 50] | 0.0123 ppm | 0.1072 ppm | 1.2890 ppm | -0.0036 ppm | 0.1444 ppm |
| Concentration per Run 1 | 0.0010 ppm | 41.8346 ppm | 0.0113 ppm | 0.1057 ppm | 1.3170 ppm | -0.0032 ppm | 0.1445 ppm |
| Concentration per Run 2 | 0.0013 ppm | 38.7969 ppm | 0.0122 ppm | 0.1084 ppm | 1.2959 ppm | -0.0040 ppm | 0.1449 ppm |
| Concentration per Run 3 | 0.0014 ppm | 35.7654 ppm | 0.0133 ppm | 0.1077 ppm | 1.2542 ppm | -0.0034 ppm | 0.1439 ppm |
| Concentration RSD | 14.3 % | 7.8 % | 8.1 % | 1.3 % | 2.5 % | 11.6 % | 0.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4800 ppm | 124.8029 % | 121.1566 % | 125.1935 % | 108.9444 % | 97.5021 % | 107.6770 % |
| Concentration per Run 1 | 0.4845 ppm | 125.3406 % | 121.0216 % | 124.8698 % | 109.3383 % | 96.7589 % | 107.6620 % |
| Concentration per Run 2 | 0.4796 ppm | 124.2402 % | 121.3391 % | 125.6025 % | 108.6753 % | 97.6358 % | 107.6477 % |
| Concentration per Run 3 | 0.4760 ppm | 124.8279 % | 121.1091 % | 125.1082 % | 108.8198 % | 98.1116 % | 107.7211 % |
| Concentration RSD | 0.9 % | 0.4 % | 0.1 % | 0.3 % | 0.3 % | 0.7 % | 0.0 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: L2513695-01D2 WG2039454
Analysis started at: 3/12/2025 11:40:02
Comments <Comment>
Rack: 1
Vial: 22

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0015 ppm | 75.9596 ppm | 0.1331 ppm | 0.0027 ppm | 0.4501 ppm | 0.0008 ppm | 16.0901 ppm |
| Concentration per Run 1 | -0.0014 ppm | 75.7031 ppm | 0.1297 ppm | 0.0025 ppm | 0.4481 ppm | 0.0008 ppm | 16.0885 ppm |
| Concentration per Run 2 | -0.0016 ppm | 75.8547 ppm | 0.1360 ppm | 0.0027 ppm | 0.4503 ppm | 0.0008 ppm | 16.0272 ppm |
| Concentration per Run 3 | -0.0015 ppm | 76.3210 ppm | 0.1335 ppm | 0.0028 ppm | 0.4518 ppm | 0.0008 ppm | 16.1546 ppm |
| Concentration RSD | 6.1 % | 0.4 % | 2.4 % | 6.8 % | 0.4 % | 1.2 % | 0.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0632 ppm | 0.2500 ppm | 0.1701 ppm | 110.2288 ppm | 35.1722 ppm | 0.1497 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0629 ppm | 0.2523 ppm | 0.1720 ppm | 109.4550 ppm | 35.0454 ppm | 0.1476 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0644 ppm | 0.2479 ppm | 0.1687 ppm | 109.5270 ppm | 35.1326 ppm | 0.1503 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0623 ppm | 0.2497 ppm | 0.1694 ppm | 111.7043 ppm | 35.3386 ppm | 0.1512 ppm |
| Concentration RSD | 28.7 % | 1.7 % | 0.9 % | 1.0 % | 1.2 % | 0.4 % | 1.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 42.1933 ppm | 2.0421 ppm | 0.0029 ppm | 2.8781 ppm | 0.2400 ppm | 0.0913 ppm | 0.0028 ppm |
| Concentration per Run 1 | 42.7897 ppm | 2.0413 ppm | 0.0031 ppm | 2.8742 ppm | 0.2398 ppm | 0.0921 ppm | 0.0039 ppm |
| Concentration per Run 2 | 41.8100 ppm | 2.0347 ppm | 0.0031 ppm | 2.8782 ppm | 0.2423 ppm | 0.0911 ppm | 0.0021 ppm |
| Concentration per Run 3 | 41.9802 ppm | 2.0503 ppm | 0.0024 ppm | 2.8819 ppm | 0.2380 ppm | 0.0909 ppm | 0.0025 ppm |
| Concentration RSD | 1.2 % | 0.4 % | 13.0 % | 0.1 % | 0.9 % | 0.7 % | 33.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 14.0248 ppm | 0.0100 ppm | 0.0669 ppm | 6.3991 ppm | -0.0033 ppm | 0.2215 ppm |
| Concentration per Run 1 | -0.0012 ppm | 14.3588 ppm | 0.0102 ppm | 0.0666 ppm | 6.4928 ppm | -0.0025 ppm | 0.2245 ppm |
| Concentration per Run 2 | -0.0022 ppm | 14.0976 ppm | 0.0100 ppm | 0.0669 ppm | 6.3582 ppm | -0.0015 ppm | 0.2194 ppm |
| Concentration per Run 3 | 0.0019 ppm | 13.6180 ppm | 0.0099 ppm | 0.0672 ppm | 6.3462 ppm | -0.0060 ppm | 0.2206 ppm |
| Concentration RSD | 451.6 % | 2.7 % | 1.6 % | 0.5 % | 1.3 % | 71.3 % | 1.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4416 ppm | 114.6012 % | 110.5907 % | 115.1767 % | 110.0149 % | 99.3815 % | 108.2280 % |
| Concentration per Run 1 | 0.4413 ppm | 114.7592 % | 109.5679 % | 115.6570 % | 110.0578 % | 99.7897 % | 106.9953 % |
| Concentration per Run 2 | 0.4470 ppm | 115.1755 % | 111.3640 % | 114.1680 % | 110.6092 % | 98.1875 % | 109.0403 % |
| Concentration per Run 3 | 0.4365 ppm | 113.8690 % | 110.8402 % | 115.7052 % | 109.3776 % | 100.1674 % | 108.6484 % |
| Concentration RSD | 1.2 % | 0.6 % | 0.8 % | 0.8 % | 0.6 % | 1.1 % | 1.0 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2039454-3D2 WG2039454
Analysis started at: 3/12/2025 11:45:22
Comments <Comment>
Rack: 1
Vial: 23

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0447 ppm | 91.4614 ppm | 0.1941 ppm | 0.9232 ppm | 2.2838 ppm | 0.0467 ppm | 34.9495 ppm |
| Concentration per Run 1 | 0.0448 ppm | 91.7807 ppm | 0.1943 ppm | 0.9140 ppm | 2.2906 ppm | 0.0468 ppm | 35.1436 ppm |
| Concentration per Run 2 | 0.0447 ppm | 90.8770 ppm | 0.1932 ppm | 0.9177 ppm | 2.2905 ppm | 0.0464 ppm | 34.8001 ppm |
| Concentration per Run 3 | 0.0445 ppm | 91.7264 ppm | 0.1947 ppm | 0.9380 ppm | 2.2704 ppm | 0.0467 ppm | 34.9047 ppm |
| Concentration RSD | 0.3 % | 0.6 % | 0.4 % | 1.4 % | 0.5 % | 0.4 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0522 ppm | 0.5489 ppm | 0.4386 ppm | 0.3947 ppm | 118.9794 ppm | 45.6986 ppm | 0.1562 ppm |
| Concentration per Run 1 | 0.0515 ppm | 0.5446 ppm | 0.4377 ppm | 0.3955 ppm | 119.5464 ppm | 45.8105 ppm | 0.1562 ppm |
| Concentration per Run 2 | 0.0518 ppm | 0.5454 ppm | 0.4401 ppm | 0.3947 ppm | 118.6545 ppm | 45.4184 ppm | 0.1548 ppm |
| Concentration per Run 3 | 0.0532 ppm | 0.5568 ppm | 0.4380 ppm | 0.3938 ppm | 118.7374 ppm | 45.8669 ppm | 0.1578 ppm |
| Concentration RSD | 1.7 % | 1.2 % | 0.3 % | 0.2 % | 0.4 % | 0.5 % | 1.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 54.2218 ppm | 2.2863 ppm | 0.8786 ppm | 13.1565 ppm | 0.6969 ppm | 0.5768 ppm | 0.2471 ppm |
| Concentration per Run 1 | 54.0360 ppm | 2.2992 ppm | 0.8704 ppm | 13.1990 ppm | 0.6902 ppm | 0.5714 ppm | 0.2441 ppm |
| Concentration per Run 2 | 54.5034 ppm | 2.2718 ppm | 0.8717 ppm | 13.0656 ppm | 0.6918 ppm | 0.5744 ppm | 0.2458 ppm |
| Concentration per Run 3 | 54.1258 ppm | 2.2880 ppm | 0.8937 ppm | 13.2047 ppm | 0.7086 ppm | 0.5847 ppm | 0.2513 ppm |
| Concentration RSD | 0.5 % | 0.6 % | 1.5 % | 0.6 % | 1.5 % | 1.2 % | 1.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1048 ppm | 13.6073 ppm | 0.9219 ppm | 1.0154 ppm | 7.9832 ppm | 0.1064 ppm | 0.6503 ppm |
| Concentration per Run 1 | 0.1058 ppm | 14.0714 ppm | 0.9141 ppm | 1.0170 ppm | 7.9910 ppm | 0.1055 ppm | 0.6492 ppm |
| Concentration per Run 2 | 0.1023 ppm | 13.5224 ppm | 0.9137 ppm | 1.0082 ppm | 8.0089 ppm | 0.1061 ppm | 0.6531 ppm |
| Concentration per Run 3 | 0.1063 ppm | 13.2281 ppm | 0.9378 ppm | 1.0210 ppm | 7.9497 ppm | 0.1076 ppm | 0.6487 ppm |
| Concentration RSD | 2.1 % | 3.1 % | 1.5 % | 0.6 % | 0.4 % | 1.0 % | 0.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.8712 ppm | 113.1301 % | 109.2468 % | 113.7226 % | 109.6602 % | 99.9489 % | 107.5107 % |
| Concentration per Run 1 | 0.8626 ppm | 112.6064 % | 109.4195 % | 114.6306 % | 109.0790 % | 100.8925 % | 107.6192 % |
| Concentration per Run 2 | 0.8659 ppm | 113.2421 % | 109.0539 % | 114.3810 % | 109.9157 % | 100.3514 % | 107.2498 % |
| Concentration per Run 3 | 0.8850 ppm | 113.5417 % | 109.2670 % | 112.1561 % | 109.9858 % | 98.6029 % | 107.6631 % |
| Concentration RSD | 1.4 % | 0.4 % | 0.2 % | 1.2 % | 0.5 % | 1.2 % | 0.2 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2039454-4D2 WG2039454
Analysis started at: 3/12/2025 11:50:42
Comments <Comment>
Rack: 1
Vial: 24

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | 85.5519 ppm | 0.1016 ppm | 0.0037 ppm | 0.4931 ppm | 0.0011 ppm | 19.4252 ppm |
| Concentration per Run 1 | -0.0013 ppm | 85.0234 ppm | 0.1052 ppm | 0.0032 ppm | 0.4898 ppm | 0.0011 ppm | 19.3695 ppm |
| Concentration per Run 2 | -0.0012 ppm | 85.8498 ppm | 0.0995 ppm | 0.0036 ppm | 0.4947 ppm | 0.0011 ppm | 19.4362 ppm |
| Concentration per Run 3 | -0.0012 ppm | 85.7824 ppm | 0.1002 ppm | 0.0045 ppm | 0.4947 ppm | 0.0011 ppm | 19.4699 ppm |
| Concentration RSD | 1.1 % | 0.5 % | 3.0 % | 17.6 % | 0.6 % | 3.8 % | 0.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0670 ppm | 0.2699 ppm | 0.1697 ppm | 117.1071 ppm | 37.4904 ppm | 0.1698 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0670 ppm | 0.2691 ppm | 0.1692 ppm | 115.9108 ppm | 37.2921 ppm | 0.1689 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0669 ppm | 0.2712 ppm | 0.1702 ppm | 117.6824 ppm | 37.6136 ppm | 0.1707 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0671 ppm | 0.2694 ppm | 0.1696 ppm | 117.7280 ppm | 37.5654 ppm | 0.1697 ppm |
| Concentration RSD | 17.7 % | 0.2 % | 0.4 % | 0.3 % | 0.9 % | 0.5 % | 0.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 46.5616 ppm | 2.0601 ppm | 0.0037 ppm | 3.4422 ppm | 0.2455 ppm | 0.0933 ppm | -0.0025 ppm |
| Concentration per Run 1 | 46.4944 ppm | 2.0535 ppm | 0.0036 ppm | 3.4148 ppm | 0.2466 ppm | 0.0946 ppm | -0.0027 ppm |
| Concentration per Run 2 | 46.7618 ppm | 2.0628 ppm | 0.0036 ppm | 3.4539 ppm | 0.2460 ppm | 0.0920 ppm | -0.0027 ppm |
| Concentration per Run 3 | 46.4286 ppm | 2.0640 ppm | 0.0038 ppm | 3.4580 ppm | 0.2439 ppm | 0.0933 ppm | -0.0021 ppm |
| Concentration RSD | 0.4 % | 0.3 % | 3.7 % | 0.7 % | 0.6 % | 1.4 % | 14.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0019 ppm | 14.9939 ppm | 0.0090 ppm | 0.0910 ppm | 6.9610 ppm | -0.0051 ppm | 0.2374 ppm |
| Concentration per Run 1 | 0.0026 ppm | 15.1321 ppm | 0.0087 ppm | 0.0905 ppm | 6.9225 ppm | -0.0064 ppm | 0.2376 ppm |
| Concentration per Run 2 | 0.0021 ppm | 14.9367 ppm | 0.0102 ppm | 0.0912 ppm | 6.9959 ppm | -0.0038 ppm | 0.2375 ppm |
| Concentration per Run 3 | 0.0011 ppm | 14.9129 ppm | 0.0082 ppm | 0.0912 ppm | 6.9646 ppm | -0.0052 ppm | 0.2370 ppm |
| Concentration RSD | 41.0 % | 0.8 % | 11.6 % | 0.4 % | 0.5 % | 25.4 % | 0.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4646 ppm | 114.7988 % | 110.7973 % | 115.7178 % | 111.0321 % | 100.0416 % | 109.1048 % |
| Concentration per Run 1 | 0.4657 ppm | 115.4721 % | 111.2405 % | 115.5411 % | 111.6005 % | 99.9764 % | 109.4429 % |
| Concentration per Run 2 | 0.4653 ppm | 114.5997 % | 110.2350 % | 115.4925 % | 110.9013 % | 99.9191 % | 108.6600 % |
| Concentration per Run 3 | 0.4627 ppm | 114.3246 % | 110.9163 % | 116.1199 % | 110.5945 % | 100.2295 % | 109.2115 % |
| Concentration RSD | 0.3 % | 0.5 % | 0.5 % | 0.3 % | 0.5 % | 0.2 % | 0.4 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2039454-5D2 WG2039454
Analysis started at: 3/12/2025 11:56:02
Comments <Comment>
Rack: 1
Vial: 25

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0335 ppm | 75.6294 ppm | 0.2423 ppm | 0.9530 ppm | 2.2351 ppm | 0.0462 ppm | 23.6165 ppm |
| Concentration per Run 1 | 0.0337 ppm | 75.8021 ppm | 0.2421 ppm | 0.9545 ppm | 2.2454 ppm | 0.0463 ppm | 23.6587 ppm |
| Concentration per Run 2 | 0.0335 ppm | 75.4565 ppm | 0.2399 ppm | 0.9451 ppm | 2.2207 ppm | 0.0459 ppm | 23.6112 ppm |
| Concentration per Run 3 | 0.0335 ppm | 75.6294 ppm | 0.2449 ppm | 0.9594 ppm | 2.2392 ppm | 0.0463 ppm | 23.5797 ppm |
| Concentration RSD | 0.4 % | 0.2 % | 1.0 % | 0.8 % | 0.6 % | 0.5 % | 0.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0526 ppm | 0.5426 ppm | 0.4065 ppm | 0.4029 ppm | 106.7921 ppm | 43.6874 ppm | 0.1463 ppm |
| Concentration per Run 1 | 0.0526 ppm | 0.5438 ppm | 0.4058 ppm | 0.4023 ppm | 106.7917 ppm | 43.8226 ppm | 0.1463 ppm |
| Concentration per Run 2 | 0.0524 ppm | 0.5390 ppm | 0.4077 ppm | 0.4028 ppm | 106.7855 ppm | 43.5405 ppm | 0.1459 ppm |
| Concentration per Run 3 | 0.0528 ppm | 0.5450 ppm | 0.4061 ppm | 0.4036 ppm | 106.7991 ppm | 43.6992 ppm | 0.1468 ppm |
| Concentration RSD | 0.4 % | 0.6 % | 0.3 % | 0.2 % | 0.0 % | 0.3 % | 0.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 50.2083 ppm | 2.4130 ppm | 0.8984 ppm | 12.1765 ppm | 0.6963 ppm | 0.6023 ppm | 0.4738 ppm |
| Concentration per Run 1 | 50.1582 ppm | 2.4188 ppm | 0.9001 ppm | 12.2161 ppm | 0.6977 ppm | 0.6039 ppm | 0.4750 ppm |
| Concentration per Run 2 | 50.2784 ppm | 2.4092 ppm | 0.8916 ppm | 12.1523 ppm | 0.6919 ppm | 0.5969 ppm | 0.4699 ppm |
| Concentration per Run 3 | 50.1884 ppm | 2.4111 ppm | 0.9034 ppm | 12.1610 ppm | 0.6993 ppm | 0.6062 ppm | 0.4763 ppm |
| Concentration RSD | 0.1 % | 0.2 % | 0.7 % | 0.3 % | 0.6 % | 0.8 % | 0.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1176 ppm | 14.9559 ppm | 0.9639 ppm | 0.9771 ppm | 7.0555 ppm | 0.1180 ppm | 0.6472 ppm |
| Concentration per Run 1 | 0.1196 ppm | 14.9870 ppm | 0.9621 ppm | 0.9786 ppm | 7.0233 ppm | 0.1208 ppm | 0.6468 ppm |
| Concentration per Run 2 | 0.1170 ppm | 14.8744 ppm | 0.9613 ppm | 0.9746 ppm | 7.0375 ppm | 0.1146 ppm | 0.6480 ppm |
| Concentration per Run 3 | 0.1162 ppm | 15.0064 ppm | 0.9682 ppm | 0.9782 ppm | 7.1056 ppm | 0.1186 ppm | 0.6467 ppm |
| Concentration RSD | 1.5 % | 0.5 % | 0.4 % | 0.2 % | 0.6 % | 2.7 % | 0.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.8783 ppm | 114.2453 % | 110.4271 % | 116.2851 % | 110.3512 % | 101.7809 % | 108.1078 % |
| Concentration per Run 1 | 0.8795 ppm | 114.2043 % | 110.6451 % | 116.2039 % | 110.4092 % | 101.5959 % | 108.3492 % |
| Concentration per Run 2 | 0.8748 ppm | 114.2021 % | 110.3495 % | 116.8950 % | 110.3822 % | 102.4703 % | 108.0496 % |
| Concentration per Run 3 | 0.8806 ppm | 114.3296 % | 110.2867 % | 115.7563 % | 110.2623 % | 101.2765 % | 107.9247 % |
| Concentration RSD | 0.3 % | 0.1 % | 0.2 % | 0.5 % | 0.1 % | 0.6 % | 0.2 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2039454-6D10 WG2039454
Analysis started at: 3/12/2025 12:01:18
Comments <Comment>
Rack: 1
Vial: 26

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 15.3932 ppm | 0.0262 ppm | 0.0018 ppm | 0.0928 ppm | 0.0002 ppm | 3.5671 ppm |
| Concentration per Run 1 | -0.0004 ppm | 15.2402 ppm | 0.0256 ppm | 0.0020 ppm | 0.0918 ppm | 0.0002 ppm | 3.5563 ppm |
| Concentration per Run 2 | -0.0003 ppm | 15.4832 ppm | 0.0262 ppm | 0.0018 ppm | 0.0935 ppm | 0.0003 ppm | 3.5816 ppm |
| Concentration per Run 3 | -0.0002 ppm | 15.4562 ppm | 0.0266 ppm | 0.0017 ppm | 0.0931 ppm | 0.0002 ppm | 3.5634 ppm |
| Concentration RSD | 24.5 % | 0.9 % | 1.9 % | 9.4 % | 0.9 % | 15.8 % | 0.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0126 ppm | 0.0566 ppm | 0.0349 ppm | 23.4947 ppm | 7.1904 ppm | 0.0305 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0129 ppm | 0.0566 ppm | 0.0346 ppm | 23.2854 ppm | 7.1224 ppm | 0.0304 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0125 ppm | 0.0564 ppm | 0.0349 ppm | 23.6497 ppm | 7.2246 ppm | 0.0306 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0124 ppm | 0.0567 ppm | 0.0354 ppm | 23.5489 ppm | 7.2244 ppm | 0.0303 ppm |
| Concentration RSD | 56.6 % | 2.0 % | 0.3 % | 1.3 % | 0.8 % | 0.8 % | 0.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.7848 ppm | 0.4261 ppm | 0.0018 ppm | 0.6021 ppm | 0.0485 ppm | 0.0190 ppm | 0.0019 ppm |
| Concentration per Run 1 | 8.7217 ppm | 0.4226 ppm | 0.0021 ppm | 0.5957 ppm | 0.0480 ppm | 0.0173 ppm | 0.0029 ppm |
| Concentration per Run 2 | 8.7298 ppm | 0.4284 ppm | 0.0017 ppm | 0.6029 ppm | 0.0487 ppm | 0.0194 ppm | 0.0020 ppm |
| Concentration per Run 3 | 8.9029 ppm | 0.4272 ppm | 0.0017 ppm | 0.6076 ppm | 0.0490 ppm | 0.0202 ppm | 0.0008 ppm |
| Concentration RSD | 1.2 % | 0.7 % | 11.7 % | 1.0 % | 1.1 % | 8.0 % | 55.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 3.0427 ppm | 0.0010 ppm | 0.0140 ppm | 1.3270 ppm | 0.0006 ppm | 0.0460 ppm |
| Concentration per Run 1 | 0.0010 ppm | 3.0924 ppm | 0.0011 ppm | 0.0140 ppm | 1.3186 ppm | -0.0004 ppm | 0.0457 ppm |
| Concentration per Run 2 | 0.0002 ppm | 3.0728 ppm | 0.0006 ppm | 0.0140 ppm | 1.3172 ppm | 0.0009 ppm | 0.0459 ppm |
| Concentration per Run 3 | -0.0004 ppm | 2.9629 ppm | 0.0013 ppm | 0.0140 ppm | 1.3453 ppm | 0.0014 ppm | 0.0466 ppm |
| Concentration RSD | 273.5 % | 2.3 % | 38.0 % | 0.3 % | 1.2 % | 146.0 % | 1.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0917 ppm | 106.2505 % | 103.7791 % | 108.4156 % | 108.8352 % | 99.3113 % | 108.6172 % |
| Concentration per Run 1 | 0.0918 ppm | 106.8255 % | 104.4098 % | 108.5345 % | 109.6720 % | 99.6124 % | 109.3083 % |
| Concentration per Run 2 | 0.0921 ppm | 105.7114 % | 104.3673 % | 108.4931 % | 108.1322 % | 99.0444 % | 109.3235 % |
| Concentration per Run 3 | 0.0911 ppm | 106.2147 % | 102.5603 % | 108.2193 % | 108.7014 % | 99.2771 % | 107.2197 % |
| Concentration RSD | 0.6 % | 0.5 % | 1.0 % | 0.2 % | 0.7 % | 0.3 % | 1.1 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: CCV
Analysis started at: 3/12/2025 12:06:22
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4565 ppm | 0.4950 ppm | 0.4796 ppm | 0.4853 ppm | 0.4625 ppm | 0.4681 ppm | 0.4581 ppm |
| Concentration per Run 1 | 0.4571 ppm | 0.4871 ppm | 0.4911 ppm | 0.4968 ppm | 0.4569 ppm | 0.4619 ppm | 0.4539 ppm |
| Concentration per Run 2 | 0.4557 ppm | 0.4995 ppm | 0.4723 ppm | 0.4788 ppm | 0.4676 ppm | 0.4730 ppm | 0.4632 ppm |
| Concentration per Run 3 | 0.4566 ppm | 0.4984 ppm | 0.4754 ppm | 0.4804 ppm | 0.4631 ppm | 0.4695 ppm | 0.4571 ppm |
| Recovery Percentage 1 | 91.294 % | 98.999 % | 95.923 % | 97.065 % | 92.507 % | 93.629 % | 91.613 % |
| Concentration RSD | 0.2 % | 1.4 % | 2.1 % | 2.0 % | 1.2 % | 1.2 % | 1.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5145 ppm | 0.5023 ppm | 0.4717 ppm | 0.4597 ppm | 0.4668 ppm | 4.8629 ppm | 0.4580 ppm |
| Concentration per Run 1 | 0.5275 ppm | 0.5160 ppm | 0.4732 ppm | 0.4599 ppm | 0.4611 ppm | 4.8019 ppm | 0.4519 ppm |
| Concentration per Run 2 | 0.5079 ppm | 0.4947 ppm | 0.4690 ppm | 0.4589 ppm | 0.4718 ppm | 4.9158 ppm | 0.4635 ppm |
| Concentration per Run 3 | 0.5080 ppm | 0.4961 ppm | 0.4728 ppm | 0.4602 ppm | 0.4674 ppm | 4.8709 ppm | 0.4587 ppm |
| Recovery Percentage 1 | 102.892 % | 100.454 % | 94.330 % | 91.938 % | 93.354 % | 97.257 % | 91.609 % |
| Concentration RSD | 2.2 % | 2.4 % | 0.5 % | 0.1 % | 1.2 % | 1.2 % | 1.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4767 ppm | 0.4609 ppm | 0.4655 ppm | 9.2375 ppm | 0.4840 ppm | 0.4816 ppm | 0.4983 ppm |
| Concentration per Run 1 | 0.4757 ppm | 0.4556 ppm | 0.4774 ppm | 9.1134 ppm | 0.4957 ppm | 0.4923 ppm | 0.5105 ppm |
| Concentration per Run 2 | 0.4739 ppm | 0.4652 ppm | 0.4595 ppm | 9.3376 ppm | 0.4768 ppm | 0.4750 ppm | 0.4913 ppm |
| Concentration per Run 3 | 0.4807 ppm | 0.4620 ppm | 0.4596 ppm | 9.2614 ppm | 0.4794 ppm | 0.4776 ppm | 0.4931 ppm |
| Recovery Percentage 1 | 95.347 % | 92.187 % | 93.095 % | 92.375 % | 96.794 % | 96.329 % | 99.658 % |
| Concentration RSD | 0.7 % | 1.1 % | 2.2 % | 1.2 % | 2.1 % | 1.9 % | 2.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4777 ppm | 5.5805 ppm | 0.4966 ppm | 0.4717 ppm | 0.4471 ppm | 0.4748 ppm | 0.4484 ppm |
| Concentration per Run 1 | 0.4888 ppm | 5.7265 ppm | 0.5100 ppm | 0.4657 ppm | 0.4470 ppm | 0.4858 ppm | 0.4491 ppm |
| Concentration per Run 2 | 0.4684 ppm | 5.4988 ppm | 0.4880 ppm | 0.4769 ppm | 0.4459 ppm | 0.4698 ppm | 0.4470 ppm |
| Concentration per Run 3 | 0.4758 ppm | 5.5161 ppm | 0.4920 ppm | 0.4726 ppm | 0.4484 ppm | 0.4688 ppm | 0.4492 ppm |
| Recovery Percentage 1 | 95.532 % | 106.295 % | 99.326 % | 94.348 % | 89.416 % | 94.960 % | 89.684 % |
| Concentration RSD | 2.2 % | 2.3 % | 2.4 % | 1.2 % | 0.3 % | 2.0 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4976 ppm | 103.1401 % | 101.3073 % | 104.9649 % | 108.2062 % | 98.6774 % | 108.4578 % |
| Concentration per Run 1 | 0.5099 ppm | 104.3000 % | 101.1756 % | 103.0014 % | 109.7149 % | 96.4655 % | 108.3252 % |
| Concentration per Run 2 | 0.4915 ppm | 102.5625 % | 101.5488 % | 106.1250 % | 107.3387 % | 99.9536 % | 108.7297 % |
| Concentration per Run 3 | 0.4913 ppm | 102.5578 % | 101.1975 % | 105.7685 % | 107.5649 % | 99.6132 % | 108.3186 % |
| Recovery Percentage 1 | 99.515 % | | | | | | |
| Concentration RSD | 2.1 % | 1.0 % | 0.2 % | 1.6 % | 1.2 % | 1.9 % | 0.2 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: CCB
Analysis started at: 3/12/2025 12:11:14
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0055 ppm | -0.0007 ppm | 0.0013 ppm | 0.0003 ppm | 0.0003 ppm | 0.0033 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0020 ppm | -0.0004 ppm | 0.0013 ppm | 0.0003 ppm | 0.0003 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0087 ppm | -0.0008 ppm | 0.0007 ppm | 0.0003 ppm | 0.0003 ppm | 0.0046 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0057 ppm | -0.0009 ppm | 0.0019 ppm | 0.0004 ppm | 0.0003 ppm | 0.0049 ppm |
| Recovery Percentage 1 | 10.176 % | 5.473 % | -14.608 % | 4.338 % | 3.388 % | 6.446 % | 3.277 % |
| Concentration RSD | 18.7 % | 61.7 % | 35.8 % | 44.7 % | 25.1 % | 4.7 % | 78.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0004 ppm | 0.0004 ppm | 0.0009 ppm | 0.0064 ppm | 0.0173 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0004 ppm | 0.0002 ppm | 0.0007 ppm | 0.0066 ppm | 0.0082 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0004 ppm | 0.0007 ppm | 0.0010 ppm | 0.0064 ppm | 0.0213 ppm | -0.0010 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0004 ppm | 0.0004 ppm | 0.0011 ppm | 0.0060 ppm | 0.0223 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 11.397 % | 1.932 % | 4.248 % | 9.107 % | 12.704 % | 0.692 % | -4.064 % |
| Concentration RSD | 20.0 % | 6.3 % | 60.3 % | 18.8 % | 5.2 % | 45.4 % | 126.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | 0.0002 ppm | 0.0009 ppm | 0.0053 ppm | 0.0012 ppm | -0.0001 ppm | -0.0005 ppm |
| Concentration per Run 1 | 0.0022 ppm | 0.0001 ppm | 0.0011 ppm | 0.0067 ppm | 0.0015 ppm | 0.0009 ppm | -0.0007 ppm |
| Concentration per Run 2 | 0.0025 ppm | 0.0004 ppm | 0.0009 ppm | 0.0042 ppm | 0.0011 ppm | -0.0005 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0020 ppm | 0.0002 ppm | 0.0008 ppm | 0.0049 ppm | 0.0011 ppm | -0.0005 ppm | -0.0011 ppm |
| Recovery Percentage 1 | 2.235 % | 2.300 % | 1.843 % | 0.263 % | 4.925 % | -0.557 % | -1.054 % |
| Concentration RSD | 10.3 % | 47.7 % | 17.4 % | 24.8 % | 17.6 % | 1,424.1 % | 132.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 0.0041 ppm | 0.0007 ppm | 0.0003 ppm | 0.0010 ppm | 0.0013 ppm | 0.0005 ppm |
| Concentration per Run 1 | -0.0006 ppm | 0.0056 ppm | 0.0006 ppm | 0.0004 ppm | 0.0008 ppm | 0.0008 ppm | 0.0005 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0036 ppm | 0.0004 ppm | 0.0003 ppm | 0.0009 ppm | 0.0025 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0005 ppm | 0.0032 ppm | 0.0010 ppm | 0.0003 ppm | 0.0012 ppm | 0.0006 ppm | 0.0005 ppm |
| Recovery Percentage 1 | -4.972 % | 0.827 % | 1.383 % | 3.221 % | 9.696 % | 6.671 % | 4.708 % |
| Concentration RSD | 20.5 % | 31.3 % | 43.7 % | 12.0 % | 21.5 % | 77.0 % | 4.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 102.8501 % | 101.9615 % | 105.4123 % | 106.4477 % | 100.1760 % | 107.9095 % |
| Concentration per Run 1 | 0.0007 ppm | 103.7229 % | 101.9493 % | 105.6961 % | 107.5772 % | 100.4372 % | 107.9110 % |
| Concentration per Run 2 | 0.0003 ppm | 102.4608 % | 102.0782 % | 104.4268 % | 105.8867 % | 99.1766 % | 108.0516 % |
| Concentration per Run 3 | 0.0004 ppm | 102.3666 % | 101.8571 % | 106.1141 % | 105.8792 % | 100.9141 % | 107.7658 % |
| Recovery Percentage 1 | 10.145 % | | | | | | |
| Concentration RSD | 39.5 % | 0.7 % | 0.1 % | 0.8 % | 0.9 % | 0.9 % | 0.1 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2039523-1 WG2039523
Analysis started at: 3/12/2025 13:29:51
Comments <Comment>
Rack: 1
Vial: 29

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0031 ppm | 0.0002 ppm | 0.0006 ppm | 0.0000 ppm | 0.0000 ppm | 0.0099 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0039 ppm | -0.0006 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm | 0.0112 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0049 ppm | 0.0003 ppm | 0.0006 ppm | -0.0001 ppm | 0.0000 ppm | 0.0106 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0007 ppm | 0.0011 ppm | 0.0007 ppm | 0.0000 ppm | 0.0000 ppm | 0.0079 ppm |
| Concentration RSD | 268.1 % | 69.7 % | 349.6 % | 37.1 % | 552.1 % | 26.4 % | 18.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | -0.0002 ppm | 0.0004 ppm | -0.0001 ppm | -0.0002 ppm | -0.0011 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0002 ppm | -0.0001 ppm | 0.0004 ppm | -0.0002 ppm | 0.0057 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | -0.0003 ppm | 0.0004 ppm | -0.0004 ppm | -0.0028 ppm | -0.0013 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0002 ppm | -0.0001 ppm | 0.0004 ppm | 0.0002 ppm | -0.0037 ppm | -0.0017 ppm |
| Concentration RSD | 849.6 % | 318.4 % | 74.4 % | 2.2 % | 255.9 % | 2,153.9 % | 61.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 0.0000 ppm | 0.0002 ppm | -0.0012 ppm | 0.0005 ppm | -0.0004 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0022 ppm | -0.0002 ppm | 0.0004 ppm | -0.0038 ppm | 0.0005 ppm | -0.0002 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0013 ppm | 0.0001 ppm | 0.0003 ppm | 0.0015 ppm | 0.0004 ppm | -0.0007 ppm | -0.0009 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0000 ppm | 0.0000 ppm | -0.0011 ppm | 0.0006 ppm | -0.0003 ppm | -0.0008 ppm |
| Concentration RSD | 61.4 % | 1,799.0 % | 98.8 % | 229.2 % | 25.1 % | 58.4 % | 177.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0002 ppm | -0.0009 ppm | 0.0000 ppm | 0.0002 ppm | 0.0011 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0001 ppm | -0.0005 ppm | 0.0000 ppm | 0.0003 ppm | 0.0019 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0013 ppm | -0.0011 ppm | 0.0000 ppm | 0.0002 ppm | 0.0009 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0006 ppm | -0.0007 ppm | -0.0011 ppm | 0.0000 ppm | 0.0002 ppm | 0.0004 ppm | -0.0001 ppm |
| Concentration RSD | 147.8 % | 604.8 % | 37.0 % | 507.2 % | 33.4 % | 71.3 % | 635.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 103.7564 % | 104.3879 % | 105.6456 % | 106.3967 % | 100.2461 % | 109.3158 % |
| Concentration per Run 1 | 0.0000 ppm | 102.3485 % | 104.5943 % | 106.3383 % | 105.0827 % | 101.1278 % | 109.5437 % |
| Concentration per Run 2 | 0.0000 ppm | 103.9061 % | 104.3473 % | 105.1372 % | 106.4943 % | 99.8177 % | 109.2636 % |
| Concentration per Run 3 | 0.0000 ppm | 105.0145 % | 104.2220 % | 105.4614 % | 107.6131 % | 99.7929 % | 109.1401 % |
| Concentration RSD | 158.1 % | 1.3 % | 0.2 % | 0.6 % | 1.2 % | 0.8 % | 0.2 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: L2513827-01 WG2039523
Analysis started at: 3/12/2025 13:35:03
Comments <Comment>
Rack: 1
Vial: 36

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0061 ppm | -0.0007 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm | 0.0135 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0095 ppm | -0.0028 ppm | 0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0133 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0038 ppm | 0.0016 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm | 0.0141 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0051 ppm | -0.0010 ppm | 0.0006 ppm | 0.0000 ppm | 0.0000 ppm | 0.0131 ppm |
| Concentration RSD | 108.7 % | 48.9 % | 305.6 % | 86.9 % | 222.9 % | 62.0 % | 4.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0004 ppm | 0.0004 ppm | 0.0042 ppm | -0.0108 ppm | -0.0009 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0005 ppm | 0.0005 ppm | 0.0040 ppm | -0.0252 ppm | -0.0008 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0003 ppm | 0.0002 ppm | 0.0003 ppm | 0.0047 ppm | -0.0068 ppm | -0.0010 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0002 ppm | 0.0004 ppm | 0.0003 ppm | 0.0040 ppm | -0.0004 ppm | -0.0008 ppm |
| Concentration RSD | 79.4 % | 492.1 % | 55.2 % | 36.8 % | 8.6 % | 119.2 % | 13.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0001 ppm | 0.0006 ppm | 0.0083 ppm | 0.0001 ppm | -0.0001 ppm | -0.0006 ppm |
| Concentration per Run 1 | -0.0009 ppm | -0.0002 ppm | 0.0007 ppm | 0.0062 ppm | 0.0001 ppm | 0.0013 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0000 ppm | 0.0004 ppm | 0.0086 ppm | 0.0000 ppm | -0.0001 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0001 ppm | 0.0006 ppm | 0.0102 ppm | 0.0002 ppm | -0.0015 ppm | -0.0032 ppm |
| Concentration RSD | 427.9 % | 112.0 % | 26.9 % | 24.2 % | 85.6 % | 1,664.8 % | 384.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0011 ppm | 0.0017 ppm | -0.0005 ppm | 0.0000 ppm | 0.0004 ppm | -0.0015 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0018 ppm | 0.0018 ppm | -0.0002 ppm | 0.0000 ppm | 0.0007 ppm | 0.0007 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0012 ppm | 0.0023 ppm | -0.0011 ppm | 0.0000 ppm | 0.0004 ppm | -0.0017 ppm | 0.0002 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0011 ppm | -0.0001 ppm | 0.0000 ppm | 0.0001 ppm | -0.0035 ppm | 0.0000 ppm |
| Concentration RSD | 74.3 % | 32.8 % | 113.5 % | 3,016.2 % | 65.9 % | 142.4 % | 162.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 105.1982 % | 104.2157 % | 105.4526 % | 108.9135 % | 98.6588 % | 109.8848 % |
| Concentration per Run 1 | 0.0003 ppm | 105.4601 % | 104.4127 % | 105.5294 % | 109.4354 % | 98.7962 % | 110.0657 % |
| Concentration per Run 2 | -0.0001 ppm | 105.0256 % | 103.8660 % | 105.4132 % | 108.5966 % | 98.3728 % | 109.4334 % |
| Concentration per Run 3 | 0.0002 ppm | 105.1089 % | 104.3684 % | 105.4152 % | 108.7086 % | 98.8074 % | 110.1553 % |
| Concentration RSD | 163.1 % | 0.2 % | 0.3 % | 0.1 % | 0.4 % | 0.3 % | 0.4 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2039523-2 WG2039523
Analysis started at: 3/12/2025 13:40:17
Comments <Comment>
Rack: 1
Vial: 30

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0474 ppm | 1.9636 ppm | 0.1087 ppm | 0.9485 ppm | 1.8667 ppm | 0.0465 ppm | 9.1175 ppm |
| Concentration per Run 1 | 0.0479 ppm | 1.9504 ppm | 0.1066 ppm | 0.9417 ppm | 1.8555 ppm | 0.0462 ppm | 9.0971 ppm |
| Concentration per Run 2 | 0.0473 ppm | 1.9812 ppm | 0.1088 ppm | 0.9476 ppm | 1.8710 ppm | 0.0469 ppm | 9.1793 ppm |
| Concentration per Run 3 | 0.0470 ppm | 1.9591 ppm | 0.1109 ppm | 0.9561 ppm | 1.8736 ppm | 0.0465 ppm | 9.0762 ppm |
| Concentration RSD | 1.0 % | 0.8 % | 2.0 % | 0.8 % | 0.5 % | 0.7 % | 0.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0534 ppm | 0.4836 ppm | 0.1875 ppm | 0.2378 ppm | 0.9380 ppm | 9.8215 ppm | -0.0010 ppm |
| Concentration per Run 1 | 0.0532 ppm | 0.4803 ppm | 0.1884 ppm | 0.2389 ppm | 0.9308 ppm | 9.7313 ppm | -0.0009 ppm |
| Concentration per Run 2 | 0.0531 ppm | 0.4824 ppm | 0.1877 ppm | 0.2372 ppm | 0.9457 ppm | 9.8988 ppm | -0.0012 ppm |
| Concentration per Run 3 | 0.0538 ppm | 0.4880 ppm | 0.1863 ppm | 0.2372 ppm | 0.9375 ppm | 9.8345 ppm | -0.0011 ppm |
| Concentration RSD | 0.7 % | 0.8 % | 0.6 % | 0.4 % | 0.8 % | 0.9 % | 16.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.5419 ppm | 0.4690 ppm | 0.9099 ppm | 9.6421 ppm | 0.4736 ppm | 0.5039 ppm | 0.4740 ppm |
| Concentration per Run 1 | 9.5790 ppm | 0.4663 ppm | 0.9018 ppm | 9.5836 ppm | 0.4704 ppm | 0.5014 ppm | 0.4680 ppm |
| Concentration per Run 2 | 9.5450 ppm | 0.4726 ppm | 0.9092 ppm | 9.7015 ppm | 0.4728 ppm | 0.5030 ppm | 0.4732 ppm |
| Concentration per Run 3 | 9.5016 ppm | 0.4680 ppm | 0.9187 ppm | 9.6413 ppm | 0.4775 ppm | 0.5073 ppm | 0.4807 ppm |
| Concentration RSD | 0.4 % | 0.7 % | 0.9 % | 0.6 % | 0.8 % | 0.6 % | 1.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1084 ppm | 1.1458 ppm | 0.9513 ppm | 0.9347 ppm | 0.8930 ppm | 0.1076 ppm | 0.4708 ppm |
| Concentration per Run 1 | 0.1061 ppm | 1.1389 ppm | 0.9460 ppm | 0.9264 ppm | 0.8968 ppm | 0.1052 ppm | 0.4720 ppm |
| Concentration per Run 2 | 0.1080 ppm | 1.1441 ppm | 0.9493 ppm | 0.9425 ppm | 0.8934 ppm | 0.1091 ppm | 0.4720 ppm |
| Concentration per Run 3 | 0.1110 ppm | 1.1545 ppm | 0.9588 ppm | 0.9353 ppm | 0.8888 ppm | 0.1084 ppm | 0.4684 ppm |
| Concentration RSD | 2.3 % | 0.7 % | 0.7 % | 0.9 % | 0.4 % | 1.9 % | 0.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4870 ppm | 102.9785 % | 101.8577 % | 104.6222 % | 107.2946 % | 100.1099 % | 107.9965 % |
| Concentration per Run 1 | 0.4846 ppm | 103.2313 % | 101.5849 % | 105.3238 % | 107.6964 % | 100.7732 % | 107.6531 % |
| Concentration per Run 2 | 0.4856 ppm | 102.4374 % | 101.7312 % | 104.7217 % | 106.7555 % | 100.1119 % | 107.9605 % |
| Concentration per Run 3 | 0.4909 ppm | 103.2667 % | 102.2571 % | 103.8210 % | 107.4319 % | 99.4445 % | 108.3757 % |
| Concentration RSD | 0.7 % | 0.5 % | 0.3 % | 0.7 % | 0.5 % | 0.7 % | 0.3 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: L2512412-01d100 WG2039523
Analysis started at: 3/12/2025 13:45:40
Comments <Comment>
Rack: 1
Vial: 31

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0031 ppm | 0.0016 ppm | 0.0059 ppm | 0.0005 ppm | 0.0000 ppm | 0.0181 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0035 ppm | 0.0009 ppm | 0.0063 ppm | 0.0005 ppm | 0.0000 ppm | 0.0174 ppm |
| Concentration per Run 2 | 0.0002 ppm | -0.0002 ppm | 0.0033 ppm | 0.0053 ppm | 0.0005 ppm | 0.0000 ppm | 0.0202 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0061 ppm | 0.0005 ppm | 0.0060 ppm | 0.0005 ppm | 0.0000 ppm | 0.0167 ppm |
| Concentration RSD | 59.2 % | 102.1 % | 98.2 % | 8.3 % | 7.3 % | 47.0 % | 10.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0004 ppm | 0.0008 ppm | 0.0011 ppm | 0.9935 ppm | 0.0160 ppm | -0.0008 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0004 ppm | 0.0006 ppm | 0.0011 ppm | 0.9882 ppm | 0.0093 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0005 ppm | 0.0007 ppm | 0.0011 ppm | 0.9991 ppm | 0.0254 ppm | -0.0009 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0003 ppm | 0.0009 ppm | 0.0010 ppm | 0.9932 ppm | 0.0133 ppm | -0.0010 ppm |
| Concentration RSD | 194.1 % | 33.4 % | 15.8 % | 4.2 % | 0.6 % | 52.2 % | 51.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0063 ppm | 0.0065 ppm | 0.0013 ppm | 1.1326 ppm | 0.0010 ppm | 0.0004 ppm | 0.0019 ppm |
| Concentration per Run 1 | 0.0067 ppm | 0.0065 ppm | 0.0018 ppm | 1.1235 ppm | 0.0014 ppm | 0.0030 ppm | 0.0016 ppm |
| Concentration per Run 2 | 0.0061 ppm | 0.0065 ppm | 0.0010 ppm | 1.1348 ppm | 0.0008 ppm | -0.0007 ppm | 0.0024 ppm |
| Concentration per Run 3 | 0.0060 ppm | 0.0064 ppm | 0.0013 ppm | 1.1395 ppm | 0.0008 ppm | -0.0012 ppm | 0.0018 ppm |
| Concentration RSD | 6.6 % | 0.6 % | 29.6 % | 0.7 % | 37.7 % | 625.6 % | 20.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0036 ppm | 0.0029 ppm | 0.0002 ppm | 0.0005 ppm | -0.0023 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0042 ppm | 0.0024 ppm | 0.0002 ppm | 0.0004 ppm | -0.0027 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0029 ppm | 0.0033 ppm | 0.0002 ppm | 0.0006 ppm | -0.0025 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0008 ppm | 0.0038 ppm | 0.0029 ppm | 0.0002 ppm | 0.0006 ppm | -0.0015 ppm | 0.0003 ppm |
| Concentration RSD | 273.9 % | 19.1 % | 15.6 % | 6.2 % | 17.3 % | 27.9 % | 36.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | 106.1916 % | 103.5426 % | 104.3531 % | 110.5922 % | 98.1807 % | 109.5540 % |
| Concentration per Run 1 | 0.0022 ppm | 106.9207 % | 103.4210 % | 102.7707 % | 111.6018 % | 96.6688 % | 109.4511 % |
| Concentration per Run 2 | 0.0022 ppm | 105.8875 % | 103.7135 % | 105.2565 % | 109.9863 % | 99.4054 % | 109.6539 % |
| Concentration per Run 3 | 0.0022 ppm | 105.7665 % | 103.4933 % | 105.0321 % | 110.1886 % | 98.4677 % | 109.5568 % |
| Concentration RSD | 1.4 % | 0.6 % | 0.1 % | 1.3 % | 0.8 % | 1.4 % | 0.1 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2039523-3d100 WG2039523
Analysis started at: 3/12/2025 13:50:52
Comments <Comment>
Rack: 1
Vial: 32

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0236 ppm | 0.0021 ppm | 0.0147 ppm | 0.0177 ppm | 0.0005 ppm | 0.1055 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0247 ppm | 0.0036 ppm | 0.0151 ppm | 0.0175 ppm | 0.0004 ppm | 0.1067 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0241 ppm | 0.0011 ppm | 0.0149 ppm | 0.0177 ppm | 0.0005 ppm | 0.1041 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0220 ppm | 0.0016 ppm | 0.0141 ppm | 0.0178 ppm | 0.0005 ppm | 0.1057 ppm |
| Concentration RSD | 17.2 % | 6.1 % | 60.4 % | 3.5 % | 1.0 % | 6.2 % | 1.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0047 ppm | 0.0024 ppm | 0.0033 ppm | 0.9453 ppm | 0.1017 ppm | -0.0005 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0049 ppm | 0.0022 ppm | 0.0032 ppm | 0.9378 ppm | 0.0929 ppm | -0.0006 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0049 ppm | 0.0025 ppm | 0.0034 ppm | 0.9503 ppm | 0.1030 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0043 ppm | 0.0023 ppm | 0.0033 ppm | 0.9479 ppm | 0.1091 ppm | -0.0006 ppm |
| Concentration RSD | 4.4 % | 7.6 % | 6.5 % | 3.8 % | 0.7 % | 8.1 % | 19.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0953 ppm | 0.0104 ppm | 0.0090 ppm | 1.1633 ppm | 0.0052 ppm | 0.0049 ppm | 0.0042 ppm |
| Concentration per Run 1 | 0.0927 ppm | 0.0102 ppm | 0.0092 ppm | 1.1524 ppm | 0.0054 ppm | 0.0057 ppm | 0.0048 ppm |
| Concentration per Run 2 | 0.0957 ppm | 0.0106 ppm | 0.0090 ppm | 1.1671 ppm | 0.0053 ppm | 0.0047 ppm | 0.0037 ppm |
| Concentration per Run 3 | 0.0974 ppm | 0.0105 ppm | 0.0087 ppm | 1.1704 ppm | 0.0048 ppm | 0.0045 ppm | 0.0043 ppm |
| Concentration RSD | 2.5 % | 1.9 % | 2.7 % | 0.8 % | 5.5 % | 12.9 % | 12.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0142 ppm | 0.0092 ppm | 0.0091 ppm | 0.0087 ppm | -0.0029 ppm | 0.0043 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0144 ppm | 0.0093 ppm | 0.0090 ppm | 0.0087 ppm | -0.0024 ppm | 0.0043 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0138 ppm | 0.0095 ppm | 0.0091 ppm | 0.0087 ppm | -0.0003 ppm | 0.0046 ppm |
| Concentration per Run 3 | 0.0021 ppm | 0.0146 ppm | 0.0088 ppm | 0.0091 ppm | 0.0088 ppm | -0.0060 ppm | 0.0042 ppm |
| Concentration RSD | 112.7 % | 2.7 % | 4.1 % | 0.9 % | 0.5 % | 98.9 % | 4.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0065 ppm | 105.9247 % | 104.2372 % | 104.3240 % | 110.2168 % | 98.2394 % | 110.2511 % |
| Concentration per Run 1 | 0.0067 ppm | 106.8253 % | 105.4473 % | 104.3703 % | 111.5413 % | 98.1663 % | 111.4630 % |
| Concentration per Run 2 | 0.0066 ppm | 105.3739 % | 103.5708 % | 104.3018 % | 109.5522 % | 97.8362 % | 109.6554 % |
| Concentration per Run 3 | 0.0063 ppm | 105.5748 % | 103.6937 % | 104.2997 % | 109.5570 % | 98.7157 % | 109.6349 % |
| Concentration RSD | 3.1 % | 0.7 % | 1.0 % | 0.0 % | 1.0 % | 0.5 % | 1.0 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2039523-4d100 WG2039523
Analysis started at: 3/12/2025 13:56:03
Comments <Comment>
Rack: 1
Vial: 33

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0042 ppm | 0.0026 ppm | 0.0054 ppm | 0.0003 ppm | 0.0000 ppm | 0.0190 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0040 ppm | 0.0036 ppm | 0.0054 ppm | 0.0003 ppm | 0.0001 ppm | 0.0176 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0019 ppm | 0.0026 ppm | 0.0058 ppm | 0.0003 ppm | 0.0000 ppm | 0.0210 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0068 ppm | 0.0015 ppm | 0.0049 ppm | 0.0003 ppm | 0.0000 ppm | 0.0185 ppm |
| Concentration RSD | 380.7 % | 58.3 % | 39.5 % | 8.3 % | 2.8 % | 39.6 % | 9.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | 0.0008 ppm | 0.0012 ppm | 1.0107 ppm | 0.0151 ppm | -0.0013 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0002 ppm | 0.0010 ppm | 0.0013 ppm | 0.9978 ppm | 0.0145 ppm | -0.0014 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0002 ppm | 0.0005 ppm | 0.0011 ppm | 1.0413 ppm | 0.0065 ppm | -0.0011 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0001 ppm | 0.0010 ppm | 0.0012 ppm | 0.9931 ppm | 0.0244 ppm | -0.0014 ppm |
| Concentration RSD | 70.8 % | 196.4 % | 35.9 % | 10.9 % | 2.6 % | 59.1 % | 11.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0044 ppm | 0.0066 ppm | 0.0007 ppm | 1.1579 ppm | 0.0007 ppm | -0.0001 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0051 ppm | 0.0065 ppm | 0.0006 ppm | 1.1387 ppm | 0.0005 ppm | -0.0004 ppm | 0.0010 ppm |
| Concentration per Run 2 | 0.0043 ppm | 0.0067 ppm | 0.0006 ppm | 1.1924 ppm | 0.0007 ppm | 0.0015 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0039 ppm | 0.0066 ppm | 0.0008 ppm | 1.1424 ppm | 0.0009 ppm | -0.0014 ppm | -0.0006 ppm |
| Concentration RSD | 14.0 % | 1.1 % | 18.9 % | 2.6 % | 28.1 % | 1,543.4 % | 401.0 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0033 ppm | 0.0014 ppm | 0.0001 ppm | 0.0002 ppm | -0.0034 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.0038 ppm | 0.0016 ppm | 0.0001 ppm | 0.0001 ppm | -0.0011 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0006 ppm | 0.0030 ppm | 0.0008 ppm | 0.0001 ppm | 0.0003 ppm | -0.0036 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0030 ppm | 0.0020 ppm | 0.0000 ppm | 0.0002 ppm | -0.0055 ppm | 0.0000 ppm |
| Concentration RSD | 790.2 % | 13.6 % | 43.8 % | 41.8 % | 39.8 % | 65.5 % | 6,972.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | 105.9555 % | 102.4684 % | 104.5463 % | 110.3571 % | 98.3696 % | 108.9530 % |
| Concentration per Run 1 | 0.0022 ppm | 107.1796 % | 99.6374 % | 104.2887 % | 112.0123 % | 97.5149 % | 105.8527 % |
| Concentration per Run 2 | 0.0022 ppm | 104.0111 % | 104.0099 % | 104.7669 % | 107.9873 % | 98.6280 % | 110.5969 % |
| Concentration per Run 3 | 0.0021 ppm | 106.6759 % | 103.7580 % | 104.5832 % | 111.0718 % | 98.9661 % | 110.4095 % |
| Concentration RSD | 3.0 % | 1.6 % | 2.4 % | 0.2 % | 1.9 % | 0.8 % | 2.5 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2039523-5d100 WG2039523
Analysis started at: 3/12/2025 14:01:16
Comments <Comment>
Rack: 1
Vial: 34

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0253 ppm | 1.9699 ppm | 0.1209 ppm | 0.9684 ppm | 1.8917 ppm | 0.0475 ppm | 9.0683 ppm |
| Concentration per Run 1 | 0.0326 ppm | 1.9595 ppm | 0.1216 ppm | 0.9701 ppm | 1.8746 ppm | 0.0475 ppm | 9.1107 ppm |
| Concentration per Run 2 | 0.0220 ppm | 1.9912 ppm | 0.1199 ppm | 0.9667 ppm | 1.9082 ppm | 0.0479 ppm | 9.1098 ppm |
| Concentration per Run 3 | 0.0211 ppm | 1.9589 ppm | 0.1213 ppm | 0.9684 ppm | 1.8924 ppm | 0.0472 ppm | 8.9845 ppm |
| Concentration RSD | 25.3 % | 0.9 % | 0.8 % | 0.2 % | 0.9 % | 0.7 % | 0.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0528 ppm | 0.4845 ppm | 0.1880 ppm | 0.2451 ppm | 1.8759 ppm | 10.0437 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0531 ppm | 0.4868 ppm | 0.1872 ppm | 0.2448 ppm | 1.8725 ppm | 10.0113 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0528 ppm | 0.4843 ppm | 0.1873 ppm | 0.2444 ppm | 1.8904 ppm | 10.1328 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0525 ppm | 0.4823 ppm | 0.1895 ppm | 0.2460 ppm | 1.8649 ppm | 9.9869 ppm | -0.0006 ppm |
| Concentration RSD | 0.6 % | 0.5 % | 0.7 % | 0.3 % | 0.7 % | 0.8 % | 697.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.5838 ppm | 0.4737 ppm | 0.9067 ppm | 10.8871 ppm | 0.4713 ppm | 0.5080 ppm | 0.4746 ppm |
| Concentration per Run 1 | 9.5669 ppm | 0.4744 ppm | 0.9085 ppm | 10.8576 ppm | 0.4726 ppm | 0.5116 ppm | 0.4736 ppm |
| Concentration per Run 2 | 9.5600 ppm | 0.4774 ppm | 0.9051 ppm | 10.9973 ppm | 0.4721 ppm | 0.5059 ppm | 0.4772 ppm |
| Concentration per Run 3 | 9.6245 ppm | 0.4693 ppm | 0.9066 ppm | 10.8064 ppm | 0.4692 ppm | 0.5064 ppm | 0.4730 ppm |
| Concentration RSD | 0.4 % | 0.9 % | 0.2 % | 0.9 % | 0.4 % | 0.6 % | 0.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1235 ppm | 0.8016 ppm | 0.9473 ppm | 0.9485 ppm | 0.8945 ppm | 0.1156 ppm | 0.4737 ppm |
| Concentration per Run 1 | 0.1248 ppm | 0.8042 ppm | 0.9561 ppm | 0.9474 ppm | 0.8935 ppm | 0.1169 ppm | 0.4731 ppm |
| Concentration per Run 2 | 0.1245 ppm | 0.8012 ppm | 0.9461 ppm | 0.9567 ppm | 0.8910 ppm | 0.1142 ppm | 0.4725 ppm |
| Concentration per Run 3 | 0.1213 ppm | 0.7994 ppm | 0.9397 ppm | 0.9413 ppm | 0.8988 ppm | 0.1157 ppm | 0.4756 ppm |
| Concentration RSD | 1.6 % | 0.3 % | 0.9 % | 0.8 % | 0.4 % | 1.1 % | 0.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4807 ppm | 105.5777 % | 101.4387 % | 104.0894 % | 110.2536 % | 99.3902 % | 107.8602 % |
| Concentration per Run 1 | 0.4829 ppm | 105.5540 % | 101.8601 % | 104.1192 % | 110.6951 % | 99.8273 % | 108.2726 % |
| Concentration per Run 2 | 0.4805 ppm | 105.0804 % | 101.6093 % | 104.2782 % | 109.6063 % | 99.3289 % | 108.1085 % |
| Concentration per Run 3 | 0.4785 ppm | 106.0988 % | 100.8468 % | 103.8707 % | 110.4594 % | 99.0145 % | 107.1994 % |
| Concentration RSD | 0.5 % | 0.5 % | 0.5 % | 0.2 % | 0.5 % | 0.4 % | 0.5 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2039523-6d500 WG2039523
Analysis started at: 3/12/2025 14:06:17
Comments <Comment>
Rack: 1
Vial: 35

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0039 ppm | -0.0004 ppm | 0.0024 ppm | 0.0004 ppm | 0.0000 ppm | 0.0077 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0053 ppm | 0.0016 ppm | 0.0025 ppm | 0.0004 ppm | 0.0000 ppm | 0.0082 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0048 ppm | -0.0022 ppm | 0.0024 ppm | 0.0003 ppm | 0.0000 ppm | 0.0052 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0016 ppm | -0.0007 ppm | 0.0024 ppm | 0.0003 ppm | 0.0000 ppm | 0.0098 ppm |
| Concentration RSD | 16.7 % | 51.6 % | 467.8 % | 1.3 % | 13.2 % | 23.6 % | 30.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0002 ppm | 0.0001 ppm | 0.0006 ppm | 0.2014 ppm | 0.0116 ppm | -0.0007 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0001 ppm | -0.0001 ppm | 0.0005 ppm | 0.1993 ppm | 0.0087 ppm | -0.0010 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0003 ppm | 0.0002 ppm | 0.0005 ppm | 0.2035 ppm | 0.0183 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0003 ppm | 0.0006 ppm | 0.2014 ppm | 0.0078 ppm | -0.0009 ppm |
| Concentration RSD | 50.5 % | 84.4 % | 161.5 % | 8.4 % | 1.1 % | 49.8 % | 48.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0059 ppm | 0.0014 ppm | 0.0015 ppm | 0.2274 ppm | 0.0008 ppm | 0.0008 ppm | 0.0014 ppm |
| Concentration per Run 1 | 0.0051 ppm | 0.0015 ppm | 0.0015 ppm | 0.2216 ppm | 0.0011 ppm | 0.0003 ppm | 0.0010 ppm |
| Concentration per Run 2 | 0.0071 ppm | 0.0013 ppm | 0.0017 ppm | 0.2269 ppm | 0.0004 ppm | 0.0011 ppm | 0.0015 ppm |
| Concentration per Run 3 | 0.0056 ppm | 0.0014 ppm | 0.0013 ppm | 0.2336 ppm | 0.0007 ppm | 0.0009 ppm | 0.0016 ppm |
| Concentration RSD | 17.5 % | 9.5 % | 12.9 % | 2.6 % | 43.9 % | 58.3 % | 25.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | -0.0004 ppm | 0.0009 ppm | 0.0002 ppm | 0.0007 ppm | -0.0003 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0020 ppm | -0.0004 ppm | 0.0020 ppm | 0.0001 ppm | 0.0007 ppm | -0.0009 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0010 ppm | -0.0006 ppm | 0.0002 ppm | 0.0002 ppm | 0.0007 ppm | 0.0001 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0006 ppm | -0.0002 ppm | 0.0004 ppm | 0.0002 ppm | 0.0007 ppm | -0.0002 ppm | 0.0004 ppm |
| Concentration RSD | 61.7 % | 47.2 % | 113.4 % | 15.5 % | 3.9 % | 164.9 % | 49.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 106.0260 % | 102.6831 % | 105.7359 % | 110.9757 % | 99.1808 % | 109.2884 % |
| Concentration per Run 1 | 0.0011 ppm | 106.7669 % | 104.4866 % | 105.8306 % | 111.9134 % | 99.2523 % | 111.2349 % |
| Concentration per Run 2 | 0.0010 ppm | 105.3471 % | 102.3137 % | 105.5982 % | 110.4028 % | 98.9669 % | 108.7788 % |
| Concentration per Run 3 | 0.0008 ppm | 105.9638 % | 101.2490 % | 105.7788 % | 110.6109 % | 99.3233 % | 107.8516 % |
| Concentration RSD | 13.9 % | 0.7 % | 1.6 % | 0.1 % | 0.7 % | 0.2 % | 1.6 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: CCV
Analysis started at: 3/12/2025 14:11:31
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4535 ppm | 0.4861 ppm | 0.4780 ppm | 0.4803 ppm | 0.4576 ppm | 0.4619 ppm | 0.4524 ppm |
| Concentration per Run 1 | 0.4596 ppm | 0.4765 ppm | 0.4781 ppm | 0.4799 ppm | 0.4514 ppm | 0.4576 ppm | 0.4509 ppm |
| Concentration per Run 2 | 0.4481 ppm | 0.4918 ppm | 0.4842 ppm | 0.4850 ppm | 0.4603 ppm | 0.4639 ppm | 0.4542 ppm |
| Concentration per Run 3 | 0.4529 ppm | 0.4900 ppm | 0.4716 ppm | 0.4759 ppm | 0.4610 ppm | 0.4640 ppm | 0.4519 ppm |
| Recovery Percentage 1 | 90.707 % | 97.220 % | 95.599 % | 96.056 % | 91.516 % | 92.371 % | 90.472 % |
| Concentration RSD | 1.3 % | 1.7 % | 1.3 % | 1.0 % | 1.2 % | 0.8 % | 0.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5082 ppm | 0.4977 ppm | 0.4688 ppm | 0.4575 ppm | 0.4584 ppm | 4.8266 ppm | 0.4536 ppm |
| Concentration per Run 1 | 0.5084 ppm | 0.4977 ppm | 0.4748 ppm | 0.4622 ppm | 0.4554 ppm | 4.7646 ppm | 0.4484 ppm |
| Concentration per Run 2 | 0.5128 ppm | 0.5026 ppm | 0.4652 ppm | 0.4531 ppm | 0.4597 ppm | 4.8487 ppm | 0.4558 ppm |
| Concentration per Run 3 | 0.5034 ppm | 0.4929 ppm | 0.4665 ppm | 0.4571 ppm | 0.4602 ppm | 4.8665 ppm | 0.4565 ppm |
| Recovery Percentage 1 | 101.634 % | 99.547 % | 93.769 % | 91.495 % | 91.685 % | 96.532 % | 90.717 % |
| Concentration RSD | 0.9 % | 1.0 % | 1.1 % | 1.0 % | 0.6 % | 1.1 % | 1.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4717 ppm | 0.4531 ppm | 0.4616 ppm | 9.1493 ppm | 0.4801 ppm | 0.4759 ppm | 0.4931 ppm |
| Concentration per Run 1 | 0.4778 ppm | 0.4505 ppm | 0.4610 ppm | 9.0517 ppm | 0.4803 ppm | 0.4754 ppm | 0.4949 ppm |
| Concentration per Run 2 | 0.4671 ppm | 0.4542 ppm | 0.4661 ppm | 9.1914 ppm | 0.4842 ppm | 0.4809 ppm | 0.4976 ppm |
| Concentration per Run 3 | 0.4701 ppm | 0.4545 ppm | 0.4578 ppm | 9.2048 ppm | 0.4759 ppm | 0.4714 ppm | 0.4870 ppm |
| Recovery Percentage 1 | 94.335 % | 90.612 % | 92.318 % | 91.493 % | 96.026 % | 95.177 % | 98.628 % |
| Concentration RSD | 1.2 % | 0.5 % | 0.9 % | 0.9 % | 0.9 % | 1.0 % | 1.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4768 ppm | 5.5255 ppm | 0.4948 ppm | 0.4667 ppm | 0.4443 ppm | 0.4719 ppm | 0.4718 ppm |
| Concentration per Run 1 | 0.4773 ppm | 5.5273 ppm | 0.4948 ppm | 0.4610 ppm | 0.4495 ppm | 0.4719 ppm | 0.4769 ppm |
| Concentration per Run 2 | 0.4818 ppm | 5.5808 ppm | 0.4984 ppm | 0.4693 ppm | 0.4404 ppm | 0.4771 ppm | 0.4681 ppm |
| Concentration per Run 3 | 0.4714 ppm | 5.4683 ppm | 0.4911 ppm | 0.4699 ppm | 0.4429 ppm | 0.4666 ppm | 0.4703 ppm |
| Recovery Percentage 1 | 95.363 % | 105.247 % | 98.953 % | 93.342 % | 88.856 % | 94.373 % | 94.352 % |
| Concentration RSD | 1.1 % | 1.0 % | 0.7 % | 1.1 % | 1.1 % | 1.1 % | 1.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4919 ppm | 104.1963 % | 102.1232 % | 105.8549 % | 109.2615 % | 99.6090 % | 109.2937 % |
| Concentration per Run 1 | 0.4918 ppm | 104.5023 % | 101.1972 % | 106.1806 % | 109.8617 % | 99.6138 % | 108.3126 % |
| Concentration per Run 2 | 0.4959 ppm | 103.8043 % | 102.8396 % | 105.3231 % | 108.7766 % | 98.7165 % | 110.0550 % |
| Concentration per Run 3 | 0.4879 ppm | 104.2822 % | 102.3328 % | 106.0610 % | 109.1461 % | 100.4967 % | 109.5134 % |
| Recovery Percentage 1 | 98.372 % | | | | | | |
| Concentration RSD | 0.8 % | 0.3 % | 0.8 % | 0.4 % | 0.5 % | 0.9 % | 0.8 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: CCB
Analysis started at: 3/12/2025 14:16:24
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 0.0054 ppm | -0.0009 ppm | 0.0012 ppm | 0.0003 ppm | 0.0003 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0025 ppm | -0.0009 ppm | 0.0012 ppm | 0.0002 ppm | 0.0003 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0076 ppm | -0.0009 ppm | 0.0007 ppm | 0.0003 ppm | 0.0003 ppm | 0.0022 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0060 ppm | -0.0009 ppm | 0.0016 ppm | 0.0003 ppm | 0.0003 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 20.415 % | 5.372 % | -17.569 % | 3.844 % | 2.870 % | 5.181 % | 1.046 % |
| Concentration RSD | 0.9 % | 48.2 % | 2.1 % | 38.4 % | 18.0 % | 1.6 % | 115.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0004 ppm | 0.0003 ppm | 0.0006 ppm | 0.0030 ppm | 0.0043 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0005 ppm | 0.0004 ppm | 0.0006 ppm | 0.0032 ppm | 0.0054 ppm | 0.0010 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0001 ppm | 0.0004 ppm | 0.0007 ppm | 0.0030 ppm | 0.0010 ppm | -0.0006 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0006 ppm | 0.0001 ppm | 0.0006 ppm | 0.0029 ppm | 0.0065 ppm | -0.0001 ppm |
| Recovery Percentage 1 | 7.432 % | 2.012 % | 2.946 % | 6.494 % | 6.023 % | 0.171 % | 0.955 % |
| Concentration RSD | 7.9 % | 63.7 % | 63.3 % | 4.3 % | 5.0 % | 68.4 % | 906.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | 0.0002 ppm | 0.0007 ppm | 0.0033 ppm | 0.0011 ppm | -0.0008 ppm | -0.0009 ppm |
| Concentration per Run 1 | 0.0017 ppm | 0.0002 ppm | 0.0008 ppm | 0.0046 ppm | 0.0014 ppm | -0.0016 ppm | -0.0012 ppm |
| Concentration per Run 2 | 0.0021 ppm | 0.0002 ppm | 0.0008 ppm | 0.0026 ppm | 0.0010 ppm | 0.0005 ppm | -0.0007 ppm |
| Concentration per Run 3 | 0.0028 ppm | 0.0002 ppm | 0.0007 ppm | 0.0029 ppm | 0.0008 ppm | -0.0014 ppm | -0.0007 ppm |
| Recovery Percentage 1 | 2.209 % | 1.938 % | 1.474 % | 0.167 % | 4.217 % | -8.400 % | -1.769 % |
| Concentration RSD | 25.9 % | 15.8 % | 9.1 % | 32.4 % | 29.6 % | 141.9 % | 30.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 0.0015 ppm | -0.0010 ppm | 0.0002 ppm | 0.0006 ppm | 0.0009 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0015 ppm | -0.0001 ppm | 0.0002 ppm | 0.0005 ppm | 0.0016 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0028 ppm | 0.0016 ppm | -0.0014 ppm | 0.0002 ppm | 0.0007 ppm | -0.0004 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0014 ppm | -0.0014 ppm | 0.0003 ppm | 0.0006 ppm | 0.0014 ppm | 0.0002 ppm |
| Recovery Percentage 1 | 17.373 % | 0.294 % | -1.991 % | 2.296 % | 6.276 % | 4.320 % | 3.330 % |
| Concentration RSD | 54.7 % | 7.6 % | 77.3 % | 17.5 % | 15.4 % | 130.9 % | 41.9 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 104.0695 % | 103.8903 % | 106.2892 % | 107.1115 % | 100.7078 % | 109.1525 % |
| Concentration per Run 1 | 0.0006 ppm | 105.1847 % | 103.9948 % | 106.9745 % | 108.3700 % | 101.4180 % | 109.2434 % |
| Concentration per Run 2 | 0.0007 ppm | 103.7417 % | 103.9784 % | 106.1215 % | 106.8600 % | 100.5170 % | 109.2065 % |
| Concentration per Run 3 | 0.0005 ppm | 103.2821 % | 103.6976 % | 105.7716 % | 106.1044 % | 100.1884 % | 109.0075 % |
| Recovery Percentage 1 | 12.181 % | | | | | | |
| Concentration RSD | 13.9 % | 1.0 % | 0.2 % | 0.6 % | 1.1 % | 0.6 % | 0.1 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2039234-1 WG2039234
Analysis started at: 3/12/2025 15:24:23
Comments <Comment>
Rack: 1
Vial: 37

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0025 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0029 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0049 ppm | 0.0017 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0021 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0044 ppm | -0.0010 ppm | -0.0001 ppm | -0.0001 ppm | 0.0000 ppm | 0.0042 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0018 ppm | -0.0005 ppm | 0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0024 ppm |
| Recovery Percentage 1 | 0.553 % | 2.497 % | 1.429 % | 0.132 % | -0.217 % | 0.539 % | 2.905 % |
| Concentration RSD | 753.3 % | 150.7 % | 2,015.7 % | 446.5 % | 238.5 % | 30.7 % | 38.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0003 ppm | 0.0001 ppm | 0.0001 ppm | 0.0014 ppm | 0.0136 ppm | -0.0012 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0003 ppm | 0.0002 ppm | 0.0002 ppm | 0.0015 ppm | 0.0043 ppm | -0.0009 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0003 ppm | -0.0001 ppm | 0.0001 ppm | 0.0010 ppm | 0.0263 ppm | -0.0008 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0002 ppm | 0.0002 ppm | 0.0001 ppm | 0.0017 ppm | 0.0102 ppm | -0.0019 ppm |
| Recovery Percentage 1 | 0.177 % | -1.417 % | 0.674 % | 1.306 % | 2.816 % | 0.543 % | -11.939 % |
| Concentration RSD | 407.0 % | 23.9 % | 258.4 % | 32.5 % | 26.7 % | 83.6 % | 51.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | -0.0002 ppm | 0.0003 ppm | -0.0034 ppm | 0.0008 ppm | 0.0001 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0022 ppm | -0.0002 ppm | 0.0003 ppm | -0.0024 ppm | 0.0009 ppm | -0.0003 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0008 ppm | -0.0002 ppm | 0.0006 ppm | -0.0046 ppm | 0.0006 ppm | -0.0002 ppm | 0.0014 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0000 ppm | 0.0001 ppm | -0.0031 ppm | 0.0010 ppm | 0.0010 ppm | -0.0014 ppm |
| Recovery Percentage 1 | 1.084 % | -1.668 % | 0.641 % | -0.169 % | 3.254 % | 1.274 % | 0.336 % |
| Concentration RSD | 88.0 % | 70.6 % | 92.2 % | 33.3 % | 21.2 % | 568.3 % | 847.0 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | -0.0014 ppm | -0.0010 ppm | 0.0000 ppm | 0.0003 ppm | -0.0021 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0010 ppm | -0.0006 ppm | -0.0012 ppm | 0.0000 ppm | 0.0003 ppm | -0.0031 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0005 ppm | -0.0015 ppm | -0.0005 ppm | 0.0000 ppm | 0.0002 ppm | -0.0030 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0005 ppm | -0.0021 ppm | -0.0012 ppm | 0.0001 ppm | 0.0005 ppm | -0.0003 ppm | 0.0003 ppm |
| Recovery Percentage 1 | 3.482 % | -0.283 % | -1.910 % | 0.148 % | 3.308 % | -10.603 % | 2.061 % |
| Concentration RSD | 231.6 % | 55.1 % | 43.1 % | 376.2 % | 47.3 % | 73.3 % | 79.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 105.9446 % | 107.7759 % | 108.5004 % | 107.3079 % | 104.6540 % | 110.7567 % |
| Concentration per Run 1 | 0.0002 ppm | 106.8224 % | 107.6084 % | 108.7496 % | 108.5113 % | 104.6745 % | 110.6854 % |
| Concentration per Run 2 | 0.0001 ppm | 105.7581 % | 107.8456 % | 108.0791 % | 106.9767 % | 103.9871 % | 110.8578 % |
| Concentration per Run 3 | -0.0001 ppm | 105.2534 % | 107.8735 % | 108.6723 % | 106.4357 % | 105.3004 % | 110.7269 % |
| Recovery Percentage 1 | 1.194 % | | | | | | |
| Concentration RSD | 206.5 % | 0.8 % | 0.1 % | 0.3 % | 1.0 % | 0.6 % | 0.1 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2039234-2 WG2039234
Analysis started at: 3/12/2025 15:29:34
Comments <Comment>
Rack: 1
Vial: 38

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0459 ppm | 1.9619 ppm | 0.1061 ppm | 0.9158 ppm | 1.8622 ppm | 0.0465 ppm | 8.9882 ppm |
| Concentration per Run 1 | 0.0456 ppm | 1.9434 ppm | 0.1070 ppm | 0.9156 ppm | 1.8449 ppm | 0.0462 ppm | 8.9749 ppm |
| Concentration per Run 2 | 0.0459 ppm | 1.9664 ppm | 0.1063 ppm | 0.9198 ppm | 1.8780 ppm | 0.0465 ppm | 8.9880 ppm |
| Concentration per Run 3 | 0.0462 ppm | 1.9759 ppm | 0.1052 ppm | 0.9120 ppm | 1.8638 ppm | 0.0468 ppm | 9.0017 ppm |
| Concentration RSD | 0.6 % | 0.9 % | 0.9 % | 0.4 % | 0.9 % | 0.7 % | 0.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0510 ppm | 0.4619 ppm | 0.1839 ppm | 0.2335 ppm | 0.9390 ppm | 9.7555 ppm | -0.0013 ppm |
| Concentration per Run 1 | 0.0509 ppm | 0.4607 ppm | 0.1821 ppm | 0.2325 ppm | 0.9307 ppm | 9.6860 ppm | -0.0012 ppm |
| Concentration per Run 2 | 0.0513 ppm | 0.4643 ppm | 0.1840 ppm | 0.2333 ppm | 0.9409 ppm | 9.7612 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0508 ppm | 0.4606 ppm | 0.1856 ppm | 0.2347 ppm | 0.9456 ppm | 9.8194 ppm | -0.0022 ppm |
| Concentration RSD | 0.6 % | 0.5 % | 1.0 % | 0.5 % | 0.8 % | 0.7 % | 70.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.5787 ppm | 0.4712 ppm | 0.8919 ppm | 9.7743 ppm | 0.4563 ppm | 0.4868 ppm | 0.4621 ppm |
| Concentration per Run 1 | 9.4961 ppm | 0.4686 ppm | 0.8896 ppm | 9.6943 ppm | 0.4562 ppm | 0.4897 ppm | 0.4571 ppm |
| Concentration per Run 2 | 9.6043 ppm | 0.4725 ppm | 0.8963 ppm | 9.7806 ppm | 0.4577 ppm | 0.4861 ppm | 0.4655 ppm |
| Concentration per Run 3 | 9.6356 ppm | 0.4726 ppm | 0.8897 ppm | 9.8481 ppm | 0.4551 ppm | 0.4847 ppm | 0.4638 ppm |
| Concentration RSD | 0.8 % | 0.5 % | 0.4 % | 0.8 % | 0.3 % | 0.5 % | 1.0 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1042 ppm | 1.0558 ppm | 0.9237 ppm | 0.9301 ppm | 0.9018 ppm | 0.1020 ppm | 0.4531 ppm |
| Concentration per Run 1 | 0.1045 ppm | 1.0577 ppm | 0.9231 ppm | 0.9214 ppm | 0.8951 ppm | 0.1032 ppm | 0.4498 ppm |
| Concentration per Run 2 | 0.1038 ppm | 1.0585 ppm | 0.9302 ppm | 0.9325 ppm | 0.9020 ppm | 0.1020 ppm | 0.4529 ppm |
| Concentration per Run 3 | 0.1044 ppm | 1.0511 ppm | 0.9178 ppm | 0.9365 ppm | 0.9083 ppm | 0.1007 ppm | 0.4566 ppm |
| Concentration RSD | 0.4 % | 0.4 % | 0.7 % | 0.8 % | 0.7 % | 1.2 % | 0.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4737 ppm | 105.5547 % | 105.3534 % | 107.2086 % | 107.7960 % | 104.5101 % | 108.6151 % |
| Concentration per Run 1 | 0.4731 ppm | 105.8322 % | 106.1296 % | 107.8374 % | 108.1226 % | 104.5724 % | 109.3759 % |
| Concentration per Run 2 | 0.4764 ppm | 105.6512 % | 105.3427 % | 106.7942 % | 107.8353 % | 104.0441 % | 108.5156 % |
| Concentration per Run 3 | 0.4716 ppm | 105.1806 % | 104.5879 % | 106.9941 % | 107.4302 % | 104.9139 % | 107.9538 % |
| Concentration RSD | 0.5 % | 0.3 % | 0.7 % | 0.5 % | 0.3 % | 0.4 % | 0.7 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: WG2039234-3 WG2039234
Analysis started at: 3/12/2025 15:36:16
Comments <Comment>
Rack: 1
Vial: 39

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0457 ppm | 1.9331 ppm | 0.1059 ppm | 0.9042 ppm | 1.8202 ppm | 0.0462 ppm | 9.0702 ppm |
| Concentration per Run 1 | 0.0449 ppm | 1.9142 ppm | 0.1070 ppm | 0.9049 ppm | 1.8108 ppm | 0.0459 ppm | 9.0726 ppm |
| Concentration per Run 2 | 0.0464 ppm | 1.9381 ppm | 0.1048 ppm | 0.9021 ppm | 1.8329 ppm | 0.0463 ppm | 9.0594 ppm |
| Concentration per Run 3 | 0.0459 ppm | 1.9471 ppm | 0.1058 ppm | 0.9057 ppm | 1.8169 ppm | 0.0463 ppm | 9.0786 ppm |
| Concentration RSD | 1.7 % | 0.9 % | 1.0 % | 0.2 % | 0.6 % | 0.5 % | 0.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0501 ppm | 0.4549 ppm | 0.1820 ppm | 0.2309 ppm | 0.9381 ppm | 9.7444 ppm | -0.0013 ppm |
| Concentration per Run 1 | 0.0502 ppm | 0.4556 ppm | 0.1796 ppm | 0.2275 ppm | 0.9341 ppm | 9.6921 ppm | -0.0019 ppm |
| Concentration per Run 2 | 0.0500 ppm | 0.4542 ppm | 0.1834 ppm | 0.2332 ppm | 0.9403 ppm | 9.7692 ppm | -0.0010 ppm |
| Concentration per Run 3 | 0.0501 ppm | 0.4548 ppm | 0.1831 ppm | 0.2320 ppm | 0.9399 ppm | 9.7720 ppm | -0.0010 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 1.2 % | 1.3 % | 0.4 % | 0.5 % | 38.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.4316 ppm | 0.4668 ppm | 0.8821 ppm | 9.7052 ppm | 0.4519 ppm | 0.4809 ppm | 0.4578 ppm |
| Concentration per Run 1 | 9.3003 ppm | 0.4652 ppm | 0.8831 ppm | 9.6327 ppm | 0.4532 ppm | 0.4824 ppm | 0.4560 ppm |
| Concentration per Run 2 | 9.5104 ppm | 0.4676 ppm | 0.8808 ppm | 9.7242 ppm | 0.4507 ppm | 0.4793 ppm | 0.4570 ppm |
| Concentration per Run 3 | 9.4841 ppm | 0.4677 ppm | 0.8822 ppm | 9.7586 ppm | 0.4519 ppm | 0.4810 ppm | 0.4603 ppm |
| Concentration RSD | 1.2 % | 0.3 % | 0.1 % | 0.7 % | 0.3 % | 0.3 % | 0.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1029 ppm | 1.0413 ppm | 0.9065 ppm | 0.9229 ppm | 0.8960 ppm | 0.0995 ppm | 0.4518 ppm |
| Concentration per Run 1 | 0.1037 ppm | 1.0418 ppm | 0.9073 ppm | 0.9163 ppm | 0.8830 ppm | 0.1034 ppm | 0.4448 ppm |
| Concentration per Run 2 | 0.1023 ppm | 1.0402 ppm | 0.9055 ppm | 0.9244 ppm | 0.9036 ppm | 0.0976 ppm | 0.4558 ppm |
| Concentration per Run 3 | 0.1028 ppm | 1.0420 ppm | 0.9068 ppm | 0.9279 ppm | 0.9015 ppm | 0.0975 ppm | 0.4547 ppm |
| Concentration RSD | 0.7 % | 0.1 % | 0.1 % | 0.6 % | 1.3 % | 3.4 % | 1.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4668 ppm | 104.6882 % | 106.1466 % | 107.7468 % | 107.2501 % | 105.5047 % | 109.3420 % |
| Concentration per Run 1 | 0.4676 ppm | 104.6495 % | 107.6030 % | 107.6386 % | 107.5963 % | 105.3625 % | 110.8294 % |
| Concentration per Run 2 | 0.4652 ppm | 104.6901 % | 105.2587 % | 107.7761 % | 107.0263 % | 105.7300 % | 108.4034 % |
| Concentration per Run 3 | 0.4677 ppm | 104.7250 % | 105.5781 % | 107.8258 % | 107.1277 % | 105.4215 % | 108.7931 % |
| Concentration RSD | 0.3 % | 0.0 % | 1.2 % | 0.1 % | 0.3 % | 0.2 % | 1.2 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: L2512154-01 WG2039234
Analysis started at: 3/12/2025 15:41:14
Comments <Comment>
Rack: 1
Vial: 40

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.4768 ppm | -0.0019 ppm | 0.0315 ppm | 0.0202 ppm | 0.0001 ppm | 7.7864 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.4687 ppm | -0.0013 ppm | 0.0320 ppm | 0.0200 ppm | 0.0001 ppm | 7.7311 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.4851 ppm | -0.0019 ppm | 0.0309 ppm | 0.0204 ppm | 0.0001 ppm | 7.8355 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.4768 ppm | -0.0024 ppm | 0.0314 ppm | 0.0203 ppm | 0.0001 ppm | 7.7925 ppm |
| Concentration RSD | 36.2 % | 1.7 % | 27.3 % | 1.8 % | 1.1 % | 8.7 % | 0.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0016 ppm | 0.0009 ppm | 0.0036 ppm | 1.9244 ppm | 1.4021 ppm | -0.0007 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0015 ppm | 0.0011 ppm | 0.0037 ppm | 1.8993 ppm | 1.3783 ppm | -0.0008 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0015 ppm | 0.0010 ppm | 0.0036 ppm | 1.9394 ppm | 1.4117 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0017 ppm | 0.0008 ppm | 0.0034 ppm | 1.9345 ppm | 1.4163 ppm | -0.0008 ppm |
| Concentration RSD | 149.9 % | 10.2 % | 13.5 % | 3.9 % | 1.1 % | 1.5 % | 36.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.1047 ppm | 0.1362 ppm | 0.0018 ppm | 24.3583 ppm | 0.0014 ppm | -0.0002 ppm | 0.0016 ppm |
| Concentration per Run 1 | 1.1052 ppm | 0.1343 ppm | 0.0021 ppm | 24.0311 ppm | 0.0007 ppm | 0.0008 ppm | 0.0003 ppm |
| Concentration per Run 2 | 1.1035 ppm | 0.1379 ppm | 0.0019 ppm | 24.5500 ppm | 0.0020 ppm | -0.0011 ppm | 0.0029 ppm |
| Concentration per Run 3 | 1.1055 ppm | 0.1365 ppm | 0.0015 ppm | 24.4938 ppm | 0.0014 ppm | -0.0001 ppm | 0.0016 ppm |
| Concentration RSD | 0.1 % | 1.3 % | 17.4 % | 1.2 % | 46.0 % | 568.3 % | 82.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 3.9500 ppm | 0.0011 ppm | 0.0379 ppm | 0.0046 ppm | -0.0020 ppm | 0.0009 ppm |
| Concentration per Run 1 | -0.0008 ppm | 3.9899 ppm | -0.0001 ppm | 0.0373 ppm | 0.0048 ppm | -0.0011 ppm | 0.0010 ppm |
| Concentration per Run 2 | 0.0012 ppm | 3.9063 ppm | 0.0022 ppm | 0.0382 ppm | 0.0047 ppm | -0.0023 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0008 ppm | 3.9537 ppm | 0.0012 ppm | 0.0381 ppm | 0.0043 ppm | -0.0025 ppm | 0.0009 ppm |
| Concentration RSD | 258.2 % | 1.1 % | 106.8 % | 1.2 % | 5.0 % | 37.7 % | 3.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0072 ppm | 107.8124 % | 107.1134 % | 107.9038 % | 109.6189 % | 104.5646 % | 109.6158 % |
| Concentration per Run 1 | 0.0071 ppm | 108.6816 % | 107.0339 % | 106.9644 % | 110.8587 % | 103.6419 % | 109.1824 % |
| Concentration per Run 2 | 0.0073 ppm | 107.2669 % | 107.4020 % | 108.6826 % | 108.9484 % | 105.5874 % | 110.0582 % |
| Concentration per Run 3 | 0.0073 ppm | 107.4886 % | 106.9043 % | 108.0642 % | 109.0495 % | 104.4645 % | 109.6067 % |
| Concentration RSD | 1.7 % | 0.7 % | 0.2 % | 0.8 % | 1.0 % | 0.9 % | 0.4 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: L2512154-03 WG2039234
Analysis started at: 3/12/2025 15:46:21
Comments <Comment>
Rack: 1
Vial: 41

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0189 ppm | 0.0180 ppm | 0.0115 ppm | 0.0125 ppm | 0.0000 ppm | 12.2976 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0194 ppm | 0.0204 ppm | 0.0115 ppm | 0.0122 ppm | 0.0001 ppm | 12.1199 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0193 ppm | 0.0157 ppm | 0.0111 ppm | 0.0125 ppm | 0.0000 ppm | 12.1760 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0180 ppm | 0.0177 ppm | 0.0119 ppm | 0.0129 ppm | 0.0000 ppm | 12.5970 ppm |
| Concentration RSD | 148.9 % | 4.1 % | 13.1 % | 3.5 % | 2.6 % | 77.1 % | 2.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0019 ppm | 0.0003 ppm | 0.0014 ppm | 3.9056 ppm | 1.4605 ppm | -0.0014 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0019 ppm | 0.0004 ppm | 0.0015 ppm | 3.8186 ppm | 1.4293 ppm | -0.0009 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0018 ppm | 0.0003 ppm | 0.0013 ppm | 3.8728 ppm | 1.4396 ppm | -0.0021 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0020 ppm | 0.0001 ppm | 0.0013 ppm | 4.0255 ppm | 1.5127 ppm | -0.0011 ppm |
| Concentration RSD | 38.4 % | 4.7 % | 44.1 % | 5.0 % | 2.7 % | 3.1 % | 48.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.8701 ppm | 0.0593 ppm | 0.0016 ppm | 39.8474 ppm | 0.0015 ppm | -0.0013 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.8731 ppm | 0.0580 ppm | 0.0018 ppm | 38.8075 ppm | 0.0012 ppm | -0.0020 ppm | 0.0024 ppm |
| Concentration per Run 2 | 0.8721 ppm | 0.0589 ppm | 0.0016 ppm | 39.5558 ppm | 0.0017 ppm | -0.0005 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.8650 ppm | 0.0611 ppm | 0.0014 ppm | 41.1788 ppm | 0.0015 ppm | -0.0013 ppm | -0.0016 ppm |
| Concentration RSD | 0.5 % | 2.7 % | 12.3 % | 3.0 % | 16.4 % | 56.5 % | 407.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 4.3439 ppm | 0.0000 ppm | 0.0443 ppm | 0.0006 ppm | -0.0018 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0002 ppm | 4.3468 ppm | -0.0003 ppm | 0.0432 ppm | 0.0009 ppm | -0.0012 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0003 ppm | 4.3096 ppm | 0.0004 ppm | 0.0440 ppm | 0.0003 ppm | -0.0031 ppm | 0.0006 ppm |
| Concentration per Run 3 | -0.0010 ppm | 4.3753 ppm | -0.0002 ppm | 0.0456 ppm | 0.0007 ppm | -0.0010 ppm | 0.0003 ppm |
| Concentration RSD | 147.4 % | 0.8 % | 834.4 % | 2.8 % | 44.8 % | 63.2 % | 33.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0031 ppm | 105.2428 % | 105.4965 % | 107.3553 % | 107.0405 % | 104.0127 % | 108.3938 % |
| Concentration per Run 1 | 0.0032 ppm | 106.5795 % | 105.2734 % | 107.4210 % | 108.9225 % | 103.9896 % | 108.2460 % |
| Concentration per Run 2 | 0.0031 ppm | 106.0402 % | 105.5878 % | 107.7817 % | 107.8345 % | 104.7713 % | 108.4476 % |
| Concentration per Run 3 | 0.0031 ppm | 103.1087 % | 105.6283 % | 106.8633 % | 104.3646 % | 103.2773 % | 108.4880 % |
| Concentration RSD | 1.1 % | 1.8 % | 0.2 % | 0.4 % | 2.2 % | 0.7 % | 0.1 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: L2512154-04 WG2039234
Analysis started at: 3/12/2025 15:51:30
Comments <Comment>
Rack: 1
Vial: 42

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0368 ppm | 0.0041 ppm | 0.0053 ppm | 0.0159 ppm | 0.0000 ppm | 5.7878 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0353 ppm | 0.0044 ppm | 0.0054 ppm | 0.0157 ppm | 0.0001 ppm | 5.7760 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0375 ppm | 0.0037 ppm | 0.0050 ppm | 0.0159 ppm | 0.0000 ppm | 5.7837 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0375 ppm | 0.0043 ppm | 0.0056 ppm | 0.0161 ppm | 0.0000 ppm | 5.8037 ppm |
| Concentration RSD | 181.3 % | 3.5 % | 9.2 % | 5.5 % | 1.0 % | 23.5 % | 0.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0030 ppm | 0.0004 ppm | 0.0005 ppm | 2.3523 ppm | 0.3648 ppm | -0.0008 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0030 ppm | 0.0004 ppm | 0.0006 ppm | 2.3362 ppm | 0.3619 ppm | -0.0008 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0030 ppm | 0.0003 ppm | 0.0005 ppm | 2.3546 ppm | 0.3731 ppm | -0.0005 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0029 ppm | 0.0004 ppm | 0.0005 ppm | 2.3660 ppm | 0.3595 ppm | -0.0012 ppm |
| Concentration RSD | 56.6 % | 3.1 % | 26.5 % | 6.4 % | 0.6 % | 2.0 % | 38.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3385 ppm | 0.0442 ppm | 0.0008 ppm | 7.9985 ppm | 0.0010 ppm | 0.0000 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.3390 ppm | 0.0440 ppm | 0.0006 ppm | 7.9192 ppm | 0.0011 ppm | -0.0001 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.3383 ppm | 0.0443 ppm | 0.0007 ppm | 8.0380 ppm | 0.0002 ppm | 0.0008 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.3381 ppm | 0.0443 ppm | 0.0010 ppm | 8.0383 ppm | 0.0017 ppm | -0.0008 ppm | 0.0005 ppm |
| Concentration RSD | 0.1 % | 0.4 % | 28.0 % | 0.9 % | 75.0 % | 2,085.1 % | 57.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | 1.1954 ppm | -0.0001 ppm | 0.0234 ppm | 0.0005 ppm | -0.0024 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0020 ppm | 1.1911 ppm | -0.0002 ppm | 0.0232 ppm | 0.0005 ppm | -0.0043 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0018 ppm | 1.1976 ppm | 0.0002 ppm | 0.0235 ppm | 0.0005 ppm | -0.0016 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0024 ppm | 1.1974 ppm | -0.0002 ppm | 0.0235 ppm | 0.0005 ppm | -0.0013 ppm | 0.0001 ppm |
| Concentration RSD | 271.4 % | 0.3 % | 428.4 % | 0.7 % | 8.1 % | 67.2 % | 35.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0771 ppm | 107.1128 % | 108.0406 % | 107.6941 % | 108.4336 % | 103.6079 % | 110.3262 % |
| Concentration per Run 1 | 0.0769 ppm | 107.6416 % | 107.6292 % | 108.3170 % | 109.1040 % | 104.0517 % | 109.8102 % |
| Concentration per Run 2 | 0.0766 ppm | 107.0026 % | 108.4476 % | 107.5743 % | 108.2918 % | 103.5877 % | 110.8282 % |
| Concentration per Run 3 | 0.0776 ppm | 106.6943 % | 108.0451 % | 107.1909 % | 107.9050 % | 103.1842 % | 110.3402 % |
| Concentration RSD | 0.6 % | 0.5 % | 0.4 % | 0.5 % | 0.6 % | 0.4 % | 0.5 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: L2512154-06 WG2039234
Analysis started at: 3/12/2025 15:56:39
Comments <Comment>
Rack: 1
Vial: 43

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0129 ppm | 0.0040 ppm | 0.0062 ppm | 0.0162 ppm | 0.0000 ppm | 9.4074 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0114 ppm | 0.0051 ppm | 0.0064 ppm | 0.0160 ppm | 0.0000 ppm | 9.3328 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0156 ppm | 0.0020 ppm | 0.0058 ppm | 0.0162 ppm | 0.0001 ppm | 9.4152 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0118 ppm | 0.0047 ppm | 0.0065 ppm | 0.0163 ppm | 0.0000 ppm | 9.4742 ppm |
| Concentration RSD | 214.4 % | 17.7 % | 43.1 % | 6.2 % | 0.7 % | 31.3 % | 0.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0028 ppm | 0.0003 ppm | 0.0003 ppm | 8.3855 ppm | 1.2757 ppm | -0.0005 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0028 ppm | 0.0001 ppm | 0.0002 ppm | 8.2961 ppm | 1.2628 ppm | -0.0010 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0028 ppm | 0.0003 ppm | 0.0003 ppm | 8.4065 ppm | 1.2770 ppm | -0.0006 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0028 ppm | 0.0005 ppm | 0.0003 ppm | 8.4538 ppm | 1.2874 ppm | 0.0000 ppm |
| Concentration RSD | 78.8 % | 0.6 % | 63.0 % | 18.9 % | 1.0 % | 1.0 % | 102.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6471 ppm | 0.0592 ppm | 0.0007 ppm | 38.8568 ppm | 0.0010 ppm | 0.0005 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.6458 ppm | 0.0588 ppm | 0.0004 ppm | 38.4611 ppm | 0.0015 ppm | 0.0013 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.6451 ppm | 0.0592 ppm | 0.0007 ppm | 39.0720 ppm | 0.0009 ppm | 0.0005 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.6505 ppm | 0.0595 ppm | 0.0009 ppm | 39.0375 ppm | 0.0006 ppm | -0.0003 ppm | -0.0003 ppm |
| Concentration RSD | 0.5 % | 0.6 % | 33.7 % | 0.9 % | 43.5 % | 159.6 % | 351.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 2.0266 ppm | -0.0002 ppm | 0.0481 ppm | 0.0004 ppm | -0.0032 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0012 ppm | 2.0315 ppm | 0.0001 ppm | 0.0477 ppm | 0.0006 ppm | -0.0032 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0028 ppm | 2.0173 ppm | -0.0006 ppm | 0.0482 ppm | 0.0005 ppm | -0.0030 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0010 ppm | 2.0309 ppm | -0.0001 ppm | 0.0484 ppm | 0.0002 ppm | -0.0033 ppm | 0.0002 ppm |
| Concentration RSD | 57.3 % | 0.4 % | 173.9 % | 0.8 % | 49.1 % | 4.8 % | 58.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0026 ppm | 106.9890 % | 106.2548 % | 108.2082 % | 108.7248 % | 105.5060 % | 108.3583 % |
| Concentration per Run 1 | 0.0028 ppm | 108.0944 % | 106.5422 % | 108.0230 % | 110.0681 % | 105.3387 % | 108.6973 % |
| Concentration per Run 2 | 0.0025 ppm | 106.8736 % | 106.3802 % | 108.3547 % | 108.5581 % | 106.0462 % | 108.5112 % |
| Concentration per Run 3 | 0.0026 ppm | 105.9992 % | 105.8419 % | 108.2470 % | 107.5482 % | 105.1331 % | 107.8665 % |
| Concentration RSD | 4.0 % | 1.0 % | 0.3 % | 0.2 % | 1.2 % | 0.5 % | 0.4 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: L2512168-01 WG2039234
Analysis started at: 3/12/2025 16:01:47
Comments <Comment>
Rack: 1
Vial: 44

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.1041 ppm | 0.0023 ppm | 0.0077 ppm | 0.0209 ppm | 0.0001 ppm | 3.5138 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0989 ppm | 0.0008 ppm | 0.0078 ppm | 0.0206 ppm | 0.0000 ppm | 3.4807 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.1113 ppm | 0.0044 ppm | 0.0075 ppm | 0.0208 ppm | 0.0001 ppm | 3.4989 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.1020 ppm | 0.0016 ppm | 0.0078 ppm | 0.0212 ppm | 0.0001 ppm | 3.5618 ppm |
| Concentration RSD | 148.1 % | 6.2 % | 82.9 % | 2.0 % | 1.6 % | 30.1 % | 1.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0014 ppm | 0.0002 ppm | 0.0025 ppm | 4.6927 ppm | 0.8620 ppm | -0.0005 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0015 ppm | 0.0001 ppm | 0.0026 ppm | 4.6329 ppm | 0.8433 ppm | -0.0011 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0014 ppm | 0.0002 ppm | 0.0026 ppm | 4.6811 ppm | 0.8492 ppm | -0.0006 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0014 ppm | 0.0003 ppm | 0.0025 ppm | 4.7642 ppm | 0.8934 ppm | 0.0001 ppm |
| Concentration RSD | 87.0 % | 5.6 % | 65.7 % | 2.0 % | 1.4 % | 3.2 % | 110.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.8455 ppm | 0.1492 ppm | 0.0004 ppm | 104.0744 ppm | 0.0014 ppm | -0.0001 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.8489 ppm | 0.1479 ppm | 0.0003 ppm | 102.8543 ppm | 0.0015 ppm | -0.0005 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.8437 ppm | 0.1487 ppm | 0.0004 ppm | 103.0701 ppm | 0.0011 ppm | -0.0009 ppm | 0.0016 ppm |
| Concentration per Run 3 | 0.8440 ppm | 0.1509 ppm | 0.0004 ppm | 106.2987 ppm | 0.0016 ppm | 0.0010 ppm | 0.0004 ppm |
| Concentration RSD | 0.3 % | 1.1 % | 9.6 % | 1.9 % | 16.6 % | 857.3 % | 124.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 2.4286 ppm | -0.0001 ppm | 0.0259 ppm | 0.0009 ppm | 0.0000 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0008 ppm | 2.4317 ppm | 0.0003 ppm | 0.0255 ppm | 0.0006 ppm | 0.0008 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0003 ppm | 2.4246 ppm | -0.0004 ppm | 0.0259 ppm | 0.0008 ppm | -0.0002 ppm | 0.0006 ppm |
| Concentration per Run 3 | -0.0012 ppm | 2.4294 ppm | -0.0004 ppm | 0.0264 ppm | 0.0011 ppm | -0.0006 ppm | 0.0005 ppm |
| Concentration RSD | 2,761.5 % | 0.1 % | 314.8 % | 1.7 % | 28.8 % | 7,677.3 % | 11.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0181 ppm | 104.6011 % | 105.8510 % | 110.3573 % | 105.9648 % | 109.4464 % | 107.8844 % |
| Concentration per Run 1 | 0.0181 ppm | 105.9461 % | 105.7481 % | 110.3930 % | 107.3993 % | 109.4928 % | 107.8461 % |
| Concentration per Run 2 | 0.0181 ppm | 104.9360 % | 106.0912 % | 110.3479 % | 106.3698 % | 109.5409 % | 108.0647 % |
| Concentration per Run 3 | 0.0182 ppm | 102.9212 % | 105.7136 % | 110.3311 % | 104.1253 % | 109.3053 % | 107.7425 % |
| Concentration RSD | 0.5 % | 1.5 % | 0.2 % | 0.0 % | 1.6 % | 0.1 % | 0.2 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: L2512169-01 WG2039234
Analysis started at: 3/12/2025 16:07:04
Comments <Comment>
Rack: 1
Vial: 45

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 3.2517 ppm | 0.0009 ppm | 0.0143 ppm | 0.2572 ppm | 0.0019 ppm | 28.7980 ppm |
| Concentration per Run 1 | 0.0001 ppm | 3.2346 ppm | 0.0015 ppm | 0.0144 ppm | 0.2557 ppm | 0.0019 ppm | 28.7696 ppm |
| Concentration per Run 2 | -0.0002 ppm | 3.2519 ppm | 0.0021 ppm | 0.0142 ppm | 0.2576 ppm | 0.0019 ppm | 28.8201 ppm |
| Concentration per Run 3 | -0.0001 ppm | 3.2687 ppm | -0.0009 ppm | 0.0144 ppm | 0.2582 ppm | 0.0020 ppm | 28.8041 ppm |
| Concentration RSD | 184.0 % | 0.5 % | 171.3 % | 0.6 % | 0.5 % | 0.7 % | 0.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0341 ppm | 0.0005 ppm | 0.0029 ppm | 20.1716 ppm | 6.3198 ppm | 0.0009 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0340 ppm | 0.0007 ppm | 0.0029 ppm | 20.0855 ppm | 6.2767 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0345 ppm | 0.0003 ppm | 0.0028 ppm | 20.2092 ppm | 6.3009 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0336 ppm | 0.0005 ppm | 0.0030 ppm | 20.2201 ppm | 6.3819 ppm | 0.0018 ppm |
| Concentration RSD | 2.6 % | 1.4 % | 35.2 % | 3.3 % | 0.4 % | 0.9 % | 94.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 7.1416 ppm | 0.2794 ppm | 0.0002 ppm | 307.4657 [SIC 500] | 0.0234 ppm | 0.0002 ppm | -0.0008 ppm |
| Concentration per Run 1 | 7.1406 ppm | 0.2790 ppm | -0.0001 ppm | 309.6307 ppm | 0.0233 ppm | 0.0002 ppm | -0.0014 ppm |
| Concentration per Run 2 | 7.1337 ppm | 0.2800 ppm | 0.0004 ppm | 309.4351 ppm | 0.0234 ppm | 0.0017 ppm | -0.0013 ppm |
| Concentration per Run 3 | 7.1503 ppm | 0.2793 ppm | 0.0004 ppm | 303.3313 ppm | 0.0234 ppm | -0.0012 ppm | 0.0004 ppm |
| Concentration RSD | 0.1 % | 0.2 % | 118.2 % | 1.2 % | 0.3 % | 604.1 % | 127.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 9.5516 ppm | 0.0006 ppm | 0.2488 ppm | 0.0004 ppm | -0.0008 ppm | 0.0011 ppm |
| Concentration per Run 1 | 0.0007 ppm | 9.4985 ppm | 0.0002 ppm | 0.2473 ppm | 0.0006 ppm | 0.0004 ppm | 0.0010 ppm |
| Concentration per Run 2 | -0.0014 ppm | 9.6508 ppm | 0.0005 ppm | 0.2492 ppm | 0.0005 ppm | 0.0005 ppm | 0.0012 ppm |
| Concentration per Run 3 | 0.0016 ppm | 9.5055 ppm | 0.0013 ppm | 0.2500 ppm | 0.0002 ppm | -0.0032 ppm | 0.0010 ppm |
| Concentration RSD | 538.7 % | 0.9 % | 88.1 % | 0.6 % | 54.5 % | 275.9 % | 11.9 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0808 ppm | 132.0515 % | 128.5899 % | 139.6416 % | 105.1662 % | 109.8899 % | 102.2909 % |
| Concentration per Run 1 | 0.0805 ppm | 132.4196 % | 128.5956 % | 140.1449 % | 105.6240 % | 110.6567 % | 102.3347 % |
| Concentration per Run 2 | 0.0817 ppm | 131.9986 % | 128.7514 % | 139.2489 % | 104.9713 % | 108.7336 % | 102.4406 % |
| Concentration per Run 3 | 0.0803 ppm | 131.7364 % | 128.4227 % | 139.5310 % | 104.9033 % | 110.2796 % | 102.0974 % |
| Concentration RSD | 0.9 % | 0.3 % | 0.1 % | 0.3 % | 0.4 % | 0.9 % | 0.2 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: L2512169-02 WG2039234
Analysis started at: 3/12/2025 16:12:21
Comments <Comment>
Rack: 1
Vial: 46

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0789 ppm | -0.0015 ppm | 0.0210 ppm | 0.1044 ppm | 0.0003 ppm | 13.1355 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0769 ppm | -0.0011 ppm | 0.0210 ppm | 0.1037 ppm | 0.0003 ppm | 13.0696 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0803 ppm | -0.0018 ppm | 0.0213 ppm | 0.1039 ppm | 0.0003 ppm | 13.1058 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0797 ppm | -0.0016 ppm | 0.0207 ppm | 0.1055 ppm | 0.0003 ppm | 13.2310 ppm |
| Concentration RSD | 236.7 % | 2.3 % | 21.5 % | 1.4 % | 0.9 % | 4.7 % | 0.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0070 ppm | 0.0004 ppm | 0.0024 ppm | 0.0043 ppm | 2.8610 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0070 ppm | 0.0003 ppm | 0.0025 ppm | 0.0049 ppm | 2.8356 ppm | -0.0006 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0072 ppm | 0.0003 ppm | 0.0026 ppm | 0.0032 ppm | 2.8635 ppm | -0.0007 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0069 ppm | 0.0006 ppm | 0.0022 ppm | 0.0047 ppm | 2.8840 ppm | 0.0013 ppm |
| Concentration RSD | 16.6 % | 1.6 % | 39.3 % | 7.6 % | 21.2 % | 0.8 % | 29,366.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.1037 ppm | 0.1040 ppm | 0.0006 ppm | 119.2904 ppm | 0.0029 ppm | -0.0002 ppm | 0.0001 ppm |
| Concentration per Run 1 | 2.1089 ppm | 0.1035 ppm | 0.0005 ppm | 119.2779 ppm | 0.0031 ppm | 0.0004 ppm | -0.0002 ppm |
| Concentration per Run 2 | 2.1038 ppm | 0.1039 ppm | 0.0007 ppm | 119.1901 ppm | 0.0028 ppm | -0.0011 ppm | 0.0001 ppm |
| Concentration per Run 3 | 2.0983 ppm | 0.1047 ppm | 0.0005 ppm | 119.4032 ppm | 0.0028 ppm | 0.0001 ppm | 0.0005 ppm |
| Concentration RSD | 0.3 % | 0.6 % | 16.3 % | 0.1 % | 6.7 % | 413.3 % | 230.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 3.8261 ppm | 0.0003 ppm | 0.0930 ppm | 0.0004 ppm | -0.0007 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0005 ppm | 3.8234 ppm | 0.0000 ppm | 0.0924 ppm | 0.0004 ppm | -0.0023 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0001 ppm | 3.8253 ppm | 0.0008 ppm | 0.0925 ppm | 0.0004 ppm | -0.0008 ppm | 0.0005 ppm |
| Concentration per Run 3 | -0.0005 ppm | 3.8297 ppm | 0.0000 ppm | 0.0940 ppm | 0.0003 ppm | 0.0009 ppm | 0.0006 ppm |
| Concentration RSD | 51.4 % | 0.1 % | 156.0 % | 1.0 % | 19.1 % | 214.7 % | 33.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0109 ppm | 104.7224 % | 104.2070 % | 110.5152 % | 105.7461 % | 109.9707 % | 105.7731 % |
| Concentration per Run 1 | 0.0109 ppm | 105.3723 % | 104.0093 % | 110.8496 % | 106.5371 % | 110.0323 % | 105.6489 % |
| Concentration per Run 2 | 0.0110 ppm | 104.8797 % | 104.2274 % | 110.3151 % | 106.1524 % | 109.8633 % | 105.8079 % |
| Concentration per Run 3 | 0.0109 ppm | 103.9152 % | 104.3844 % | 110.3808 % | 104.5489 % | 110.0164 % | 105.8624 % |
| Concentration RSD | 0.4 % | 0.7 % | 0.2 % | 0.3 % | 1.0 % | 0.1 % | 0.1 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: CCV
Analysis started at: 3/12/2025 16:17:39
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4392 ppm | 0.4871 ppm | 0.4594 ppm | 0.4547 ppm | 0.4595 ppm | 0.4691 ppm | 0.4604 ppm |
| Concentration per Run 1 | 0.4384 ppm | 0.4824 ppm | 0.4585 ppm | 0.4527 ppm | 0.4578 ppm | 0.4677 ppm | 0.4665 ppm |
| Concentration per Run 2 | 0.4399 ppm | 0.4830 ppm | 0.4564 ppm | 0.4531 ppm | 0.4580 ppm | 0.4680 ppm | 0.4540 ppm |
| Concentration per Run 3 | 0.4393 ppm | 0.4958 ppm | 0.4632 ppm | 0.4582 ppm | 0.4626 ppm | 0.4716 ppm | 0.4608 ppm |
| Recovery Percentage 1 | 87.839 % | 97.412 % | 91.874 % | 90.936 % | 91.890 % | 93.825 % | 92.085 % |
| Concentration RSD | 0.2 % | 1.6 % | 0.8 % | 0.7 % | 0.6 % | 0.5 % | 1.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4716 ppm | 0.4623 ppm | 0.4603 ppm | 0.4479 ppm | 0.4745 ppm | 4.8702 ppm | 0.4658 ppm |
| Concentration per Run 1 | 0.4703 ppm | 0.4607 ppm | 0.4605 ppm | 0.4467 ppm | 0.4735 ppm | 4.8541 ppm | 0.4637 ppm |
| Concentration per Run 2 | 0.4701 ppm | 0.4606 ppm | 0.4600 ppm | 0.4479 ppm | 0.4742 ppm | 4.8645 ppm | 0.4646 ppm |
| Concentration per Run 3 | 0.4745 ppm | 0.4656 ppm | 0.4605 ppm | 0.4489 ppm | 0.4758 ppm | 4.8919 ppm | 0.4690 ppm |
| Recovery Percentage 1 | 94.328 % | 92.465 % | 92.070 % | 89.571 % | 94.898 % | 97.403 % | 93.158 % |
| Concentration RSD | 0.5 % | 0.6 % | 0.1 % | 0.2 % | 0.3 % | 0.4 % | 0.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4721 ppm | 0.4640 ppm | 0.4501 ppm | 9.3057 ppm | 0.4581 ppm | 0.4533 ppm | 0.4707 ppm |
| Concentration per Run 1 | 0.4706 ppm | 0.4635 ppm | 0.4482 ppm | 9.2825 ppm | 0.4565 ppm | 0.4532 ppm | 0.4686 ppm |
| Concentration per Run 2 | 0.4742 ppm | 0.4622 ppm | 0.4483 ppm | 9.2702 ppm | 0.4567 ppm | 0.4510 ppm | 0.4703 ppm |
| Concentration per Run 3 | 0.4714 ppm | 0.4664 ppm | 0.4538 ppm | 9.3644 ppm | 0.4613 ppm | 0.4558 ppm | 0.4733 ppm |
| Recovery Percentage 1 | 94.415 % | 92.806 % | 90.021 % | 93.057 % | 91.630 % | 90.667 % | 94.143 % |
| Concentration RSD | 0.4 % | 0.5 % | 0.7 % | 0.6 % | 0.6 % | 0.5 % | 0.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4563 ppm | 5.2394 ppm | 0.4699 ppm | 0.4672 ppm | 0.4579 ppm | 0.4426 ppm | 0.4502 ppm |
| Concentration per Run 1 | 0.4548 ppm | 5.2280 ppm | 0.4673 ppm | 0.4658 ppm | 0.4576 ppm | 0.4412 ppm | 0.4497 ppm |
| Concentration per Run 2 | 0.4532 ppm | 5.2202 ppm | 0.4673 ppm | 0.4656 ppm | 0.4573 ppm | 0.4416 ppm | 0.4500 ppm |
| Concentration per Run 3 | 0.4608 ppm | 5.2700 ppm | 0.4752 ppm | 0.4702 ppm | 0.4588 ppm | 0.4450 ppm | 0.4509 ppm |
| Recovery Percentage 1 | 91.250 % | 99.797 % | 93.988 % | 93.444 % | 91.575 % | 88.520 % | 90.040 % |
| Concentration RSD | 0.9 % | 0.5 % | 1.0 % | 0.6 % | 0.2 % | 0.5 % | 0.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4725 ppm | 105.6101 % | 107.4890 % | 109.0676 % | 106.6283 % | 106.4628 % | 109.1581 % |
| Concentration per Run 1 | 0.4702 ppm | 105.4381 % | 107.7285 % | 109.3556 % | 106.4774 % | 106.7067 % | 109.3915 % |
| Concentration per Run 2 | 0.4707 ppm | 106.1878 % | 107.5286 % | 109.6669 % | 107.1041 % | 106.7833 % | 109.1398 % |
| Concentration per Run 3 | 0.4767 ppm | 105.2045 % | 107.2098 % | 108.1803 % | 106.3035 % | 105.8984 % | 108.9430 % |
| Recovery Percentage 1 | 94.502 % | | | | | | |
| Concentration RSD | 0.8 % | 0.5 % | 0.2 % | 0.7 % | 0.4 % | 0.5 % | 0.2 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: CCB
Analysis started at: 3/12/2025 16:22:32
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0024 ppm | -0.0001 ppm | 0.0004 ppm | 0.0003 ppm | 0.0003 ppm | 0.0022 ppm |
| Concentration per Run 1 | 0.0003 ppm | -0.0013 ppm | 0.0008 ppm | 0.0003 ppm | 0.0003 ppm | 0.0003 ppm | 0.0048 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0050 ppm | 0.0008 ppm | 0.0005 ppm | 0.0004 ppm | 0.0003 ppm | 0.0020 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0033 ppm | -0.0020 ppm | 0.0004 ppm | 0.0003 ppm | 0.0003 ppm | -0.0001 ppm |
| Recovery Percentage 1 | 9.444 % | 2.355 % | -2.727 % | 1.377 % | 3.275 % | 5.359 % | 2.216 % |
| Concentration RSD | 25.8 % | 138.0 % | 1,182.6 % | 25.2 % | 14.8 % | 3.7 % | 110.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0004 ppm | 0.0003 ppm | 0.0002 ppm | 0.0033 ppm | 0.0390 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0006 ppm | 0.0002 ppm | 0.0000 ppm | 0.0038 ppm | 0.0439 ppm | -0.0006 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0005 ppm | 0.0003 ppm | 0.0002 ppm | 0.0025 ppm | 0.0348 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0002 ppm | 0.0003 ppm | 0.0004 ppm | 0.0035 ppm | 0.0383 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 6.337 % | 2.119 % | 2.672 % | 2.377 % | 6.546 % | 1.559 % | -3.032 % |
| Concentration RSD | 6.5 % | 44.2 % | 17.9 % | 82.2 % | 22.3 % | 11.7 % | 96.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0025 ppm | 0.0002 ppm | 0.0009 ppm | 0.0357 ppm | 0.0007 ppm | 0.0002 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.0026 ppm | 0.0002 ppm | 0.0009 ppm | 0.0329 ppm | 0.0006 ppm | 0.0007 ppm | 0.0020 ppm |
| Concentration per Run 2 | 0.0025 ppm | 0.0001 ppm | 0.0009 ppm | 0.0384 ppm | 0.0007 ppm | -0.0001 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0023 ppm | 0.0002 ppm | 0.0008 ppm | 0.0358 ppm | 0.0007 ppm | 0.0000 ppm | 0.0013 ppm |
| Recovery Percentage 1 | 2.455 % | 1.862 % | 1.719 % | 1.784 % | 2.724 % | 1.936 % | 2.034 % |
| Concentration RSD | 6.9 % | 47.0 % | 3.4 % | 7.7 % | 7.9 % | 247.8 % | 107.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 0.0013 ppm | 0.0001 ppm | 0.0003 ppm | 0.0007 ppm | 0.0013 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0018 ppm | 0.0002 ppm | 0.0003 ppm | 0.0008 ppm | 0.0037 ppm | 0.0005 ppm |
| Concentration per Run 2 | -0.0015 ppm | 0.0010 ppm | 0.0003 ppm | 0.0003 ppm | 0.0007 ppm | -0.0002 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0009 ppm | 0.0010 ppm | -0.0002 ppm | 0.0003 ppm | 0.0006 ppm | 0.0006 ppm | 0.0007 ppm |
| Recovery Percentage 1 | -6.504 % | 0.251 % | 0.252 % | 2.812 % | 6.791 % | 6.688 % | 5.465 % |
| Concentration RSD | 157.2 % | 34.9 % | 209.9 % | 6.3 % | 13.5 % | 154.5 % | 29.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 106.0036 % | 108.3679 % | 108.7655 % | 105.5051 % | 107.6197 % | 108.2121 % |
| Concentration per Run 1 | 0.0004 ppm | 105.9337 % | 108.9162 % | 109.3315 % | 105.5695 % | 108.0274 % | 108.7343 % |
| Concentration per Run 2 | 0.0007 ppm | 106.2272 % | 108.1629 % | 107.8186 % | 105.6200 % | 106.7237 % | 107.9639 % |
| Concentration per Run 3 | 0.0005 ppm | 105.8499 % | 108.0247 % | 109.1465 % | 105.3257 % | 108.1080 % | 107.9380 % |
| Recovery Percentage 1 | 10.632 % | | | | | | |
| Concentration RSD | 25.1 % | 0.2 % | 0.4 % | 0.8 % | 0.1 % | 0.7 % | 0.4 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: CCV
Analysis started at: 3/12/2025 16:35:23
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4337 ppm | 0.4748 ppm | 0.4538 ppm | 0.4482 ppm | 0.4520 ppm | 0.4619 ppm | 0.4489 ppm |
| Concentration per Run 1 | 0.4331 ppm | 0.4723 ppm | 0.4552 ppm | 0.4486 ppm | 0.4477 ppm | 0.4576 ppm | 0.4463 ppm |
| Concentration per Run 2 | 0.4328 ppm | 0.4753 ppm | 0.4542 ppm | 0.4489 ppm | 0.4540 ppm | 0.4641 ppm | 0.4508 ppm |
| Concentration per Run 3 | 0.4352 ppm | 0.4767 ppm | 0.4519 ppm | 0.4472 ppm | 0.4544 ppm | 0.4642 ppm | 0.4496 ppm |
| Recovery Percentage 1 | 86.741 % | 94.954 % | 90.758 % | 89.641 % | 90.408 % | 92.390 % | 89.783 % |
| Concentration RSD | 0.3 % | 0.5 % | 0.4 % | 0.2 % | 0.8 % | 0.8 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4645 ppm | 0.4571 ppm | 0.4534 ppm | 0.4411 ppm | 0.4639 ppm | 4.7576 ppm | 0.4558 ppm |
| Concentration per Run 1 | 0.4663 ppm | 0.4584 ppm | 0.4549 ppm | 0.4409 ppm | 0.4599 ppm | 4.7106 ppm | 0.4513 ppm |
| Concentration per Run 2 | 0.4635 ppm | 0.4567 ppm | 0.4520 ppm | 0.4413 ppm | 0.4650 ppm | 4.7627 ppm | 0.4588 ppm |
| Concentration per Run 3 | 0.4637 ppm | 0.4560 ppm | 0.4532 ppm | 0.4411 ppm | 0.4669 ppm | 4.7994 ppm | 0.4572 ppm |
| Recovery Percentage 1 | 92.895 % | 91.410 % | 90.679 % | 88.221 % | 92.788 % | 95.151 % | 91.152 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.3 % | 0.0 % | 0.8 % | 0.9 % | 0.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4658 ppm | 0.4569 ppm | 0.4437 ppm | 9.2416 ppm | 0.4523 ppm | 0.4465 ppm | 0.4639 ppm |
| Concentration per Run 1 | 0.4677 ppm | 0.4529 ppm | 0.4431 ppm | 9.1651 ppm | 0.4530 ppm | 0.4473 ppm | 0.4629 ppm |
| Concentration per Run 2 | 0.4660 ppm | 0.4586 ppm | 0.4446 ppm | 9.2829 ppm | 0.4525 ppm | 0.4461 ppm | 0.4632 ppm |
| Concentration per Run 3 | 0.4638 ppm | 0.4593 ppm | 0.4433 ppm | 9.2767 ppm | 0.4513 ppm | 0.4461 ppm | 0.4655 ppm |
| Recovery Percentage 1 | 93.167 % | 91.385 % | 88.730 % | 92.416 % | 90.452 % | 89.299 % | 92.771 % |
| Concentration RSD | 0.4 % | 0.8 % | 0.2 % | 0.7 % | 0.2 % | 0.2 % | 0.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4520 ppm | 5.1588 ppm | 0.4637 ppm | 0.4588 ppm | 0.4487 ppm | 0.4389 ppm | 0.4447 ppm |
| Concentration per Run 1 | 0.4522 ppm | 5.1700 ppm | 0.4649 ppm | 0.4544 ppm | 0.4498 ppm | 0.4405 ppm | 0.4451 ppm |
| Concentration per Run 2 | 0.4528 ppm | 5.1546 ppm | 0.4644 ppm | 0.4607 ppm | 0.4478 ppm | 0.4397 ppm | 0.4446 ppm |
| Concentration per Run 3 | 0.4512 ppm | 5.1518 ppm | 0.4617 ppm | 0.4614 ppm | 0.4486 ppm | 0.4365 ppm | 0.4444 ppm |
| Recovery Percentage 1 | 90.408 % | 98.263 % | 92.734 % | 91.762 % | 89.745 % | 87.781 % | 88.947 % |
| Concentration RSD | 0.2 % | 0.2 % | 0.4 % | 0.8 % | 0.2 % | 0.5 % | 0.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4665 ppm | 106.5462 % | 108.3669 % | 109.8618 % | 107.8782 % | 107.2356 % | 110.5622 % |
| Concentration per Run 1 | 0.4677 ppm | 107.3915 % | 108.3392 % | 109.8278 % | 108.8734 % | 107.0030 % | 110.5476 % |
| Concentration per Run 2 | 0.4656 ppm | 106.3173 % | 108.5340 % | 109.7797 % | 107.5249 % | 107.2802 % | 110.7592 % |
| Concentration per Run 3 | 0.4661 ppm | 105.9299 % | 108.2276 % | 109.9778 % | 107.2363 % | 107.4237 % | 110.3798 % |
| Recovery Percentage 1 | 93.295 % | | | | | | |
| Concentration RSD | 0.2 % | 0.7 % | 0.1 % | 0.1 % | 0.8 % | 0.2 % | 0.2 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: CCB
Analysis started at: 3/12/2025 16:40:16
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0034 ppm | -0.0003 ppm | 0.0003 ppm | 0.0002 ppm | 0.0002 ppm | -0.0014 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0031 ppm | 0.0000 ppm | 0.0005 ppm | 0.0003 ppm | 0.0002 ppm | -0.0020 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0026 ppm | -0.0013 ppm | 0.0002 ppm | 0.0001 ppm | 0.0002 ppm | -0.0011 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0046 ppm | 0.0005 ppm | 0.0002 ppm | 0.0002 ppm | 0.0001 ppm | -0.0011 ppm |
| Recovery Percentage 1 | 7.354 % | 3.424 % | -5.230 % | 1.051 % | 2.187 % | 3.123 % | -1.410 % |
| Concentration RSD | 39.6 % | 31.3 % | 346.9 % | 64.2 % | 40.7 % | 9.7 % | 33.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0003 ppm | 0.0000 ppm | 0.0001 ppm | 0.0019 ppm | 0.0166 ppm | -0.0007 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0002 ppm | -0.0002 ppm | -0.0001 ppm | 0.0018 ppm | 0.0156 ppm | -0.0004 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0003 ppm | 0.0000 ppm | 0.0002 ppm | 0.0019 ppm | 0.0193 ppm | -0.0011 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0005 ppm | 0.0002 ppm | 0.0002 ppm | 0.0020 ppm | 0.0147 ppm | -0.0006 ppm |
| Recovery Percentage 1 | 4.462 % | 1.587 % | 0.329 % | 0.922 % | 3.800 % | 0.662 % | -6.927 % |
| Concentration RSD | 51.0 % | 45.9 % | 608.5 % | 152.5 % | 4.4 % | 14.8 % | 52.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0020 ppm | 0.0000 ppm | 0.0006 ppm | 0.0114 ppm | 0.0006 ppm | 0.0003 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0020 ppm | 0.0000 ppm | 0.0006 ppm | 0.0120 ppm | 0.0010 ppm | 0.0006 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0029 ppm | 0.0001 ppm | 0.0007 ppm | 0.0094 ppm | 0.0001 ppm | 0.0007 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0011 ppm | -0.0001 ppm | 0.0004 ppm | 0.0127 ppm | 0.0006 ppm | -0.0005 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 1.996 % | -0.061 % | 1.131 % | 0.569 % | 2.326 % | 2.717 % | 0.445 % |
| Concentration RSD | 43.9 % | 1,951.7 % | 30.8 % | 15.2 % | 83.0 % | 243.9 % | 249.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0008 ppm | -0.0007 ppm | 0.0002 ppm | 0.0006 ppm | 0.0029 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0000 ppm | -0.0009 ppm | 0.0001 ppm | 0.0005 ppm | 0.0034 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0003 ppm | -0.0010 ppm | -0.0005 ppm | 0.0002 ppm | 0.0007 ppm | 0.0031 ppm | 0.0005 ppm |
| Concentration per Run 3 | -0.0009 ppm | -0.0014 ppm | -0.0007 ppm | 0.0002 ppm | 0.0006 ppm | 0.0022 ppm | 0.0003 ppm |
| Recovery Percentage 1 | -1.535 % | -0.157 % | -1.449 % | 1.740 % | 6.385 % | 14.446 % | 3.942 % |
| Concentration RSD | 449.5 % | 93.5 % | 28.4 % | 27.8 % | 15.4 % | 20.8 % | 23.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 106.7602 % | 109.3450 % | 109.9631 % | 106.4229 % | 109.3264 % | 109.6772 % |
| Concentration per Run 1 | 0.0003 ppm | 107.1265 % | 110.6920 % | 109.8803 % | 107.1034 % | 109.1988 % | 111.0947 % |
| Concentration per Run 2 | 0.0002 ppm | 106.1530 % | 108.7225 % | 110.0975 % | 105.7668 % | 109.4587 % | 109.0822 % |
| Concentration per Run 3 | 0.0003 ppm | 107.0011 % | 108.6205 % | 109.9115 % | 106.3984 % | 109.3216 % | 108.8548 % |
| Recovery Percentage 1 | 5.476 % | | | | | | |
| Concentration RSD | 24.5 % | 0.5 % | 1.1 % | 0.1 % | 0.6 % | 0.1 % | 1.1 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: xLDR 150 Na Fail
Analysis started at: 3/12/2025 18:30:12
Comments <Comment>
Rack: 1
Vial: 47

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | -0.0003 ppm | -0.0003 ppm | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | 0.0026 ppm |
| Concentration per Run 1 | 0.0006 ppm | -0.0005 ppm | -0.0004 ppm | -0.0001 ppm | 0.0001 ppm | 0.0001 ppm | 0.0038 ppm |
| Concentration per Run 2 | 0.0005 ppm | -0.0026 ppm | 0.0008 ppm | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | 0.0014 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0024 ppm | -0.0012 ppm | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | 0.0025 ppm |
| Concentration RSD | 37.0 % | 929.7 % | 410.0 % | 142.2 % | 23.7 % | 14.0 % | 47.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0003 ppm | 0.0003 ppm | 0.0000 ppm | -0.0022 ppm | 0.0027 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0004 ppm | 0.0003 ppm | 0.0001 ppm | -0.0030 ppm | -0.0005 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0002 ppm | 0.0003 ppm | 0.0000 ppm | -0.0021 ppm | -0.0029 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0002 ppm | 0.0002 ppm | 0.0001 ppm | -0.0014 ppm | 0.0116 ppm | -0.0013 ppm |
| Concentration RSD | 49.3 % | 28.4 % | 10.5 % | 168.0 % | 37.1 % | 284.5 % | 1,289.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 0.0002 ppm | 0.0002 ppm | 131.3284 ppm | 0.0014 ppm | 0.0003 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.0020 ppm | 0.0003 ppm | 0.0001 ppm | 129.8392 ppm | 0.0010 ppm | -0.0001 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0001 ppm | 0.0003 ppm | 130.7601 ppm | 0.0017 ppm | 0.0005 ppm | 0.0018 ppm |
| Concentration per Run 3 | 0.0018 ppm | 0.0002 ppm | 0.0002 ppm | 133.3858 ppm | 0.0014 ppm | 0.0004 ppm | 0.0004 ppm |
| Concentration RSD | 50.9 % | 30.4 % | 32.8 % | 1.4 % | 22.8 % | 106.5 % | 69.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | -0.0002 ppm | -0.0005 ppm | 0.0001 ppm | 0.0006 ppm | 0.0030 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0019 ppm | 0.0017 ppm | -0.0006 ppm | 0.0001 ppm | 0.0006 ppm | 0.0031 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0007 ppm | -0.0010 ppm | -0.0007 ppm | 0.0001 ppm | 0.0005 ppm | 0.0030 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0014 ppm | -0.0004 ppm | 0.0001 ppm | 0.0008 ppm | 0.0030 ppm | 0.0004 ppm |
| Concentration RSD | 126.5 % | 805.2 % | 30.9 % | 18.5 % | 25.7 % | 1.4 % | 39.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 105.1307 % | 105.9037 % | 113.9819 % | 106.1062 % | 115.2527 % | 107.1973 % |
| Concentration per Run 1 | 0.0004 ppm | 105.7090 % | 105.9350 % | 114.3464 % | 106.7875 % | 115.8369 % | 107.2187 % |
| Concentration per Run 2 | 0.0003 ppm | 105.1575 % | 105.7841 % | 114.7064 % | 106.0939 % | 115.7205 % | 107.1058 % |
| Concentration per Run 3 | 0.0005 ppm | 104.5256 % | 105.9921 % | 112.8929 % | 105.4373 % | 114.2007 % | 107.2672 % |
| Concentration RSD | 25.1 % | 0.6 % | 0.1 % | 0.8 % | 0.6 % | 0.8 % | 0.1 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: xLDR 200 Na Fail
Analysis started at: 3/12/2025 18:37:17
Comments <Comment>
Rack: 1
Vial: 48

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0008 ppm | -0.0007 ppm | 0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0046 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0028 ppm | -0.0001 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm | 0.0038 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0044 ppm | -0.0017 ppm | 0.0002 ppm | 0.0001 ppm | 0.0000 ppm | 0.0033 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0010 ppm | -0.0003 ppm | -0.0001 ppm | 0.0000 ppm | 0.0000 ppm | 0.0068 ppm |
| Concentration RSD | 181.3 % | 426.6 % | 126.1 % | 129.6 % | 93.7 % | 24.5 % | 40.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | -0.0001 ppm | -0.0041 ppm | 0.0360 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | -0.0046 ppm | 0.0183 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | 0.0000 ppm | -0.0038 ppm | 0.0302 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | 0.0002 ppm | -0.0001 ppm | -0.0038 ppm | 0.0596 ppm | -0.0007 ppm |
| Concentration RSD | 222.3 % | 181.3 % | 122.7 % | 75.1 % | 11.0 % | 59.0 % | 960.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0001 ppm | 0.0002 ppm | 173.9251 [SIC 500] | 0.0004 ppm | -0.0005 ppm | -0.0005 ppm |
| Concentration per Run 1 | -0.0007 ppm | 0.0000 ppm | 0.0001 ppm | 174.4515 ppm | 0.0004 ppm | -0.0003 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0001 ppm | 0.0004 ppm | 174.2015 ppm | 0.0002 ppm | -0.0004 ppm | -0.0012 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0003 ppm | 0.0001 ppm | 173.1225 ppm | 0.0005 ppm | -0.0007 ppm | -0.0005 ppm |
| Concentration RSD | 705.1 % | 287.6 % | 95.8 % | 0.4 % | 43.4 % | 41.9 % | 151.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0010 ppm | -0.0029 ppm | -0.0014 ppm | 0.0000 ppm | 0.0003 ppm | 0.0032 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0011 ppm | -0.0026 ppm | -0.0005 ppm | 0.0000 ppm | 0.0004 ppm | 0.0029 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0006 ppm | -0.0034 ppm | -0.0023 ppm | 0.0000 ppm | 0.0001 ppm | 0.0039 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0025 ppm | -0.0026 ppm | -0.0013 ppm | 0.0000 ppm | 0.0004 ppm | 0.0027 ppm | 0.0002 ppm |
| Concentration RSD | 157.9 % | 15.9 % | 63.2 % | 151.5 % | 49.3 % | 19.9 % | 55.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 105.0763 % | 105.1916 % | 114.2799 % | 106.1216 % | 116.1078 % | 106.0832 % |
| Concentration per Run 1 | 0.0001 ppm | 104.5675 % | 105.1191 % | 114.3431 % | 105.5566 % | 116.7595 % | 106.1310 % |
| Concentration per Run 2 | 0.0001 ppm | 105.6028 % | 105.3787 % | 114.5327 % | 106.8551 % | 115.9222 % | 106.2664 % |
| Concentration per Run 3 | 0.0002 ppm | 105.0586 % | 105.0771 % | 113.9638 % | 105.9532 % | 115.6416 % | 105.8521 % |
| Concentration RSD | 24.5 % | 0.5 % | 0.2 % | 0.3 % | 0.6 % | 0.5 % | 0.2 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: LDR Na 150
Analysis started at: 3/12/2025 18:44:23
Comments <Comment>
Rack: 1
Vial: 49

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0028 ppm | -0.0004 ppm | -0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0017 ppm | -0.0005 ppm | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0015 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0046 ppm | 0.0012 ppm | -0.0001 ppm | 0.0001 ppm | 0.0000 ppm | -0.0009 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0022 ppm | -0.0018 ppm | -0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0009 ppm |
| Concentration RSD | 60.8 % | 53.9 % | 375.1 % | 102.0 % | 443.1 % | 11.2 % | 240.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0002 ppm | -0.0001 ppm | -0.0034 ppm | 0.0455 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm | -0.0037 ppm | 0.0250 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0004 ppm | 0.0004 ppm | -0.0002 ppm | -0.0035 ppm | 0.0517 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0002 ppm | 0.0001 ppm | -0.0001 ppm | -0.0031 ppm | 0.0598 ppm | -0.0004 ppm |
| Concentration RSD | 67.1 % | 376.2 % | 106.2 % | 109.5 % | 8.6 % | 40.0 % | 512.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | -0.0001 ppm | 0.0000 ppm | 141.5921 ppm | 0.0004 ppm | 0.0002 ppm | 0.0011 ppm |
| Concentration per Run 1 | -0.0013 ppm | 0.0000 ppm | 0.0001 ppm | 142.4878 ppm | 0.0003 ppm | 0.0004 ppm | 0.0019 ppm |
| Concentration per Run 2 | -0.0006 ppm | 0.0000 ppm | 0.0000 ppm | 141.1443 ppm | 0.0003 ppm | -0.0014 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0002 ppm | 0.0000 ppm | 141.1443 ppm | 0.0006 ppm | 0.0017 ppm | 0.0014 ppm |
| Concentration RSD | 78.8 % | 142.5 % | 154.6 % | 0.5 % | 48.7 % | 616.8 % | 84.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0023 ppm | -0.0010 ppm | 0.0000 ppm | 0.0003 ppm | 0.0006 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0010 ppm | -0.0027 ppm | -0.0005 ppm | 0.0000 ppm | 0.0002 ppm | 0.0016 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0020 ppm | -0.0011 ppm | 0.0000 ppm | 0.0002 ppm | -0.0011 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0008 ppm | -0.0022 ppm | -0.0013 ppm | 0.0000 ppm | 0.0005 ppm | 0.0012 ppm | 0.0002 ppm |
| Concentration RSD | 937.6 % | 15.9 % | 41.8 % | 133.4 % | 76.5 % | 252.2 % | 159.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 105.8859 % | 105.6088 % | 114.2022 % | 106.4871 % | 115.3582 % | 106.2525 % |
| Concentration per Run 1 | 0.0003 ppm | 106.0251 % | 104.7116 % | 114.6214 % | 106.8803 % | 115.9326 % | 105.1787 % |
| Concentration per Run 2 | 0.0001 ppm | 105.9267 % | 106.1764 % | 113.8069 % | 106.4343 % | 114.9231 % | 106.9069 % |
| Concentration per Run 3 | -0.0001 ppm | 105.7058 % | 105.9385 % | 114.1784 % | 106.1467 % | 115.2189 % | 106.6720 % |
| Concentration RSD | 218.7 % | 0.2 % | 0.7 % | 0.4 % | 0.3 % | 0.4 % | 0.9 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: L2512169-01d20 WG2039234
Analysis started at: 3/12/2025 19:07:12
Comments <Comment>
Rack: 1
Vial: 50

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.1660 ppm | -0.0013 ppm | 0.0005 ppm | 0.0132 ppm | 0.0001 ppm | 1.9286 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.1642 ppm | -0.0018 ppm | 0.0007 ppm | 0.0130 ppm | 0.0001 ppm | 1.9001 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.1680 ppm | -0.0026 ppm | 0.0005 ppm | 0.0132 ppm | 0.0001 ppm | 1.9450 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.1659 ppm | 0.0007 ppm | 0.0002 ppm | 0.0133 ppm | 0.0001 ppm | 1.9406 ppm |
| Concentration RSD | 109.2 % | 1.2 % | 137.2 % | 60.0 % | 1.2 % | 15.2 % | 1.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0017 ppm | 0.0002 ppm | -0.0001 ppm | 1.0619 ppm | 0.3363 ppm | -0.0009 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0017 ppm | 0.0005 ppm | -0.0002 ppm | 1.0456 ppm | 0.3184 ppm | -0.0018 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0018 ppm | 0.0002 ppm | -0.0001 ppm | 1.0707 ppm | 0.3407 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0015 ppm | -0.0001 ppm | -0.0001 ppm | 1.0695 ppm | 0.3497 ppm | -0.0005 ppm |
| Concentration RSD | 54.5 % | 8.1 % | 156.3 % | 79.6 % | 1.3 % | 4.8 % | 98.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3872 ppm | 0.0145 ppm | 0.0004 ppm | 17.5012 ppm | 0.0013 ppm | 0.0000 ppm | 0.0016 ppm |
| Concentration per Run 1 | 0.3863 ppm | 0.0143 ppm | 0.0007 ppm | 17.2515 ppm | 0.0012 ppm | 0.0003 ppm | 0.0013 ppm |
| Concentration per Run 2 | 0.3887 ppm | 0.0148 ppm | 0.0002 ppm | 17.5948 ppm | 0.0017 ppm | 0.0010 ppm | 0.0016 ppm |
| Concentration per Run 3 | 0.3866 ppm | 0.0144 ppm | 0.0002 ppm | 17.6572 ppm | 0.0009 ppm | -0.0014 ppm | 0.0020 ppm |
| Concentration RSD | 0.3 % | 1.7 % | 81.2 % | 1.2 % | 28.6 % | 4,852.4 % | 22.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.4738 ppm | -0.0011 ppm | 0.0129 ppm | 0.0002 ppm | 0.0018 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0010 ppm | 0.4792 ppm | -0.0013 ppm | 0.0127 ppm | 0.0004 ppm | 0.0027 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0016 ppm | 0.4728 ppm | -0.0011 ppm | 0.0130 ppm | 0.0002 ppm | 0.0016 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0017 ppm | 0.4695 ppm | -0.0008 ppm | 0.0131 ppm | 0.0001 ppm | 0.0012 ppm | 0.0002 ppm |
| Concentration RSD | 567.5 % | 1.0 % | 24.3 % | 1.7 % | 55.6 % | 40.4 % | 11.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0043 ppm | 107.3139 % | 109.7664 % | 114.0354 % | 107.3723 % | 111.1954 % | 109.9002 % |
| Concentration per Run 1 | 0.0045 ppm | 108.0473 % | 109.9878 % | 114.0277 % | 108.5696 % | 110.8438 % | 110.2266 % |
| Concentration per Run 2 | 0.0043 ppm | 106.5648 % | 109.5506 % | 113.9421 % | 106.4104 % | 111.3756 % | 109.6416 % |
| Concentration per Run 3 | 0.0042 ppm | 107.3296 % | 109.7609 % | 114.1364 % | 107.1371 % | 111.3668 % | 109.8326 % |
| Concentration RSD | 3.4 % | 0.7 % | 0.2 % | 0.1 % | 1.0 % | 0.3 % | 0.3 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: CCV
Analysis started at: 3/12/2025 19:12:19
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4292 ppm | 0.4726 ppm | 0.4476 ppm | 0.4422 ppm | 0.4485 ppm | 0.4595 ppm | 0.4537 ppm |
| Concentration per Run 1 | 0.4277 ppm | 0.4669 ppm | 0.4445 ppm | 0.4392 ppm | 0.4443 ppm | 0.4551 ppm | 0.4497 ppm |
| Concentration per Run 2 | 0.4302 ppm | 0.4741 ppm | 0.4506 ppm | 0.4453 ppm | 0.4505 ppm | 0.4616 ppm | 0.4558 ppm |
| Concentration per Run 3 | 0.4296 ppm | 0.4769 ppm | 0.4475 ppm | 0.4420 ppm | 0.4508 ppm | 0.4617 ppm | 0.4557 ppm |
| Recovery Percentage 1 | 85.839 % | 94.523 % | 89.511 % | 88.433 % | 89.708 % | 91.894 % | 90.743 % |
| Concentration RSD | 0.3 % | 1.1 % | 0.7 % | 0.7 % | 0.8 % | 0.8 % | 0.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4582 ppm | 0.4491 ppm | 0.4528 ppm | 0.4373 ppm | 0.4647 ppm | 4.7548 ppm | 0.4581 ppm |
| Concentration per Run 1 | 0.4554 ppm | 0.4454 ppm | 0.4507 ppm | 0.4352 ppm | 0.4616 ppm | 4.7057 ppm | 0.4531 ppm |
| Concentration per Run 2 | 0.4605 ppm | 0.4522 ppm | 0.4542 ppm | 0.4386 ppm | 0.4681 ppm | 4.7692 ppm | 0.4604 ppm |
| Concentration per Run 3 | 0.4586 ppm | 0.4497 ppm | 0.4535 ppm | 0.4382 ppm | 0.4645 ppm | 4.7896 ppm | 0.4606 ppm |
| Recovery Percentage 1 | 91.633 % | 89.824 % | 90.559 % | 87.466 % | 92.944 % | 95.096 % | 91.611 % |
| Concentration RSD | 0.6 % | 0.8 % | 0.4 % | 0.4 % | 0.7 % | 0.9 % | 0.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4679 ppm | 0.4534 ppm | 0.4390 ppm | 9.2724 ppm | 0.4461 ppm | 0.4407 ppm | 0.4570 ppm |
| Concentration per Run 1 | 0.4670 ppm | 0.4490 ppm | 0.4349 ppm | 9.1772 ppm | 0.4431 ppm | 0.4375 ppm | 0.4525 ppm |
| Concentration per Run 2 | 0.4671 ppm | 0.4562 ppm | 0.4422 ppm | 9.3159 ppm | 0.4491 ppm | 0.4427 ppm | 0.4623 ppm |
| Concentration per Run 3 | 0.4696 ppm | 0.4551 ppm | 0.4398 ppm | 9.3241 ppm | 0.4462 ppm | 0.4421 ppm | 0.4562 ppm |
| Recovery Percentage 1 | 93.579 % | 90.687 % | 87.791 % | 92.724 % | 89.224 % | 88.147 % | 91.396 % |
| Concentration RSD | 0.3 % | 0.9 % | 0.8 % | 0.9 % | 0.7 % | 0.6 % | 1.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4448 ppm | 5.0892 ppm | 0.4569 ppm | 0.4564 ppm | 0.4506 ppm | 0.4283 ppm | 0.4407 ppm |
| Concentration per Run 1 | 0.4403 ppm | 5.0513 ppm | 0.4524 ppm | 0.4523 ppm | 0.4481 ppm | 0.4264 ppm | 0.4384 ppm |
| Concentration per Run 2 | 0.4477 ppm | 5.1293 ppm | 0.4602 ppm | 0.4581 ppm | 0.4519 ppm | 0.4314 ppm | 0.4418 ppm |
| Concentration per Run 3 | 0.4465 ppm | 5.0870 ppm | 0.4582 ppm | 0.4588 ppm | 0.4518 ppm | 0.4272 ppm | 0.4419 ppm |
| Recovery Percentage 1 | 88.969 % | 96.937 % | 91.378 % | 91.280 % | 90.122 % | 85.662 % | 88.142 % |
| Concentration RSD | 0.9 % | 0.8 % | 0.9 % | 0.8 % | 0.5 % | 0.6 % | 0.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4625 ppm | 106.8534 % | 109.3152 % | 111.3768 % | 107.4983 % | 109.1793 % | 110.1567 % |
| Concentration per Run 1 | 0.4594 ppm | 107.6022 % | 110.0399 % | 111.9520 % | 108.3386 % | 110.0800 % | 110.7807 % |
| Concentration per Run 2 | 0.4647 ppm | 106.3365 % | 108.9484 % | 110.8347 % | 107.1039 % | 108.4040 % | 109.8586 % |
| Concentration per Run 3 | 0.4632 ppm | 106.6215 % | 108.9574 % | 111.3437 % | 107.0524 % | 109.0539 % | 109.8308 % |
| Recovery Percentage 1 | 92.494 % | | | | | | |
| Concentration RSD | 0.6 % | 0.6 % | 0.6 % | 0.5 % | 0.7 % | 0.8 % | 0.5 % |

# ICP Data Trace 7

3/12/2025 19:23:10

LabBook: WG2039409_03122025T7.imexp

Sample: CCB
Analysis started at: 3/12/2025 19:17:11
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0058 ppm | -0.0008 ppm | 0.0001 ppm | 0.0002 ppm | 0.0002 ppm | -0.0006 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0045 ppm | -0.0013 ppm | 0.0005 ppm | 0.0002 ppm | 0.0001 ppm | -0.0010 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0036 ppm | -0.0008 ppm | 0.0000 ppm | 0.0002 ppm | 0.0002 ppm | -0.0018 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0093 ppm | -0.0002 ppm | -0.0002 ppm | 0.0002 ppm | 0.0002 ppm | 0.0010 ppm |
| Recovery Percentage 1 | 7.435 % | 5.791 % | -15.004 % | 0.363 % | 1.970 % | 3.279 % | -0.622 % |
| Concentration RSD | 101.3 % | 52.5 % | 77.8 % | 348.5 % | 20.1 % | 11.0 % | 232.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0004 ppm | 0.0001 ppm | 0.0001 ppm | 0.0018 ppm | 0.0161 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0002 ppm | 0.0000 ppm | 0.0001 ppm | 0.0018 ppm | 0.0188 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0006 ppm | 0.0001 ppm | 0.0001 ppm | 0.0013 ppm | 0.0109 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0003 ppm | 0.0003 ppm | 0.0000 ppm | 0.0024 ppm | 0.0187 ppm | -0.0001 ppm |
| Recovery Percentage 1 | 5.869 % | 1.893 % | 1.157 % | 0.871 % | 3.649 % | 0.645 % | -0.148 % |
| Concentration RSD | 19.8 % | 56.8 % | 139.2 % | 68.8 % | 30.2 % | 28.2 % | 2,315.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 0.0001 ppm | 0.0006 ppm | 0.0164 ppm | 0.0009 ppm | -0.0004 ppm | 0.0010 ppm |
| Concentration per Run 1 | -0.0009 ppm | 0.0002 ppm | 0.0009 ppm | 0.0159 ppm | 0.0009 ppm | -0.0020 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0000 ppm | 0.0006 ppm | 0.0156 ppm | 0.0012 ppm | 0.0014 ppm | 0.0015 ppm |
| Concentration per Run 3 | 0.0053 ppm | 0.0002 ppm | 0.0004 ppm | 0.0177 ppm | 0.0007 ppm | -0.0005 ppm | 0.0014 ppm |
| Recovery Percentage 1 | 1.500 % | 1.376 % | 1.271 % | 0.820 % | 3.688 % | -3.586 % | 1.923 % |
| Concentration RSD | 220.0 % | 96.0 % | 36.3 % | 6.9 % | 30.0 % | 465.8 % | 89.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | -0.0011 ppm | -0.0007 ppm | 0.0002 ppm | 0.0005 ppm | 0.0023 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0007 ppm | -0.0016 ppm | 0.0002 ppm | 0.0004 ppm | 0.0018 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0000 ppm | -0.0010 ppm | 0.0002 ppm | 0.0005 ppm | 0.0029 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0005 ppm | -0.0026 ppm | 0.0005 ppm | 0.0002 ppm | 0.0005 ppm | 0.0023 ppm | 0.0005 ppm |
| Recovery Percentage 1 | 2.512 % | -0.219 % | -1.411 % | 1.771 % | 4.703 % | 11.701 % | 3.671 % |
| Concentration RSD | 87.2 % | 121.8 % | 150.1 % | 10.0 % | 16.7 % | 23.8 % | 37.5 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 107.9346 % | 110.5530 % | 112.4546 % | 106.8877 % | 112.6474 % | 110.0062 % |
| Concentration per Run 1 | 0.0004 ppm | 107.8971 % | 110.5055 % | 112.6104 % | 107.1470 % | 112.9385 % | 109.9923 % |
| Concentration per Run 2 | 0.0003 ppm | 108.1098 % | 110.5857 % | 112.1667 % | 106.8589 % | 112.1802 % | 109.9978 % |
| Concentration per Run 3 | 0.0003 ppm | 107.7970 % | 110.5678 % | 112.5865 % | 106.6571 % | 112.8236 % | 110.0286 % |
| Recovery Percentage 1 | 6.534 % | | | | | | |
| Concentration RSD | 15.1 % | 0.1 % | 0.0 % | 0.2 % | 0.2 % | 0.4 % | 0.0 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: Blank JMF Trace8
Analysis started at: 3/14/2025 9:04:40 AM
Rack 0
Vial 1
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -1.1 % | -0.1 % | -0.6 % | 0.3 % | 0.6 % | -0.3 % | -0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -0.3 % | 0.9 % | -0.5 % | 0.1 % | -0.3 % | 0.9 % | -13.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -0.3 % | -0.5 % | 0.3 % | 0.1 % | 1.4 % | 0.1 % | 0.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | 3.7 % | 0.9 % | 2.7 % | 2.7 % | -0.2 % | -1.6 % | -0.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % |
| Concentration per Run | 0.0000 ppm | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % |
| Concentration RSD | 0.3 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: ICAL
Analysis started at: 3/14/2025 9:09:16 AM
Rack 0
Vial 2
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 10.0000 ppm |
| Concentration per Run 1 | 0.9919 ppm | 24.9339 ppm | 0.9992 ppm | 0.9942 ppm | 1.0069 ppm | 1.0042 ppm | 10.0126 ppm |
| Concentration per Run 2 | 1.0010 ppm | 25.0477 ppm | 1.0114 ppm | 0.9971 ppm | 0.9943 ppm | 0.9990 ppm | 10.0056 ppm |
| Concentration per Run 3 | 1.0072 ppm | 25.0183 ppm | 0.9894 ppm | 1.0087 ppm | 0.9987 ppm | 0.9967 ppm | 9.9818 ppm |
| Concentration RSD | 0.8 % | 0.2 % | 1.1 % | 0.8 % | 0.6 % | 0.4 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 35.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 0.9950 ppm | 0.9902 ppm | 0.9931 ppm | 0.9927 ppm | 25.0901 ppm | 34.8782 ppm | 0.9979 ppm |
| Concentration per Run 2 | 0.9980 ppm | 1.0049 ppm | 1.0012 ppm | 0.9952 ppm | 25.0025 ppm | 35.0889 ppm | 1.0102 ppm |
| Concentration per Run 3 | 1.0069 ppm | 1.0049 ppm | 1.0056 ppm | 1.0121 ppm | 24.9074 ppm | 35.0329 ppm | 0.9919 ppm |
| Concentration RSD | 0.6 % | 0.8 % | 0.6 % | 1.1 % | 0.4 % | 0.3 % | 0.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.0000 ppm | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 9.9423 ppm | 1.0027 ppm | 0.9898 ppm | 25.0229 ppm | 0.9910 ppm | 1.0004 ppm | 0.9884 ppm |
| Concentration per Run 2 | 9.9884 ppm | 1.0010 ppm | 0.9968 ppm | 25.0161 ppm | 1.0025 ppm | 1.0068 ppm | 1.0064 ppm |
| Concentration per Run 3 | 10.0693 ppm | 0.9963 ppm | 1.0134 ppm | 24.9610 ppm | 1.0065 ppm | 0.9928 ppm | 1.0052 ppm |
| Concentration RSD | 0.6 % | 0.3 % | 1.2 % | 0.1 % | 0.8 % | 0.7 % | 1.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 10.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 0.9996 ppm | 9.8833 ppm | 0.9931 ppm | 1.0063 ppm | 0.9950 ppm | 0.9934 ppm | 0.9908 ppm |
| Concentration per Run 2 | 1.0125 ppm | 10.0346 ppm | 1.0001 ppm | 0.9955 ppm | 1.0017 ppm | 1.0103 ppm | 0.9976 ppm |
| Concentration per Run 3 | 0.9879 ppm | 10.0821 ppm | 1.0068 ppm | 0.9982 ppm | 1.0033 ppm | 0.9963 ppm | 1.0116 ppm |
| Concentration RSD | 1.2 % | 1.0 % | 0.7 % | 0.6 % | 0.4 % | 0.9 % | 1.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 103.3179 % | 102.3230 % | 93.0203 % | 96.9962 % | 98.5981 % | 96.9960 % |
| Concentration per Run 1 | 0.9956 ppm | 103.7742 % | 102.6771 % | 92.7436 % | 97.6870 % | 99.1592 % | 96.6455 % |
| Concentration per Run 2 | 1.0030 ppm | 103.6572 % | 101.3944 % | 93.0263 % | 96.9493 % | 97.8942 % | 97.2336 % |
| Concentration per Run 3 | 1.0014 ppm | 102.5222 % | 102.8973 % | 93.2911 % | 96.3522 % | 98.7410 % | 97.1089 % |
| Concentration RSD | 0.4 % | 0.7 % | 0.8 % | 0.3 % | 0.7 % | 0.7 % | 0.3 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: ICV
Analysis started at: 3/14/2025 9:18:14 AM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5246 ppm | 0.5015 ppm | 0.4877 ppm | 0.5249 ppm | 0.5030 ppm | 0.5295 ppm | 0.5221 ppm |
| Concentration per Run 1 | 0.5244 ppm | 0.5039 ppm | 0.4848 ppm | 0.5202 ppm | 0.5033 ppm | 0.5278 ppm | 0.5239 ppm |
| Concentration per Run 2 | 0.5253 ppm | 0.5024 ppm | 0.4920 ppm | 0.5246 ppm | 0.5050 ppm | 0.5309 ppm | 0.5217 ppm |
| Concentration per Run 3 | 0.5242 ppm | 0.4981 ppm | 0.4862 ppm | 0.5298 ppm | 0.5007 ppm | 0.5298 ppm | 0.5207 ppm |
| Recovery Percentage 1 | 104.924 % | 100.292 % | 97.535 % | 104.974 % | 100.598 % | 105.898 % | 104.418 % |
| Concentration RSD | 0.1 % | 0.6 % | 0.8 % | 0.9 % | 0.4 % | 0.3 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5219 ppm | 0.5273 ppm | 0.5168 ppm | 0.5347 ppm | 0.5299 ppm | 5.3440 ppm | 0.5312 ppm |
| Concentration per Run 1 | 0.5213 ppm | 0.5255 ppm | 0.5170 ppm | 0.5329 ppm | 0.5315 ppm | 5.3297 ppm | 0.5308 ppm |
| Concentration per Run 2 | 0.5216 ppm | 0.5275 ppm | 0.5158 ppm | 0.5360 ppm | 0.5308 ppm | 5.3120 ppm | 0.5328 ppm |
| Concentration per Run 3 | 0.5227 ppm | 0.5290 ppm | 0.5176 ppm | 0.5350 ppm | 0.5273 ppm | 5.3903 ppm | 0.5299 ppm |
| Recovery Percentage 1 | 104.377 % | 105.464 % | 103.365 % | 106.931 % | 105.974 % | 106.880 % | 106.231 % |
| Concentration RSD | 0.1 % | 0.3 % | 0.2 % | 0.3 % | 0.4 % | 0.8 % | 0.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5348 ppm | 0.5082 ppm | 0.5215 ppm | 10.4391 ppm | 0.5340 ppm | 0.5067 ppm | 0.5345 ppm |
| Concentration per Run 1 | 0.5366 ppm | 0.5073 ppm | 0.5155 ppm | 10.3981 ppm | 0.5336 ppm | 0.5071 ppm | 0.5316 ppm |
| Concentration per Run 2 | 0.5319 ppm | 0.5091 ppm | 0.5205 ppm | 10.4819 ppm | 0.5346 ppm | 0.5074 ppm | 0.5322 ppm |
| Concentration per Run 3 | 0.5360 ppm | 0.5081 ppm | 0.5284 ppm | 10.4374 ppm | 0.5338 ppm | 0.5057 ppm | 0.5396 ppm |
| Recovery Percentage 1 | 106.962 % | 101.631 % | 104.299 % | 104.391 % | 106.804 % | 101.349 % | 106.890 % |
| Concentration RSD | 0.5 % | 0.2 % | 1.3 % | 0.4 % | 0.1 % | 0.2 % | 0.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5041 ppm | 5.9848 ppm | 0.5468 ppm | 0.5225 ppm | 0.5252 ppm | 0.5190 ppm | 0.5163 ppm |
| Concentration per Run 1 | 0.4994 ppm | 5.9726 ppm | 0.5445 ppm | 0.5234 ppm | 0.5257 ppm | 0.5173 ppm | 0.5149 ppm |
| Concentration per Run 2 | 0.5099 ppm | 5.9730 ppm | 0.5476 ppm | 0.5233 ppm | 0.5259 ppm | 0.5235 ppm | 0.5163 ppm |
| Concentration per Run 3 | 0.5029 ppm | 6.0089 ppm | 0.5482 ppm | 0.5209 ppm | 0.5240 ppm | 0.5163 ppm | 0.5177 ppm |
| Recovery Percentage 1 | 100.812 % | 113.997 % | 109.355 % | 104.508 % | 105.037 % | 103.805 % | 103.259 % |
| Concentration RSD | 1.1 % | 0.3 % | 0.4 % | 0.3 % | 0.2 % | 0.8 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5251 ppm | 102.5033 % | 102.4153 % | 98.2097 % | 98.0265 % | 99.4102 % | 98.2278 % |
| Concentration per Run 1 | 0.5261 ppm | 102.9691 % | 103.1963 % | 98.0751 % | 98.5101 % | 100.5755 % | 98.2794 % |
| Concentration per Run 2 | 0.5252 ppm | 102.7580 % | 101.8919 % | 98.9593 % | 98.4474 % | 99.0113 % | 98.7589 % |
| Concentration per Run 3 | 0.5241 ppm | 101.7827 % | 102.1577 % | 97.5946 % | 97.1220 % | 98.6440 % | 97.6451 % |
| Recovery Percentage 1 | 105.018 % | | | | | | |
| Concentration RSD | 0.2 % | 0.6 % | 0.7 % | 0.7 % | 0.8 % | 1.0 % | 0.6 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: ICB
Analysis started at: 3/14/2025 9:22:51 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0013 ppm | 0.0011 ppm | -0.0001 ppm | -0.0001 ppm | 0.0000 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0006 ppm | -0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | -0.0007 ppm |
| Concentration per Run 2 | 0.0002 ppm | -0.0003 ppm | 0.0027 ppm | 0.0016 ppm | -0.0001 ppm | 0.0000 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0047 ppm | 0.0011 ppm | -0.0020 ppm | -0.0001 ppm | 0.0000 ppm | 0.0003 ppm |
| Recovery Percentage 1 | 3.969 % | 1.268 % | 22.571 % | -0.420 % | -0.590 % | -0.156 % | 0.231 % |
| Concentration RSD | 24.8 % | 233.5 % | 140.6 % | 1,417.1 % | 41.8 % | 118.1 % | 406.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | -0.0002 ppm | -0.0002 ppm | 0.0002 ppm | 0.0130 ppm | 0.0009 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0005 ppm | 0.0000 ppm | -0.0005 ppm | 0.0006 ppm | 0.0168 ppm | 0.0020 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0001 ppm | -0.0004 ppm | 0.0000 ppm | -0.0004 ppm | 0.0163 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0007 ppm | -0.0002 ppm | 0.0000 ppm | 0.0004 ppm | 0.0060 ppm | 0.0004 ppm |
| Recovery Percentage 1 | -0.843 % | 0.983 % | -2.253 % | -1.695 % | 0.460 % | 0.521 % | 9.090 % |
| Concentration RSD | 199.4 % | 578.2 % | 75.9 % | 171.2 % | 225.2 % | 46.8 % | 108.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0001 ppm | 0.0028 ppm | -0.0018 ppm | 0.0006 ppm | -0.0006 ppm | -0.0006 ppm |
| Concentration per Run 1 | 0.0004 ppm | -0.0001 ppm | 0.0028 ppm | -0.0053 ppm | 0.0008 ppm | 0.0005 ppm | -0.0002 ppm |
| Concentration per Run 2 | -0.0005 ppm | -0.0002 ppm | 0.0029 ppm | 0.0014 ppm | 0.0009 ppm | -0.0018 ppm | -0.0039 ppm |
| Concentration per Run 3 | -0.0005 ppm | -0.0001 ppm | 0.0027 ppm | -0.0015 ppm | 0.0002 ppm | -0.0004 ppm | 0.0022 ppm |
| Recovery Percentage 1 | -0.170 % | -1.348 % | 5.522 % | -0.089 % | 2.568 % | -5.521 % | -1.211 % |
| Concentration RSD | 310.1 % | 26.3 % | 4.0 % | 188.0 % | 56.4 % | 214.0 % | 506.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | -0.0070 ppm | 0.0004 ppm | 0.0000 ppm | 0.0000 ppm | -0.0015 ppm | -0.0003 ppm |
| Concentration per Run 1 | -0.0028 ppm | -0.0082 ppm | 0.0005 ppm | 0.0000 ppm | 0.0001 ppm | -0.0017 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0011 ppm | -0.0072 ppm | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | -0.0015 ppm | -0.0005 ppm |
| Concentration per Run 3 | 0.0023 ppm | -0.0056 ppm | 0.0008 ppm | 0.0000 ppm | 0.0002 ppm | -0.0014 ppm | -0.0003 ppm |
| Recovery Percentage 1 | 2.012 % | -1.397 % | 0.865 % | 0.076 % | 0.323 % | -7.632 % | -2.691 % |
| Concentration RSD | 1,327.9 % | 19.1 % | 83.6 % | 613.3 % | 472.7 % | 9.6 % | 100.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 97.1060 % | 100.8302 % | 97.2192 % | 97.9663 % | 101.2631 % | 99.8472 % |
| Concentration per Run 1 | -0.0003 ppm | 102.9602 % | 102.5261 % | 97.0303 % | 105.2110 % | 102.7047 % | 99.8536 % |
| Concentration per Run 2 | -0.0001 ppm | 89.4814 % | 100.0350 % | 97.6389 % | 88.5628 % | 100.9263 % | 100.3030 % |
| Concentration per Run 3 | 0.0000 ppm | 98.8765 % | 99.9296 % | 96.9883 % | 100.1252 % | 100.1582 % | 99.3851 % |
| Recovery Percentage 1 | -3.123 % | | | | | | |
| Concentration RSD | 80.4 % | 7.1 % | 1.5 % | 0.4 % | 8.7 % | 1.3 % | 0.5 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: ICV
Analysis started at: 3/14/2025 9:27:17 AM
Rack 0
Vial 10
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5054 ppm | 0.4912 ppm | 0.4868 ppm | 0.5077 ppm | 0.4946 ppm | 0.5185 ppm | 0.5088 ppm |
| Concentration per Run 1 | 0.4833 ppm | 0.4922 ppm | 0.4874 ppm | 0.4844 ppm | 0.4926 ppm | 0.5171 ppm | 0.5026 ppm |
| Concentration per Run 2 | 0.5199 ppm | 0.4919 ppm | 0.4853 ppm | 0.5217 ppm | 0.4941 ppm | 0.5191 ppm | 0.5152 ppm |
| Concentration per Run 3 | 0.5129 ppm | 0.4893 ppm | 0.4876 ppm | 0.5171 ppm | 0.4971 ppm | 0.5194 ppm | 0.5086 ppm |
| Recovery Percentage 1 | 101.075 % | 98.230 % | 97.357 % | 101.544 % | 98.919 % | 103.705 % | 101.759 % |
| Concentration RSD | 3.8 % | 0.3 % | 0.3 % | 4.0 % | 0.5 % | 0.2 % | 1.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5162 ppm | 0.5185 ppm | 0.5103 ppm | 0.5135 ppm | 0.5241 ppm | 5.2227 ppm | 0.5186 ppm |
| Concentration per Run 1 | 0.4903 ppm | 0.4862 ppm | 0.4865 ppm | 0.4896 ppm | 0.5228 ppm | 5.2089 ppm | 0.5176 ppm |
| Concentration per Run 2 | 0.5331 ppm | 0.5452 ppm | 0.5257 ppm | 0.5279 ppm | 0.5245 ppm | 5.2307 ppm | 0.5183 ppm |
| Concentration per Run 3 | 0.5252 ppm | 0.5241 ppm | 0.5186 ppm | 0.5228 ppm | 0.5249 ppm | 5.2285 ppm | 0.5199 ppm |
| Recovery Percentage 1 | 103.234 % | 103.700 % | 102.055 % | 102.691 % | 104.814 % | 104.454 % | 103.719 % |
| Concentration RSD | 4.4 % | 5.8 % | 4.1 % | 4.0 % | 0.2 % | 0.2 % | 0.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5192 ppm | 0.4968 ppm | 0.5092 ppm | 10.2501 ppm | 0.5263 ppm | 0.5071 ppm | 0.5242 ppm |
| Concentration per Run 1 | 0.4965 ppm | 0.4946 ppm | 0.4816 ppm | 10.2140 ppm | 0.5023 ppm | 0.5072 ppm | 0.4864 ppm |
| Concentration per Run 2 | 0.5340 ppm | 0.4990 ppm | 0.5244 ppm | 10.2351 ppm | 0.5427 ppm | 0.5067 ppm | 0.5597 ppm |
| Concentration per Run 3 | 0.5272 ppm | 0.4968 ppm | 0.5217 ppm | 10.3013 ppm | 0.5340 ppm | 0.5074 ppm | 0.5265 ppm |
| Recovery Percentage 1 | 103.850 % | 99.364 % | 101.843 % | 102.501 % | 105.262 % | 101.414 % | 104.842 % |
| Concentration RSD | 3.8 % | 0.4 % | 4.7 % | 0.4 % | 4.0 % | 0.1 % | 7.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4960 ppm | 5.7290 ppm | 0.5186 ppm | 0.5084 ppm | 0.5175 ppm | 0.5131 ppm | 0.5094 ppm |
| Concentration per Run 1 | 0.4978 ppm | 5.3923 ppm | 0.4953 ppm | 0.5070 ppm | 0.4936 ppm | 0.5133 ppm | 0.4863 ppm |
| Concentration per Run 2 | 0.4931 ppm | 6.0245 ppm | 0.5334 ppm | 0.5080 ppm | 0.5345 ppm | 0.5126 ppm | 0.5243 ppm |
| Concentration per Run 3 | 0.4970 ppm | 5.7702 ppm | 0.5273 ppm | 0.5103 ppm | 0.5242 ppm | 0.5134 ppm | 0.5175 ppm |
| Recovery Percentage 1 | 99.192 % | 109.124 % | 103.728 % | 101.686 % | 103.493 % | 102.622 % | 101.872 % |
| Concentration RSD | 0.5 % | 5.6 % | 3.9 % | 0.3 % | 4.1 % | 0.1 % | 4.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5210 ppm | 104.0470 % | 103.5551 % | 96.8757 % | 99.4156 % | 100.5930 % | 99.0932 % |
| Concentration per Run 1 | 0.4957 ppm | 108.3223 % | 104.1019 % | 96.9670 % | 104.8946 % | 100.7968 % | 99.2360 % |
| Concentration per Run 2 | 0.5395 ppm | 101.2862 % | 102.6794 % | 96.9258 % | 94.4993 % | 99.9637 % | 99.0313 % |
| Concentration per Run 3 | 0.5278 ppm | 102.5325 % | 103.8840 % | 96.7341 % | 98.8528 % | 101.0185 % | 99.0123 % |
| Recovery Percentage 1 | 104.198 % | | | | | | |
| Concentration RSD | 4.4 % | 3.6 % | 0.7 % | 0.1 % | 5.3 % | 0.6 % | 0.1 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: ICB
Analysis started at: 3/14/2025 9:31:45 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0025 ppm | 0.0000 ppm | 0.0007 ppm | 0.0000 ppm | 0.0000 ppm | -0.0031 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0003 ppm | 0.0011 ppm | 0.0004 ppm | -0.0001 ppm | 0.0000 ppm | -0.0032 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0032 ppm | -0.0005 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm | -0.0033 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0041 ppm | -0.0007 ppm | 0.0015 ppm | 0.0000 ppm | 0.0000 ppm | -0.0029 ppm |
| Recovery Percentage 1 | 3.359 % | 2.541 % | -0.156 % | 2.500 % | -0.264 % | 0.158 % | -3.099 % |
| Concentration RSD | 136.7 % | 78.4 % | 12,339.9 % | 92.1 % | 225.2 % | 469.7 % | 7.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0001 ppm | -0.0002 ppm | -0.0003 ppm | 0.0011 ppm | -0.0011 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0001 ppm | 0.0000 ppm | -0.0003 ppm | 0.0008 ppm | -0.0084 ppm | 0.0013 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0002 ppm | -0.0002 ppm | -0.0002 ppm | 0.0010 ppm | 0.0012 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0001 ppm | -0.0003 ppm | -0.0003 ppm | 0.0015 ppm | 0.0039 ppm | -0.0008 ppm |
| Recovery Percentage 1 | 3.002 % | 0.722 % | -1.851 % | -2.901 % | 2.204 % | -0.043 % | 4.088 % |
| Concentration RSD | 32.8 % | 210.5 % | 67.6 % | 16.9 % | 35.5 % | 606.1 % | 262.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | -0.0002 ppm | 0.0020 ppm | -0.0051 ppm | 0.0000 ppm | -0.0004 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0019 ppm | -0.0003 ppm | 0.0021 ppm | -0.0043 ppm | 0.0000 ppm | 0.0004 ppm | -0.0011 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0000 ppm | 0.0024 ppm | -0.0016 ppm | 0.0000 ppm | -0.0008 ppm | -0.0017 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0003 ppm | 0.0017 ppm | -0.0093 ppm | -0.0002 ppm | -0.0007 ppm | 0.0016 ppm |
| Recovery Percentage 1 | 0.579 % | -2.241 % | 4.093 % | -0.254 % | -0.183 % | -3.605 % | -0.783 % |
| Concentration RSD | 199.8 % | 79.6 % | 16.4 % | 77.0 % | 212.3 % | 178.6 % | 457.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | -0.0078 ppm | 0.0001 ppm | 0.0000 ppm | 0.0001 ppm | -0.0008 ppm | -0.0002 ppm |
| Concentration per Run 1 | -0.0024 ppm | -0.0077 ppm | -0.0005 ppm | 0.0000 ppm | 0.0002 ppm | -0.0012 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0008 ppm | -0.0076 ppm | 0.0008 ppm | 0.0000 ppm | 0.0002 ppm | -0.0006 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0010 ppm | -0.0082 ppm | 0.0001 ppm | 0.0000 ppm | 0.0001 ppm | -0.0007 ppm | -0.0005 ppm |
| Recovery Percentage 1 | -8.719 % | -1.568 % | 0.242 % | -0.005 % | 1.384 % | -4.212 % | -2.009 % |
| Concentration RSD | 186.0 % | 4.3 % | 534.8 % | 6,275.1 % | 41.0 % | 37.4 % | 123.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 100.6108 % | 101.9941 % | 99.6738 % | 102.2325 % | 101.2324 % | 100.9342 % |
| Concentration per Run 1 | -0.0001 ppm | 99.5803 % | 102.4713 % | 99.2223 % | 101.6322 % | 101.3055 % | 100.6336 % |
| Concentration per Run 2 | -0.0004 ppm | 98.8107 % | 101.9425 % | 100.0666 % | 100.4069 % | 101.4037 % | 101.2373 % |
| Concentration per Run 3 | -0.0003 ppm | 103.4415 % | 101.5686 % | 99.7324 % | 104.6585 % | 100.9881 % | 100.9316 % |
| Recovery Percentage 1 | -5.697 % | | | | | | |
| Concentration RSD | 51.9 % | 2.5 % | 0.4 % | 0.4 % | 2.1 % | 0.2 % | 0.3 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: LLOQ
Analysis started at: 3/14/2025 9:36:11 AM
Rack 0
Vial 5
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0057 ppm | 0.1078 ppm | 0.0047 ppm | 0.0324 ppm | 0.0102 ppm | 0.0053 ppm | 0.1112 ppm |
| Concentration per Run 1 | 0.0058 ppm | 0.1114 ppm | 0.0036 ppm | 0.0336 ppm | 0.0102 ppm | 0.0053 ppm | 0.1133 ppm |
| Concentration per Run 2 | 0.0056 ppm | 0.1075 ppm | 0.0039 ppm | 0.0323 ppm | 0.0101 ppm | 0.0053 ppm | 0.1094 ppm |
| Concentration per Run 3 | 0.0056 ppm | 0.1046 ppm | 0.0066 ppm | 0.0313 ppm | 0.0101 ppm | 0.0053 ppm | 0.1110 ppm |
| Recovery Percentage 1 | 113.545 % | 107.820 % | 94.429 % | 107.957 % | 101.551 % | 105.947 % | 111.234 % |
| Concentration RSD | 1.7 % | 3.1 % | 35.3 % | 3.5 % | 0.5 % | 0.3 % | 1.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0043 ppm | 0.0105 ppm | 0.0102 ppm | 0.0106 ppm | 0.0572 ppm | 2.7341 ppm | 0.0118 ppm |
| Concentration per Run 1 | 0.0043 ppm | 0.0102 ppm | 0.0104 ppm | 0.0103 ppm | 0.0570 ppm | 2.7046 ppm | 0.0121 ppm |
| Concentration per Run 2 | 0.0043 ppm | 0.0107 ppm | 0.0105 ppm | 0.0110 ppm | 0.0561 ppm | 2.7522 ppm | 0.0134 ppm |
| Concentration per Run 3 | 0.0044 ppm | 0.0105 ppm | 0.0098 ppm | 0.0107 ppm | 0.0587 ppm | 2.7457 ppm | 0.0100 ppm |
| Recovery Percentage 1 | 108.163 % | 104.705 % | 102.437 % | 106.487 % | 114.497 % | 109.366 % | 118.374 % |
| Concentration RSD | 0.7 % | 2.7 % | 3.4 % | 3.3 % | 2.3 % | 0.9 % | 14.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1093 ppm | 0.0104 ppm | 0.0558 ppm | 2.1657 ppm | 0.0216 ppm | 0.0109 ppm | 0.0515 ppm |
| Concentration per Run 1 | 0.1114 ppm | 0.0105 ppm | 0.0558 ppm | 2.1612 ppm | 0.0213 ppm | 0.0104 ppm | 0.0533 ppm |
| Concentration per Run 2 | 0.1099 ppm | 0.0104 ppm | 0.0561 ppm | 2.1795 ppm | 0.0223 ppm | 0.0119 ppm | 0.0518 ppm |
| Concentration per Run 3 | 0.1067 ppm | 0.0102 ppm | 0.0555 ppm | 2.1563 ppm | 0.0212 ppm | 0.0104 ppm | 0.0494 ppm |
| Recovery Percentage 1 | 109.344 % | 103.544 % | 111.621 % | 108.284 % | 86.465 % | 109.125 % | 102.968 % |
| Concentration RSD | 2.2 % | 1.7 % | 0.5 % | 0.6 % | 2.9 % | 8.0 % | 3.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0093 ppm | 0.5504 ppm | 0.0572 ppm | 0.0106 ppm | 0.0108 ppm | 0.0193 ppm | 0.0105 ppm |
| Concentration per Run 1 | 0.0106 ppm | 0.5472 ppm | 0.0584 ppm | 0.0106 ppm | 0.0108 ppm | 0.0200 ppm | 0.0104 ppm |
| Concentration per Run 2 | 0.0079 ppm | 0.5587 ppm | 0.0570 ppm | 0.0106 ppm | 0.0109 ppm | 0.0194 ppm | 0.0107 ppm |
| Concentration per Run 3 | 0.0094 ppm | 0.5453 ppm | 0.0561 ppm | 0.0106 ppm | 0.0106 ppm | 0.0187 ppm | 0.0102 ppm |
| Recovery Percentage 1 | 92.863 % | 110.078 % | 114.336 % | 106.135 % | 107.618 % | 96.730 % | 104.546 % |
| Concentration RSD | 14.6 % | 1.3 % | 2.1 % | 0.3 % | 1.6 % | 3.4 % | 2.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0059 ppm | 103.6927 % | 103.1263 % | 97.4020 % | 101.6635 % | 100.2959 % | 98.9482 % |
| Concentration per Run 1 | 0.0059 ppm | 103.9325 % | 102.9469 % | 98.5765 % | 102.4394 % | 99.9798 % | 98.8096 % |
| Concentration per Run 2 | 0.0061 ppm | 102.2942 % | 103.4819 % | 95.1181 % | 100.2659 % | 100.7504 % | 96.7763 % |
| Concentration per Run 3 | 0.0058 ppm | 104.8513 % | 102.9501 % | 98.5115 % | 102.2853 % | 100.1575 % | 101.2588 % |
| Recovery Percentage 1 | 118.462 % | | | | | | |
| Concentration RSD | 2.3 % | 1.2 % | 0.3 % | 2.0 % | 1.2 % | 0.4 % | 2.3 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: ICSA
Analysis started at: 3/14/2025 9:40:41 AM
Rack 0
Vial 6
Comment LDR +/-10%

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 497.8638 ppm | 0.0022 ppm | 0.0029 ppm | 0.0013 ppm | 0.0001 ppm | 441.6008 ppm |
| Concentration per Run 1 | -0.0004 ppm | 499.6699 ppm | 0.0010 ppm | 0.0028 ppm | 0.0013 ppm | 0.0001 ppm | 443.5865 ppm |
| Concentration per Run 2 | -0.0013 ppm | 495.4674 ppm | 0.0055 ppm | 0.0044 ppm | 0.0013 ppm | 0.0001 ppm | 439.8600 ppm |
| Concentration per Run 3 | -0.0005 ppm | 498.4541 ppm | 0.0003 ppm | 0.0016 ppm | 0.0012 ppm | 0.0001 ppm | 441.3558 ppm |
| Recovery Percentage 1 | -14.661 % | 497,863.806 % | 44.719 % | 9.758 % | 12.800 % | 1.397 % | 441,600.783 % |
| Concentration RSD | 68.0 % | 0.4 % | 126.8 % | 49.1 % | 3.5 % | 4.0 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0017 ppm | 0.0000 ppm | -0.0011 ppm | -0.0083 ppm | 183.1818 ppm | -0.0248 ppm | -0.0014 ppm |
| Concentration per Run 1 | -0.0017 ppm | 0.0001 ppm | -0.0007 ppm | -0.0079 ppm | 183.3590 ppm | -0.0351 ppm | 0.0007 ppm |
| Concentration per Run 2 | -0.0018 ppm | 0.0000 ppm | -0.0013 ppm | -0.0087 ppm | 182.2950 ppm | -0.0054 ppm | -0.0019 ppm |
| Concentration per Run 3 | -0.0017 ppm | -0.0001 ppm | -0.0013 ppm | -0.0083 ppm | 183.8913 ppm | -0.0340 ppm | -0.0030 ppm |
| Recovery Percentage 1 | -43.435 % | -0.099 % | -11.376 % | -83.423 % | 366,363.545 % | -0.993 % | -13.976 % |
| Concentration RSD | 3.0 % | 820.1 % | 30.0 % | 4.8 % | 0.4 % | 67.8 % | 135.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 476.8645 ppm | 0.0015 ppm | -0.0008 ppm | 0.0087 ppm | 0.0003 ppm | -0.0080 ppm | -0.0017 ppm |
| Concentration per Run 1 | 479.6177 ppm | 0.0013 ppm | -0.0009 ppm | 0.0088 ppm | 0.0006 ppm | -0.0078 ppm | 0.0010 ppm |
| Concentration per Run 2 | 473.9445 ppm | 0.0015 ppm | -0.0006 ppm | 0.0083 ppm | -0.0003 ppm | -0.0086 ppm | -0.0045 ppm |
| Concentration per Run 3 | 477.0313 ppm | 0.0017 ppm | -0.0007 ppm | 0.0091 ppm | 0.0005 ppm | -0.0078 ppm | -0.0017 ppm |
| Recovery Percentage 1 | 476,864.501 % | 15.082 % | -1.507 % | 0.437 % | 1.007 % | -80.266 % | -3.443 % |
| Concentration RSD | 0.6 % | 15.3 % | 23.4 % | 4.5 % | 208.5 % | 5.7 % | 158.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0038 ppm | -0.0231 ppm | 0.0020 ppm | 0.0032 ppm | -0.0001 ppm | 0.0011 ppm | 0.0019 ppm |
| Concentration per Run 1 | 0.0009 ppm | -0.0247 ppm | 0.0014 ppm | 0.0031 ppm | -0.0002 ppm | -0.0013 ppm | 0.0019 ppm |
| Concentration per Run 2 | -0.0041 ppm | -0.0211 ppm | 0.0037 ppm | 0.0032 ppm | -0.0001 ppm | 0.0036 ppm | 0.0022 ppm |
| Concentration per Run 3 | -0.0083 ppm | -0.0236 ppm | 0.0009 ppm | 0.0031 ppm | 0.0001 ppm | 0.0009 ppm | 0.0017 ppm |
| Recovery Percentage 1 | -38.401 % | -4.626 % | 4.061 % | 31.538 % | -0.780 % | 5.479 % | 19.436 % |
| Concentration RSD | 120.0 % | 7.9 % | 73.8 % | 0.8 % | 238.6 % | 224.5 % | 11.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0026 ppm | 89.0531 % | 97.6494 % | 73.3320 % | 83.6545 % | 94.8620 % | 85.2383 % |
| Concentration per Run 1 | -0.0028 ppm | 88.7111 % | 97.7396 % | 72.5885 % | 83.0400 % | 95.2394 % | 84.4471 % |
| Concentration per Run 2 | -0.0024 ppm | 89.2399 % | 97.4483 % | 73.0829 % | 83.8923 % | 94.3325 % | 85.3082 % |
| Concentration per Run 3 | -0.0026 ppm | 89.2084 % | 97.7602 % | 74.3247 % | 84.0311 % | 95.0142 % | 85.9594 % |
| Recovery Percentage 1 | -51.938 % | | | | | | |
| Concentration RSD | 6.7 % | 0.3 % | 0.2 % | 1.2 % | 0.6 % | 0.5 % | 0.9 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: LDR 500 Ca
Analysis started at: 3/14/2025 9:46:57 AM
Rack 1
Vial 1
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | -0.0023 ppm | 0.0019 ppm | 0.0005 ppm | -0.0002 ppm | 0.0000 ppm | 489.8740 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0061 ppm | 0.0005 ppm | 0.0004 ppm | -0.0002 ppm | 0.0000 ppm | 489.3289 ppm |
| Concentration per Run 2 | -0.0004 ppm | -0.0035 ppm | 0.0024 ppm | 0.0004 ppm | -0.0002 ppm | 0.0000 ppm | 493.1036 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0027 ppm | 0.0029 ppm | 0.0006 ppm | -0.0001 ppm | 0.0000 ppm | 487.1896 ppm |
| Concentration RSD | 47.5 % | 198.9 % | 64.6 % | 30.3 % | 19.7 % | 131.5 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0022 ppm | 0.0002 ppm | -0.0003 ppm | 0.0004 ppm | 0.0123 ppm | 0.0080 ppm | -0.0014 ppm |
| Concentration per Run 1 | -0.0024 ppm | 0.0001 ppm | -0.0002 ppm | 0.0005 ppm | 0.0134 ppm | 0.0021 ppm | -0.0015 ppm |
| Concentration per Run 2 | -0.0022 ppm | 0.0004 ppm | -0.0003 ppm | 0.0002 ppm | 0.0100 ppm | 0.0142 ppm | -0.0012 ppm |
| Concentration per Run 3 | -0.0021 ppm | 0.0001 ppm | -0.0003 ppm | 0.0005 ppm | 0.0135 ppm | 0.0078 ppm | -0.0016 ppm |
| Concentration RSD | 7.4 % | 76.0 % | 34.7 % | 44.6 % | 16.3 % | 75.2 % | 15.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0043 ppm | 0.0000 ppm | -0.0002 ppm | 0.0031 ppm | 0.0001 ppm | -0.0001 ppm | -0.0008 ppm |
| Concentration per Run 1 | 0.0059 ppm | 0.0000 ppm | -0.0002 ppm | 0.0064 ppm | 0.0005 ppm | 0.0011 ppm | -0.0010 ppm |
| Concentration per Run 2 | 0.0021 ppm | 0.0000 ppm | -0.0007 ppm | 0.0016 ppm | 0.0000 ppm | -0.0010 ppm | -0.0007 ppm |
| Concentration per Run 3 | 0.0048 ppm | 0.0000 ppm | 0.0002 ppm | 0.0015 ppm | -0.0001 ppm | -0.0006 ppm | -0.0006 ppm |
| Concentration RSD | 45.9 % | 1,262.1 % | 187.8 % | 88.3 % | 304.8 % | 919.1 % | 28.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | -0.0047 ppm | -0.0001 ppm | -0.0026 ppm | -0.0005 ppm | -0.0008 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0003 ppm | -0.0066 ppm | -0.0001 ppm | -0.0027 ppm | -0.0003 ppm | -0.0003 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0028 ppm | -0.0031 ppm | -0.0003 ppm | -0.0026 ppm | -0.0005 ppm | -0.0012 ppm | -0.0002 ppm |
| Concentration per Run 3 | -0.0005 ppm | -0.0044 ppm | -0.0001 ppm | -0.0025 ppm | -0.0007 ppm | -0.0009 ppm | -0.0002 ppm |
| Concentration RSD | 119.1 % | 37.5 % | 68.5 % | 3.4 % | 39.1 % | 55.0 % | 49.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 91.9742 % | 99.1129 % | 81.7595 % | 91.4073 % | 96.9522 % | 91.0547 % |
| Concentration per Run 1 | -0.0005 ppm | 91.1308 % | 99.9110 % | 81.7581 % | 91.3617 % | 97.9459 % | 91.0332 % |
| Concentration per Run 2 | -0.0007 ppm | 91.9950 % | 97.5558 % | 81.6713 % | 91.5320 % | 95.0617 % | 91.0254 % |
| Concentration per Run 3 | 0.0000 ppm | 92.7967 % | 99.8718 % | 81.8491 % | 91.3280 % | 97.8489 % | 91.1055 % |
| Concentration RSD | 96.0 % | 0.9 % | 1.4 % | 0.1 % | 0.1 % | 1.7 % | 0.0 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: SIC Multi
Analysis started at: 3/14/2025 9:51:24 AM
Rack 0
Vial 7
Comment LDR +/-10%

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | 0.0181 ppm | -0.0043 ppm | 0.0022 ppm | 0.0002 ppm | 0.0003 ppm | 0.0116 ppm |
| Concentration per Run 1 | -0.0007 ppm | 0.0166 ppm | -0.0040 ppm | 0.0017 ppm | 0.0002 ppm | 0.0004 ppm | 0.0105 ppm |
| Concentration per Run 2 | -0.0008 ppm | 0.0216 ppm | -0.0049 ppm | 0.0033 ppm | 0.0001 ppm | 0.0002 ppm | 0.0140 ppm |
| Concentration per Run 3 | -0.0007 ppm | 0.0159 ppm | -0.0041 ppm | 0.0016 ppm | 0.0002 ppm | 0.0002 ppm | 0.0102 ppm |
| Recovery Percentage 1 | -15.026 % | 18.052 % | -86.574 % | 7.351 % | 1.511 % | 5.830 % | 11.567 % |
| Concentration RSD | 7.6 % | 17.3 % | 10.7 % | 42.3 % | 49.5 % | 45.6 % | 18.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0025 ppm | 20.8236 ppm | -0.0018 ppm | 0.0105 ppm | 0.0210 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0026 ppm | 20.8051 ppm | -0.0020 ppm | 0.0124 ppm | 0.0404 ppm | 0.0006 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0027 ppm | 20.8336 ppm | -0.0015 ppm | 0.0103 ppm | 0.0181 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0021 ppm | 20.8320 ppm | -0.0019 ppm | 0.0088 ppm | 0.0045 ppm | -0.0003 ppm |
| Recovery Percentage 1 | -1.337 % | 24.709 % | 208,235.720 % | -18.103 % | 21.002 % | 0.841 % | 2.528 % |
| Concentration RSD | 129.1 % | 13.2 % | 0.1 % | 14.8 % | 16.9 % | 86.2 % | 174.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0050 ppm | 20.5442 [SIC 100] | 0.0005 ppm | 0.0293 ppm | -0.0002 ppm | -0.0035 ppm | -0.0179 ppm |
| Concentration per Run 1 | -0.0046 ppm | 21.6592 ppm | 0.0004 ppm | 0.0313 ppm | 0.0000 ppm | -0.0052 ppm | -0.0198 ppm |
| Concentration per Run 2 | -0.0054 ppm | 21.3000 ppm | 0.0008 ppm | 0.0329 ppm | 0.0006 ppm | -0.0028 ppm | -0.0153 ppm |
| Concentration per Run 3 | -0.0051 ppm | 18.6732 ppm | 0.0003 ppm | 0.0236 ppm | -0.0010 ppm | -0.0024 ppm | -0.0186 ppm |
| Recovery Percentage 1 | -5.018 % | 205,441.532 % | 1.052 % | 1.464 % | -0.623 % | -34.782 % | -35.832 % |
| Concentration RSD | 8.3 % | 7.9 % | 48.5 % | 16.9 % | 523.4 % | 42.7 % | 13.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | -0.1758 ppm | -0.0131 ppm | 0.0003 ppm | 20.4573 ppm | 0.0092 ppm | 10.4297 [SIC 10] |
| Concentration per Run 1 | -0.0010 ppm | -0.1817 ppm | -0.0134 ppm | 0.0003 ppm | 20.5227 ppm | 0.0089 ppm | 10.4245 ppm |
| Concentration per Run 2 | -0.0005 ppm | -0.1768 ppm | -0.0125 ppm | 0.0004 ppm | 20.4173 ppm | 0.0118 ppm | 10.4303 ppm |
| Concentration per Run 3 | -0.0007 ppm | -0.1687 ppm | -0.0134 ppm | 0.0003 ppm | 20.4318 ppm | 0.0069 ppm | 10.4343 ppm |
| Recovery Percentage 1 | -7.018 % | -35.153 % | -26.191 % | 3.406 % | 204,572.626 % | 45.969 % | 104,297.046 % |
| Concentration RSD | 34.6 % | 3.7 % | 4.0 % | 24.9 % | 0.3 % | 26.6 % | 0.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 103.5557 % | 104.6381 % | 81.6327 % | 99.5047 % | 99.7426 % | 100.3766 % |
| Concentration per Run 1 | 0.0013 ppm | 103.4079 % | 99.7075 % | 79.4155 % | 99.6575 % | 93.8672 % | 98.6119 % |
| Concentration per Run 2 | 0.0008 ppm | 103.9912 % | 100.4177 % | 84.5942 % | 99.5884 % | 99.2779 % | 104.1132 % |
| Concentration per Run 3 | 0.0009 ppm | 103.2681 % | 113.7891 % | 80.8884 % | 99.2681 % | 106.0829 % | 98.4048 % |
| Recovery Percentage 1 | 19.902 % | | | | | | |
| Concentration RSD | 24.9 % | 0.4 % | 7.6 % | 3.3 % | 0.2 % | 6.1 % | 3.2 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: LDR Check
Analysis started at: 3/14/2025 9:57:45 AM
Rack 0
Vial 8
Comment LDR +/-10%

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0028 ppm | -0.0081 ppm | 23.3788 ppm | 19.0633 ppm | 19.4314 ppm | 5.0541 ppm | 0.0268 ppm |
| Concentration per Run 1 | 0.0028 ppm | -0.0060 ppm | 23.3122 ppm | 18.8714 ppm | 19.3684 ppm | 5.0297 ppm | 0.0257 ppm |
| Concentration per Run 2 | 0.0027 ppm | -0.0089 ppm | 23.3456 ppm | 18.7789 ppm | 19.5944 ppm | 5.0964 ppm | 0.0273 ppm |
| Concentration per Run 3 | 0.0030 ppm | -0.0094 ppm | 23.4785 ppm | 19.5398 ppm | 19.3315 ppm | 5.0361 ppm | 0.0274 ppm |
| Recovery Percentage 1 | | | 116.894 % | 95.317 % | 97.157 % | | 0.000 % |
| Concentration RSD | 4.7 % | 22.9 % | 0.4 % | 2.2 % | 0.7 % | 0.7 % | 3.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.9937 ppm | 4.8890 ppm | 0.0007 ppm | 18.8824 ppm | 0.0051 ppm | 533.0388 ppm | 20.0712 ppm |
| Concentration per Run 1 | 4.9409 ppm | 4.6862 ppm | 0.0008 ppm | 18.7277 ppm | 0.0061 ppm | 527.7158 ppm | 19.9125 ppm |
| Concentration per Run 2 | 4.9393 ppm | 4.8860 ppm | 0.0004 ppm | 18.5932 ppm | 0.0034 ppm | 540.6077 ppm | 20.2690 ppm |
| Concentration per Run 3 | 5.1008 ppm | 5.0948 ppm | 0.0008 ppm | 19.3264 ppm | 0.0059 ppm | 530.7930 ppm | 20.0320 ppm |
| Recovery Percentage 1 | 99.874 % | 97.780 % | | 94.412 % | 0.000 % | 106.608 % | 100.356 % |
| Concentration RSD | 1.9 % | 4.2 % | 31.1 % | 2.1 % | 29.6 % | 1.3 % | 0.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0041 ppm | 0.0009 ppm | 4.8172 ppm | 493.8368 ppm | 9.5490 ppm | 53.3446 ppm | 5.1274 ppm |
| Concentration per Run 1 | -0.0038 ppm | 0.0009 ppm | 4.7139 ppm | 490.8894 ppm | 9.4378 ppm | 53.3232 ppm | 4.9335 ppm |
| Concentration per Run 2 | -0.0049 ppm | 0.0008 ppm | 4.7429 ppm | 496.2318 ppm | 9.4394 ppm | 53.4220 ppm | 5.1198 ppm |
| Concentration per Run 3 | -0.0034 ppm | 0.0008 ppm | 4.9949 ppm | 494.3892 ppm | 9.7697 ppm | 53.2886 ppm | 5.3289 ppm |
| Recovery Percentage 1 | | 0.000 % | 96.344 % | 98.767 % | 95.490 % | 106.689 % | 102.548 % |
| Concentration RSD | 18.5 % | 5.4 % | 3.2 % | 0.5 % | 2.0 % | 0.1 % | 3.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.4555 [SIC 20] | 21.6580 [SIC 200] | 9.9171 ppm | 5.1176 ppm | 0.0054 ppm | 4.7985 ppm | 0.0049 ppm |
| Concentration per Run 1 | 5.4487 ppm | 20.7890 ppm | 9.7979 ppm | 5.0958 ppm | 0.0055 ppm | 4.7883 ppm | 0.0048 ppm |
| Concentration per Run 2 | 5.4530 ppm | 21.6236 ppm | 9.7819 ppm | 5.1614 ppm | 0.0053 ppm | 4.7920 ppm | 0.0049 ppm |
| Concentration per Run 3 | 5.4647 ppm | 22.5613 ppm | 10.1715 ppm | 5.0957 ppm | 0.0054 ppm | 4.8152 ppm | 0.0051 ppm |
| Recovery Percentage 1 | 109.109 % | 108.290 % | 99.171 % | 102.353 % | 0.000 % | 95.970 % | 0.000 % |
| Concentration RSD | 0.2 % | 4.1 % | 2.2 % | 0.7 % | 1.8 % | 0.3 % | 2.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 20.3481 [SIC 20] | 94.9688 % | 101.9807 % | 78.3453 % | 89.3659 % | 97.7246 % | 87.2379 % |
| Concentration per Run 1 | 20.0880 ppm | 95.9657 % | 102.9720 % | 78.2324 % | 92.9807 % | 98.7665 % | 87.1092 % |
| Concentration per Run 2 | 20.1560 ppm | 95.4611 % | 100.6687 % | 77.9340 % | 88.5409 % | 96.3634 % | 86.9738 % |
| Concentration per Run 3 | 20.8002 ppm | 93.4796 % | 102.3014 % | 78.8697 % | 86.5761 % | 98.0439 % | 87.6308 % |
| Recovery Percentage 1 | 101.740 % | | | | | | |
| Concentration RSD | 1.9 % | 1.4 % | 1.2 % | 0.6 % | 3.7 % | 1.3 % | 0.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: LDR 400 Fe pass
Analysis started at: 3/14/2025 10:20:47 AM
Rack 1
Vial 2
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0263 ppm | 0.0009 ppm | 0.0020 ppm | 0.0003 ppm | 0.0000 ppm | 0.0059 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0284 ppm | 0.0001 ppm | 0.0016 ppm | 0.0003 ppm | 0.0000 ppm | 0.0068 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0250 ppm | -0.0001 ppm | 0.0019 ppm | 0.0003 ppm | 0.0000 ppm | 0.0053 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0255 ppm | 0.0026 ppm | 0.0025 ppm | 0.0002 ppm | 0.0001 ppm | 0.0055 ppm |
| Concentration RSD | 307.8 % | 6.9 % | 170.5 % | 23.9 % | 16.4 % | 5,572.3 % | 13.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0037 ppm | -0.0013 ppm | -0.0025 ppm | -0.0135 ppm | 373.1083 ppm | -0.0339 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0035 ppm | -0.0013 ppm | -0.0030 ppm | -0.0137 ppm | 372.4902 ppm | -0.0412 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0036 ppm | -0.0006 ppm | -0.0024 ppm | -0.0138 ppm | 371.8522 ppm | -0.0240 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0040 ppm | -0.0020 ppm | -0.0023 ppm | -0.0131 ppm | 374.9826 ppm | -0.0366 ppm | -0.0006 ppm |
| Concentration RSD | 7.0 % | 55.9 % | 14.6 % | 2.6 % | 0.4 % | 26.2 % | 2,382.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0227 ppm | 0.0003 ppm | -0.0020 ppm | 0.0146 ppm | -0.0016 ppm | -0.0001 ppm | 0.0071 ppm |
| Concentration per Run 1 | -0.0226 ppm | 0.0003 ppm | -0.0020 ppm | 0.0144 ppm | -0.0017 ppm | 0.0004 ppm | 0.0049 ppm |
| Concentration per Run 2 | -0.0234 ppm | 0.0003 ppm | -0.0015 ppm | 0.0139 ppm | -0.0014 ppm | -0.0006 ppm | 0.0073 ppm |
| Concentration per Run 3 | -0.0221 ppm | 0.0005 ppm | -0.0024 ppm | 0.0154 ppm | -0.0019 ppm | -0.0001 ppm | 0.0089 ppm |
| Concentration RSD | 2.9 % | 36.7 % | 23.0 % | 5.1 % | 16.4 % | 392.1 % | 28.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | -0.0063 ppm | 0.0023 ppm | 0.0003 ppm | 0.0001 ppm | -0.0007 ppm | 0.0029 ppm |
| Concentration per Run 1 | -0.0012 ppm | -0.0066 ppm | 0.0024 ppm | 0.0003 ppm | 0.0003 ppm | -0.0003 ppm | 0.0029 ppm |
| Concentration per Run 2 | -0.0025 ppm | -0.0056 ppm | 0.0015 ppm | 0.0002 ppm | 0.0001 ppm | -0.0002 ppm | 0.0032 ppm |
| Concentration per Run 3 | 0.0020 ppm | -0.0068 ppm | 0.0031 ppm | 0.0003 ppm | 0.0000 ppm | -0.0017 ppm | 0.0027 ppm |
| Concentration RSD | 388.3 % | 10.2 % | 35.4 % | 18.0 % | 97.7 % | 110.2 % | 7.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 103.8233 % | 103.7734 % | 92.3479 % | 96.8388 % | 99.5205 % | 95.9703 % |
| Concentration per Run 1 | -0.0004 ppm | 104.9838 % | 104.5401 % | 92.5523 % | 97.8645 % | 100.1440 % | 96.2660 % |
| Concentration per Run 2 | -0.0010 ppm | 103.1360 % | 103.3520 % | 92.0994 % | 96.3723 % | 98.8438 % | 95.7037 % |
| Concentration per Run 3 | -0.0008 ppm | 103.3500 % | 103.4281 % | 92.3920 % | 96.2797 % | 99.5738 % | 95.9412 % |
| Concentration RSD | 41.9 % | 1.0 % | 0.6 % | 0.2 % | 0.9 % | 0.7 % | 0.3 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: LLOQ 0.005ppm As
Analysis started at: 3/14/2025 10:25:24 AM
Rack 1
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0062 ppm | 0.0073 ppm | 0.0053 ppm | 0.0069 ppm | 0.0058 ppm | 0.0060 ppm | 0.0087 ppm |
| Concentration per Run 1 | 0.0062 ppm | 0.0115 ppm | 0.0044 ppm | 0.0072 ppm | 0.0060 ppm | 0.0063 ppm | 0.0092 ppm |
| Concentration per Run 2 | 0.0062 ppm | 0.0027 ppm | 0.0057 ppm | 0.0067 ppm | 0.0057 ppm | 0.0059 ppm | 0.0116 ppm |
| Concentration per Run 3 | 0.0062 ppm | 0.0076 ppm | 0.0056 ppm | 0.0068 ppm | 0.0058 ppm | 0.0058 ppm | 0.0053 ppm |
| Recovery Percentage 1 | 124.305 % | 0.000 % | 105.027 % | 0.000 % | 0.000 % | 120.081 % | 0.000 % |
| Concentration RSD | 0.5 % | 60.7 % | 14.5 % | 3.9 % | 3.1 % | 4.3 % | 36.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0062 ppm | 0.0061 ppm | 0.0059 ppm | 0.0056 ppm | 0.0322 ppm | 0.0873 ppm | 0.0078 ppm |
| Concentration per Run 1 | 0.0063 ppm | 0.0064 ppm | 0.0061 ppm | 0.0057 ppm | 0.0330 ppm | 0.0892 ppm | 0.0082 ppm |
| Concentration per Run 2 | 0.0062 ppm | 0.0058 ppm | 0.0057 ppm | 0.0056 ppm | 0.0331 ppm | 0.0782 ppm | 0.0074 ppm |
| Concentration per Run 3 | 0.0060 ppm | 0.0060 ppm | 0.0061 ppm | 0.0055 ppm | 0.0305 ppm | 0.0945 ppm | 0.0077 ppm |
| Recovery Percentage 1 | 123.471 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % |
| Concentration RSD | 2.3 % | 5.3 % | 4.1 % | 1.8 % | 4.5 % | 9.6 % | 4.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0068 ppm | 0.0058 ppm | 0.0058 ppm | 0.1319 ppm | 0.0068 ppm | 0.0058 ppm | 0.0064 ppm |
| Concentration per Run 1 | 0.0078 ppm | 0.0063 ppm | 0.0055 ppm | 0.1380 ppm | 0.0071 ppm | 0.0057 ppm | 0.0083 ppm |
| Concentration per Run 2 | 0.0057 ppm | 0.0057 ppm | 0.0054 ppm | 0.1335 ppm | 0.0063 ppm | 0.0064 ppm | 0.0059 ppm |
| Concentration per Run 3 | 0.0069 ppm | 0.0054 ppm | 0.0065 ppm | 0.1243 ppm | 0.0069 ppm | 0.0051 ppm | 0.0051 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % |
| Concentration RSD | 15.6 % | 7.3 % | 10.9 % | 5.3 % | 6.6 % | 11.3 % | 25.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0052 ppm | 0.0552 ppm | 0.0065 ppm | 0.0061 ppm | 0.0061 ppm | 0.0043 ppm | 0.0058 ppm |
| Concentration per Run 1 | 0.0041 ppm | 0.0570 ppm | 0.0066 ppm | 0.0064 ppm | 0.0062 ppm | 0.0052 ppm | 0.0059 ppm |
| Concentration per Run 2 | 0.0057 ppm | 0.0545 ppm | 0.0061 ppm | 0.0061 ppm | 0.0059 ppm | 0.0038 ppm | 0.0057 ppm |
| Concentration per Run 3 | 0.0059 ppm | 0.0541 ppm | 0.0068 ppm | 0.0058 ppm | 0.0060 ppm | 0.0037 ppm | 0.0057 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % |
| Concentration RSD | 18.6 % | 2.9 % | 6.2 % | 4.5 % | 2.8 % | 19.5 % | 2.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0059 ppm | 101.3812 % | 98.1806 % | 98.2537 % | 103.1033 % | 97.9138 % | 101.2546 % |
| Concentration per Run 1 | 0.0061 ppm | 100.0958 % | 94.3383 % | 97.8231 % | 102.1637 % | 93.9477 % | 101.3138 % |
| Concentration per Run 2 | 0.0057 ppm | 102.2640 % | 99.7377 % | 98.5479 % | 103.9146 % | 100.1473 % | 101.3067 % |
| Concentration per Run 3 | 0.0059 ppm | 101.7837 % | 100.4656 % | 98.3901 % | 103.2315 % | 99.6465 % | 101.1434 % |
| Recovery Percentage 1 | 118.370 % | | | | | | |
| Concentration RSD | 3.1 % | 1.1 % | 3.4 % | 0.4 % | 0.9 % | 3.5 % | 0.1 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: zLLOQ 0.01ppm
Analysis started at: 3/14/2025 10:29:49 AM
Rack 1
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0120 ppm | 0.0085 ppm | 0.0106 ppm | 0.0129 ppm | 0.0113 ppm | 0.0117 ppm | 0.0149 ppm |
| Concentration per Run 1 | 0.0119 ppm | 0.0128 ppm | 0.0112 ppm | 0.0126 ppm | 0.0114 ppm | 0.0118 ppm | 0.0163 ppm |
| Concentration per Run 2 | 0.0123 ppm | 0.0010 ppm | 0.0102 ppm | 0.0142 ppm | 0.0113 ppm | 0.0116 ppm | 0.0162 ppm |
| Concentration per Run 3 | 0.0119 ppm | 0.0117 ppm | 0.0103 ppm | 0.0121 ppm | 0.0112 ppm | 0.0116 ppm | 0.0121 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 105.657 % | 129.421 % | 113.117 % | 0.000 % | 0.000 % |
| Concentration RSD | 1.9 % | 76.8 % | 5.0 % | 8.4 % | 0.9 % | 0.6 % | 16.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0124 ppm | 0.0119 ppm | 0.0120 ppm | 0.0116 ppm | 0.0180 ppm | 0.1325 ppm | 0.0129 ppm |
| Concentration per Run 1 | 0.0124 ppm | 0.0116 ppm | 0.0122 ppm | 0.0118 ppm | 0.0192 ppm | 0.1192 ppm | 0.0136 ppm |
| Concentration per Run 2 | 0.0124 ppm | 0.0120 ppm | 0.0117 ppm | 0.0114 ppm | 0.0174 ppm | 0.1383 ppm | 0.0125 ppm |
| Concentration per Run 3 | 0.0124 ppm | 0.0123 ppm | 0.0122 ppm | 0.0116 ppm | 0.0175 ppm | 0.1398 ppm | 0.0127 ppm |
| Recovery Percentage 1 | 0.000 % | 119.495 % | 120.373 % | 116.216 % | 0.000 % | 0.000 % | 129.400 % |
| Concentration RSD | 0.1 % | 2.9 % | 2.4 % | 1.7 % | 5.8 % | 8.7 % | 4.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0137 ppm | 0.0113 ppm | 0.0116 ppm | 0.2506 ppm | 0.0127 ppm | 0.0117 ppm | 0.0108 ppm |
| Concentration per Run 1 | 0.0133 ppm | 0.0114 ppm | 0.0115 ppm | 0.2495 ppm | 0.0125 ppm | 0.0121 ppm | 0.0140 ppm |
| Concentration per Run 2 | 0.0134 ppm | 0.0112 ppm | 0.0118 ppm | 0.2507 ppm | 0.0128 ppm | 0.0116 ppm | 0.0096 ppm |
| Concentration per Run 3 | 0.0145 ppm | 0.0115 ppm | 0.0117 ppm | 0.2515 ppm | 0.0130 ppm | 0.0114 ppm | 0.0087 ppm |
| Recovery Percentage 1 | 0.000 % | 113.425 % | 116.420 % | 0.000 % | 127.495 % | 117.086 % | 0.000 % |
| Concentration RSD | 4.9 % | 1.4 % | 1.3 % | 0.4 % | 1.9 % | 3.2 % | 26.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0120 ppm | 0.1188 ppm | 0.0119 ppm | 0.0118 ppm | 0.0120 ppm | 0.0103 ppm | 0.0115 ppm |
| Concentration per Run 1 | 0.0141 ppm | 0.1201 ppm | 0.0123 ppm | 0.0119 ppm | 0.0120 ppm | 0.0111 ppm | 0.0116 ppm |
| Concentration per Run 2 | 0.0117 ppm | 0.1161 ppm | 0.0124 ppm | 0.0117 ppm | 0.0120 ppm | 0.0106 ppm | 0.0114 ppm |
| Concentration per Run 3 | 0.0102 ppm | 0.1200 ppm | 0.0110 ppm | 0.0118 ppm | 0.0120 ppm | 0.0093 ppm | 0.0115 ppm |
| Recovery Percentage 1 | 120.123 % | 0.000 % | 119.085 % | 118.048 % | 120.009 % | 102.975 % | 115.371 % |
| Concentration RSD | 16.4 % | 1.9 % | 6.3 % | 1.0 % | 0.2 % | 9.0 % | 0.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0122 ppm | 100.9613 % | 101.4369 % | 98.2912 % | 101.9928 % | 100.9758 % | 101.1494 % |
| Concentration per Run 1 | 0.0125 ppm | 100.0496 % | 100.9462 % | 98.8157 % | 101.3169 % | 100.7900 % | 101.9554 % |
| Concentration per Run 2 | 0.0121 ppm | 102.3189 % | 102.0138 % | 97.8594 % | 103.3740 % | 101.2861 % | 100.6504 % |
| Concentration per Run 3 | 0.0120 ppm | 100.5153 % | 101.3505 % | 98.1985 % | 101.2877 % | 100.8513 % | 100.8423 % |
| Recovery Percentage 1 | 122.141 % | | | | | | |
| Concentration RSD | 2.3 % | 1.2 % | 0.5 % | 0.5 % | 1.2 % | 0.3 % | 0.7 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: LDR 5 As pass
Analysis started at: 3/14/2025 10:34:14 AM
Rack 1
Vial 5
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0014 ppm | 4.9126 ppm | 0.0001 ppm | -0.0001 ppm | 0.0000 ppm | 0.0021 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0028 ppm | 4.9229 ppm | 0.0006 ppm | -0.0001 ppm | 0.0000 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | 4.9228 ppm | 0.0002 ppm | -0.0002 ppm | 0.0000 ppm | 0.0019 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0016 ppm | 4.8920 ppm | -0.0005 ppm | 0.0000 ppm | 0.0000 ppm | 0.0033 ppm |
| Concentration RSD | 136.7 % | 99.2 % | 0.4 % | 436.8 % | 119.0 % | 436.4 % | 51.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0004 ppm | -0.0004 ppm | -0.0002 ppm | 0.0043 ppm | 0.0151 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0007 ppm | -0.0007 ppm | 0.0001 ppm | 0.0045 ppm | 0.0170 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0002 ppm | -0.0003 ppm | -0.0005 ppm | 0.0046 ppm | 0.0221 ppm | -0.0008 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0005 ppm | -0.0002 ppm | -0.0003 ppm | 0.0038 ppm | 0.0063 ppm | -0.0003 ppm |
| Concentration RSD | 269.6 % | 59.0 % | 68.1 % | 141.0 % | 9.9 % | 53.3 % | 230.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0000 ppm | -0.0006 ppm | 0.0095 ppm | 0.0003 ppm | -0.0004 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0002 ppm | -0.0009 ppm | 0.0106 ppm | 0.0002 ppm | -0.0008 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0001 ppm | -0.0004 ppm | 0.0111 ppm | 0.0011 ppm | -0.0002 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0007 ppm | 0.0000 ppm | -0.0005 ppm | 0.0069 ppm | -0.0003 ppm | -0.0002 ppm | 0.0010 ppm |
| Concentration RSD | 453.9 % | 595.5 % | 37.3 % | 24.4 % | 218.1 % | 94.5 % | 58.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0066 ppm | 0.0009 ppm | -0.0001 ppm | 0.0001 ppm | -0.0012 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0068 ppm | -0.0002 ppm | -0.0001 ppm | 0.0002 ppm | -0.0006 ppm | -0.0002 ppm |
| Concentration per Run 2 | -0.0003 ppm | -0.0062 ppm | 0.0004 ppm | -0.0001 ppm | -0.0002 ppm | -0.0020 ppm | 0.0002 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0067 ppm | 0.0024 ppm | -0.0001 ppm | 0.0001 ppm | -0.0009 ppm | -0.0004 ppm |
| Concentration RSD | 38.1 % | 4.8 % | 153.0 % | 37.2 % | 410.7 % | 63.3 % | 215.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 99.2436 % | 102.7263 % | 99.4863 % | 99.2661 % | 101.9515 % | 101.5155 % |
| Concentration per Run 1 | 0.0000 ppm | 94.1356 % | 101.8326 % | 100.0111 % | 93.7555 % | 102.1623 % | 102.4417 % |
| Concentration per Run 2 | 0.0000 ppm | 100.5530 % | 103.5890 % | 99.3836 % | 101.1109 % | 102.7184 % | 101.1149 % |
| Concentration per Run 3 | -0.0002 ppm | 103.0422 % | 102.7574 % | 99.0641 % | 102.9318 % | 100.9740 % | 100.9899 % |
| Concentration RSD | 197.5 % | 4.6 % | 0.9 % | 0.5 % | 4.9 % | 0.9 % | 0.8 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: CCV
Analysis started at: 3/14/2025 11:10:14 AM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5178 ppm | 0.4918 ppm | 0.4812 ppm | 0.5155 ppm | 0.4892 ppm | 0.5099 ppm | 0.5021 ppm |
| Concentration per Run 1 | 0.4818 ppm | 0.4934 ppm | 0.4801 ppm | 0.4779 ppm | 0.4868 ppm | 0.5092 ppm | 0.5027 ppm |
| Concentration per Run 2 | 0.5476 ppm | 0.4925 ppm | 0.4851 ppm | 0.5453 ppm | 0.4916 ppm | 0.5108 ppm | 0.5027 ppm |
| Concentration per Run 3 | 0.5240 ppm | 0.4894 ppm | 0.4783 ppm | 0.5232 ppm | 0.4893 ppm | 0.5096 ppm | 0.5008 ppm |
| Recovery Percentage 1 | 103.563 % | 98.351 % | 96.236 % | 103.091 % | 97.845 % | 101.978 % | 100.412 % |
| Concentration RSD | 6.4 % | 0.4 % | 0.7 % | 6.7 % | 0.5 % | 0.2 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5110 ppm | 0.5231 ppm | 0.5091 ppm | 0.5252 ppm | 0.5054 ppm | 5.1435 ppm | 0.4944 ppm |
| Concentration per Run 1 | 0.4765 ppm | 0.4779 ppm | 0.4733 ppm | 0.4858 ppm | 0.4996 ppm | 5.1469 ppm | 0.4943 ppm |
| Concentration per Run 2 | 0.5415 ppm | 0.5669 ppm | 0.5391 ppm | 0.5562 ppm | 0.5080 ppm | 5.1796 ppm | 0.4950 ppm |
| Concentration per Run 3 | 0.5149 ppm | 0.5244 ppm | 0.5148 ppm | 0.5335 ppm | 0.5087 ppm | 5.1041 ppm | 0.4939 ppm |
| Recovery Percentage 1 | 102.192 % | 104.617 % | 101.811 % | 105.032 % | 101.090 % | 102.871 % | 98.884 % |
| Concentration RSD | 6.4 % | 8.5 % | 6.5 % | 6.8 % | 1.0 % | 0.7 % | 0.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5227 ppm | 0.4922 ppm | 0.5084 ppm | 10.1321 ppm | 0.5254 ppm | 0.4979 ppm | 0.5326 ppm |
| Concentration per Run 1 | 0.4866 ppm | 0.4939 ppm | 0.4667 ppm | 10.1700 ppm | 0.4895 ppm | 0.4977 ppm | 0.4882 ppm |
| Concentration per Run 2 | 0.5535 ppm | 0.4925 ppm | 0.5394 ppm | 10.1370 ppm | 0.5558 ppm | 0.4994 ppm | 0.5765 ppm |
| Concentration per Run 3 | 0.5279 ppm | 0.4902 ppm | 0.5193 ppm | 10.0893 ppm | 0.5309 ppm | 0.4966 ppm | 0.5330 ppm |
| Recovery Percentage 1 | 104.531 % | 98.438 % | 101.686 % | 101.321 % | 105.083 % | 99.584 % | 106.511 % |
| Concentration RSD | 6.5 % | 0.4 % | 7.4 % | 0.4 % | 6.4 % | 0.3 % | 8.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4960 ppm | 5.8656 ppm | 0.5166 ppm | 0.5003 ppm | 0.5101 ppm | 0.5073 ppm | 0.5093 ppm |
| Concentration per Run 1 | 0.4987 ppm | 5.3506 ppm | 0.4828 ppm | 0.4984 ppm | 0.4756 ppm | 0.5060 ppm | 0.4712 ppm |
| Concentration per Run 2 | 0.4969 ppm | 6.3576 ppm | 0.5457 ppm | 0.5029 ppm | 0.5375 ppm | 0.5110 ppm | 0.5403 ppm |
| Concentration per Run 3 | 0.4923 ppm | 5.8886 ppm | 0.5212 ppm | 0.4998 ppm | 0.5171 ppm | 0.5049 ppm | 0.5164 ppm |
| Recovery Percentage 1 | 99.193 % | 111.726 % | 103.316 % | 100.069 % | 102.016 % | 101.466 % | 101.860 % |
| Concentration RSD | 0.7 % | 8.6 % | 6.1 % | 0.5 % | 6.2 % | 0.6 % | 6.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5165 ppm | 102.1317 % | 104.0194 % | 98.0992 % | 96.9805 % | 100.1879 % | 98.6052 % |
| Concentration per Run 1 | 0.4829 ppm | 108.4879 % | 103.6352 % | 97.5756 % | 104.6826 % | 100.3791 % | 98.3910 % |
| Concentration per Run 2 | 0.5449 ppm | 96.8790 % | 104.2951 % | 98.1787 % | 89.6541 % | 100.3332 % | 98.8429 % |
| Concentration per Run 3 | 0.5218 ppm | 101.0283 % | 104.1280 % | 98.5435 % | 96.6048 % | 99.8516 % | 98.5816 % |
| Recovery Percentage 1 | 103.306 % | | | | | | |
| Concentration RSD | 6.1 % | 5.8 % | 0.3 % | 0.5 % | 7.8 % | 0.3 % | 0.2 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: CCB
Analysis started at: 3/14/2025 11:14:53 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0011 ppm | -0.0001 ppm | 0.0006 ppm | -0.0001 ppm | 0.0000 ppm | -0.0019 ppm |
| Concentration per Run 1 | 0.0004 ppm | -0.0058 ppm | 0.0009 ppm | -0.0008 ppm | 0.0000 ppm | 0.0000 ppm | 0.0017 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0037 ppm | -0.0020 ppm | 0.0013 ppm | -0.0002 ppm | 0.0000 ppm | -0.0037 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0055 ppm | 0.0009 ppm | 0.0011 ppm | 0.0000 ppm | 0.0000 ppm | -0.0038 ppm |
| Recovery Percentage 1 | 6.561 % | 1.112 % | -1.769 % | 1.864 % | -0.533 % | 0.299 % | -1.904 % |
| Concentration RSD | 110.8 % | 544.9 % | 1,917.2 % | 207.9 % | 171.6 % | 35.3 % | 165.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | -0.0003 ppm | -0.0001 ppm | 0.0002 ppm | 0.0202 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0004 ppm | -0.0002 ppm | 0.0000 ppm | 0.0011 ppm | 0.0130 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0000 ppm | -0.0005 ppm | 0.0000 ppm | -0.0007 ppm | 0.0322 ppm | 0.0010 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0002 ppm | -0.0002 ppm | -0.0003 ppm | 0.0001 ppm | 0.0154 ppm | -0.0007 ppm |
| Recovery Percentage 1 | 0.414 % | 0.641 % | -3.035 % | -1.047 % | 0.362 % | 0.808 % | 1.493 % |
| Concentration RSD | 446.4 % | 459.5 % | 63.8 % | 132.1 % | 493.9 % | 51.8 % | 568.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | -0.0001 ppm | 0.0022 ppm | -0.0051 ppm | -0.0002 ppm | -0.0003 ppm | 0.0017 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0001 ppm | 0.0026 ppm | -0.0068 ppm | -0.0004 ppm | -0.0004 ppm | 0.0013 ppm |
| Concentration per Run 2 | -0.0008 ppm | 0.0000 ppm | 0.0024 ppm | -0.0007 ppm | -0.0001 ppm | 0.0004 ppm | -0.0004 ppm |
| Concentration per Run 3 | -0.0003 ppm | -0.0001 ppm | 0.0016 ppm | -0.0079 ppm | 0.0000 ppm | -0.0009 ppm | 0.0041 ppm |
| Recovery Percentage 1 | -0.471 % | -0.696 % | 4.393 % | -0.255 % | -0.750 % | -3.239 % | 3.321 % |
| Concentration RSD | 66.8 % | 98.9 % | 22.7 % | 76.3 % | 104.7 % | 196.8 % | 135.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | -0.0079 ppm | -0.0004 ppm | 0.0001 ppm | 0.0001 ppm | -0.0014 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0016 ppm | -0.0088 ppm | -0.0009 ppm | 0.0001 ppm | 0.0000 ppm | -0.0030 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0017 ppm | -0.0085 ppm | 0.0006 ppm | 0.0000 ppm | -0.0001 ppm | 0.0002 ppm | -0.0004 ppm |
| Concentration per Run 3 | -0.0004 ppm | -0.0063 ppm | -0.0009 ppm | 0.0001 ppm | 0.0002 ppm | -0.0012 ppm | 0.0001 ppm |
| Recovery Percentage 1 | 9.450 % | -1.571 % | -0.796 % | 0.643 % | 0.653 % | -6.752 % | -1.326 % |
| Concentration RSD | 126.0 % | 17.0 % | 212.2 % | 59.6 % | 212.5 % | 117.3 % | 180.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 100.1569 % | 98.5907 % | 99.5600 % | 100.5002 % | 98.7939 % | 101.9800 % |
| Concentration per Run 1 | -0.0003 ppm | 99.5742 % | 96.2383 % | 96.6235 % | 100.5676 % | 97.1772 % | 99.9998 % |
| Concentration per Run 2 | -0.0001 ppm | 100.4398 % | 99.9865 % | 100.9031 % | 100.5544 % | 100.1526 % | 104.2353 % |
| Concentration per Run 3 | -0.0003 ppm | 100.4567 % | 99.5472 % | 101.1535 % | 100.3785 % | 99.0520 % | 101.7051 % |
| Recovery Percentage 1 | -5.016 % | | | | | | |
| Concentration RSD | 38.8 % | 0.5 % | 2.1 % | 2.6 % | 0.1 % | 1.5 % | 2.1 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2039207-1 WG2039207
Analysis started at: 3/14/2025 11:31:21 AM
Rack 1
Vial 6
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0176 ppm | -0.0004 ppm | 0.0005 ppm | 0.0002 ppm | 0.0000 ppm | 0.0140 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0178 ppm | -0.0011 ppm | 0.0002 ppm | 0.0002 ppm | 0.0000 ppm | 0.0120 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0167 ppm | 0.0006 ppm | 0.0008 ppm | 0.0002 ppm | 0.0000 ppm | 0.0139 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0182 ppm | -0.0008 ppm | 0.0005 ppm | 0.0002 ppm | 0.0000 ppm | 0.0163 ppm |
| Recovery Percentage 1 | 8.788 % | 17.582 % | -8.454 % | 1.648 % | 2.094 % | 0.691 % | 14.048 % |
| Concentration RSD | 4.4 % | 4.4 % | 219.6 % | 67.9 % | 9.1 % | 47.2 % | 15.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0000 ppm | 0.0007 ppm | 0.0001 ppm | 0.0251 ppm | 0.0392 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0004 ppm | 0.0006 ppm | -0.0001 ppm | 0.0252 ppm | 0.0299 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0005 ppm | 0.0001 ppm | 0.0233 ppm | 0.0534 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0003 ppm | 0.0010 ppm | 0.0002 ppm | 0.0268 ppm | 0.0344 ppm | 0.0009 ppm |
| Recovery Percentage 1 | 1.677 % | 0.046 % | 6.874 % | 0.718 % | 50.219 % | 1.569 % | 4.706 % |
| Concentration RSD | 67.0 % | 6,997.5 % | 39.1 % | 238.7 % | 6.8 % | 31.7 % | 87.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0056 ppm | 0.0007 ppm | -0.0002 ppm | 0.0113 ppm | 0.0008 ppm | 0.0000 ppm | 0.0017 ppm |
| Concentration per Run 1 | 0.0061 ppm | 0.0007 ppm | -0.0001 ppm | 0.0131 ppm | 0.0003 ppm | 0.0002 ppm | 0.0043 ppm |
| Concentration per Run 2 | 0.0045 ppm | 0.0008 ppm | -0.0001 ppm | 0.0082 ppm | 0.0013 ppm | -0.0007 ppm | -0.0011 ppm |
| Concentration per Run 3 | 0.0061 ppm | 0.0006 ppm | -0.0004 ppm | 0.0127 ppm | 0.0007 ppm | 0.0005 ppm | 0.0020 ppm |
| Recovery Percentage 1 | 5.573 % | 6.815 % | -0.405 % | 0.567 % | 3.125 % | -0.082 % | 3.486 % |
| Concentration RSD | 17.1 % | 13.6 % | 100.4 % | 23.8 % | 66.4 % | 7,906.4 % | 156.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0013 ppm | 0.0049 ppm | 0.0045 ppm | 0.0001 ppm | 0.0002 ppm | -0.0037 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0045 ppm | 0.0046 ppm | 0.0001 ppm | 0.0003 ppm | -0.0041 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0017 ppm | 0.0045 ppm | 0.0046 ppm | 0.0001 ppm | 0.0003 ppm | -0.0037 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0018 ppm | 0.0057 ppm | 0.0042 ppm | 0.0000 ppm | 0.0000 ppm | -0.0032 ppm | -0.0001 ppm |
| Recovery Percentage 1 | -12.802 % | 0.976 % | 8.969 % | 0.799 % | 1.684 % | -18.362 % | -0.944 % |
| Concentration RSD | 63.7 % | 14.4 % | 5.1 % | 71.7 % | 88.9 % | 13.2 % | 36.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 104.7065 % | 102.7058 % | 97.5610 % | 100.1471 % | 99.7602 % | 98.6908 % |
| Concentration per Run 1 | 0.0008 ppm | 104.5984 % | 101.9670 % | 96.1479 % | 99.9858 % | 99.3582 % | 95.9769 % |
| Concentration per Run 2 | 0.0006 ppm | 104.7616 % | 102.3568 % | 97.1133 % | 100.3735 % | 99.2817 % | 99.3054 % |
| Concentration per Run 3 | 0.0011 ppm | 104.7595 % | 103.7937 % | 99.4217 % | 100.0819 % | 100.6407 % | 100.7900 % |
| Recovery Percentage 1 | 16.502 % | | | | | | |
| Concentration RSD | 30.7 % | 0.1 % | 0.9 % | 1.7 % | 0.2 % | 0.8 % | 2.5 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2039207-2D2 WG2039207
Analysis started at: 3/14/2025 11:35:54 AM
Rack 1
Vial 7
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0544 ppm | 2.0681 ppm | 0.1146 ppm | 1.0611 ppm | 2.0722 ppm | 0.0527 ppm | 10.3703 ppm |
| Concentration per Run 1 | 0.0535 ppm | 2.0791 ppm | 0.1123 ppm | 1.0457 ppm | 2.0735 ppm | 0.0529 ppm | 10.3742 ppm |
| Concentration per Run 2 | 0.0553 ppm | 2.0650 ppm | 0.1157 ppm | 1.0875 ppm | 2.0756 ppm | 0.0528 ppm | 10.3552 ppm |
| Concentration per Run 3 | 0.0545 ppm | 2.0601 ppm | 0.1157 ppm | 1.0500 ppm | 2.0675 ppm | 0.0525 ppm | 10.3816 ppm |
| Concentration RSD | 1.6 % | 0.5 % | 1.7 % | 2.2 % | 0.2 % | 0.3 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0560 ppm | 0.5361 ppm | 0.2149 ppm | 0.2791 ppm | 1.0630 ppm | 10.5681 ppm | 0.0011 ppm |
| Concentration per Run 1 | 0.0549 ppm | 0.5274 ppm | 0.2112 ppm | 0.2739 ppm | 1.0679 ppm | 10.4966 ppm | 0.0027 ppm |
| Concentration per Run 2 | 0.0572 ppm | 0.5465 ppm | 0.2203 ppm | 0.2863 ppm | 1.0544 ppm | 10.5522 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0558 ppm | 0.5345 ppm | 0.2132 ppm | 0.2771 ppm | 1.0669 ppm | 10.6555 ppm | -0.0001 ppm |
| Concentration RSD | 2.1 % | 1.8 % | 2.2 % | 2.3 % | 0.7 % | 0.8 % | 133.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.9910 ppm | 0.5191 ppm | 1.0832 ppm | 10.6057 ppm | 0.5479 ppm | 0.5497 ppm | 0.5445 ppm |
| Concentration per Run 1 | 10.7971 ppm | 0.5208 ppm | 1.0599 ppm | 10.5855 ppm | 0.5355 ppm | 0.5429 ppm | 0.5382 ppm |
| Concentration per Run 2 | 11.2210 ppm | 0.5182 ppm | 1.1082 ppm | 10.5898 ppm | 0.5609 ppm | 0.5534 ppm | 0.5568 ppm |
| Concentration per Run 3 | 10.9548 ppm | 0.5183 ppm | 1.0816 ppm | 10.6418 ppm | 0.5472 ppm | 0.5528 ppm | 0.5385 ppm |
| Concentration RSD | 1.9 % | 0.3 % | 2.2 % | 0.3 % | 2.3 % | 1.1 % | 2.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1171 ppm | 1.1112 ppm | 1.0857 ppm | 1.0292 ppm | 1.0778 ppm | 0.1167 ppm | 0.5525 ppm |
| Concentration per Run 1 | 0.1163 ppm | 1.0943 ppm | 1.0628 ppm | 1.0320 ppm | 1.0608 ppm | 0.1170 ppm | 0.5427 ppm |
| Concentration per Run 2 | 0.1171 ppm | 1.1339 ppm | 1.1128 ppm | 1.0304 ppm | 1.1008 ppm | 0.1142 ppm | 0.5643 ppm |
| Concentration per Run 3 | 0.1179 ppm | 1.1055 ppm | 1.0816 ppm | 1.0252 ppm | 1.0717 ppm | 0.1188 ppm | 0.5505 ppm |
| Concentration RSD | 0.7 % | 1.8 % | 2.3 % | 0.3 % | 1.9 % | 2.0 % | 2.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5437 ppm | 102.0875 % | 103.9016 % | 95.9641 % | 97.8474 % | 100.1306 % | 99.2027 % |
| Concentration per Run 1 | 0.5347 ppm | 103.8137 % | 104.4790 % | 97.5269 % | 99.3720 % | 100.9212 % | 101.1611 % |
| Concentration per Run 2 | 0.5569 ppm | 100.1255 % | 103.9228 % | 94.6214 % | 96.2574 % | 99.6810 % | 97.7920 % |
| Concentration per Run 3 | 0.5396 ppm | 102.3234 % | 103.3030 % | 95.7441 % | 97.9129 % | 99.7898 % | 98.6551 % |
| Concentration RSD | 2.1 % | 1.8 % | 0.6 % | 1.5 % | 1.6 % | 0.7 % | 1.8 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513195-01D2 WG2039207
Analysis started at: 3/14/2025 11:40:20 AM
Rack 1
Vial 27
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 57.8657 ppm | 0.0211 ppm | 0.0106 ppm | 0.3130 ppm | 0.0022 ppm | 16.2624 ppm |
| Concentration per Run 1 | 0.0009 ppm | 57.8793 ppm | 0.0207 ppm | 0.0105 ppm | 0.3140 ppm | 0.0022 ppm | 16.2283 ppm |
| Concentration per Run 2 | 0.0010 ppm | 57.9402 ppm | 0.0224 ppm | 0.0114 ppm | 0.3126 ppm | 0.0022 ppm | 16.2972 ppm |
| Concentration per Run 3 | 0.0008 ppm | 57.7775 ppm | 0.0201 ppm | 0.0098 ppm | 0.3124 ppm | 0.0022 ppm | 16.2617 ppm |
| Concentration RSD | 7.5 % | 0.1 % | 5.7 % | 7.4 % | 0.3 % | 0.8 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 0.0659 ppm | 0.1639 ppm | 0.2133 ppm | 120.1433 ppm | 2.2805 ppm | 0.0563 ppm |
| Concentration per Run 1 | 0.0016 ppm | 0.0640 ppm | 0.1590 ppm | 0.2079 ppm | 120.0333 ppm | 2.2873 ppm | 0.0571 ppm |
| Concentration per Run 2 | 0.0016 ppm | 0.0681 ppm | 0.1659 ppm | 0.2153 ppm | 120.4485 ppm | 2.2773 ppm | 0.0559 ppm |
| Concentration per Run 3 | 0.0015 ppm | 0.0657 ppm | 0.1670 ppm | 0.2167 ppm | 119.9480 ppm | 2.2767 ppm | 0.0561 ppm |
| Concentration RSD | 4.2 % | 3.1 % | 2.6 % | 2.2 % | 0.2 % | 0.3 % | 1.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 26.4512 ppm | 3.1425 ppm | 0.0055 ppm | 0.7002 ppm | 0.1071 ppm | 0.1021 ppm | 0.0013 ppm |
| Concentration per Run 1 | 25.7375 ppm | 3.1347 ppm | 0.0055 ppm | 0.7029 ppm | 0.1031 ppm | 0.1045 ppm | -0.0005 ppm |
| Concentration per Run 2 | 26.7116 ppm | 3.1483 ppm | 0.0054 ppm | 0.6993 ppm | 0.1095 ppm | 0.1010 ppm | 0.0036 ppm |
| Concentration per Run 3 | 26.9045 ppm | 3.1447 ppm | 0.0055 ppm | 0.6983 ppm | 0.1087 ppm | 0.1009 ppm | 0.0009 ppm |
| Concentration RSD | 2.4 % | 0.2 % | 0.8 % | 0.3 % | 3.3 % | 2.0 % | 161.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 2.5847 ppm | 0.0023 ppm | 0.0694 ppm | 4.3047 ppm | -0.0013 ppm | 0.2682 ppm |
| Concentration per Run 1 | 0.0007 ppm | 2.5007 ppm | 0.0023 ppm | 0.0694 ppm | 4.1832 ppm | -0.0019 ppm | 0.2610 ppm |
| Concentration per Run 2 | 0.0029 ppm | 2.6739 ppm | 0.0022 ppm | 0.0695 ppm | 4.3518 ppm | -0.0007 ppm | 0.2712 ppm |
| Concentration per Run 3 | -0.0025 ppm | 2.5796 ppm | 0.0025 ppm | 0.0692 ppm | 4.3791 ppm | -0.0013 ppm | 0.2725 ppm |
| Concentration RSD | 765.1 % | 3.4 % | 7.8 % | 0.2 % | 2.5 % | 47.7 % | 2.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2320 ppm | 104.5809 % | 110.4729 % | 90.3634 % | 106.5482 % | 116.2556 % | 109.7153 % |
| Concentration per Run 1 | 0.2257 ppm | 107.1372 % | 111.1769 % | 89.7277 % | 109.3229 % | 117.4227 % | 109.2342 % |
| Concentration per Run 2 | 0.2346 ppm | 104.3253 % | 110.6325 % | 90.3828 % | 104.1540 % | 116.5426 % | 109.6548 % |
| Concentration per Run 3 | 0.2357 ppm | 102.2800 % | 109.6092 % | 90.9797 % | 106.1676 % | 114.8015 % | 110.2570 % |
| Concentration RSD | 2.4 % | 2.3 % | 0.7 % | 0.7 % | 2.4 % | 1.1 % | 0.5 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513173-02D2 WG2039207
Analysis started at: 3/14/2025 11:44:44 AM
Rack 1
Vial 13
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 47.8086 ppm | 0.0402 ppm | 0.0026 ppm | 0.0756 ppm | 0.0019 ppm | 0.8256 ppm |
| Concentration per Run 1 | 0.0010 ppm | 47.8495 ppm | 0.0409 ppm | 0.0027 ppm | 0.0751 ppm | 0.0019 ppm | 0.8246 ppm |
| Concentration per Run 2 | 0.0010 ppm | 47.6889 ppm | 0.0365 ppm | 0.0026 ppm | 0.0761 ppm | 0.0019 ppm | 0.8258 ppm |
| Concentration per Run 3 | 0.0007 ppm | 47.8875 ppm | 0.0431 ppm | 0.0024 ppm | 0.0755 ppm | 0.0019 ppm | 0.8264 ppm |
| Concentration RSD | 21.8 % | 0.2 % | 8.3 % | 6.8 % | 0.6 % | 1.2 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | 0.0208 ppm | 0.1517 ppm | 0.0715 ppm | 192.6405 ppm | 1.2813 ppm | 0.0081 ppm |
| Concentration per Run 1 | 0.0022 ppm | 0.0203 ppm | 0.1533 ppm | 0.0720 ppm | 192.1323 ppm | 1.3025 ppm | 0.0085 ppm |
| Concentration per Run 2 | 0.0023 ppm | 0.0214 ppm | 0.1542 ppm | 0.0735 ppm | 194.1095 ppm | 1.2829 ppm | 0.0079 ppm |
| Concentration per Run 3 | 0.0019 ppm | 0.0207 ppm | 0.1476 ppm | 0.0691 ppm | 191.6796 ppm | 1.2585 ppm | 0.0078 ppm |
| Concentration RSD | 10.0 % | 2.8 % | 2.4 % | 3.1 % | 0.7 % | 1.7 % | 4.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0506 ppm | 0.2660 ppm | 0.0079 ppm | 0.1213 ppm | 0.0319 ppm | 0.0536 ppm | 0.0051 ppm |
| Concentration per Run 1 | 1.0589 ppm | 0.2662 ppm | 0.0081 ppm | 0.1210 ppm | 0.0322 ppm | 0.0530 ppm | 0.0044 ppm |
| Concentration per Run 2 | 1.0702 ppm | 0.2660 ppm | 0.0077 ppm | 0.1223 ppm | 0.0326 ppm | 0.0541 ppm | 0.0078 ppm |
| Concentration per Run 3 | 1.0227 ppm | 0.2658 ppm | 0.0079 ppm | 0.1205 ppm | 0.0310 ppm | 0.0538 ppm | 0.0029 ppm |
| Concentration RSD | 2.4 % | 0.1 % | 2.4 % | 0.8 % | 2.5 % | 1.0 % | 49.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0021 ppm | 4.1969 ppm | 0.0048 ppm | 0.0058 ppm | 0.7275 ppm | -0.0004 ppm | 0.3098 ppm |
| Concentration per Run 1 | -0.0012 ppm | 4.2122 ppm | 0.0053 ppm | 0.0058 ppm | 0.7353 ppm | -0.0017 ppm | 0.3126 ppm |
| Concentration per Run 2 | -0.0015 ppm | 4.2720 ppm | 0.0040 ppm | 0.0058 ppm | 0.7390 ppm | 0.0002 ppm | 0.3162 ppm |
| Concentration per Run 3 | -0.0034 ppm | 4.1066 ppm | 0.0050 ppm | 0.0058 ppm | 0.7082 ppm | 0.0005 ppm | 0.3005 ppm |
| Concentration RSD | 58.8 % | 2.0 % | 13.7 % | 0.7 % | 2.3 % | 336.0 % | 2.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0919 ppm | 111.7016 % | 115.8314 % | 98.8788 % | 100.9594 % | 107.2442 % | 100.9154 % |
| Concentration per Run 1 | 0.0935 ppm | 110.4239 % | 116.3837 % | 99.3493 % | 100.2881 % | 106.9759 % | 100.8253 % |
| Concentration per Run 2 | 0.0928 ppm | 110.1797 % | 115.0646 % | 99.2051 % | 99.9508 % | 106.7258 % | 101.4413 % |
| Concentration per Run 3 | 0.0896 ppm | 114.5013 % | 116.0460 % | 98.0819 % | 102.6393 % | 108.0309 % | 100.4795 % |
| Concentration RSD | 2.3 % | 2.2 % | 0.6 % | 0.7 % | 1.5 % | 0.6 % | 0.5 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513173-04D2 WG2039207
Analysis started at: 3/14/2025 11:49:08 AM
Rack 1
Vial 14
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 53.5995 ppm | 0.0765 ppm | 0.0050 ppm | 0.1083 ppm | 0.0030 ppm | 0.8096 ppm |
| Concentration per Run 1 | -0.0001 ppm | 54.6289 ppm | 0.0781 ppm | 0.0052 ppm | 0.1107 ppm | 0.0031 ppm | 0.8307 ppm |
| Concentration per Run 2 | 0.0008 ppm | 53.2311 ppm | 0.0753 ppm | 0.0055 ppm | 0.1082 ppm | 0.0030 ppm | 0.8022 ppm |
| Concentration per Run 3 | -0.0005 ppm | 52.9386 ppm | 0.0762 ppm | 0.0042 ppm | 0.1059 ppm | 0.0030 ppm | 0.7959 ppm |
| Concentration RSD | 946.1 % | 1.7 % | 1.9 % | 14.3 % | 2.2 % | 1.5 % | 2.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0027 ppm | 0.0367 ppm | 0.1434 ppm | 0.0919 ppm | 281.0848 ppm | 2.1569 ppm | 0.0057 ppm |
| Concentration per Run 1 | 0.0028 ppm | 0.0364 ppm | 0.1457 ppm | 0.0935 ppm | 287.1710 ppm | 2.2080 ppm | 0.0058 ppm |
| Concentration per Run 2 | 0.0030 ppm | 0.0374 ppm | 0.1446 ppm | 0.0933 ppm | 279.9558 ppm | 2.1470 ppm | 0.0059 ppm |
| Concentration per Run 3 | 0.0023 ppm | 0.0362 ppm | 0.1398 ppm | 0.0890 ppm | 276.1275 ppm | 2.1156 ppm | 0.0054 ppm |
| Concentration RSD | 13.8 % | 1.8 % | 2.2 % | 2.7 % | 2.0 % | 2.2 % | 4.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0975 ppm | 0.4187 ppm | 0.0058 ppm | 0.0931 ppm | 0.0429 ppm | 0.0851 ppm | 0.0089 ppm |
| Concentration per Run 1 | 1.1122 ppm | 0.4283 ppm | 0.0056 ppm | 0.0994 ppm | 0.0435 ppm | 0.0850 ppm | 0.0096 ppm |
| Concentration per Run 2 | 1.1074 ppm | 0.4160 ppm | 0.0060 ppm | 0.0891 ppm | 0.0446 ppm | 0.0859 ppm | 0.0090 ppm |
| Concentration per Run 3 | 1.0728 ppm | 0.4119 ppm | 0.0057 ppm | 0.0910 ppm | 0.0407 ppm | 0.0843 ppm | 0.0079 ppm |
| Concentration RSD | 2.0 % | 2.0 % | 3.3 % | 5.9 % | 4.7 % | 0.9 % | 9.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 3.6111 ppm | 0.0053 ppm | 0.0079 ppm | 1.1628 ppm | -0.0002 ppm | 0.4556 ppm |
| Concentration per Run 1 | -0.0011 ppm | 3.6560 ppm | 0.0048 ppm | 0.0080 ppm | 1.1754 ppm | 0.0003 ppm | 0.4603 ppm |
| Concentration per Run 2 | -0.0005 ppm | 3.6526 ppm | 0.0064 ppm | 0.0078 ppm | 1.1729 ppm | -0.0007 ppm | 0.4611 ppm |
| Concentration per Run 3 | 0.0013 ppm | 3.5247 ppm | 0.0048 ppm | 0.0077 ppm | 1.1402 ppm | -0.0003 ppm | 0.4452 ppm |
| Concentration RSD | 1,763.6 % | 2.1 % | 17.6 % | 2.1 % | 1.7 % | 226.0 % | 2.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1208 ppm | 109.5780 % | 114.1542 % | 95.4184 % | 102.0398 % | 108.7965 % | 102.3727 % |
| Concentration per Run 1 | 0.1229 ppm | 108.4432 % | 112.3745 % | 95.1229 % | 101.0889 % | 106.7721 % | 101.9507 % |
| Concentration per Run 2 | 0.1211 ppm | 108.9647 % | 114.1617 % | 96.1504 % | 101.5087 % | 109.2808 % | 102.9304 % |
| Concentration per Run 3 | 0.1183 ppm | 111.3262 % | 115.9263 % | 94.9820 % | 103.5219 % | 110.3365 % | 102.2371 % |
| Concentration RSD | 1.9 % | 1.4 % | 1.6 % | 0.7 % | 1.3 % | 1.7 % | 0.5 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513119-04D2 WG2039207
Analysis started at: 3/14/2025 11:53:32 AM
Rack 1
Vial 8
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0023 ppm | 73.1371 ppm | 0.1048 ppm | 0.0408 ppm | 0.8702 ppm | 0.0048 ppm | 48.3472 ppm |
| Concentration per Run 1 | 0.0022 ppm | 73.3781 ppm | 0.1066 ppm | 0.0395 ppm | 0.8718 ppm | 0.0048 ppm | 48.5235 ppm |
| Concentration per Run 2 | 0.0023 ppm | 73.4411 ppm | 0.1040 ppm | 0.0420 ppm | 0.8775 ppm | 0.0049 ppm | 48.5058 ppm |
| Concentration per Run 3 | 0.0023 ppm | 72.5921 ppm | 0.1039 ppm | 0.0409 ppm | 0.8615 ppm | 0.0049 ppm | 48.0122 ppm |
| Concentration RSD | 3.4 % | 0.6 % | 1.5 % | 3.0 % | 0.9 % | 0.7 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0153 ppm | 0.0531 ppm | 0.1553 ppm | 0.2883 ppm | 199.3637 ppm | 3.7394 ppm | 0.0809 ppm |
| Concentration per Run 1 | 0.0153 ppm | 0.0528 ppm | 0.1556 ppm | 0.2897 ppm | 199.6778 ppm | 3.7779 ppm | 0.0813 ppm |
| Concentration per Run 2 | 0.0153 ppm | 0.0530 ppm | 0.1552 ppm | 0.2872 ppm | 200.0433 ppm | 3.7410 ppm | 0.0810 ppm |
| Concentration per Run 3 | 0.0154 ppm | 0.0535 ppm | 0.1552 ppm | 0.2882 ppm | 198.3699 ppm | 3.6994 ppm | 0.0804 ppm |
| Concentration RSD | 0.4 % | 0.7 % | 0.2 % | 0.4 % | 0.4 % | 1.1 % | 0.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 59.7748 ppm | 18.9362 ppm | 0.0065 ppm | 0.5387 ppm | 0.1225 ppm | 0.3890 ppm | 0.0079 ppm |
| Concentration per Run 1 | 59.8310 ppm | 19.0035 ppm | 0.0060 ppm | 0.5419 ppm | 0.1238 ppm | 0.3915 ppm | 0.0107 ppm |
| Concentration per Run 2 | 59.7450 ppm | 18.9951 ppm | 0.0068 ppm | 0.5410 ppm | 0.1218 ppm | 0.3881 ppm | 0.0059 ppm |
| Concentration per Run 3 | 59.7484 ppm | 18.8099 ppm | 0.0066 ppm | 0.5331 ppm | 0.1218 ppm | 0.3874 ppm | 0.0072 ppm |
| Concentration RSD | 0.1 % | 0.6 % | 6.6 % | 0.9 % | 0.9 % | 0.6 % | 31.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0025 ppm | 7.5657 ppm | 0.0365 ppm | 0.2875 ppm | 11.7213 ppm | -0.0034 ppm | 0.4401 ppm |
| Concentration per Run 1 | 0.0013 ppm | 7.5963 ppm | 0.0364 ppm | 0.2885 ppm | 11.7366 ppm | -0.0049 ppm | 0.4414 ppm |
| Concentration per Run 2 | -0.0059 ppm | 7.5489 ppm | 0.0359 ppm | 0.2891 ppm | 11.7300 ppm | -0.0031 ppm | 0.4393 ppm |
| Concentration per Run 3 | -0.0031 ppm | 7.5519 ppm | 0.0372 ppm | 0.2850 ppm | 11.6974 ppm | -0.0023 ppm | 0.4395 ppm |
| Concentration RSD | 142.8 % | 0.4 % | 1.7 % | 0.8 % | 0.2 % | 38.4 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.1678 ppm | 101.9427 % | 111.5906 % | 77.7487 % | 104.5533 % | 117.8996 % | 104.7356 % |
| Concentration per Run 1 | 6.1799 ppm | 102.1776 % | 111.5291 % | 77.7240 % | 104.7468 % | 117.4818 % | 104.8530 % |
| Concentration per Run 2 | 6.1706 ppm | 101.9598 % | 111.8752 % | 77.9940 % | 104.6309 % | 118.3938 % | 105.0214 % |
| Concentration per Run 3 | 6.1528 ppm | 101.6907 % | 111.3674 % | 77.5282 % | 104.2822 % | 117.8233 % | 104.3325 % |
| Concentration RSD | 0.2 % | 0.2 % | 0.2 % | 0.3 % | 0.2 % | 0.4 % | 0.3 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2039207-3D2 WG2039207
Analysis started at: 3/14/2025 11:57:58 AM
Rack 1
Vial 9
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0531 ppm | 74.4001 ppm | 0.2414 ppm | 0.9978 ppm | 2.6356 ppm | 0.0515 ppm | 119.1762 ppm |
| Concentration per Run 1 | 0.0529 ppm | 73.9651 ppm | 0.2384 ppm | 0.9906 ppm | 2.6235 ppm | 0.0513 ppm | 118.6475 ppm |
| Concentration per Run 2 | 0.0534 ppm | 74.6873 ppm | 0.2512 ppm | 1.0032 ppm | 2.6382 ppm | 0.0515 ppm | 119.7079 ppm |
| Concentration per Run 3 | 0.0530 ppm | 74.5480 ppm | 0.2347 ppm | 0.9997 ppm | 2.6451 ppm | 0.0517 ppm | 119.1733 ppm |
| Concentration RSD | 0.4 % | 0.5 % | 3.6 % | 0.7 % | 0.4 % | 0.4 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0564 ppm | 0.4725 ppm | 0.3118 ppm | 0.5131 ppm | 176.1831 ppm | 18.2380 ppm | 0.1121 ppm |
| Concentration per Run 1 | 0.0566 ppm | 0.4704 ppm | 0.3110 ppm | 0.5113 ppm | 175.5595 ppm | 18.0796 ppm | 0.1115 ppm |
| Concentration per Run 2 | 0.0566 ppm | 0.4753 ppm | 0.3134 ppm | 0.5140 ppm | 176.4764 ppm | 18.2721 ppm | 0.1114 ppm |
| Concentration per Run 3 | 0.0560 ppm | 0.4717 ppm | 0.3111 ppm | 0.5140 ppm | 176.5132 ppm | 18.3624 ppm | 0.1135 ppm |
| Concentration RSD | 0.6 % | 0.5 % | 0.4 % | 0.3 % | 0.3 % | 0.8 % | 1.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 85.5687 ppm | 13.7531 ppm | 0.9520 ppm | 12.2042 ppm | 0.5600 ppm | 0.9317 ppm | 0.2335 ppm |
| Concentration per Run 1 | 85.3639 ppm | 13.6668 ppm | 0.9415 ppm | 12.0900 ppm | 0.5596 ppm | 0.9167 ppm | 0.2316 ppm |
| Concentration per Run 2 | 86.1017 ppm | 13.8040 ppm | 0.9557 ppm | 12.2539 ppm | 0.5633 ppm | 0.9608 ppm | 0.2315 ppm |
| Concentration per Run 3 | 85.2404 ppm | 13.7885 ppm | 0.9589 ppm | 12.2688 ppm | 0.5573 ppm | 0.9176 ppm | 0.2373 ppm |
| Concentration RSD | 0.5 % | 0.5 % | 1.0 % | 0.8 % | 0.5 % | 2.7 % | 1.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1177 ppm | 34.0643 [SIC 200] | 0.8932 ppm | 1.3268 ppm | 8.1609 ppm | 0.1112 ppm | 0.7547 ppm |
| Concentration per Run 1 | 0.1160 ppm | 33.9546 ppm | 0.8912 ppm | 1.3208 ppm | 8.1164 ppm | 0.1084 ppm | 0.7533 ppm |
| Concentration per Run 2 | 0.1181 ppm | 34.1529 ppm | 0.8985 ppm | 1.3273 ppm | 8.2274 ppm | 0.1149 ppm | 0.7577 ppm |
| Concentration per Run 3 | 0.1190 ppm | 34.0856 ppm | 0.8897 ppm | 1.3323 ppm | 8.1389 ppm | 0.1104 ppm | 0.7533 ppm |
| Concentration RSD | 1.3 % | 0.3 % | 0.5 % | 0.4 % | 0.7 % | 3.0 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.0041 ppm | 98.9887 % | 117.6401 % | 74.9257 % | 100.7575 % | 123.6855 % | 99.3057 % |
| Concentration per Run 1 | 2.9922 ppm | 98.7851 % | 118.4863 % | 75.9356 % | 100.5497 % | 123.2151 % | 97.6838 % |
| Concentration per Run 2 | 3.0372 ppm | 98.6715 % | 117.0693 % | 72.8244 % | 100.5499 % | 123.7613 % | 98.2214 % |
| Concentration per Run 3 | 2.9828 ppm | 99.5095 % | 117.3648 % | 76.0171 % | 101.1728 % | 124.0801 % | 102.0120 % |
| Concentration RSD | 1.0 % | 0.5 % | 0.6 % | 2.4 % | 0.4 % | 0.4 % | 2.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2039207-4D2 WG2039207
Analysis started at: 3/14/2025 12:02:24 PM
Rack 1
Vial 10
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0027 ppm | 43.1000 ppm | 0.0825 ppm | 0.0257 ppm | 0.4969 ppm | 0.0030 ppm | 20.4406 ppm |
| Concentration per Run 1 | 0.0028 ppm | 43.2342 ppm | 0.0795 ppm | 0.0264 ppm | 0.4994 ppm | 0.0031 ppm | 20.5188 ppm |
| Concentration per Run 2 | 0.0024 ppm | 43.1613 ppm | 0.0802 ppm | 0.0246 ppm | 0.5004 ppm | 0.0030 ppm | 20.4068 ppm |
| Concentration per Run 3 | 0.0030 ppm | 42.9045 ppm | 0.0878 ppm | 0.0260 ppm | 0.4911 ppm | 0.0030 ppm | 20.3963 ppm |
| Concentration RSD | 10.3 % | 0.4 % | 5.5 % | 3.7 % | 1.0 % | 1.9 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0069 ppm | 0.0490 ppm | 0.1005 ppm | 0.2157 ppm | 163.9043 ppm | 3.0709 ppm | 0.0720 ppm |
| Concentration per Run 1 | 0.0071 ppm | 0.0497 ppm | 0.1022 ppm | 0.2210 ppm | 164.6597 ppm | 3.0975 ppm | 0.0727 ppm |
| Concentration per Run 2 | 0.0068 ppm | 0.0486 ppm | 0.1001 ppm | 0.2143 ppm | 164.1963 ppm | 3.0588 ppm | 0.0716 ppm |
| Concentration per Run 3 | 0.0068 ppm | 0.0488 ppm | 0.0993 ppm | 0.2119 ppm | 162.8569 ppm | 3.0563 ppm | 0.0716 ppm |
| Concentration RSD | 2.5 % | 1.2 % | 1.5 % | 2.2 % | 0.6 % | 0.8 % | 0.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 18.3287 ppm | 4.9058 ppm | 0.0080 ppm | 0.3468 ppm | 0.0993 ppm | 0.3401 ppm | 0.0049 ppm |
| Concentration per Run 1 | 18.7390 ppm | 4.9187 ppm | 0.0082 ppm | 0.3474 ppm | 0.1000 ppm | 0.3312 ppm | 0.0087 ppm |
| Concentration per Run 2 | 18.1957 ppm | 4.9140 ppm | 0.0080 ppm | 0.3474 ppm | 0.0978 ppm | 0.3308 ppm | 0.0028 ppm |
| Concentration per Run 3 | 18.0512 ppm | 4.8849 ppm | 0.0077 ppm | 0.3456 ppm | 0.1000 ppm | 0.3583 ppm | 0.0032 ppm |
| Concentration RSD | 2.0 % | 0.4 % | 3.0 % | 0.3 % | 1.2 % | 4.6 % | 66.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0019 ppm | 3.4342 ppm | 0.0315 ppm | 0.1699 ppm | 1.7810 ppm | -0.0020 ppm | 0.1526 ppm |
| Concentration per Run 1 | 0.0006 ppm | 3.4668 ppm | 0.0316 ppm | 0.1707 ppm | 1.8210 ppm | -0.0011 ppm | 0.1561 ppm |
| Concentration per Run 2 | 0.0036 ppm | 3.4128 ppm | 0.0317 ppm | 0.1712 ppm | 1.7783 ppm | -0.0026 ppm | 0.1517 ppm |
| Concentration per Run 3 | 0.0015 ppm | 3.4229 ppm | 0.0312 ppm | 0.1678 ppm | 1.7438 ppm | -0.0023 ppm | 0.1501 ppm |
| Concentration RSD | 79.1 % | 0.8 % | 0.9 % | 1.1 % | 2.2 % | 39.7 % | 2.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.1097 ppm | 105.0601 % | 118.9851 % | 88.9641 % | 104.8177 % | 123.7102 % | 102.0402 % |
| Concentration per Run 1 | 2.1568 ppm | 102.8529 % | 119.0043 % | 91.5743 % | 103.8016 % | 124.0245 % | 105.0205 % |
| Concentration per Run 2 | 2.1018 ppm | 106.0385 % | 119.7630 % | 90.9235 % | 105.9724 % | 124.2041 % | 104.2078 % |
| Concentration per Run 3 | 2.0705 ppm | 106.2889 % | 118.1878 % | 84.3943 % | 104.6793 % | 122.9020 % | 96.8923 % |
| Concentration RSD | 2.1 % | 1.8 % | 0.7 % | 4.5 % | 1.0 % | 0.6 % | 4.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2039207-5D2 WG2039207
Analysis started at: 3/14/2025 12:06:51 PM
Rack 1
Vial 11
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0530 ppm | 71.4184 ppm | 0.2364 ppm | 0.9813 ppm | 2.8484 ppm | 0.0540 ppm | 53.8617 ppm |
| Concentration per Run 1 | 0.0525 ppm | 71.8152 ppm | 0.2359 ppm | 0.9837 ppm | 2.8677 ppm | 0.0543 ppm | 54.0744 ppm |
| Concentration per Run 2 | 0.0533 ppm | 71.1646 ppm | 0.2374 ppm | 0.9784 ppm | 2.8384 ppm | 0.0537 ppm | 53.5891 ppm |
| Concentration per Run 3 | 0.0531 ppm | 71.2753 ppm | 0.2358 ppm | 0.9819 ppm | 2.8391 ppm | 0.0539 ppm | 53.9215 ppm |
| Concentration RSD | 0.8 % | 0.5 % | 0.4 % | 0.3 % | 0.6 % | 0.5 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0637 ppm | 0.4854 ppm | 0.3329 ppm | 0.5227 ppm | 186.7530 ppm | 14.6958 ppm | 0.0800 ppm |
| Concentration per Run 1 | 0.0635 ppm | 0.4829 ppm | 0.3321 ppm | 0.5187 ppm | 187.7973 ppm | 14.7305 ppm | 0.0811 ppm |
| Concentration per Run 2 | 0.0638 ppm | 0.4846 ppm | 0.3336 ppm | 0.5233 ppm | 185.9523 ppm | 14.7351 ppm | 0.0797 ppm |
| Concentration per Run 3 | 0.0637 ppm | 0.4886 ppm | 0.3329 ppm | 0.5260 ppm | 186.5093 ppm | 14.6218 ppm | 0.0793 ppm |
| Concentration RSD | 0.3 % | 0.6 % | 0.2 % | 0.7 % | 0.5 % | 0.4 % | 1.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 63.5763 ppm | 17.9605 ppm | 1.0019 ppm | 11.5134 ppm | 0.5870 ppm | 0.9658 ppm | 0.4389 ppm |
| Concentration per Run 1 | 63.4321 ppm | 18.0313 ppm | 0.9928 ppm | 11.5768 ppm | 0.5842 ppm | 0.9690 ppm | 0.4325 ppm |
| Concentration per Run 2 | 63.7051 ppm | 17.8802 ppm | 1.0008 ppm | 11.4900 ppm | 0.5877 ppm | 0.9692 ppm | 0.4388 ppm |
| Concentration per Run 3 | 63.5917 ppm | 17.9700 ppm | 1.0121 ppm | 11.4735 ppm | 0.5890 ppm | 0.9591 ppm | 0.4453 ppm |
| Concentration RSD | 0.2 % | 0.4 % | 1.0 % | 0.5 % | 0.4 % | 0.6 % | 1.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1370 ppm | 8.1491 ppm | 0.9961 ppm | 1.3054 ppm | 11.6037 ppm | 0.1282 ppm | 0.8985 ppm |
| Concentration per Run 1 | 0.1365 ppm | 8.0769 ppm | 0.9878 ppm | 1.3130 ppm | 11.5924 ppm | 0.1277 ppm | 0.8952 ppm |
| Concentration per Run 2 | 0.1363 ppm | 8.1643 ppm | 0.9947 ppm | 1.3020 ppm | 11.6240 ppm | 0.1294 ppm | 0.8994 ppm |
| Concentration per Run 3 | 0.1381 ppm | 8.2062 ppm | 1.0058 ppm | 1.3012 ppm | 11.5948 ppm | 0.1275 ppm | 0.9008 ppm |
| Concentration RSD | 0.7 % | 0.8 % | 0.9 % | 0.5 % | 0.2 % | 0.8 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.9734 ppm | 102.0936 % | 120.5943 % | 77.0968 % | 104.4714 % | 128.1962 % | 103.9115 % |
| Concentration per Run 1 | 5.9501 ppm | 102.3416 % | 120.1669 % | 77.1738 % | 105.3890 % | 128.2651 % | 103.9385 % |
| Concentration per Run 2 | 6.0046 ppm | 102.2151 % | 120.9779 % | 76.2243 % | 104.4337 % | 128.4753 % | 103.0805 % |
| Concentration per Run 3 | 5.9654 ppm | 101.7242 % | 120.6382 % | 77.8922 % | 103.5914 % | 127.8481 % | 104.7154 % |
| Concentration RSD | 0.5 % | 0.3 % | 0.3 % | 1.1 % | 0.9 % | 0.2 % | 0.8 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2039207-6D10 WG2039207
Analysis started at: 3/14/2025 12:11:18 PM
Rack 1
Vial 12
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 14.4936 ppm | 0.0179 ppm | 0.0100 ppm | 0.1765 ppm | 0.0009 ppm | 9.3927 ppm |
| Concentration per Run 1 | 0.0013 ppm | 14.4362 ppm | 0.0183 ppm | 0.0109 ppm | 0.1763 ppm | 0.0010 ppm | 9.3645 ppm |
| Concentration per Run 2 | 0.0012 ppm | 14.5339 ppm | 0.0182 ppm | 0.0097 ppm | 0.1767 ppm | 0.0009 ppm | 9.3864 ppm |
| Concentration per Run 3 | 0.0010 ppm | 14.5105 ppm | 0.0172 ppm | 0.0094 ppm | 0.1765 ppm | 0.0009 ppm | 9.4272 ppm |
| Concentration RSD | 9.3 % | 0.4 % | 3.5 % | 7.5 % | 0.1 % | 4.6 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0031 ppm | 0.0118 ppm | 0.0306 ppm | 0.0564 ppm | 40.6859 ppm | 0.7577 ppm | 0.0169 ppm |
| Concentration per Run 1 | 0.0030 ppm | 0.0121 ppm | 0.0310 ppm | 0.0571 ppm | 40.6258 ppm | 0.7596 ppm | 0.0170 ppm |
| Concentration per Run 2 | 0.0030 ppm | 0.0118 ppm | 0.0307 ppm | 0.0563 ppm | 40.7074 ppm | 0.7542 ppm | 0.0171 ppm |
| Concentration per Run 3 | 0.0032 ppm | 0.0116 ppm | 0.0302 ppm | 0.0558 ppm | 40.7247 ppm | 0.7591 ppm | 0.0168 ppm |
| Concentration RSD | 2.3 % | 2.4 % | 1.3 % | 1.1 % | 0.1 % | 0.4 % | 0.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 11.9765 ppm | 3.7749 ppm | 0.0044 ppm | 0.1011 ppm | 0.0254 ppm | 0.0664 ppm | 0.0045 ppm |
| Concentration per Run 1 | 12.1541 ppm | 3.7722 ppm | 0.0042 ppm | 0.0990 ppm | 0.0257 ppm | 0.0663 ppm | 0.0091 ppm |
| Concentration per Run 2 | 11.9201 ppm | 3.7786 ppm | 0.0045 ppm | 0.1021 ppm | 0.0253 ppm | 0.0667 ppm | 0.0005 ppm |
| Concentration per Run 3 | 11.8554 ppm | 3.7739 ppm | 0.0045 ppm | 0.1022 ppm | 0.0251 ppm | 0.0662 ppm | 0.0040 ppm |
| Concentration RSD | 1.3 % | 0.1 % | 4.1 % | 1.8 % | 1.3 % | 0.4 % | 94.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0018 ppm | 1.5674 ppm | 0.0070 ppm | 0.0572 ppm | 2.3083 ppm | -0.0026 ppm | 0.0850 ppm |
| Concentration per Run 1 | -0.0027 ppm | 1.5853 ppm | 0.0063 ppm | 0.0571 ppm | 2.3445 ppm | -0.0022 ppm | 0.0863 ppm |
| Concentration per Run 2 | 0.0006 ppm | 1.5647 ppm | 0.0062 ppm | 0.0574 ppm | 2.2951 ppm | -0.0030 ppm | 0.0845 ppm |
| Concentration per Run 3 | -0.0033 ppm | 1.5523 ppm | 0.0086 ppm | 0.0573 ppm | 2.2853 ppm | -0.0026 ppm | 0.0842 ppm |
| Concentration RSD | 115.5 % | 1.1 % | 19.1 % | 0.2 % | 1.4 % | 14.9 % | 1.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.2623 ppm | 102.9118 % | 123.2783 % | 94.6363 % | 101.1970 % | 123.2560 % | 101.5622 % |
| Concentration per Run 1 | 1.2798 ppm | 101.7485 % | 123.5631 % | 94.5421 % | 100.4631 % | 123.1190 % | 101.5719 % |
| Concentration per Run 2 | 1.2518 ppm | 103.3397 % | 123.3424 % | 94.7213 % | 101.4515 % | 123.5212 % | 101.8450 % |
| Concentration per Run 3 | 1.2554 ppm | 103.6473 % | 122.9293 % | 94.6455 % | 101.6763 % | 123.1278 % | 101.2698 % |
| Concentration RSD | 1.2 % | 1.0 % | 0.3 % | 0.1 % | 0.6 % | 0.2 % | 0.3 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: CCV
Analysis started at: 3/14/2025 12:15:45 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5067 ppm | 0.5000 ppm | 0.4708 ppm | 0.5055 ppm | 0.5075 ppm | 0.5018 ppm | 0.4822 ppm |
| Concentration per Run 1 | 0.5069 ppm | 0.5064 ppm | 0.4660 ppm | 0.5043 ppm | 0.5086 ppm | 0.5029 ppm | 0.4848 ppm |
| Concentration per Run 2 | 0.5076 ppm | 0.4990 ppm | 0.4757 ppm | 0.5068 ppm | 0.5071 ppm | 0.5042 ppm | 0.4813 ppm |
| Concentration per Run 3 | 0.5055 ppm | 0.4946 ppm | 0.4707 ppm | 0.5054 ppm | 0.5068 ppm | 0.4982 ppm | 0.4805 ppm |
| Recovery Percentage 1 | 101.330 % | 100.002 % | 94.158 % | 101.099 % | 101.502 % | 100.355 % | 96.442 % |
| Concentration RSD | 0.2 % | 1.2 % | 1.0 % | 0.2 % | 0.2 % | 0.6 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5100 ppm | 0.5098 ppm | 0.5084 ppm | 0.5183 ppm | 0.5059 ppm | 5.2274 ppm | 0.5206 ppm |
| Concentration per Run 1 | 0.5116 ppm | 0.5114 ppm | 0.5072 ppm | 0.5194 ppm | 0.5103 ppm | 5.2793 ppm | 0.5278 ppm |
| Concentration per Run 2 | 0.5104 ppm | 0.5085 ppm | 0.5101 ppm | 0.5174 ppm | 0.5065 ppm | 5.2412 ppm | 0.5227 ppm |
| Concentration per Run 3 | 0.5080 ppm | 0.5095 ppm | 0.5080 ppm | 0.5180 ppm | 0.5009 ppm | 5.1616 ppm | 0.5114 ppm |
| Recovery Percentage 1 | 101.998 % | 101.959 % | 101.686 % | 103.656 % | 101.180 % | 104.547 % | 104.123 % |
| Concentration RSD | 0.4 % | 0.3 % | 0.3 % | 0.2 % | 0.9 % | 1.1 % | 1.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5147 ppm | 0.4792 ppm | 0.5147 ppm | 10.3920 ppm | 0.5198 ppm | 0.4920 ppm | 0.5142 ppm |
| Concentration per Run 1 | 0.5126 ppm | 0.4806 ppm | 0.5106 ppm | 10.4464 ppm | 0.5168 ppm | 0.4850 ppm | 0.5097 ppm |
| Concentration per Run 2 | 0.5183 ppm | 0.4810 ppm | 0.5170 ppm | 10.3620 ppm | 0.5223 ppm | 0.4961 ppm | 0.5205 ppm |
| Concentration per Run 3 | 0.5131 ppm | 0.4761 ppm | 0.5164 ppm | 10.3676 ppm | 0.5202 ppm | 0.4948 ppm | 0.5123 ppm |
| Recovery Percentage 1 | 102.934 % | 95.843 % | 102.934 % | 103.920 % | 103.957 % | 98.390 % | 102.834 % |
| Concentration RSD | 0.6 % | 0.6 % | 0.7 % | 0.5 % | 0.5 % | 1.2 % | 1.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4779 ppm | 5.6341 ppm | 0.5126 ppm | 0.5117 ppm | 0.5182 ppm | 0.4946 ppm | 0.5125 ppm |
| Concentration per Run 1 | 0.4691 ppm | 5.6187 ppm | 0.5097 ppm | 0.5126 ppm | 0.5183 ppm | 0.4903 ppm | 0.5130 ppm |
| Concentration per Run 2 | 0.4812 ppm | 5.6573 ppm | 0.5153 ppm | 0.5127 ppm | 0.5190 ppm | 0.4966 ppm | 0.5141 ppm |
| Concentration per Run 3 | 0.4834 ppm | 5.6262 ppm | 0.5128 ppm | 0.5097 ppm | 0.5173 ppm | 0.4969 ppm | 0.5105 ppm |
| Recovery Percentage 1 | 95.582 % | 107.316 % | 102.522 % | 102.338 % | 103.639 % | 98.918 % | 102.505 % |
| Concentration RSD | 1.6 % | 0.4 % | 0.5 % | 0.3 % | 0.2 % | 0.7 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5120 ppm | 103.4364 % | 121.1268 % | 99.4448 % | 99.8693 % | 117.4811 % | 100.5516 % |
| Concentration per Run 1 | 0.5127 ppm | 103.3999 % | 121.3415 % | 100.8816 % | 100.2472 % | 117.7598 % | 101.9930 % |
| Concentration per Run 2 | 0.5137 ppm | 103.1033 % | 119.8121 % | 98.3352 % | 99.3742 % | 116.6220 % | 99.1832 % |
| Concentration per Run 3 | 0.5096 ppm | 103.8059 % | 122.2267 % | 99.1176 % | 99.9865 % | 118.0614 % | 100.4787 % |
| Recovery Percentage 1 | 102.405 % | | | | | | |
| Concentration RSD | 0.4 % | 0.3 % | 1.0 % | 1.3 % | 0.4 % | 0.6 % | 1.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: CCB
Analysis started at: 3/14/2025 12:20:11 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0095 ppm | -0.0011 ppm | 0.0004 ppm | 0.0000 ppm | 0.0001 ppm | -0.0007 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0059 ppm | -0.0003 ppm | 0.0005 ppm | -0.0001 ppm | 0.0001 ppm | 0.0017 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0150 ppm | -0.0021 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm | -0.0036 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0075 ppm | -0.0007 ppm | 0.0006 ppm | 0.0000 ppm | 0.0001 ppm | -0.0001 ppm |
| Recovery Percentage 1 | 6.095 % | 9.495 % | -21.315 % | 1.328 % | -0.104 % | 1.203 % | -0.676 % |
| Concentration RSD | 60.2 % | 51.2 % | 89.9 % | 59.9 % | 541.8 % | 39.9 % | 401.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0002 ppm | -0.0001 ppm | -0.0004 ppm | 0.0027 ppm | 0.0161 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0004 ppm | -0.0001 ppm | -0.0004 ppm | 0.0024 ppm | 0.0247 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0004 ppm | -0.0001 ppm | -0.0003 ppm | 0.0029 ppm | 0.0193 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0002 ppm | -0.0001 ppm | -0.0004 ppm | 0.0028 ppm | 0.0044 ppm | 0.0008 ppm |
| Recovery Percentage 1 | 0.616 % | 1.919 % | -1.360 % | -3.825 % | 5.392 % | 0.645 % | 4.166 % |
| Concentration RSD | 63.4 % | 193.2 % | 12.3 % | 24.5 % | 9.4 % | 65.3 % | 78.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 0.0001 ppm | 0.0024 ppm | -0.0123 ppm | 0.0004 ppm | -0.0001 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0003 ppm | 0.0027 ppm | -0.0130 ppm | 0.0002 ppm | 0.0005 ppm | 0.0019 ppm |
| Concentration per Run 2 | -0.0006 ppm | 0.0000 ppm | 0.0025 ppm | -0.0088 ppm | 0.0008 ppm | -0.0002 ppm | 0.0016 ppm |
| Concentration per Run 3 | -0.0008 ppm | 0.0000 ppm | 0.0019 ppm | -0.0150 ppm | 0.0002 ppm | -0.0007 ppm | -0.0016 ppm |
| Recovery Percentage 1 | -0.556 % | 1.181 % | 4.711 % | -0.614 % | 1.533 % | -1.325 % | 1.280 % |
| Concentration RSD | 51.7 % | 129.3 % | 17.6 % | 25.7 % | 90.0 % | 457.4 % | 304.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0010 ppm | -0.0044 ppm | -0.0007 ppm | 0.0000 ppm | 0.0003 ppm | -0.0007 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0023 ppm | -0.0053 ppm | -0.0009 ppm | 0.0000 ppm | 0.0002 ppm | -0.0010 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0040 ppm | -0.0001 ppm | -0.0001 ppm | 0.0004 ppm | -0.0006 ppm | -0.0002 ppm |
| Concentration per Run 3 | -0.0010 ppm | -0.0040 ppm | -0.0009 ppm | 0.0000 ppm | 0.0003 ppm | -0.0004 ppm | 0.0000 ppm |
| Recovery Percentage 1 | -10.314 % | -0.889 % | -1.302 % | -0.308 % | 2.909 % | -3.415 % | -0.005 % |
| Concentration RSD | 117.3 % | 16.2 % | 69.5 % | 249.0 % | 38.7 % | 49.3 % | 25,285.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 101.2744 % | 116.3510 % | 98.2811 % | 101.7904 % | 116.3030 % | 100.8596 % |
| Concentration per Run 1 | -0.0004 ppm | 100.9409 % | 117.4003 % | 97.3241 % | 101.8162 % | 117.7681 % | 100.2816 % |
| Concentration per Run 2 | -0.0002 ppm | 100.6449 % | 115.8641 % | 98.7200 % | 101.0616 % | 115.3271 % | 101.2000 % |
| Concentration per Run 3 | -0.0004 ppm | 102.2373 % | 115.7885 % | 98.7992 % | 102.4934 % | 115.8137 % | 101.0972 % |
| Recovery Percentage 1 | -6.539 % | | | | | | |
| Concentration RSD | 31.5 % | 0.8 % | 0.8 % | 0.8 % | 0.7 % | 1.1 % | 0.5 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513173-06D2 WG2039207
Analysis started at: 3/14/2025 12:36:06 PM
Rack 1
Vial 15
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 45.1087 ppm | 0.0271 ppm | 0.0028 ppm | 0.0408 ppm | 0.0006 ppm | 0.3635 ppm |
| Concentration per Run 1 | 0.0012 ppm | 44.9392 ppm | 0.0281 ppm | 0.0021 ppm | 0.0408 ppm | 0.0006 ppm | 0.3659 ppm |
| Concentration per Run 2 | 0.0011 ppm | 45.2352 ppm | 0.0271 ppm | 0.0039 ppm | 0.0414 ppm | 0.0007 ppm | 0.3563 ppm |
| Concentration per Run 3 | 0.0011 ppm | 45.1517 ppm | 0.0260 ppm | 0.0025 ppm | 0.0403 ppm | 0.0006 ppm | 0.3683 ppm |
| Concentration RSD | 2.2 % | 0.3 % | 4.0 % | 32.6 % | 1.3 % | 3.7 % | 1.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 0.0045 ppm | 0.1082 ppm | 0.0259 ppm | 109.3529 ppm | 1.2528 ppm | 0.0078 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0045 ppm | 0.1079 ppm | 0.0256 ppm | 109.2087 ppm | 1.2779 ppm | 0.0086 ppm |
| Concentration per Run 2 | 0.0013 ppm | 0.0043 ppm | 0.1084 ppm | 0.0263 ppm | 109.6354 ppm | 1.2252 ppm | 0.0068 ppm |
| Concentration per Run 3 | 0.0014 ppm | 0.0048 ppm | 0.1082 ppm | 0.0258 ppm | 109.2147 ppm | 1.2552 ppm | 0.0081 ppm |
| Concentration RSD | 4.5 % | 5.1 % | 0.3 % | 1.4 % | 0.2 % | 2.1 % | 11.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5854 ppm | 0.0801 ppm | 0.0053 ppm | 0.1690 ppm | 0.0106 ppm | 0.0415 ppm | 0.0031 ppm |
| Concentration per Run 1 | 0.5856 ppm | 0.0806 ppm | 0.0053 ppm | 0.1681 ppm | 0.0110 ppm | 0.0419 ppm | 0.0027 ppm |
| Concentration per Run 2 | 0.5853 ppm | 0.0802 ppm | 0.0049 ppm | 0.1667 ppm | 0.0106 ppm | 0.0429 ppm | 0.0045 ppm |
| Concentration per Run 3 | 0.5853 ppm | 0.0796 ppm | 0.0057 ppm | 0.1723 ppm | 0.0103 ppm | 0.0397 ppm | 0.0022 ppm |
| Concentration RSD | 0.0 % | 0.6 % | 7.6 % | 1.7 % | 3.1 % | 4.0 % | 37.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 4.0243 ppm | 0.0053 ppm | 0.0053 ppm | 0.5106 ppm | -0.0008 ppm | 0.2076 ppm |
| Concentration per Run 1 | 0.0005 ppm | 4.0379 ppm | 0.0053 ppm | 0.0053 ppm | 0.5099 ppm | -0.0013 ppm | 0.2077 ppm |
| Concentration per Run 2 | -0.0032 ppm | 4.0320 ppm | 0.0060 ppm | 0.0053 ppm | 0.5097 ppm | -0.0001 ppm | 0.2070 ppm |
| Concentration per Run 3 | 0.0005 ppm | 4.0030 ppm | 0.0046 ppm | 0.0054 ppm | 0.5122 ppm | -0.0010 ppm | 0.2080 ppm |
| Concentration RSD | 286.6 % | 0.5 % | 12.8 % | 0.9 % | 0.3 % | 73.6 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0264 ppm | 106.6297 % | 119.1382 % | 98.2323 % | 96.9227 % | 113.4422 % | 99.0711 % |
| Concentration per Run 1 | 0.0269 ppm | 106.5683 % | 118.0493 % | 98.2090 % | 96.7202 % | 112.4202 % | 98.8607 % |
| Concentration per Run 2 | 0.0262 ppm | 106.4360 % | 119.5487 % | 98.1410 % | 96.3774 % | 113.5673 % | 98.6927 % |
| Concentration per Run 3 | 0.0261 ppm | 106.8849 % | 119.8168 % | 98.3470 % | 97.6705 % | 114.3392 % | 99.6599 % |
| Concentration RSD | 1.7 % | 0.2 % | 0.8 % | 0.1 % | 0.7 % | 0.9 % | 0.5 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513173-08D2 WG2039207
Analysis started at: 3/14/2025 12:40:44 PM
Rack 1
Vial 16
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 30.5812 ppm | 0.0502 ppm | 0.0038 ppm | 0.0476 ppm | 0.0030 ppm | 0.2739 ppm |
| Concentration per Run 1 | 0.0013 ppm | 30.8515 ppm | 0.0510 ppm | 0.0027 ppm | 0.0481 ppm | 0.0030 ppm | 0.2790 ppm |
| Concentration per Run 2 | 0.0009 ppm | 28.9141 ppm | 0.0508 ppm | 0.0037 ppm | 0.0452 ppm | 0.0028 ppm | 0.2622 ppm |
| Concentration per Run 3 | 0.0014 ppm | 31.9778 ppm | 0.0486 ppm | 0.0049 ppm | 0.0495 ppm | 0.0031 ppm | 0.2804 ppm |
| Concentration RSD | 22.4 % | 5.1 % | 2.7 % | 28.2 % | 4.5 % | 4.8 % | 3.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0026 ppm | 0.0381 ppm | 0.1070 ppm | 0.0685 ppm | 239.2666 ppm | 1.7383 ppm | 0.0028 ppm |
| Concentration per Run 1 | 0.0028 ppm | 0.0386 ppm | 0.1080 ppm | 0.0689 ppm | 240.7298 ppm | 1.7616 ppm | 0.0029 ppm |
| Concentration per Run 2 | 0.0025 ppm | 0.0383 ppm | 0.1076 ppm | 0.0688 ppm | 227.8237 ppm | 1.6585 ppm | 0.0027 ppm |
| Concentration per Run 3 | 0.0026 ppm | 0.0374 ppm | 0.1053 ppm | 0.0676 ppm | 249.2464 ppm | 1.7948 ppm | 0.0029 ppm |
| Concentration RSD | 4.8 % | 1.6 % | 1.4 % | 1.0 % | 4.5 % | 4.1 % | 2.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3542 ppm | 0.3877 ppm | 0.0070 ppm | 0.1306 ppm | 0.0575 ppm | 0.0630 ppm | 0.0052 ppm |
| Concentration per Run 1 | 0.3572 ppm | 0.3919 ppm | 0.0074 ppm | 0.1295 ppm | 0.0579 ppm | 0.0640 ppm | 0.0062 ppm |
| Concentration per Run 2 | 0.3563 ppm | 0.3689 ppm | 0.0070 ppm | 0.1228 ppm | 0.0581 ppm | 0.0628 ppm | 0.0039 ppm |
| Concentration per Run 3 | 0.3493 ppm | 0.4023 ppm | 0.0066 ppm | 0.1395 ppm | 0.0564 ppm | 0.0620 ppm | 0.0056 ppm |
| Concentration RSD | 1.2 % | 4.4 % | 5.2 % | 6.4 % | 1.6 % | 1.5 % | 22.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0017 ppm | 4.4146 ppm | 0.0044 ppm | 0.0038 ppm | 0.8480 ppm | -0.0002 ppm | 0.2545 ppm |
| Concentration per Run 1 | -0.0033 ppm | 4.4550 ppm | 0.0046 ppm | 0.0039 ppm | 0.8570 ppm | -0.0004 ppm | 0.2574 ppm |
| Concentration per Run 2 | -0.0010 ppm | 4.4348 ppm | 0.0054 ppm | 0.0036 ppm | 0.8541 ppm | 0.0002 ppm | 0.2560 ppm |
| Concentration per Run 3 | -0.0009 ppm | 4.3541 ppm | 0.0031 ppm | 0.0039 ppm | 0.8330 ppm | -0.0004 ppm | 0.2501 ppm |
| Concentration RSD | 80.8 % | 1.2 % | 25.7 % | 4.1 % | 1.5 % | 170.8 % | 1.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1335 ppm | 108.9517 % | 121.7853 % | 95.8464 % | 101.5286 % | 115.1192 % | 101.4893 % |
| Concentration per Run 1 | 0.1348 ppm | 108.2198 % | 120.3005 % | 94.6949 % | 100.9800 % | 114.9568 % | 100.2154 % |
| Concentration per Run 2 | 0.1346 ppm | 108.3361 % | 126.9036 % | 96.6110 % | 100.8691 % | 117.4917 % | 102.3417 % |
| Concentration per Run 3 | 0.1311 ppm | 110.2991 % | 118.1519 % | 96.2333 % | 102.7367 % | 112.9093 % | 101.9107 % |
| Concentration RSD | 1.6 % | 1.1 % | 3.7 % | 1.1 % | 1.0 % | 2.0 % | 1.1 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513173-10D2 WG2039207
Analysis started at: 3/14/2025 12:45:08 PM
Rack 1
Vial 17
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 54.3070 ppm | 0.0517 ppm | 0.0038 ppm | 0.0433 ppm | 0.0018 ppm | 6.5020 ppm |
| Concentration per Run 1 | 0.0011 ppm | 53.5611 ppm | 0.0522 ppm | 0.0055 ppm | 0.0429 ppm | 0.0018 ppm | 6.4168 ppm |
| Concentration per Run 2 | 0.0008 ppm | 54.8547 ppm | 0.0501 ppm | 0.0033 ppm | 0.0437 ppm | 0.0018 ppm | 6.5678 ppm |
| Concentration per Run 3 | 0.0008 ppm | 54.5053 ppm | 0.0528 ppm | 0.0025 ppm | 0.0432 ppm | 0.0019 ppm | 6.5213 ppm |
| Concentration RSD | 20.1 % | 1.2 % | 2.7 % | 40.9 % | 0.9 % | 1.2 % | 1.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0025 ppm | 0.0128 ppm | 0.2024 ppm | 0.0671 ppm | 232.8680 ppm | 0.9764 ppm | 0.0079 ppm |
| Concentration per Run 1 | 0.0024 ppm | 0.0129 ppm | 0.2025 ppm | 0.0666 ppm | 230.4928 ppm | 0.9601 ppm | 0.0090 ppm |
| Concentration per Run 2 | 0.0024 ppm | 0.0129 ppm | 0.2014 ppm | 0.0671 ppm | 235.0766 ppm | 0.9831 ppm | 0.0072 ppm |
| Concentration per Run 3 | 0.0026 ppm | 0.0127 ppm | 0.2032 ppm | 0.0675 ppm | 233.0347 ppm | 0.9860 ppm | 0.0075 ppm |
| Concentration RSD | 5.8 % | 1.1 % | 0.4 % | 0.6 % | 1.0 % | 1.5 % | 11.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0185 ppm | 0.3443 ppm | 0.0076 ppm | 0.2986 ppm | 0.0235 ppm | 0.0720 ppm | 0.0069 ppm |
| Concentration per Run 1 | 1.0182 ppm | 0.3394 ppm | 0.0074 ppm | 0.2979 ppm | 0.0235 ppm | 0.0724 ppm | 0.0048 ppm |
| Concentration per Run 2 | 1.0212 ppm | 0.3487 ppm | 0.0075 ppm | 0.2969 ppm | 0.0239 ppm | 0.0718 ppm | 0.0107 ppm |
| Concentration per Run 3 | 1.0162 ppm | 0.3449 ppm | 0.0077 ppm | 0.3011 ppm | 0.0230 ppm | 0.0719 ppm | 0.0052 ppm |
| Concentration RSD | 0.2 % | 1.4 % | 1.9 % | 0.7 % | 2.0 % | 0.5 % | 48.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0017 ppm | 3.1807 ppm | 0.0085 ppm | 0.0572 ppm | 0.7297 ppm | 0.0006 ppm | 0.5496 ppm |
| Concentration per Run 1 | -0.0010 ppm | 3.1729 ppm | 0.0079 ppm | 0.0567 ppm | 0.7296 ppm | 0.0008 ppm | 0.5500 ppm |
| Concentration per Run 2 | -0.0009 ppm | 3.1754 ppm | 0.0089 ppm | 0.0576 ppm | 0.7326 ppm | 0.0000 ppm | 0.5480 ppm |
| Concentration per Run 3 | -0.0032 ppm | 3.1937 ppm | 0.0088 ppm | 0.0573 ppm | 0.7268 ppm | 0.0009 ppm | 0.5508 ppm |
| Concentration RSD | 76.6 % | 0.4 % | 6.1 % | 0.9 % | 0.4 % | 88.7 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0655 ppm | 110.8190 % | 126.6981 % | 98.0272 % | 100.1705 % | 117.0919 % | 101.5612 % |
| Concentration per Run 1 | 0.0661 ppm | 111.0043 % | 128.2585 % | 97.9556 % | 100.5133 % | 119.8361 % | 101.6473 % |
| Concentration per Run 2 | 0.0654 ppm | 110.7661 % | 125.3922 % | 97.9476 % | 100.1817 % | 115.1439 % | 101.4020 % |
| Concentration per Run 3 | 0.0650 ppm | 110.6866 % | 126.4438 % | 98.1785 % | 99.8165 % | 116.2957 % | 101.6345 % |
| Concentration RSD | 0.9 % | 0.1 % | 1.1 % | 0.1 % | 0.3 % | 2.1 % | 0.1 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513173-12D2 WG2039207
Analysis started at: 3/14/2025 12:49:33 PM
Rack 1
Vial 18
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 13.6208 ppm | 0.0054 ppm | 0.0026 ppm | 0.0254 ppm | 0.0006 ppm | 0.8438 ppm |
| Concentration per Run 1 | 0.0008 ppm | 13.6554 ppm | 0.0050 ppm | 0.0024 ppm | 0.0255 ppm | 0.0006 ppm | 0.8467 ppm |
| Concentration per Run 2 | 0.0011 ppm | 13.5451 ppm | 0.0061 ppm | 0.0035 ppm | 0.0252 ppm | 0.0006 ppm | 0.8409 ppm |
| Concentration per Run 3 | 0.0006 ppm | 13.6618 ppm | 0.0052 ppm | 0.0017 ppm | 0.0253 ppm | 0.0006 ppm | 0.8438 ppm |
| Concentration RSD | 30.6 % | 0.5 % | 10.3 % | 35.0 % | 0.6 % | 2.8 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0023 ppm | 0.0377 ppm | 0.0102 ppm | 31.7913 ppm | 1.1407 ppm | 0.0023 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0022 ppm | 0.0379 ppm | 0.0103 ppm | 31.9250 ppm | 1.1561 ppm | 0.0023 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0022 ppm | 0.0378 ppm | 0.0101 ppm | 31.5100 ppm | 1.1347 ppm | 0.0025 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0023 ppm | 0.0372 ppm | 0.0102 ppm | 31.9390 ppm | 1.1314 ppm | 0.0020 ppm |
| Concentration RSD | 20.0 % | 3.5 % | 1.0 % | 1.2 % | 0.8 % | 1.2 % | 11.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3509 ppm | 0.0598 ppm | 0.0030 ppm | 0.0846 ppm | 0.0069 ppm | 0.0191 ppm | 0.0012 ppm |
| Concentration per Run 1 | 0.3518 ppm | 0.0598 ppm | 0.0026 ppm | 0.0849 ppm | 0.0065 ppm | 0.0185 ppm | 0.0027 ppm |
| Concentration per Run 2 | 0.3506 ppm | 0.0595 ppm | 0.0033 ppm | 0.0821 ppm | 0.0069 ppm | 0.0205 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.3501 ppm | 0.0601 ppm | 0.0031 ppm | 0.0869 ppm | 0.0074 ppm | 0.0183 ppm | 0.0004 ppm |
| Concentration RSD | 0.2 % | 0.5 % | 11.5 % | 2.8 % | 6.6 % | 6.5 % | 110.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 2.7652 ppm | 0.0028 ppm | 0.0088 ppm | 0.1847 ppm | -0.0025 ppm | 0.0399 ppm |
| Concentration per Run 1 | 0.0010 ppm | 2.7734 ppm | 0.0028 ppm | 0.0089 ppm | 0.1854 ppm | -0.0025 ppm | 0.0402 ppm |
| Concentration per Run 2 | 0.0016 ppm | 2.7735 ppm | 0.0026 ppm | 0.0088 ppm | 0.1855 ppm | -0.0031 ppm | 0.0398 ppm |
| Concentration per Run 3 | -0.0010 ppm | 2.7486 ppm | 0.0030 ppm | 0.0088 ppm | 0.1833 ppm | -0.0020 ppm | 0.0397 ppm |
| Concentration RSD | 260.6 % | 0.5 % | 6.0 % | 0.5 % | 0.7 % | 21.2 % | 0.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0176 ppm | 103.4759 % | 116.8272 % | 99.3666 % | 100.3609 % | 114.0871 % | 101.8156 % |
| Concentration per Run 1 | 0.0175 ppm | 103.2158 % | 116.5970 % | 101.7213 % | 100.4284 % | 113.8330 % | 103.8934 % |
| Concentration per Run 2 | 0.0178 ppm | 102.8399 % | 118.1041 % | 97.5702 % | 99.8074 % | 114.8897 % | 100.0580 % |
| Concentration per Run 3 | 0.0175 ppm | 104.3721 % | 115.7805 % | 98.8083 % | 100.8469 % | 113.5386 % | 101.4955 % |
| Concentration RSD | 0.7 % | 0.8 % | 1.0 % | 2.1 % | 0.5 % | 0.6 % | 1.9 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513173-14D2 WG2039207
Analysis started at: 3/14/2025 12:53:58 PM
Rack 1
Vial 19
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 113.7310 ppm | 0.0584 ppm | 0.0026 ppm | 0.2432 ppm | 0.0021 ppm | 1.0823 ppm |
| Concentration per Run 1 | -0.0001 ppm | 116.3276 ppm | 0.0575 ppm | 0.0026 ppm | 0.2493 ppm | 0.0022 ppm | 1.1050 ppm |
| Concentration per Run 2 | 0.0017 ppm | 113.1777 ppm | 0.0585 ppm | 0.0022 ppm | 0.2408 ppm | 0.0021 ppm | 1.0831 ppm |
| Concentration per Run 3 | 0.0014 ppm | 111.6876 ppm | 0.0591 ppm | 0.0030 ppm | 0.2396 ppm | 0.0020 ppm | 1.0589 ppm |
| Concentration RSD | 99.0 % | 2.1 % | 1.4 % | 14.3 % | 2.2 % | 4.6 % | 2.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0031 ppm | 0.0081 ppm | 0.2932 ppm | 0.0560 ppm | 302.6246 ppm | 1.6341 ppm | 0.0329 ppm |
| Concentration per Run 1 | 0.0026 ppm | 0.0086 ppm | 0.2928 ppm | 0.0553 ppm | 311.2138 ppm | 1.6842 ppm | 0.0349 ppm |
| Concentration per Run 2 | 0.0036 ppm | 0.0081 ppm | 0.2970 ppm | 0.0567 ppm | 300.3414 ppm | 1.6188 ppm | 0.0329 ppm |
| Concentration per Run 3 | 0.0030 ppm | 0.0076 ppm | 0.2898 ppm | 0.0560 ppm | 296.3188 ppm | 1.5994 ppm | 0.0310 ppm |
| Concentration RSD | 17.0 % | 6.1 % | 1.2 % | 1.2 % | 2.5 % | 2.7 % | 6.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.3490 ppm | 0.0936 ppm | 0.0095 ppm | 1.8571 ppm | 0.0165 ppm | 0.1358 ppm | 0.0032 ppm |
| Concentration per Run 1 | 3.3373 ppm | 0.0958 ppm | 0.0101 ppm | 1.9029 ppm | 0.0168 ppm | 0.1343 ppm | 0.0015 ppm |
| Concentration per Run 2 | 3.3973 ppm | 0.0932 ppm | 0.0091 ppm | 1.8449 ppm | 0.0159 ppm | 0.1368 ppm | 0.0016 ppm |
| Concentration per Run 3 | 3.3123 ppm | 0.0917 ppm | 0.0094 ppm | 1.8235 ppm | 0.0168 ppm | 0.1362 ppm | 0.0066 ppm |
| Concentration RSD | 1.3 % | 2.2 % | 5.6 % | 2.2 % | 3.2 % | 0.9 % | 88.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 4.0751 ppm | 0.0083 ppm | 0.0198 ppm | 0.7732 ppm | 0.0025 ppm | 0.5193 ppm |
| Concentration per Run 1 | -0.0008 ppm | 4.0382 ppm | 0.0087 ppm | 0.0203 ppm | 0.7768 ppm | 0.0032 ppm | 0.5167 ppm |
| Concentration per Run 2 | -0.0006 ppm | 4.1341 ppm | 0.0095 ppm | 0.0197 ppm | 0.7811 ppm | 0.0017 ppm | 0.5263 ppm |
| Concentration per Run 3 | 0.0000 ppm | 4.0529 ppm | 0.0067 ppm | 0.0194 ppm | 0.7616 ppm | 0.0026 ppm | 0.5150 ppm |
| Concentration RSD | 95.7 % | 1.3 % | 17.5 % | 2.3 % | 1.3 % | 29.5 % | 1.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0428 ppm | 106.7589 % | 119.5056 % | 92.8198 % | 101.7766 % | 119.0171 % | 102.8282 % |
| Concentration per Run 1 | 0.0428 ppm | 106.8337 % | 117.1169 % | 93.1850 % | 102.7470 % | 116.8926 % | 103.5141 % |
| Concentration per Run 2 | 0.0434 ppm | 105.4793 % | 119.7728 % | 92.0336 % | 100.1026 % | 119.5033 % | 102.5387 % |
| Concentration per Run 3 | 0.0421 ppm | 107.9637 % | 121.6272 % | 93.2407 % | 102.4804 % | 120.6554 % | 102.4317 % |
| Concentration RSD | 1.6 % | 1.2 % | 1.9 % | 0.7 % | 1.4 % | 1.6 % | 0.6 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513173-16D2 WG2039207
Analysis started at: 3/14/2025 12:58:24 PM
Rack 1
Vial 20
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 101.0782 ppm | 0.0691 ppm | 0.0010 ppm | 0.2032 ppm | 0.0017 ppm | 1.0140 ppm |
| Concentration per Run 1 | 0.0016 ppm | 100.9638 ppm | 0.0686 ppm | 0.0000 ppm | 0.2019 ppm | 0.0017 ppm | 1.0117 ppm |
| Concentration per Run 2 | 0.0019 ppm | 94.9121 ppm | 0.0694 ppm | 0.0019 ppm | 0.1914 ppm | 0.0016 ppm | 0.9549 ppm |
| Concentration per Run 3 | 0.0017 ppm | 107.3587 ppm | 0.0693 ppm | 0.0010 ppm | 0.2162 ppm | 0.0018 ppm | 1.0754 ppm |
| Concentration RSD | 8.4 % | 6.2 % | 0.6 % | 98.1 % | 6.1 % | 4.9 % | 5.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0030 ppm | 0.0079 ppm | 0.2276 ppm | 0.0555 ppm | 265.0272 ppm | 1.4267 ppm | 0.0302 ppm |
| Concentration per Run 1 | 0.0030 ppm | 0.0084 ppm | 0.2341 ppm | 0.0565 ppm | 264.4152 ppm | 1.4382 ppm | 0.0307 ppm |
| Concentration per Run 2 | 0.0028 ppm | 0.0077 ppm | 0.2207 ppm | 0.0538 ppm | 249.7487 ppm | 1.3279 ppm | 0.0284 ppm |
| Concentration per Run 3 | 0.0030 ppm | 0.0077 ppm | 0.2280 ppm | 0.0563 ppm | 280.9177 ppm | 1.5140 ppm | 0.0316 ppm |
| Concentration RSD | 3.1 % | 5.5 % | 3.0 % | 2.7 % | 5.9 % | 6.6 % | 5.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.7023 ppm | 0.0751 ppm | 0.0109 ppm | 1.5338 ppm | 0.0145 ppm | 0.1012 ppm | 0.0059 ppm |
| Concentration per Run 1 | 2.7753 ppm | 0.0750 ppm | 0.0113 ppm | 1.5373 ppm | 0.0146 ppm | 0.1006 ppm | 0.0058 ppm |
| Concentration per Run 2 | 2.6172 ppm | 0.0709 ppm | 0.0104 ppm | 1.4407 ppm | 0.0142 ppm | 0.1010 ppm | 0.0049 ppm |
| Concentration per Run 3 | 2.7144 ppm | 0.0793 ppm | 0.0109 ppm | 1.6235 ppm | 0.0146 ppm | 0.1019 ppm | 0.0071 ppm |
| Concentration RSD | 3.0 % | 5.6 % | 4.5 % | 6.0 % | 1.8 % | 0.7 % | 18.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 2.9766 ppm | 0.0094 ppm | 0.0171 ppm | 0.4941 ppm | 0.0020 ppm | 0.4614 ppm |
| Concentration per Run 1 | -0.0009 ppm | 3.0412 ppm | 0.0094 ppm | 0.0170 ppm | 0.5084 ppm | 0.0019 ppm | 0.4744 ppm |
| Concentration per Run 2 | 0.0006 ppm | 2.8747 ppm | 0.0090 ppm | 0.0161 ppm | 0.4781 ppm | 0.0016 ppm | 0.4478 ppm |
| Concentration per Run 3 | -0.0001 ppm | 3.0139 ppm | 0.0099 ppm | 0.0183 ppm | 0.4959 ppm | 0.0025 ppm | 0.4621 ppm |
| Concentration RSD | 528.7 % | 3.0 % | 4.9 % | 6.4 % | 3.1 % | 23.6 % | 2.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0410 ppm | 109.6811 % | 122.0433 % | 94.0682 % | 102.8312 % | 115.8840 % | 102.7816 % |
| Concentration per Run 1 | 0.0429 ppm | 107.1057 % | 121.5064 % | 94.1489 % | 101.1179 % | 118.6599 % | 103.1461 % |
| Concentration per Run 2 | 0.0394 ppm | 112.4697 % | 128.4034 % | 94.1720 % | 105.5531 % | 120.2469 % | 102.6829 % |
| Concentration per Run 3 | 0.0408 ppm | 109.4681 % | 116.2202 % | 93.8837 % | 101.8226 % | 108.7451 % | 102.5158 % |
| Concentration RSD | 4.3 % | 2.5 % | 5.0 % | 0.2 % | 2.3 % | 5.4 % | 0.3 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513173-18D2 WG2039207
Analysis started at: 3/14/2025 1:02:49 PM
Rack 1
Vial 21
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 56.2167 ppm | 0.0186 ppm | 0.0035 ppm | 0.0494 ppm | 0.0006 ppm | 9.4103 ppm |
| Concentration per Run 1 | 0.0011 ppm | 56.9629 ppm | 0.0190 ppm | 0.0026 ppm | 0.0500 ppm | 0.0006 ppm | 9.6002 ppm |
| Concentration per Run 2 | 0.0010 ppm | 56.2843 ppm | 0.0204 ppm | 0.0032 ppm | 0.0494 ppm | 0.0006 ppm | 9.3579 ppm |
| Concentration per Run 3 | 0.0011 ppm | 55.4029 ppm | 0.0164 ppm | 0.0047 ppm | 0.0487 ppm | 0.0006 ppm | 9.2728 ppm |
| Concentration RSD | 7.3 % | 1.4 % | 10.9 % | 31.7 % | 1.3 % | 3.4 % | 1.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0045 ppm | 0.0854 ppm | 0.0390 ppm | 78.8877 ppm | 1.1733 ppm | 0.0155 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0045 ppm | 0.0857 ppm | 0.0389 ppm | 79.7238 ppm | 1.2216 ppm | 0.0160 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0040 ppm | 0.0856 ppm | 0.0391 ppm | 78.7402 ppm | 1.1809 ppm | 0.0149 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0051 ppm | 0.0847 ppm | 0.0391 ppm | 78.1991 ppm | 1.1173 ppm | 0.0155 ppm |
| Concentration RSD | 10.1 % | 11.4 % | 0.6 % | 0.3 % | 1.0 % | 4.5 % | 3.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0314 ppm | 0.0695 ppm | 0.0055 ppm | 0.6014 ppm | 0.0113 ppm | 0.0421 ppm | 0.0005 ppm |
| Concentration per Run 1 | 1.0384 ppm | 0.0704 ppm | 0.0057 ppm | 0.6057 ppm | 0.0119 ppm | 0.0413 ppm | 0.0000 ppm |
| Concentration per Run 2 | 1.0278 ppm | 0.0694 ppm | 0.0054 ppm | 0.6060 ppm | 0.0112 ppm | 0.0423 ppm | 0.0014 ppm |
| Concentration per Run 3 | 1.0281 ppm | 0.0687 ppm | 0.0054 ppm | 0.5927 ppm | 0.0109 ppm | 0.0427 ppm | 0.0001 ppm |
| Concentration RSD | 0.6 % | 1.2 % | 2.8 % | 1.3 % | 4.5 % | 1.8 % | 154.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 3.5434 ppm | 0.0095 ppm | 0.0547 ppm | 0.2722 ppm | 0.0002 ppm | 0.1773 ppm |
| Concentration per Run 1 | 0.0015 ppm | 3.5493 ppm | 0.0093 ppm | 0.0553 ppm | 0.2742 ppm | -0.0004 ppm | 0.1777 ppm |
| Concentration per Run 2 | 0.0010 ppm | 3.5499 ppm | 0.0093 ppm | 0.0548 ppm | 0.2714 ppm | 0.0001 ppm | 0.1775 ppm |
| Concentration per Run 3 | -0.0041 ppm | 3.5310 ppm | 0.0098 ppm | 0.0540 ppm | 0.2709 ppm | 0.0009 ppm | 0.1767 ppm |
| Concentration RSD | 572.7 % | 0.3 % | 3.3 % | 1.2 % | 0.7 % | 270.4 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0281 ppm | 104.5020 % | 119.6940 % | 95.3652 % | 98.6794 % | 115.5867 % | 100.4571 % |
| Concentration per Run 1 | 0.0280 ppm | 104.4536 % | 118.0534 % | 95.6357 % | 98.6290 % | 114.7813 % | 100.6635 % |
| Concentration per Run 2 | 0.0276 ppm | 104.8072 % | 120.5959 % | 94.9655 % | 98.9413 % | 116.7372 % | 100.0256 % |
| Concentration per Run 3 | 0.0287 ppm | 104.2454 % | 120.4328 % | 95.4943 % | 98.4679 % | 115.2416 % | 100.6822 % |
| Concentration RSD | 2.0 % | 0.3 % | 1.2 % | 0.4 % | 0.2 % | 0.9 % | 0.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513173-20D2 WG2039207
Analysis started at: 3/14/2025 1:07:16 PM
Rack 1
Vial 22
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0018 ppm | 53.0397 ppm | 0.0573 ppm | 0.0035 ppm | 0.0383 ppm | 0.0021 ppm | 2.1669 ppm |
| Concentration per Run 1 | 0.0017 ppm | 53.0739 ppm | 0.0585 ppm | 0.0039 ppm | 0.0384 ppm | 0.0021 ppm | 2.1647 ppm |
| Concentration per Run 2 | 0.0018 ppm | 53.1424 ppm | 0.0564 ppm | 0.0028 ppm | 0.0385 ppm | 0.0021 ppm | 2.1626 ppm |
| Concentration per Run 3 | 0.0018 ppm | 52.9027 ppm | 0.0569 ppm | 0.0037 ppm | 0.0379 ppm | 0.0020 ppm | 2.1732 ppm |
| Concentration RSD | 2.2 % | 0.2 % | 1.9 % | 16.4 % | 0.8 % | 1.5 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0024 ppm | 0.0250 ppm | 0.1957 ppm | 0.0587 ppm | 217.3191 ppm | 1.1467 ppm | 0.0091 ppm |
| Concentration per Run 1 | 0.0026 ppm | 0.0269 ppm | 0.2100 ppm | 0.0629 ppm | 216.2551 ppm | 1.1676 ppm | 0.0089 ppm |
| Concentration per Run 2 | 0.0023 ppm | 0.0237 ppm | 0.1869 ppm | 0.0562 ppm | 219.1775 ppm | 1.1202 ppm | 0.0092 ppm |
| Concentration per Run 3 | 0.0025 ppm | 0.0243 ppm | 0.1902 ppm | 0.0570 ppm | 216.5249 ppm | 1.1524 ppm | 0.0093 ppm |
| Concentration RSD | 6.5 % | 7.0 % | 6.4 % | 6.2 % | 0.7 % | 2.1 % | 2.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5655 ppm | 0.4541 ppm | 0.0068 ppm | 0.3419 ppm | 0.0344 ppm | 0.0632 ppm | 0.0047 ppm |
| Concentration per Run 1 | 0.6076 ppm | 0.4548 ppm | 0.0072 ppm | 0.3441 ppm | 0.0372 ppm | 0.0622 ppm | 0.0034 ppm |
| Concentration per Run 2 | 0.5391 ppm | 0.4551 ppm | 0.0065 ppm | 0.3437 ppm | 0.0328 ppm | 0.0642 ppm | 0.0044 ppm |
| Concentration per Run 3 | 0.5499 ppm | 0.4525 ppm | 0.0067 ppm | 0.3381 ppm | 0.0331 ppm | 0.0632 ppm | 0.0063 ppm |
| Concentration RSD | 6.5 % | 0.3 % | 5.2 % | 1.0 % | 7.2 % | 1.6 % | 31.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 3.8013 ppm | 0.0058 ppm | 0.0151 ppm | 0.6374 ppm | -0.0003 ppm | 0.3530 ppm |
| Concentration per Run 1 | -0.0011 ppm | 4.1550 ppm | 0.0070 ppm | 0.0151 ppm | 0.6844 ppm | 0.0013 ppm | 0.3783 ppm |
| Concentration per Run 2 | 0.0002 ppm | 3.5809 ppm | 0.0042 ppm | 0.0151 ppm | 0.6095 ppm | -0.0002 ppm | 0.3375 ppm |
| Concentration per Run 3 | -0.0012 ppm | 3.6680 ppm | 0.0060 ppm | 0.0151 ppm | 0.6183 ppm | -0.0020 ppm | 0.3432 ppm |
| Concentration RSD | 116.0 % | 8.1 % | 24.8 % | 0.2 % | 6.4 % | 561.3 % | 6.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0856 ppm | 109.2391 % | 126.0907 % | 98.3221 % | 97.3116 % | 117.2392 % | 101.3886 % |
| Concentration per Run 1 | 0.0926 ppm | 102.7890 % | 126.6419 % | 98.3160 % | 89.5727 % | 117.4456 % | 101.3990 % |
| Concentration per Run 2 | 0.0813 ppm | 112.9614 % | 125.3444 % | 98.4531 % | 101.9049 % | 116.7204 % | 101.4710 % |
| Concentration per Run 3 | 0.0830 ppm | 111.9667 % | 126.2858 % | 98.1972 % | 100.4573 % | 117.5517 % | 101.2958 % |
| Concentration RSD | 7.1 % | 5.1 % | 0.5 % | 0.1 % | 6.9 % | 0.4 % | 0.1 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513173-22D2 WG2039207
Analysis started at: 3/14/2025 1:11:42 PM
Rack 1
Vial 23
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0019 ppm | 57.7093 ppm | 0.0513 ppm | 0.0037 ppm | 0.0406 ppm | 0.0019 ppm | 3.6884 ppm |
| Concentration per Run 1 | 0.0020 ppm | 57.7961 ppm | 0.0524 ppm | 0.0034 ppm | 0.0409 ppm | 0.0019 ppm | 3.6968 ppm |
| Concentration per Run 2 | 0.0019 ppm | 57.7293 ppm | 0.0508 ppm | 0.0051 ppm | 0.0405 ppm | 0.0019 ppm | 3.6803 ppm |
| Concentration per Run 3 | 0.0019 ppm | 57.6023 ppm | 0.0508 ppm | 0.0026 ppm | 0.0404 ppm | 0.0018 ppm | 3.6882 ppm |
| Concentration RSD | 4.3 % | 0.2 % | 1.8 % | 34.4 % | 0.7 % | 1.4 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0045 ppm | 0.0100 ppm | 0.2050 ppm | 0.0715 ppm | 411.1969 [SIC 500] | 1.6383 ppm | 0.0062 ppm |
| Concentration per Run 1 | 0.0043 ppm | 0.0105 ppm | 0.2083 ppm | 0.0721 ppm | 413.0600 ppm | 1.6486 ppm | 0.0064 ppm |
| Concentration per Run 2 | 0.0047 ppm | 0.0097 ppm | 0.2081 ppm | 0.0724 ppm | 411.2452 ppm | 1.6355 ppm | 0.0056 ppm |
| Concentration per Run 3 | 0.0045 ppm | 0.0098 ppm | 0.1985 ppm | 0.0698 ppm | 409.2857 ppm | 1.6309 ppm | 0.0067 ppm |
| Concentration RSD | 4.4 % | 4.3 % | 2.7 % | 2.0 % | 0.5 % | 0.6 % | 8.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.9803 ppm | 0.1129 ppm | 0.0053 ppm | 0.3883 ppm | 0.0197 ppm | 0.0848 ppm | 0.0100 ppm |
| Concentration per Run 1 | 0.9991 ppm | 0.1132 ppm | 0.0048 ppm | 0.3905 ppm | 0.0206 ppm | 0.0894 ppm | 0.0127 ppm |
| Concentration per Run 2 | 0.9951 ppm | 0.1129 ppm | 0.0060 ppm | 0.3891 ppm | 0.0199 ppm | 0.0826 ppm | 0.0095 ppm |
| Concentration per Run 3 | 0.9466 ppm | 0.1127 ppm | 0.0050 ppm | 0.3853 ppm | 0.0186 ppm | 0.0823 ppm | 0.0078 ppm |
| Concentration RSD | 3.0 % | 0.3 % | 11.7 % | 0.7 % | 5.1 % | 4.8 % | 24.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0013 ppm | 3.2630 ppm | 0.0052 ppm | 0.0173 ppm | 0.6564 ppm | 0.0004 ppm | 0.3629 ppm |
| Concentration per Run 1 | 0.0008 ppm | 3.3059 ppm | 0.0050 ppm | 0.0174 ppm | 0.6644 ppm | 0.0001 ppm | 0.3690 ppm |
| Concentration per Run 2 | -0.0035 ppm | 3.3295 ppm | 0.0048 ppm | 0.0173 ppm | 0.6672 ppm | -0.0003 ppm | 0.3686 ppm |
| Concentration per Run 3 | -0.0010 ppm | 3.1536 ppm | 0.0059 ppm | 0.0173 ppm | 0.6378 ppm | 0.0014 ppm | 0.3511 ppm |
| Concentration RSD | 171.2 % | 2.9 % | 11.8 % | 0.4 % | 2.5 % | 242.9 % | 2.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0578 ppm | 113.9494 % | 127.6903 % | 93.7903 % | 98.0296 % | 113.3438 % | 94.2579 % |
| Concentration per Run 1 | 0.0586 ppm | 112.0250 % | 127.0726 % | 91.2284 % | 96.3541 % | 112.9387 % | 89.6558 % |
| Concentration per Run 2 | 0.0588 ppm | 112.8220 % | 127.9620 % | 94.4505 % | 97.0013 % | 113.5227 % | 95.9911 % |
| Concentration per Run 3 | 0.0560 ppm | 117.0010 % | 128.0364 % | 95.6919 % | 100.7334 % | 113.5700 % | 97.1269 % |
| Concentration RSD | 2.8 % | 2.3 % | 0.4 % | 2.5 % | 2.4 % | 0.3 % | 4.3 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513173-24D2 WG2039207
Analysis started at: 3/14/2025 1:16:09 PM
Rack 1
Vial 24
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 43.8298 ppm | 0.0326 ppm | 0.0055 ppm | 0.0348 ppm | 0.0012 ppm | 3.7484 ppm |
| Concentration per Run 1 | 0.0009 ppm | 43.6849 ppm | 0.0336 ppm | 0.0046 ppm | 0.0347 ppm | 0.0012 ppm | 3.7497 ppm |
| Concentration per Run 2 | 0.0015 ppm | 44.3527 ppm | 0.0340 ppm | 0.0047 ppm | 0.0353 ppm | 0.0011 ppm | 3.7850 ppm |
| Concentration per Run 3 | 0.0020 ppm | 43.4519 ppm | 0.0303 ppm | 0.0072 ppm | 0.0344 ppm | 0.0012 ppm | 3.7106 ppm |
| Concentration RSD | 36.8 % | 1.1 % | 6.2 % | 26.5 % | 1.4 % | 1.1 % | 1.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 0.0183 ppm | 0.2243 ppm | 0.0445 ppm | 150.6830 ppm | 1.4892 ppm | 0.0070 ppm |
| Concentration per Run 1 | 0.0015 ppm | 0.0186 ppm | 0.2248 ppm | 0.0439 ppm | 150.0493 ppm | 1.5126 ppm | 0.0067 ppm |
| Concentration per Run 2 | 0.0015 ppm | 0.0185 ppm | 0.2232 ppm | 0.0444 ppm | 152.2618 ppm | 1.4876 ppm | 0.0068 ppm |
| Concentration per Run 3 | 0.0017 ppm | 0.0177 ppm | 0.2248 ppm | 0.0452 ppm | 149.7379 ppm | 1.4672 ppm | 0.0076 ppm |
| Concentration RSD | 9.5 % | 2.8 % | 0.4 % | 1.4 % | 0.9 % | 1.5 % | 6.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0633 ppm | 0.2417 ppm | 0.0077 ppm | 0.3548 ppm | 0.0242 ppm | 0.0437 ppm | 0.0044 ppm |
| Concentration per Run 1 | 1.0666 ppm | 0.2414 ppm | 0.0076 ppm | 0.3548 ppm | 0.0243 ppm | 0.0448 ppm | 0.0062 ppm |
| Concentration per Run 2 | 1.0627 ppm | 0.2444 ppm | 0.0079 ppm | 0.3578 ppm | 0.0234 ppm | 0.0444 ppm | 0.0020 ppm |
| Concentration per Run 3 | 1.0606 ppm | 0.2394 ppm | 0.0076 ppm | 0.3517 ppm | 0.0248 ppm | 0.0420 ppm | 0.0050 ppm |
| Concentration RSD | 0.3 % | 1.1 % | 2.2 % | 0.9 % | 2.8 % | 3.5 % | 49.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 4.2983 ppm | 0.0058 ppm | 0.0168 ppm | 0.5460 ppm | -0.0004 ppm | 0.2616 ppm |
| Concentration per Run 1 | 0.0017 ppm | 4.2832 ppm | 0.0048 ppm | 0.0168 ppm | 0.5479 ppm | -0.0010 ppm | 0.2614 ppm |
| Concentration per Run 2 | 0.0021 ppm | 4.3087 ppm | 0.0065 ppm | 0.0171 ppm | 0.5464 ppm | -0.0006 ppm | 0.2619 ppm |
| Concentration per Run 3 | -0.0001 ppm | 4.3031 ppm | 0.0060 ppm | 0.0166 ppm | 0.5438 ppm | 0.0006 ppm | 0.2615 ppm |
| Concentration RSD | 94.6 % | 0.3 % | 14.6 % | 1.4 % | 0.4 % | 230.2 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0662 ppm | 108.2461 % | 120.7918 % | 97.2431 % | 99.1401 % | 114.2591 % | 100.2125 % |
| Concentration per Run 1 | 0.0668 ppm | 108.5793 % | 121.1107 % | 97.1387 % | 99.7677 % | 114.8319 % | 100.0582 % |
| Concentration per Run 2 | 0.0660 ppm | 108.7350 % | 119.4405 % | 97.8060 % | 99.6448 % | 112.9172 % | 100.8469 % |
| Concentration per Run 3 | 0.0659 ppm | 107.4239 % | 121.8242 % | 96.7847 % | 98.0079 % | 115.0282 % | 99.7324 % |
| Concentration RSD | 0.8 % | 0.7 % | 1.0 % | 0.5 % | 1.0 % | 1.0 % | 0.6 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: CCV
Analysis started at: 3/14/2025 1:20:37 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4940 ppm | 0.5022 ppm | 0.4790 ppm | 0.4950 ppm | 0.5035 ppm | 0.5057 ppm | 0.4895 ppm |
| Concentration per Run 1 | 0.4921 ppm | 0.5009 ppm | 0.4798 ppm | 0.4905 ppm | 0.5038 ppm | 0.5040 ppm | 0.4882 ppm |
| Concentration per Run 2 | 0.4957 ppm | 0.5053 ppm | 0.4805 ppm | 0.4976 ppm | 0.5027 ppm | 0.5083 ppm | 0.4911 ppm |
| Concentration per Run 3 | 0.4941 ppm | 0.5004 ppm | 0.4767 ppm | 0.4968 ppm | 0.5040 ppm | 0.5047 ppm | 0.4892 ppm |
| Recovery Percentage 1 | 98.792 % | 100.447 % | 95.798 % | 99.002 % | 100.699 % | 101.133 % | 97.902 % |
| Concentration RSD | 0.4 % | 0.5 % | 0.4 % | 0.8 % | 0.1 % | 0.5 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5037 ppm | 0.5117 ppm | 0.4979 ppm | 0.5062 ppm | 0.5171 ppm | 5.2926 ppm | 0.5261 ppm |
| Concentration per Run 1 | 0.5020 ppm | 0.5104 ppm | 0.4971 ppm | 0.5025 ppm | 0.5218 ppm | 5.3158 ppm | 0.5247 ppm |
| Concentration per Run 2 | 0.5057 ppm | 0.5130 ppm | 0.4999 ppm | 0.5081 ppm | 0.5147 ppm | 5.3298 ppm | 0.5305 ppm |
| Concentration per Run 3 | 0.5034 ppm | 0.5116 ppm | 0.4968 ppm | 0.5080 ppm | 0.5149 ppm | 5.2322 ppm | 0.5229 ppm |
| Recovery Percentage 1 | 100.742 % | 102.332 % | 99.588 % | 101.243 % | 103.427 % | 105.852 % | 105.211 % |
| Concentration RSD | 0.4 % | 0.3 % | 0.3 % | 0.6 % | 0.8 % | 1.0 % | 0.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5121 ppm | 0.4823 ppm | 0.5024 ppm | 10.3917 ppm | 0.5109 ppm | 0.5017 ppm | 0.5071 ppm |
| Concentration per Run 1 | 0.5114 ppm | 0.4818 ppm | 0.4990 ppm | 10.4171 ppm | 0.5125 ppm | 0.5026 ppm | 0.5054 ppm |
| Concentration per Run 2 | 0.5139 ppm | 0.4835 ppm | 0.5042 ppm | 10.4413 ppm | 0.5113 ppm | 0.5008 ppm | 0.5101 ppm |
| Concentration per Run 3 | 0.5109 ppm | 0.4816 ppm | 0.5041 ppm | 10.3166 ppm | 0.5088 ppm | 0.5018 ppm | 0.5059 ppm |
| Recovery Percentage 1 | 102.419 % | 96.458 % | 100.485 % | 103.917 % | 102.173 % | 100.344 % | 101.425 % |
| Concentration RSD | 0.3 % | 0.2 % | 0.6 % | 0.6 % | 0.4 % | 0.2 % | 0.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4851 ppm | 5.6182 ppm | 0.5013 ppm | 0.5111 ppm | 0.5043 ppm | 0.5050 ppm | 0.5039 ppm |
| Concentration per Run 1 | 0.4864 ppm | 5.6113 ppm | 0.5022 ppm | 0.5108 ppm | 0.5032 ppm | 0.5068 ppm | 0.5029 ppm |
| Concentration per Run 2 | 0.4841 ppm | 5.6498 ppm | 0.5007 ppm | 0.5111 ppm | 0.5069 ppm | 0.5040 ppm | 0.5046 ppm |
| Concentration per Run 3 | 0.4847 ppm | 5.5937 ppm | 0.5010 ppm | 0.5114 ppm | 0.5029 ppm | 0.5041 ppm | 0.5041 ppm |
| Recovery Percentage 1 | 97.016 % | 107.014 % | 100.259 % | 102.217 % | 100.859 % | 100.995 % | 100.776 % |
| Concentration RSD | 0.2 % | 0.5 % | 0.2 % | 0.1 % | 0.4 % | 0.3 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5014 ppm | 104.7366 % | 117.3043 % | 97.1561 % | 99.2265 % | 114.1165 % | 98.6021 % |
| Concentration per Run 1 | 0.5011 ppm | 104.8631 % | 117.4121 % | 97.5165 % | 99.0839 % | 114.3777 % | 98.7106 % |
| Concentration per Run 2 | 0.5035 ppm | 104.6650 % | 117.0027 % | 96.2974 % | 99.1008 % | 113.4779 % | 97.9882 % |
| Concentration per Run 3 | 0.4996 ppm | 104.6817 % | 117.4982 % | 97.6543 % | 99.4948 % | 114.4938 % | 99.1074 % |
| Recovery Percentage 1 | 100.281 % | | | | | | |
| Concentration RSD | 0.4 % | 0.1 % | 0.2 % | 0.8 % | 0.2 % | 0.5 % | 0.6 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: CCB
Analysis started at: 3/14/2025 1:25:02 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0149 ppm | 0.0007 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm | -0.0017 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0155 ppm | -0.0001 ppm | 0.0004 ppm | 0.0000 ppm | 0.0000 ppm | -0.0009 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0180 ppm | 0.0015 ppm | -0.0004 ppm | 0.0000 ppm | 0.0000 ppm | -0.0014 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0111 ppm | 0.0008 ppm | 0.0005 ppm | 0.0000 ppm | 0.0000 ppm | -0.0029 ppm |
| Recovery Percentage 1 | 13.016 % | 14.875 % | 14.701 % | 0.493 % | -0.121 % | 0.099 % | -1.740 % |
| Concentration RSD | 14.6 % | 23.5 % | 108.7 % | 352.7 % | 194.7 % | 117.1 % | 61.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0003 ppm | -0.0001 ppm | -0.0002 ppm | 0.0045 ppm | 0.0173 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0005 ppm | -0.0001 ppm | -0.0004 ppm | 0.0049 ppm | 0.0295 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0002 ppm | -0.0003 ppm | -0.0001 ppm | 0.0048 ppm | 0.0218 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | 0.0002 ppm | -0.0002 ppm | 0.0039 ppm | 0.0006 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 2.672 % | 2.789 % | -1.015 % | -2.378 % | 9.010 % | 0.692 % | 3.092 % |
| Concentration RSD | 178.0 % | 78.5 % | 240.1 % | 51.5 % | 12.4 % | 86.7 % | 215.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0001 ppm | 0.0017 ppm | -0.0158 ppm | 0.0005 ppm | -0.0004 ppm | -0.0024 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0000 ppm | 0.0019 ppm | -0.0159 ppm | 0.0009 ppm | 0.0000 ppm | -0.0039 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0001 ppm | 0.0019 ppm | -0.0152 ppm | 0.0008 ppm | -0.0004 ppm | -0.0018 ppm |
| Concentration per Run 3 | -0.0009 ppm | -0.0002 ppm | 0.0012 ppm | -0.0164 ppm | -0.0004 ppm | -0.0007 ppm | -0.0014 ppm |
| Recovery Percentage 1 | -0.165 % | -0.618 % | 3.355 % | -0.791 % | 1.802 % | -3.666 % | -4.703 % |
| Concentration RSD | 468.1 % | 234.9 % | 25.1 % | 3.8 % | 155.0 % | 90.0 % | 57.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0073 ppm | 0.0001 ppm | 0.0000 ppm | 0.0001 ppm | -0.0011 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0027 ppm | -0.0066 ppm | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | -0.0014 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0015 ppm | -0.0079 ppm | 0.0004 ppm | 0.0000 ppm | 0.0002 ppm | -0.0008 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0009 ppm | -0.0076 ppm | -0.0001 ppm | 0.0001 ppm | 0.0000 ppm | -0.0012 ppm | -0.0003 ppm |
| Recovery Percentage 1 | 0.718 % | -1.468 % | 0.220 % | 0.472 % | 0.915 % | -5.733 % | -1.521 % |
| Concentration RSD | 3,162.2 % | 9.3 % | 244.2 % | 151.9 % | 104.3 % | 27.7 % | 81.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 101.0545 % | 115.2805 % | 96.6104 % | 101.0308 % | 114.4984 % | 98.4961 % |
| Concentration per Run 1 | -0.0003 ppm | 99.6473 % | 114.4171 % | 99.1456 % | 99.5208 % | 114.2381 % | 101.1886 % |
| Concentration per Run 2 | -0.0003 ppm | 100.4526 % | 116.0648 % | 95.5327 % | 100.1796 % | 115.1601 % | 97.3178 % |
| Concentration per Run 3 | -0.0004 ppm | 103.0636 % | 115.3597 % | 95.1529 % | 103.3920 % | 114.0970 % | 96.9818 % |
| Recovery Percentage 1 | -6.940 % | | | | | | |
| Concentration RSD | 13.6 % | 1.8 % | 0.7 % | 2.3 % | 2.1 % | 0.5 % | 2.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2040096-1 WG2040096
Analysis started at: 3/14/2025 1:38:53 PM
Rack 1
Vial 28
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0220 ppm | -0.0007 ppm | 0.0006 ppm | 0.0002 ppm | 0.0000 ppm | 0.0204 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0242 ppm | 0.0007 ppm | 0.0004 ppm | 0.0002 ppm | 0.0001 ppm | 0.0200 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0223 ppm | -0.0006 ppm | 0.0012 ppm | 0.0002 ppm | 0.0000 ppm | 0.0192 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0195 ppm | -0.0021 ppm | 0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0219 ppm |
| Recovery Percentage 1 | 9.924 % | 21.992 % | -13.502 % | 1.962 % | 1.719 % | 0.759 % | 20.360 % |
| Concentration RSD | 19.0 % | 10.7 % | 207.2 % | 95.8 % | 37.8 % | 104.7 % | 7.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0003 ppm | 0.0004 ppm | 0.0197 ppm | 0.0276 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0002 ppm | 0.0005 ppm | 0.0008 ppm | 0.0209 ppm | 0.0220 ppm | 0.0010 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0002 ppm | 0.0006 ppm | 0.0003 ppm | 0.0199 ppm | 0.0298 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0002 ppm | -0.0001 ppm | 0.0002 ppm | 0.0182 ppm | 0.0310 ppm | 0.0001 ppm |
| Recovery Percentage 1 | 0.159 % | 0.925 % | 3.033 % | 4.331 % | 39.321 % | 1.104 % | 6.203 % |
| Concentration RSD | 919.6 % | 228.5 % | 118.3 % | 64.5 % | 6.9 % | 17.8 % | 79.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0060 ppm | 0.0009 ppm | 0.0002 ppm | -0.0022 ppm | 0.0000 ppm | 0.0050 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0063 ppm | 0.0009 ppm | 0.0002 ppm | -0.0013 ppm | 0.0007 ppm | 0.0054 ppm | -0.0016 ppm |
| Concentration per Run 2 | 0.0054 ppm | 0.0010 ppm | 0.0003 ppm | -0.0035 ppm | -0.0001 ppm | 0.0053 ppm | -0.0018 ppm |
| Concentration per Run 3 | 0.0063 ppm | 0.0007 ppm | -0.0001 ppm | -0.0019 ppm | -0.0006 ppm | 0.0044 ppm | 0.0023 ppm |
| Recovery Percentage 1 | 5.980 % | 8.596 % | 0.312 % | -0.110 % | -0.081 % | 50.179 % | -0.760 % |
| Concentration RSD | 8.9 % | 12.9 % | 137.5 % | 51.1 % | 3,375.4 % | 10.8 % | 613.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0091 ppm | 0.0144 ppm | 0.0001 ppm | 0.0005 ppm | -0.0038 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0022 ppm | 0.0096 ppm | 0.0149 ppm | 0.0000 ppm | 0.0006 ppm | -0.0030 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0013 ppm | 0.0093 ppm | 0.0151 ppm | 0.0001 ppm | 0.0004 ppm | -0.0044 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0005 ppm | 0.0083 ppm | 0.0134 ppm | 0.0001 ppm | 0.0006 ppm | -0.0041 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 1.040 % | 1.811 % | 28.892 % | 1.036 % | 5.315 % | -19.066 % | -0.258 % |
| Concentration RSD | 1,758.0 % | 7.2 % | 6.6 % | 45.4 % | 20.3 % | 19.9 % | 362.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 104.7453 % | 116.2697 % | 100.1464 % | 99.4895 % | 111.9394 % | 98.9725 % |
| Concentration per Run 1 | 0.0005 ppm | 103.7036 % | 114.2138 % | 99.7437 % | 98.2327 % | 109.6630 % | 98.4915 % |
| Concentration per Run 2 | 0.0005 ppm | 105.4646 % | 117.0307 % | 100.5446 % | 99.9359 % | 113.0601 % | 99.2120 % |
| Concentration per Run 3 | 0.0003 ppm | 105.0677 % | 117.5646 % | 100.1509 % | 100.2997 % | 113.0952 % | 99.2140 % |
| Recovery Percentage 1 | 9.060 % | | | | | | |
| Concentration RSD | 21.4 % | 0.9 % | 1.5 % | 0.4 % | 1.1 % | 1.8 % | 0.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2040096-2D2 WG2040096
Analysis started at: 3/14/2025 1:43:31 PM
Rack 1
Vial 29
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0494 ppm | 1.9790 ppm | 0.1112 ppm | 0.9562 ppm | 1.9649 ppm | 0.0487 ppm | 9.7539 ppm |
| Concentration per Run 1 | 0.0497 ppm | 1.9761 ppm | 0.1114 ppm | 0.9484 ppm | 1.9652 ppm | 0.0485 ppm | 9.6933 ppm |
| Concentration per Run 2 | 0.0491 ppm | 1.9964 ppm | 0.1122 ppm | 0.9633 ppm | 1.9740 ppm | 0.0491 ppm | 9.8339 ppm |
| Concentration per Run 3 | 0.0494 ppm | 1.9645 ppm | 0.1099 ppm | 0.9569 ppm | 1.9554 ppm | 0.0485 ppm | 9.7344 ppm |
| Concentration RSD | 0.7 % | 0.8 % | 1.1 % | 0.8 % | 0.5 % | 0.8 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0509 ppm | 0.4863 ppm | 0.2019 ppm | 0.2522 ppm | 1.0643 ppm | 10.1919 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0508 ppm | 0.4859 ppm | 0.2019 ppm | 0.2507 ppm | 1.0530 ppm | 10.1889 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0511 ppm | 0.4860 ppm | 0.2025 ppm | 0.2534 ppm | 1.0748 ppm | 10.2365 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0509 ppm | 0.4870 ppm | 0.2012 ppm | 0.2524 ppm | 1.0651 ppm | 10.1505 ppm | 0.0002 ppm |
| Concentration RSD | 0.3 % | 0.1 % | 0.3 % | 0.6 % | 1.0 % | 0.4 % | 71.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.0260 ppm | 0.4785 ppm | 1.0013 ppm | 10.4555 ppm | 0.4911 ppm | 0.5178 ppm | 0.4950 ppm |
| Concentration per Run 1 | 9.9790 ppm | 0.4762 ppm | 0.9892 ppm | 10.4206 ppm | 0.4910 ppm | 0.5190 ppm | 0.4919 ppm |
| Concentration per Run 2 | 10.0725 ppm | 0.4821 ppm | 1.0033 ppm | 10.5984 ppm | 0.4925 ppm | 0.5179 ppm | 0.4981 ppm |
| Concentration per Run 3 | 10.0264 ppm | 0.4773 ppm | 1.0113 ppm | 10.3474 ppm | 0.4899 ppm | 0.5165 ppm | 0.4951 ppm |
| Concentration RSD | 0.5 % | 0.7 % | 1.1 % | 1.2 % | 0.3 % | 0.2 % | 0.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1120 ppm | 1.5819 ppm | 0.9892 ppm | 0.9934 ppm | 0.9830 ppm | 0.1139 ppm | 0.4971 ppm |
| Concentration per Run 1 | 0.1122 ppm | 1.5723 ppm | 0.9815 ppm | 0.9921 ppm | 0.9773 ppm | 0.1115 ppm | 0.4950 ppm |
| Concentration per Run 2 | 0.1122 ppm | 1.5925 ppm | 0.9930 ppm | 1.0013 ppm | 0.9857 ppm | 0.1154 ppm | 0.4984 ppm |
| Concentration per Run 3 | 0.1117 ppm | 1.5809 ppm | 0.9932 ppm | 0.9868 ppm | 0.9860 ppm | 0.1148 ppm | 0.4978 ppm |
| Concentration RSD | 0.3 % | 0.6 % | 0.7 % | 0.7 % | 0.5 % | 1.8 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4818 ppm | 102.7633 % | 116.0974 % | 94.1040 % | 96.9957 % | 112.8600 % | 97.3236 % |
| Concentration per Run 1 | 0.4798 ppm | 102.9799 % | 117.2029 % | 94.0748 % | 97.1617 % | 113.6590 % | 97.5597 % |
| Concentration per Run 2 | 0.4838 ppm | 102.3419 % | 115.2821 % | 94.5170 % | 96.4969 % | 112.6178 % | 97.3685 % |
| Concentration per Run 3 | 0.4818 ppm | 102.9680 % | 115.8073 % | 93.7204 % | 97.3283 % | 112.3032 % | 97.0426 % |
| Concentration RSD | 0.4 % | 0.4 % | 0.9 % | 0.4 % | 0.5 % | 0.6 % | 0.3 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2511136-01D2 WG2040096
Analysis started at: 3/14/2025 1:47:56 PM
Rack 1
Vial 35
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0019 ppm | 143.3948 ppm | 0.0531 ppm | 0.0126 ppm | 0.9659 ppm | 0.0028 ppm | 31.0390 ppm |
| Concentration per Run 1 | 0.0019 ppm | 142.3367 ppm | 0.0576 ppm | 0.0121 ppm | 0.9646 ppm | 0.0029 ppm | 30.7319 ppm |
| Concentration per Run 2 | 0.0019 ppm | 144.1998 ppm | 0.0502 ppm | 0.0144 ppm | 0.9631 ppm | 0.0028 ppm | 31.1986 ppm |
| Concentration per Run 3 | 0.0020 ppm | 143.6479 ppm | 0.0514 ppm | 0.0114 ppm | 0.9701 ppm | 0.0028 ppm | 31.1863 ppm |
| Concentration RSD | 4.0 % | 0.7 % | 7.4 % | 12.2 % | 0.4 % | 2.2 % | 0.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0024 ppm | 0.0757 ppm | 0.2646 ppm | 0.2006 ppm | 175.3592 ppm | 48.3773 ppm | 0.1504 ppm |
| Concentration per Run 1 | 0.0024 ppm | 0.0765 ppm | 0.2689 ppm | 0.2025 ppm | 174.9012 ppm | 47.9177 ppm | 0.1506 ppm |
| Concentration per Run 2 | 0.0025 ppm | 0.0770 ppm | 0.2664 ppm | 0.2034 ppm | 175.8872 ppm | 48.4598 ppm | 0.1502 ppm |
| Concentration per Run 3 | 0.0024 ppm | 0.0735 ppm | 0.2584 ppm | 0.1960 ppm | 175.2891 ppm | 48.7542 ppm | 0.1505 ppm |
| Concentration RSD | 2.3 % | 2.5 % | 2.1 % | 2.0 % | 0.3 % | 0.9 % | 0.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 69.4037 ppm | 4.7203 ppm | 0.0040 ppm | 7.0906 ppm | 0.2192 ppm | 0.0787 ppm | 0.0006 ppm |
| Concentration per Run 1 | 69.9063 ppm | 4.6906 ppm | 0.0037 ppm | 7.0113 ppm | 0.2220 ppm | 0.0820 ppm | -0.0023 ppm |
| Concentration per Run 2 | 70.5635 ppm | 4.7383 ppm | 0.0047 ppm | 7.1308 ppm | 0.2219 ppm | 0.0783 ppm | 0.0018 ppm |
| Concentration per Run 3 | 67.7414 ppm | 4.7322 ppm | 0.0037 ppm | 7.1298 ppm | 0.2137 ppm | 0.0758 ppm | 0.0024 ppm |
| Concentration RSD | 2.1 % | 0.5 % | 13.9 % | 1.0 % | 2.2 % | 4.0 % | 409.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0023 ppm | 77.7066 [SIC 200] | 0.0078 ppm | 0.1886 ppm | 9.0062 ppm | 0.0023 ppm | 0.3068 ppm |
| Concentration per Run 1 | -0.0010 ppm | 79.3880 ppm | 0.0074 ppm | 0.1880 ppm | 9.0571 ppm | 0.0010 ppm | 0.3104 ppm |
| Concentration per Run 2 | -0.0010 ppm | 77.3448 ppm | 0.0076 ppm | 0.1887 ppm | 9.1460 ppm | 0.0010 ppm | 0.3114 ppm |
| Concentration per Run 3 | -0.0049 ppm | 76.3870 ppm | 0.0082 ppm | 0.1890 ppm | 8.8154 ppm | 0.0048 ppm | 0.2987 ppm |
| Concentration RSD | 99.1 % | 2.0 % | 5.5 % | 0.3 % | 1.9 % | 95.6 % | 2.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7140 ppm | 103.5717 % | 124.7063 % | 78.0369 % | 108.6191 % | 138.0656 % | 108.6877 % |
| Concentration per Run 1 | 0.7254 ppm | 103.0152 % | 125.1586 % | 74.4040 % | 108.7739 % | 138.2531 % | 104.0808 % |
| Concentration per Run 2 | 0.7242 ppm | 101.7807 % | 123.9337 % | 78.8833 % | 107.2600 % | 138.0236 % | 109.9674 % |
| Concentration per Run 3 | 0.6923 ppm | 105.9191 % | 125.0266 % | 80.8235 % | 109.8233 % | 137.9201 % | 112.0147 % |
| Concentration RSD | 2.6 % | 2.1 % | 0.5 % | 4.2 % | 1.2 % | 0.1 % | 3.8 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513609-09D2 WG2040096
Analysis started at: 3/14/2025 1:52:23 PM
Rack 1
Vial 36
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 41.7099 ppm | 0.0337 ppm | 0.0347 ppm | 0.6941 ppm | 0.0015 ppm | 415.1251 ppm |
| Concentration per Run 1 | 0.0016 ppm | 41.8272 ppm | 0.0321 ppm | 0.0344 ppm | 0.6943 ppm | 0.0015 ppm | 417.7209 ppm |
| Concentration per Run 2 | 0.0016 ppm | 41.6068 ppm | 0.0357 ppm | 0.0359 ppm | 0.6946 ppm | 0.0016 ppm | 413.9180 ppm |
| Concentration per Run 3 | 0.0015 ppm | 41.6958 ppm | 0.0334 ppm | 0.0336 ppm | 0.6935 ppm | 0.0015 ppm | 413.7365 ppm |
| Concentration RSD | 3.4 % | 0.3 % | 5.5 % | 3.4 % | 0.1 % | 2.5 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | 0.0222 ppm | 0.1020 ppm | 0.1617 ppm | 59.4904 ppm | 16.4009 ppm | 0.0564 ppm |
| Concentration per Run 1 | 0.0022 ppm | 0.0226 ppm | 0.1039 ppm | 0.1640 ppm | 59.7042 ppm | 16.4309 ppm | 0.0562 ppm |
| Concentration per Run 2 | 0.0021 ppm | 0.0223 ppm | 0.1039 ppm | 0.1637 ppm | 59.6075 ppm | 16.3117 ppm | 0.0554 ppm |
| Concentration per Run 3 | 0.0020 ppm | 0.0217 ppm | 0.0981 ppm | 0.1573 ppm | 59.1596 ppm | 16.4600 ppm | 0.0575 ppm |
| Concentration RSD | 2.7 % | 2.2 % | 3.3 % | 2.3 % | 0.5 % | 0.5 % | 1.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 27.8277 ppm | 0.9856 ppm | 0.0067 ppm | 8.7169 ppm | 0.0862 ppm | 11.7154 ppm | 0.0015 ppm |
| Concentration per Run 1 | 28.2226 ppm | 0.9907 ppm | 0.0067 ppm | 8.6929 ppm | 0.0871 ppm | 11.8691 ppm | 0.0028 ppm |
| Concentration per Run 2 | 28.2721 ppm | 0.9830 ppm | 0.0071 ppm | 8.6927 ppm | 0.0871 ppm | 11.6008 ppm | 0.0011 ppm |
| Concentration per Run 3 | 26.9883 ppm | 0.9830 ppm | 0.0064 ppm | 8.7651 ppm | 0.0843 ppm | 11.6764 ppm | 0.0005 ppm |
| Concentration RSD | 2.6 % | 0.5 % | 5.4 % | 0.5 % | 1.9 % | 1.2 % | 80.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 3.5141 ppm | 0.0214 ppm | 1.2426 ppm | 3.6779 ppm | 0.0004 ppm | 0.1439 ppm |
| Concentration per Run 1 | -0.0008 ppm | 3.6183 ppm | 0.0232 ppm | 1.2440 ppm | 3.7033 ppm | 0.0012 ppm | 0.1458 ppm |
| Concentration per Run 2 | -0.0012 ppm | 3.5607 ppm | 0.0192 ppm | 1.2437 ppm | 3.7589 ppm | 0.0001 ppm | 0.1460 ppm |
| Concentration per Run 3 | 0.0015 ppm | 3.3634 ppm | 0.0218 ppm | 1.2400 ppm | 3.5716 ppm | -0.0003 ppm | 0.1398 ppm |
| Concentration RSD | 950.7 % | 3.8 % | 9.3 % | 0.2 % | 2.6 % | 214.0 % | 2.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5792 ppm | 97.8152 % | 122.1042 % | 80.0780 % | 96.9743 % | 124.2164 % | 95.4327 % |
| Concentration per Run 1 | 0.5849 ppm | 96.5197 % | 121.3767 % | 78.9605 % | 96.0484 % | 123.8988 % | 93.5270 % |
| Concentration per Run 2 | 0.5912 ppm | 96.2755 % | 122.3944 % | 81.1539 % | 95.5253 % | 124.4299 % | 96.6391 % |
| Concentration per Run 3 | 0.5616 ppm | 100.6504 % | 122.5415 % | 80.1197 % | 99.3493 % | 124.3204 % | 96.1319 % |
| Concentration RSD | 2.7 % | 2.5 % | 0.5 % | 1.4 % | 2.1 % | 0.2 % | 1.7 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513609-10D2 WG2040096
Analysis started at: 3/14/2025 1:56:50 PM
Rack 1
Vial 37
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 71.2079 ppm | 0.0508 ppm | 0.0688 ppm | 0.7535 ppm | 0.0020 ppm | 730.6077 [SIC 1000] |
| Concentration per Run 1 | 0.0014 ppm | 71.2912 ppm | 0.0528 ppm | 0.0672 ppm | 0.7542 ppm | 0.0020 ppm | 731.6197 ppm |
| Concentration per Run 2 | 0.0012 ppm | 71.0611 ppm | 0.0472 ppm | 0.0706 ppm | 0.7565 ppm | 0.0021 ppm | 725.3593 ppm |
| Concentration per Run 3 | 0.0012 ppm | 71.2714 ppm | 0.0525 ppm | 0.0685 ppm | 0.7499 ppm | 0.0020 ppm | 734.8441 ppm |
| Concentration RSD | 6.9 % | 0.2 % | 6.2 % | 2.5 % | 0.4 % | 4.5 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0320 ppm | 0.1753 ppm | 0.2717 ppm | 94.4906 ppm | 15.4569 ppm | 0.0687 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0326 ppm | 0.1726 ppm | 0.2684 ppm | 94.3089 ppm | 15.6707 ppm | 0.0704 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0320 ppm | 0.1759 ppm | 0.2740 ppm | 94.7398 ppm | 15.1200 ppm | 0.0669 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0315 ppm | 0.1775 ppm | 0.2726 ppm | 94.4230 ppm | 15.5801 ppm | 0.0686 ppm |
| Concentration RSD | 77.2 % | 1.8 % | 1.4 % | 1.1 % | 0.2 % | 1.9 % | 2.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 69.6553 ppm | 1.5361 ppm | 0.0109 ppm | 5.7865 ppm | 0.1351 ppm | 3.1977 ppm | 0.0010 ppm |
| Concentration per Run 1 | 68.5545 ppm | 1.5396 ppm | 0.0107 ppm | 5.7835 ppm | 0.1328 ppm | 3.1897 ppm | -0.0021 ppm |
| Concentration per Run 2 | 70.2096 ppm | 1.5365 ppm | 0.0105 ppm | 5.7974 ppm | 0.1350 ppm | 3.2107 ppm | 0.0056 ppm |
| Concentration per Run 3 | 70.2017 ppm | 1.5324 ppm | 0.0114 ppm | 5.7787 ppm | 0.1374 ppm | 3.1926 ppm | -0.0003 ppm |
| Concentration RSD | 1.4 % | 0.2 % | 4.4 % | 0.2 % | 1.7 % | 0.4 % | 384.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0013 ppm | 3.5062 ppm | 0.0191 ppm | 1.6493 ppm | 6.2322 ppm | 0.0027 ppm | 0.2442 ppm |
| Concentration per Run 1 | -0.0016 ppm | 3.4979 ppm | 0.0187 ppm | 1.6519 ppm | 6.1552 ppm | 0.0024 ppm | 0.2401 ppm |
| Concentration per Run 2 | -0.0007 ppm | 3.6224 ppm | 0.0189 ppm | 1.6480 ppm | 6.2447 ppm | 0.0021 ppm | 0.2463 ppm |
| Concentration per Run 3 | -0.0015 ppm | 3.3982 ppm | 0.0199 ppm | 1.6481 ppm | 6.2967 ppm | 0.0035 ppm | 0.2463 ppm |
| Concentration RSD | 37.9 % | 3.2 % | 3.4 % | 0.1 % | 1.1 % | 27.4 % | 1.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7885 ppm | 95.5423 % | 121.7790 % | 72.9151 % | 95.2072 % | 128.1420 % | 95.5842 % |
| Concentration per Run 1 | 0.7754 ppm | 97.0533 % | 121.9817 % | 73.1209 % | 96.5442 % | 127.9258 % | 95.6211 % |
| Concentration per Run 2 | 0.7908 ppm | 94.8293 % | 121.7601 % | 72.6755 % | 94.4031 % | 128.4500 % | 95.5622 % |
| Concentration per Run 3 | 0.7994 ppm | 94.7445 % | 121.5952 % | 72.9488 % | 94.6742 % | 128.0501 % | 95.5693 % |
| Concentration RSD | 1.5 % | 1.4 % | 0.2 % | 0.3 % | 1.2 % | 0.2 % | 0.0 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513655-13D2 WG2040096
Analysis started at: 3/14/2025 2:01:15 PM
Rack 1
Vial 30
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0019 ppm | 87.0340 ppm | 0.0265 ppm | 0.0033 ppm | 0.2520 ppm | 0.0041 ppm | 3.4520 ppm |
| Concentration per Run 1 | 0.0021 ppm | 88.5970 ppm | 0.0258 ppm | 0.0027 ppm | 0.2562 ppm | 0.0041 ppm | 3.4899 ppm |
| Concentration per Run 2 | 0.0019 ppm | 86.7410 ppm | 0.0270 ppm | 0.0033 ppm | 0.2506 ppm | 0.0040 ppm | 3.4544 ppm |
| Concentration per Run 3 | 0.0017 ppm | 85.7641 ppm | 0.0266 ppm | 0.0040 ppm | 0.2491 ppm | 0.0041 ppm | 3.4118 ppm |
| Concentration RSD | 9.8 % | 1.7 % | 2.3 % | 20.0 % | 1.5 % | 0.9 % | 1.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 0.2228 ppm | 0.1068 ppm | 0.1441 ppm | 135.8547 ppm | 2.2771 ppm | 0.1591 ppm |
| Concentration per Run 1 | 0.0017 ppm | 0.2220 ppm | 0.1062 ppm | 0.1437 ppm | 137.1841 ppm | 2.3319 ppm | 0.1635 ppm |
| Concentration per Run 2 | 0.0018 ppm | 0.2227 ppm | 0.1072 ppm | 0.1444 ppm | 135.3858 ppm | 2.2781 ppm | 0.1559 ppm |
| Concentration per Run 3 | 0.0017 ppm | 0.2237 ppm | 0.1070 ppm | 0.1442 ppm | 134.9943 ppm | 2.2212 ppm | 0.1577 ppm |
| Concentration RSD | 3.5 % | 0.4 % | 0.5 % | 0.2 % | 0.9 % | 2.4 % | 2.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 12.8990 ppm | 5.9124 ppm | 0.0080 ppm | 0.4136 ppm | 0.3119 ppm | 0.0424 ppm | 0.0005 ppm |
| Concentration per Run 1 | 12.8465 ppm | 5.9844 ppm | 0.0076 ppm | 0.4243 ppm | 0.3091 ppm | 0.0426 ppm | 0.0017 ppm |
| Concentration per Run 2 | 12.9531 ppm | 5.9059 ppm | 0.0080 ppm | 0.4117 ppm | 0.3147 ppm | 0.0433 ppm | -0.0023 ppm |
| Concentration per Run 3 | 12.8973 ppm | 5.8469 ppm | 0.0085 ppm | 0.4049 ppm | 0.3119 ppm | 0.0413 ppm | 0.0020 ppm |
| Concentration RSD | 0.4 % | 1.2 % | 5.3 % | 2.4 % | 0.9 % | 2.4 % | 526.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0018 ppm | 2.9646 ppm | 0.0062 ppm | 0.0237 ppm | 2.8117 ppm | -0.0030 ppm | 0.2194 ppm |
| Concentration per Run 1 | -0.0010 ppm | 2.9532 ppm | 0.0062 ppm | 0.0239 ppm | 2.8061 ppm | -0.0035 ppm | 0.2192 ppm |
| Concentration per Run 2 | -0.0024 ppm | 2.9911 ppm | 0.0060 ppm | 0.0237 ppm | 2.8185 ppm | -0.0029 ppm | 0.2195 ppm |
| Concentration per Run 3 | -0.0021 ppm | 2.9496 ppm | 0.0064 ppm | 0.0235 ppm | 2.8106 ppm | -0.0027 ppm | 0.2193 ppm |
| Concentration RSD | 42.0 % | 0.8 % | 3.6 % | 0.8 % | 0.2 % | 12.8 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2520 ppm | 107.7694 % | 129.1035 % | 93.0280 % | 116.1008 % | 148.6287 % | 118.5307 % |
| Concentration per Run 1 | 0.2499 ppm | 107.8142 % | 128.1104 % | 92.8306 % | 115.9981 % | 148.5343 % | 118.1308 % |
| Concentration per Run 2 | 0.2526 ppm | 107.6027 % | 128.7168 % | 93.3573 % | 115.7090 % | 148.1886 % | 119.1288 % |
| Concentration per Run 3 | 0.2534 ppm | 107.8914 % | 130.4832 % | 92.8962 % | 116.5955 % | 149.1632 % | 118.3323 % |
| Concentration RSD | 0.7 % | 0.1 % | 1.0 % | 0.3 % | 0.4 % | 0.3 % | 0.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2040096-3D2 WG2040096
Analysis started at: 3/14/2025 2:05:40 PM
Rack 1
Vial 31
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0476 ppm | 78.2970 ppm | 0.1292 ppm | 0.8362 ppm | 2.0998 ppm | 0.0490 ppm | 11.7785 ppm |
| Concentration per Run 1 | 0.0473 ppm | 78.0705 ppm | 0.1324 ppm | 0.8410 ppm | 2.1066 ppm | 0.0489 ppm | 11.6603 ppm |
| Concentration per Run 2 | 0.0474 ppm | 77.3772 ppm | 0.1302 ppm | 0.8361 ppm | 2.0726 ppm | 0.0485 ppm | 11.5941 ppm |
| Concentration per Run 3 | 0.0480 ppm | 79.4432 ppm | 0.1251 ppm | 0.8317 ppm | 2.1203 ppm | 0.0497 ppm | 12.0811 ppm |
| Concentration RSD | 0.8 % | 1.3 % | 2.9 % | 0.6 % | 1.2 % | 1.3 % | 2.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0472 ppm | 0.4199 ppm | 0.2720 ppm | 0.3314 ppm | 112.2178 ppm | 10.3394 ppm | 0.0447 ppm |
| Concentration per Run 1 | 0.0474 ppm | 0.4199 ppm | 0.2711 ppm | 0.3315 ppm | 111.8149 ppm | 10.2152 ppm | 0.0440 ppm |
| Concentration per Run 2 | 0.0469 ppm | 0.4203 ppm | 0.2717 ppm | 0.3297 ppm | 110.5790 ppm | 10.3035 ppm | 0.0443 ppm |
| Concentration per Run 3 | 0.0472 ppm | 0.4196 ppm | 0.2732 ppm | 0.3329 ppm | 114.2595 ppm | 10.4997 ppm | 0.0458 ppm |
| Concentration RSD | 0.5 % | 0.1 % | 0.4 % | 0.5 % | 1.7 % | 1.4 % | 2.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 20.8632 ppm | 1.8526 ppm | 0.9178 ppm | 10.6865 ppm | 0.5106 ppm | 0.5454 ppm | 0.1964 ppm |
| Concentration per Run 1 | 20.8089 ppm | 1.8475 ppm | 0.9128 ppm | 10.6740 ppm | 0.5080 ppm | 0.5469 ppm | 0.1945 ppm |
| Concentration per Run 2 | 20.7990 ppm | 1.8308 ppm | 0.9174 ppm | 10.6104 ppm | 0.5120 ppm | 0.5474 ppm | 0.1930 ppm |
| Concentration per Run 3 | 20.9816 ppm | 1.8794 ppm | 0.9233 ppm | 10.7751 ppm | 0.5118 ppm | 0.5419 ppm | 0.2016 ppm |
| Concentration RSD | 0.5 % | 1.3 % | 0.6 % | 0.8 % | 0.4 % | 0.6 % | 2.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1020 ppm | 5.2093 ppm | 0.8427 ppm | 0.9683 ppm | 3.4936 ppm | 0.1117 ppm | 0.6457 ppm |
| Concentration per Run 1 | 0.1038 ppm | 5.2042 ppm | 0.8439 ppm | 0.9653 ppm | 3.4879 ppm | 0.1113 ppm | 0.6450 ppm |
| Concentration per Run 2 | 0.1022 ppm | 5.1723 ppm | 0.8445 ppm | 0.9557 ppm | 3.4906 ppm | 0.1125 ppm | 0.6433 ppm |
| Concentration per Run 3 | 0.1000 ppm | 5.2515 ppm | 0.8397 ppm | 0.9838 ppm | 3.5022 ppm | 0.1113 ppm | 0.6489 ppm |
| Concentration RSD | 1.9 % | 0.8 % | 0.3 % | 1.5 % | 0.2 % | 0.6 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5878 ppm | 106.5905 % | 130.1667 % | 90.9431 % | 115.0690 % | 146.6904 % | 116.8783 % |
| Concentration per Run 1 | 0.5851 ppm | 106.6928 % | 130.8734 % | 90.7484 % | 115.3189 % | 147.3679 % | 117.0351 % |
| Concentration per Run 2 | 0.5906 ppm | 106.9544 % | 132.0653 % | 90.6593 % | 115.7044 % | 148.6915 % | 116.8003 % |
| Concentration per Run 3 | 0.5876 ppm | 106.1242 % | 127.5615 % | 91.4215 % | 114.1838 % | 144.0119 % | 116.7995 % |
| Concentration RSD | 0.5 % | 0.4 % | 1.8 % | 0.5 % | 0.7 % | 1.6 % | 0.1 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2040096-4D2 WG2040096
Analysis started at: 3/14/2025 2:10:06 PM
Rack 1
Vial 32
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 67.9261 ppm | 0.0207 ppm | 0.0029 ppm | 0.1764 ppm | 0.0032 ppm | 2.9783 ppm |
| Concentration per Run 1 | 0.0012 ppm | 67.9172 ppm | 0.0243 ppm | 0.0031 ppm | 0.1774 ppm | 0.0032 ppm | 2.9603 ppm |
| Concentration per Run 2 | 0.0010 ppm | 67.9005 ppm | 0.0186 ppm | 0.0024 ppm | 0.1761 ppm | 0.0032 ppm | 2.9825 ppm |
| Concentration per Run 3 | 0.0014 ppm | 67.9605 ppm | 0.0193 ppm | 0.0031 ppm | 0.1757 ppm | 0.0032 ppm | 2.9920 ppm |
| Concentration RSD | 18.4 % | 0.0 % | 15.0 % | 14.2 % | 0.5 % | 0.9 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 0.0382 ppm | 0.1031 ppm | 0.0929 ppm | 116.0511 ppm | 2.3104 ppm | 0.0425 ppm |
| Concentration per Run 1 | 0.0014 ppm | 0.0382 ppm | 0.1039 ppm | 0.0938 ppm | 116.0162 ppm | 2.3156 ppm | 0.0430 ppm |
| Concentration per Run 2 | 0.0014 ppm | 0.0382 ppm | 0.1037 ppm | 0.0933 ppm | 115.9605 ppm | 2.2869 ppm | 0.0413 ppm |
| Concentration per Run 3 | 0.0014 ppm | 0.0382 ppm | 0.1017 ppm | 0.0916 ppm | 116.1765 ppm | 2.3288 ppm | 0.0431 ppm |
| Concentration RSD | 2.6 % | 0.0 % | 1.2 % | 1.2 % | 0.1 % | 0.9 % | 2.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 11.8110 ppm | 1.2214 ppm | 0.0053 ppm | 0.3429 ppm | 0.0591 ppm | 0.0317 ppm | -0.0007 ppm |
| Concentration per Run 1 | 11.8841 ppm | 1.2178 ppm | 0.0048 ppm | 0.3465 ppm | 0.0586 ppm | 0.0324 ppm | -0.0025 ppm |
| Concentration per Run 2 | 11.9079 ppm | 1.2208 ppm | 0.0057 ppm | 0.3436 ppm | 0.0603 ppm | 0.0319 ppm | -0.0009 ppm |
| Concentration per Run 3 | 11.6410 ppm | 1.2256 ppm | 0.0056 ppm | 0.3385 ppm | 0.0582 ppm | 0.0308 ppm | 0.0013 ppm |
| Concentration RSD | 1.3 % | 0.3 % | 9.3 % | 1.2 % | 1.9 % | 2.6 % | 275.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0023 ppm | 2.2861 ppm | 0.0810 ppm | 0.0203 ppm | 2.3458 ppm | 0.0003 ppm | 0.1829 ppm |
| Concentration per Run 1 | -0.0015 ppm | 2.2947 ppm | 0.0791 ppm | 0.0204 ppm | 2.3562 ppm | -0.0003 ppm | 0.1838 ppm |
| Concentration per Run 2 | -0.0037 ppm | 2.2846 ppm | 0.0826 ppm | 0.0203 ppm | 2.3657 ppm | 0.0009 ppm | 0.1849 ppm |
| Concentration per Run 3 | -0.0017 ppm | 2.2790 ppm | 0.0815 ppm | 0.0203 ppm | 2.3154 ppm | 0.0002 ppm | 0.1801 ppm |
| Concentration RSD | 52.3 % | 0.3 % | 2.2 % | 0.2 % | 1.1 % | 230.5 % | 1.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1268 ppm | 108.7886 % | 131.4394 % | 91.2699 % | 112.6658 % | 142.7423 % | 110.6970 % |
| Concentration per Run 1 | 0.1271 ppm | 107.7360 % | 131.9175 % | 87.6415 % | 111.8768 % | 143.3002 % | 106.2718 % |
| Concentration per Run 2 | 0.1283 ppm | 108.2874 % | 130.6613 % | 92.1329 % | 112.7530 % | 141.9959 % | 111.9146 % |
| Concentration per Run 3 | 0.1248 ppm | 110.3425 % | 131.7395 % | 94.0355 % | 113.3675 % | 142.9308 % | 113.9046 % |
| Concentration RSD | 1.4 % | 1.3 % | 0.5 % | 3.6 % | 0.7 % | 0.5 % | 3.6 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: xWG2040096-5D2 WG2040096
Analysis started at: 3/14/2025 2:14:32 PM
Rack 1
Vial 33
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0583 ppm | 85.2518 ppm | 0.1478 ppm | 0.9065 ppm | 2.1892 ppm | 0.0510 ppm | 12.2738 ppm |
| Concentration per Run 1 | 0.0437 ppm | 85.0789 ppm | 0.1481 ppm | 0.9095 ppm | 2.1940 ppm | 0.0509 ppm | 12.1853 ppm |
| Concentration per Run 2 | 0.0897 ppm | 85.1219 ppm | 0.1423 ppm | 0.9010 ppm | 2.1851 ppm | 0.0512 ppm | 12.3544 ppm |
| Concentration per Run 3 | 0.0415 ppm | 85.5546 ppm | 0.1530 ppm | 0.9089 ppm | 2.1884 ppm | 0.0511 ppm | 12.2816 ppm |
| Concentration RSD | 46.7 % | 0.3 % | 3.6 % | 0.5 % | 0.2 % | 0.3 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0496 ppm | 0.6166 ppm | 0.2913 ppm | 0.3958 ppm | 130.5505 ppm | 11.1015 ppm | 0.1567 ppm |
| Concentration per Run 1 | 0.0496 ppm | 0.6177 ppm | 0.2919 ppm | 0.3975 ppm | 129.8640 ppm | 11.0589 ppm | 0.1554 ppm |
| Concentration per Run 2 | 0.0496 ppm | 0.6146 ppm | 0.2913 ppm | 0.3952 ppm | 131.0309 ppm | 11.1904 ppm | 0.1587 ppm |
| Concentration per Run 3 | 0.0495 ppm | 0.6176 ppm | 0.2908 ppm | 0.3947 ppm | 130.7566 ppm | 11.0551 ppm | 0.1561 ppm |
| Concentration RSD | 0.1 % | 0.3 % | 0.2 % | 0.4 % | 0.5 % | 0.7 % | 1.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 22.0763 ppm | 6.0654 ppm | 0.9729 ppm | 11.0547 ppm | 0.7679 ppm | 0.5866 ppm | 0.4079 ppm |
| Concentration per Run 1 | 22.1067 ppm | 6.0366 ppm | 0.9666 ppm | 11.0515 ppm | 0.7695 ppm | 0.5899 ppm | 0.4036 ppm |
| Concentration per Run 2 | 22.0705 ppm | 6.0759 ppm | 0.9702 ppm | 10.9651 ppm | 0.7677 ppm | 0.5608 ppm | 0.4113 ppm |
| Concentration per Run 3 | 22.0517 ppm | 6.0836 ppm | 0.9817 ppm | 11.1473 ppm | 0.7666 ppm | 0.6090 ppm | 0.4089 ppm |
| Concentration RSD | 0.1 % | 0.4 % | 0.8 % | 0.8 % | 0.2 % | 4.1 % | 1.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1213 ppm | 3.6521 ppm | 0.9413 ppm | 1.0068 ppm | 3.7173 ppm | 0.1167 ppm | 0.7000 ppm |
| Concentration per Run 1 | 0.1215 ppm | 3.6453 ppm | 0.9430 ppm | 1.0056 ppm | 3.7288 ppm | 0.1179 ppm | 0.7002 ppm |
| Concentration per Run 2 | 0.1160 ppm | 3.6435 ppm | 0.9373 ppm | 1.0107 ppm | 3.7059 ppm | 0.1114 ppm | 0.7004 ppm |
| Concentration per Run 3 | 0.1264 ppm | 3.6676 ppm | 0.9436 ppm | 1.0041 ppm | 3.7171 ppm | 0.1208 ppm | 0.6994 ppm |
| Concentration RSD | 4.3 % | 0.4 % | 0.4 % | 0.3 % | 0.3 % | 4.1 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6987 ppm | 107.0847 % | 130.9408 % | 90.5467 % | 116.1513 % | 148.2871 % | 116.5016 % |
| Concentration per Run 1 | 0.7006 ppm | 107.0462 % | 131.5950 % | 89.9846 % | 116.3593 % | 148.9739 % | 116.9977 % |
| Concentration per Run 2 | 0.6952 ppm | 107.3785 % | 131.0804 % | 94.0223 % | 115.9971 % | 148.4724 % | 119.5258 % |
| Concentration per Run 3 | 0.7002 ppm | 106.8293 % | 130.1468 % | 87.6332 % | 116.0976 % | 147.4150 % | 112.9812 % |
| Concentration RSD | 0.4 % | 0.3 % | 0.6 % | 3.6 % | 0.2 % | 0.5 % | 2.8 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2040096-6D10 WG2040096
Analysis started at: 3/14/2025 2:18:57 PM
Rack 1
Vial 34
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 17.8556 ppm | 0.0068 ppm | 0.0015 ppm | 0.0504 ppm | 0.0008 ppm | 0.7159 ppm |
| Concentration per Run 1 | 0.0006 ppm | 17.9097 ppm | 0.0055 ppm | 0.0014 ppm | 0.0502 ppm | 0.0008 ppm | 0.7231 ppm |
| Concentration per Run 2 | 0.0008 ppm | 17.8184 ppm | 0.0087 ppm | 0.0021 ppm | 0.0507 ppm | 0.0009 ppm | 0.7117 ppm |
| Concentration per Run 3 | 0.0006 ppm | 17.8389 ppm | 0.0062 ppm | 0.0010 ppm | 0.0503 ppm | 0.0008 ppm | 0.7128 ppm |
| Concentration RSD | 20.5 % | 0.3 % | 25.0 % | 36.4 % | 0.5 % | 5.6 % | 0.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0528 ppm | 0.0221 ppm | 0.0294 ppm | 29.0416 ppm | 0.5524 ppm | 0.0402 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0525 ppm | 0.0218 ppm | 0.0295 ppm | 29.1273 ppm | 0.5788 ppm | 0.0409 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0528 ppm | 0.0222 ppm | 0.0292 ppm | 29.0105 ppm | 0.5461 ppm | 0.0391 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0530 ppm | 0.0222 ppm | 0.0294 ppm | 28.9869 ppm | 0.5324 ppm | 0.0405 ppm |
| Concentration RSD | 13.5 % | 0.6 % | 0.9 % | 0.6 % | 0.3 % | 4.3 % | 2.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.7622 ppm | 1.2360 ppm | 0.0052 ppm | 0.0743 ppm | 0.0676 ppm | 0.0079 ppm | 0.0013 ppm |
| Concentration per Run 1 | 2.7753 ppm | 1.2415 ppm | 0.0050 ppm | 0.0760 ppm | 0.0675 ppm | 0.0085 ppm | 0.0016 ppm |
| Concentration per Run 2 | 2.7500 ppm | 1.2299 ppm | 0.0049 ppm | 0.0772 ppm | 0.0673 ppm | 0.0074 ppm | 0.0027 ppm |
| Concentration per Run 3 | 2.7613 ppm | 1.2365 ppm | 0.0057 ppm | 0.0698 ppm | 0.0679 ppm | 0.0079 ppm | -0.0004 ppm |
| Concentration RSD | 0.5 % | 0.5 % | 8.8 % | 5.4 % | 0.5 % | 7.3 % | 122.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 0.6801 ppm | 0.0016 ppm | 0.0048 ppm | 0.5909 ppm | -0.0018 ppm | 0.0449 ppm |
| Concentration per Run 1 | -0.0025 ppm | 0.6869 ppm | 0.0026 ppm | 0.0048 ppm | 0.5905 ppm | 0.0000 ppm | 0.0453 ppm |
| Concentration per Run 2 | -0.0016 ppm | 0.6787 ppm | 0.0015 ppm | 0.0048 ppm | 0.5913 ppm | -0.0024 ppm | 0.0446 ppm |
| Concentration per Run 3 | 0.0022 ppm | 0.6747 ppm | 0.0008 ppm | 0.0048 ppm | 0.5910 ppm | -0.0029 ppm | 0.0447 ppm |
| Concentration RSD | 382.2 % | 0.9 % | 57.1 % | 0.7 % | 0.1 % | 85.7 % | 0.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0543 ppm | 107.1477 % | 127.1428 % | 100.0844 % | 105.3816 % | 128.4011 % | 105.4783 % |
| Concentration per Run 1 | 0.0545 ppm | 106.5217 % | 126.6207 % | 100.8792 % | 104.7188 % | 127.8428 % | 106.1208 % |
| Concentration per Run 2 | 0.0534 ppm | 107.2066 % | 128.0168 % | 99.4770 % | 105.4435 % | 129.2330 % | 105.0924 % |
| Concentration per Run 3 | 0.0549 ppm | 107.7149 % | 126.7910 % | 99.8969 % | 105.9826 % | 128.1274 % | 105.2218 % |
| Concentration RSD | 1.4 % | 0.6 % | 0.6 % | 0.7 % | 0.6 % | 0.6 % | 0.5 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: CCV
Analysis started at: 3/14/2025 2:23:24 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5020 ppm | 0.5209 ppm | 0.4997 ppm | 0.4979 ppm | 0.5227 ppm | 0.5128 ppm | 0.4902 ppm |
| Concentration per Run 1 | 0.5057 ppm | 0.5156 ppm | 0.4753 ppm | 0.5024 ppm | 0.5174 ppm | 0.5062 ppm | 0.4839 ppm |
| Concentration per Run 2 | 0.5040 ppm | 0.5171 ppm | 0.4955 ppm | 0.5006 ppm | 0.5168 ppm | 0.5087 ppm | 0.4868 ppm |
| Concentration per Run 3 | 0.4963 ppm | 0.5300 ppm | 0.5283 ppm | 0.4908 ppm | 0.5340 ppm | 0.5234 ppm | 0.4998 ppm |
| Recovery Percentage 1 | 100.402 % | 104.184 % | 99.943 % | 99.588 % | 104.547 % | 102.555 % | 98.035 % |
| Concentration RSD | 1.0 % | 1.5 % | 5.4 % | 1.3 % | 1.9 % | 1.8 % | 1.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4964 ppm | 0.5088 ppm | 0.4984 ppm | 0.5137 ppm | 0.5168 ppm | 5.4291 ppm | 0.5438 ppm |
| Concentration per Run 1 | 0.5019 ppm | 0.5132 ppm | 0.5023 ppm | 0.5199 ppm | 0.5091 ppm | 5.4027 ppm | 0.5386 ppm |
| Concentration per Run 2 | 0.4962 ppm | 0.5050 ppm | 0.4995 ppm | 0.5146 ppm | 0.5126 ppm | 5.3555 ppm | 0.5399 ppm |
| Concentration per Run 3 | 0.4911 ppm | 0.5082 ppm | 0.4935 ppm | 0.5066 ppm | 0.5286 ppm | 5.5291 ppm | 0.5531 ppm |
| Recovery Percentage 1 | 99.278 % | 101.757 % | 99.685 % | 102.744 % | 103.359 % | 108.582 % | 108.768 % |
| Concentration RSD | 1.1 % | 0.8 % | 0.9 % | 1.3 % | 2.0 % | 1.7 % | 1.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5060 ppm | 0.4864 ppm | 0.5056 ppm | 10.9226 ppm | 0.5113 ppm | 0.5251 ppm | 0.5155 ppm |
| Concentration per Run 1 | 0.5134 ppm | 0.4799 ppm | 0.5071 ppm | 10.7775 ppm | 0.5170 ppm | 0.5010 ppm | 0.5282 ppm |
| Concentration per Run 2 | 0.5028 ppm | 0.4833 ppm | 0.5067 ppm | 10.7727 ppm | 0.5102 ppm | 0.5226 ppm | 0.5097 ppm |
| Concentration per Run 3 | 0.5019 ppm | 0.4961 ppm | 0.5029 ppm | 11.2178 ppm | 0.5067 ppm | 0.5516 ppm | 0.5085 ppm |
| Recovery Percentage 1 | 101.208 % | 97.289 % | 101.113 % | 109.226 % | 102.264 % | 105.017 % | 103.091 % |
| Concentration RSD | 1.3 % | 1.8 % | 0.5 % | 2.3 % | 1.0 % | 4.8 % | 2.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5112 ppm | 5.6630 ppm | 0.5023 ppm | 0.5295 ppm | 0.5054 ppm | 0.5307 ppm | 0.5045 ppm |
| Concentration per Run 1 | 0.4837 ppm | 5.7198 ppm | 0.5090 ppm | 0.5221 ppm | 0.5092 ppm | 0.5060 ppm | 0.5096 ppm |
| Concentration per Run 2 | 0.5107 ppm | 5.6185 ppm | 0.4990 ppm | 0.5241 ppm | 0.5061 ppm | 0.5270 ppm | 0.5049 ppm |
| Concentration per Run 3 | 0.5393 ppm | 5.6508 ppm | 0.4988 ppm | 0.5424 ppm | 0.5011 ppm | 0.5590 ppm | 0.4990 ppm |
| Recovery Percentage 1 | 102.243 % | 107.867 % | 100.455 % | 105.909 % | 101.090 % | 106.134 % | 100.896 % |
| Concentration RSD | 5.4 % | 0.9 % | 1.2 % | 2.1 % | 0.8 % | 5.0 % | 1.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4939 ppm | 106.8322 % | 123.5552 % | 95.4847 % | 101.3803 % | 121.7651 % | 96.3500 % |
| Concentration per Run 1 | 0.4988 ppm | 105.7551 % | 125.3981 % | 99.5928 % | 100.3121 % | 122.9241 % | 100.4370 % |
| Concentration per Run 2 | 0.4920 ppm | 106.5080 % | 124.0402 % | 96.3300 % | 101.9867 % | 121.3374 % | 96.5642 % |
| Concentration per Run 3 | 0.4908 ppm | 108.2337 % | 121.2272 % | 90.5313 % | 101.8422 % | 121.0337 % | 92.0488 % |
| Recovery Percentage 1 | 98.775 % | | | | | | |
| Concentration RSD | 0.9 % | 1.2 % | 1.7 % | 4.8 % | 0.9 % | 0.8 % | 4.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: CCB
Analysis started at: 3/14/2025 2:27:50 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0150 ppm | 0.0003 ppm | 0.0007 ppm | 0.0001 ppm | 0.0001 ppm | 0.0012 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0190 ppm | 0.0004 ppm | 0.0001 ppm | 0.0000 ppm | 0.0001 ppm | 0.0018 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0136 ppm | 0.0012 ppm | 0.0005 ppm | 0.0001 ppm | 0.0000 ppm | 0.0010 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0124 ppm | -0.0007 ppm | 0.0016 ppm | 0.0001 ppm | 0.0001 ppm | 0.0006 ppm |
| Recovery Percentage 1 | 9.828 % | 15.038 % | 6.178 % | 2.406 % | 0.585 % | 1.254 % | 1.151 % |
| Concentration RSD | 29.3 % | 23.4 % | 306.1 % | 103.9 % | 141.7 % | 25.7 % | 52.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0002 ppm | -0.0001 ppm | 0.0001 ppm | 0.0045 ppm | -0.0015 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0003 ppm | -0.0001 ppm | 0.0003 ppm | 0.0039 ppm | -0.0166 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | -0.0001 ppm | -0.0001 ppm | 0.0056 ppm | 0.0064 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0004 ppm | 0.0000 ppm | 0.0001 ppm | 0.0038 ppm | 0.0056 ppm | -0.0001 ppm |
| Recovery Percentage 1 | 1.796 % | 2.485 % | -0.855 % | 0.839 % | 8.905 % | -0.062 % | 4.226 % |
| Concentration RSD | 41.1 % | 68.8 % | 70.9 % | 252.9 % | 23.1 % | 845.9 % | 146.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0002 ppm | 0.0019 ppm | -0.0136 ppm | 0.0009 ppm | 0.0002 ppm | -0.0004 ppm |
| Concentration per Run 1 | -0.0007 ppm | 0.0001 ppm | 0.0015 ppm | -0.0117 ppm | 0.0011 ppm | -0.0004 ppm | -0.0013 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.0001 ppm | 0.0024 ppm | -0.0138 ppm | 0.0009 ppm | 0.0004 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0020 ppm | 0.0003 ppm | 0.0018 ppm | -0.0154 ppm | 0.0006 ppm | 0.0007 ppm | -0.0005 ppm |
| Recovery Percentage 1 | 0.808 % | 1.978 % | 3.793 % | -0.681 % | 3.467 % | 1.893 % | -0.754 % |
| Concentration RSD | 175.2 % | 63.5 % | 25.2 % | 13.6 % | 24.0 % | 298.2 % | 252.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0023 ppm | -0.0079 ppm | -0.0003 ppm | 0.0000 ppm | 0.0001 ppm | -0.0003 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0065 ppm | -0.0007 ppm | 0.0000 ppm | 0.0000 ppm | -0.0008 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0032 ppm | -0.0077 ppm | 0.0005 ppm | -0.0001 ppm | 0.0000 ppm | -0.0006 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0036 ppm | -0.0094 ppm | -0.0006 ppm | 0.0001 ppm | 0.0001 ppm | 0.0003 ppm | 0.0000 ppm |
| Recovery Percentage 1 | -23.158 % | -1.579 % | -0.543 % | 0.260 % | 0.544 % | -1.739 % | 0.318 % |
| Concentration RSD | 81.0 % | 18.4 % | 250.3 % | 308.8 % | 121.8 % | 162.7 % | 246.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 101.8699 % | 121.4461 % | 100.3754 % | 100.2474 % | 121.1377 % | 101.2347 % |
| Concentration per Run 1 | -0.0003 ppm | 98.2256 % | 122.5706 % | 100.6209 % | 96.5141 % | 122.0394 % | 101.6453 % |
| Concentration per Run 2 | -0.0004 ppm | 103.1433 % | 120.7834 % | 100.1593 % | 101.8055 % | 120.8472 % | 100.9931 % |
| Concentration per Run 3 | -0.0003 ppm | 104.2407 % | 120.9843 % | 100.3462 % | 102.4225 % | 120.5265 % | 101.0656 % |
| Recovery Percentage 1 | -5.949 % | | | | | | |
| Concentration RSD | 18.9 % | 3.1 % | 0.8 % | 0.2 % | 3.2 % | 0.7 % | 0.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2040096-5D2 WG2040096
Analysis started at: 3/14/2025 2:39:57 PM
Rack 1
Vial 33
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0414 ppm | 84.4701 ppm | 0.1421 ppm | 0.9429 ppm | 2.1637 ppm | 0.0507 ppm | 12.3271 ppm |
| Concentration per Run 1 | 0.0412 ppm | 84.2501 ppm | 0.1435 ppm | 0.9254 ppm | 2.1667 ppm | 0.0506 ppm | 12.3093 ppm |
| Concentration per Run 2 | 0.0409 ppm | 84.6979 ppm | 0.1431 ppm | 0.9203 ppm | 2.1736 ppm | 0.0509 ppm | 12.3714 ppm |
| Concentration per Run 3 | 0.0421 ppm | 84.4624 ppm | 0.1399 ppm | 0.9830 ppm | 2.1507 ppm | 0.0506 ppm | 12.3006 ppm |
| Concentration RSD | 1.5 % | 0.3 % | 1.4 % | 3.7 % | 0.5 % | 0.3 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0504 ppm | 0.6383 ppm | 0.2964 ppm | 0.4050 ppm | 130.3786 ppm | 10.8826 ppm | 0.1513 ppm |
| Concentration per Run 1 | 0.0496 ppm | 0.6191 ppm | 0.2917 ppm | 0.4011 ppm | 130.5734 ppm | 10.7681 ppm | 0.1512 ppm |
| Concentration per Run 2 | 0.0494 ppm | 0.6274 ppm | 0.2910 ppm | 0.3957 ppm | 130.9611 ppm | 10.9518 ppm | 0.1538 ppm |
| Concentration per Run 3 | 0.0523 ppm | 0.6684 ppm | 0.3065 ppm | 0.4181 ppm | 129.6014 ppm | 10.9279 ppm | 0.1490 ppm |
| Concentration RSD | 3.1 % | 4.1 % | 2.9 % | 2.9 % | 0.5 % | 0.9 % | 1.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 22.8079 ppm | 6.0741 ppm | 0.9926 ppm | 10.7804 ppm | 0.7848 ppm | 0.5698 ppm | 0.4339 ppm |
| Concentration per Run 1 | 22.4806 ppm | 6.0649 ppm | 0.9715 ppm | 10.7135 ppm | 0.7703 ppm | 0.5660 ppm | 0.4247 ppm |
| Concentration per Run 2 | 22.3679 ppm | 6.0898 ppm | 0.9736 ppm | 10.8310 ppm | 0.7724 ppm | 0.5698 ppm | 0.4234 ppm |
| Concentration per Run 3 | 23.5751 ppm | 6.0675 ppm | 1.0326 ppm | 10.7966 ppm | 0.8118 ppm | 0.5735 ppm | 0.4535 ppm |
| Concentration RSD | 2.9 % | 0.2 % | 3.5 % | 0.6 % | 3.0 % | 0.7 % | 3.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1159 ppm | 3.7789 ppm | 0.9637 ppm | 0.9930 ppm | 3.7195 ppm | 0.1156 ppm | 0.7075 ppm |
| Concentration per Run 1 | 0.1149 ppm | 3.6815 ppm | 0.9474 ppm | 0.9947 ppm | 3.6477 ppm | 0.1155 ppm | 0.6984 ppm |
| Concentration per Run 2 | 0.1165 ppm | 3.7097 ppm | 0.9500 ppm | 0.9956 ppm | 3.6507 ppm | 0.1177 ppm | 0.6926 ppm |
| Concentration per Run 3 | 0.1162 ppm | 3.9453 ppm | 0.9937 ppm | 0.9886 ppm | 3.8601 ppm | 0.1137 ppm | 0.7315 ppm |
| Concentration RSD | 0.7 % | 3.8 % | 2.7 % | 0.4 % | 3.3 % | 1.7 % | 3.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7167 ppm | 102.3147 % | 127.3903 % | 89.9320 % | 108.8643 % | 143.1586 % | 113.4538 % |
| Concentration per Run 1 | 0.7021 ppm | 103.1307 % | 127.3548 % | 89.9563 % | 111.0163 % | 143.3927 % | 113.0796 % |
| Concentration per Run 2 | 0.7024 ppm | 103.7841 % | 127.5424 % | 89.4565 % | 110.1715 % | 143.2745 % | 112.9075 % |
| Concentration per Run 3 | 0.7455 ppm | 100.0294 % | 127.2736 % | 90.3833 % | 105.4051 % | 142.8085 % | 114.3743 % |
| Concentration RSD | 3.5 % | 2.0 % | 0.1 % | 0.5 % | 2.8 % | 0.2 % | 0.7 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513173-26D2 WG2039207
Analysis started at: 3/14/2025 2:44:38 PM
Rack 1
Vial 25
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0018 ppm | 64.8233 ppm | 0.0384 ppm | 0.0023 ppm | 0.0610 ppm | 0.0014 ppm | 1.0566 ppm |
| Concentration per Run 1 | 0.0016 ppm | 63.8488 ppm | 0.0388 ppm | 0.0006 ppm | 0.0599 ppm | 0.0014 ppm | 1.0462 ppm |
| Concentration per Run 2 | 0.0026 ppm | 65.1184 ppm | 0.0375 ppm | 0.0028 ppm | 0.0613 ppm | 0.0014 ppm | 1.0596 ppm |
| Concentration per Run 3 | 0.0013 ppm | 65.5027 ppm | 0.0388 ppm | 0.0034 ppm | 0.0618 ppm | 0.0014 ppm | 1.0639 ppm |
| Concentration RSD | 36.8 % | 1.3 % | 2.0 % | 63.1 % | 1.6 % | 2.2 % | 0.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0025 ppm | 0.0132 ppm | 0.2119 ppm | 0.0603 ppm | 205.9977 ppm | 1.2279 ppm | 0.0136 ppm |
| Concentration per Run 1 | 0.0024 ppm | 0.0131 ppm | 0.2128 ppm | 0.0607 ppm | 202.6389 ppm | 1.2427 ppm | 0.0138 ppm |
| Concentration per Run 2 | 0.0025 ppm | 0.0131 ppm | 0.2030 ppm | 0.0582 ppm | 207.1649 ppm | 1.2172 ppm | 0.0132 ppm |
| Concentration per Run 3 | 0.0026 ppm | 0.0136 ppm | 0.2201 ppm | 0.0622 ppm | 208.1893 ppm | 1.2239 ppm | 0.0139 ppm |
| Concentration RSD | 4.6 % | 2.2 % | 4.0 % | 3.3 % | 1.4 % | 1.1 % | 2.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.5540 ppm | 0.1865 ppm | 0.0125 ppm | 0.4055 ppm | 0.0270 ppm | 0.0610 ppm | 0.0051 ppm |
| Concentration per Run 1 | 1.5661 ppm | 0.1851 ppm | 0.0123 ppm | 0.4003 ppm | 0.0275 ppm | 0.0618 ppm | 0.0053 ppm |
| Concentration per Run 2 | 1.4948 ppm | 0.1866 ppm | 0.0118 ppm | 0.4054 ppm | 0.0255 ppm | 0.0609 ppm | 0.0045 ppm |
| Concentration per Run 3 | 1.6010 ppm | 0.1880 ppm | 0.0133 ppm | 0.4106 ppm | 0.0281 ppm | 0.0602 ppm | 0.0056 ppm |
| Concentration RSD | 3.5 % | 0.8 % | 5.7 % | 1.3 % | 4.9 % | 1.3 % | 11.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 5.4127 ppm | 0.0081 ppm | 0.0075 ppm | 0.6532 ppm | 0.0011 ppm | 0.4924 ppm |
| Concentration per Run 1 | 0.0015 ppm | 5.4074 ppm | 0.0082 ppm | 0.0074 ppm | 0.6588 ppm | 0.0019 ppm | 0.4957 ppm |
| Concentration per Run 2 | -0.0003 ppm | 5.1453 ppm | 0.0076 ppm | 0.0075 ppm | 0.6224 ppm | 0.0009 ppm | 0.4735 ppm |
| Concentration per Run 3 | -0.0022 ppm | 5.6853 ppm | 0.0084 ppm | 0.0076 ppm | 0.6785 ppm | 0.0006 ppm | 0.5081 ppm |
| Concentration RSD | 564.6 % | 5.0 % | 5.2 % | 1.3 % | 4.4 % | 64.8 % | 3.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0650 ppm | 113.4773 % | 137.3802 % | 98.0077 % | 99.2980 % | 124.2529 % | 99.7981 % |
| Concentration per Run 1 | 0.0656 ppm | 112.5945 % | 138.7618 % | 96.7831 % | 99.2016 % | 125.7236 % | 98.8571 % |
| Concentration per Run 2 | 0.0623 ppm | 117.4806 % | 137.4310 % | 98.6246 % | 103.5186 % | 123.9512 % | 100.0558 % |
| Concentration per Run 3 | 0.0672 ppm | 110.3569 % | 135.9477 % | 98.6154 % | 95.1738 % | 123.0839 % | 100.4815 % |
| Concentration RSD | 3.9 % | 3.2 % | 1.0 % | 1.1 % | 4.2 % | 1.1 % | 0.8 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513173-28D2 WG2039207
Analysis started at: 3/14/2025 2:49:02 PM
Rack 1
Vial 26
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 43.9130 ppm | 0.0502 ppm | 0.0028 ppm | 0.0406 ppm | 0.0018 ppm | 0.7306 ppm |
| Concentration per Run 1 | 0.0017 ppm | 44.3713 ppm | 0.0514 ppm | 0.0028 ppm | 0.0414 ppm | 0.0018 ppm | 0.7339 ppm |
| Concentration per Run 2 | 0.0017 ppm | 43.6272 ppm | 0.0487 ppm | 0.0039 ppm | 0.0403 ppm | 0.0018 ppm | 0.7289 ppm |
| Concentration per Run 3 | 0.0018 ppm | 43.7404 ppm | 0.0504 ppm | 0.0016 ppm | 0.0402 ppm | 0.0018 ppm | 0.7290 ppm |
| Concentration RSD | 2.1 % | 0.9 % | 2.7 % | 41.2 % | 1.6 % | 2.2 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0023 ppm | 0.0349 ppm | 0.2893 ppm | 0.1160 ppm | 217.3677 ppm | 1.5493 ppm | 0.0057 ppm |
| Concentration per Run 1 | 0.0025 ppm | 0.0353 ppm | 0.2961 ppm | 0.1187 ppm | 220.0935 ppm | 1.5489 ppm | 0.0062 ppm |
| Concentration per Run 2 | 0.0022 ppm | 0.0343 ppm | 0.2853 ppm | 0.1148 ppm | 216.1840 ppm | 1.5509 ppm | 0.0058 ppm |
| Concentration per Run 3 | 0.0023 ppm | 0.0349 ppm | 0.2866 ppm | 0.1146 ppm | 215.8256 ppm | 1.5482 ppm | 0.0050 ppm |
| Concentration RSD | 7.2 % | 1.4 % | 2.0 % | 2.0 % | 1.1 % | 0.1 % | 10.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6076 ppm | 0.7023 ppm | 0.0081 ppm | 0.2529 ppm | 0.0394 ppm | 0.0501 ppm | 0.0051 ppm |
| Concentration per Run 1 | 0.6213 ppm | 0.7076 ppm | 0.0075 ppm | 0.2536 ppm | 0.0406 ppm | 0.0498 ppm | 0.0029 ppm |
| Concentration per Run 2 | 0.5983 ppm | 0.6998 ppm | 0.0083 ppm | 0.2537 ppm | 0.0385 ppm | 0.0501 ppm | 0.0050 ppm |
| Concentration per Run 3 | 0.6033 ppm | 0.6994 ppm | 0.0086 ppm | 0.2515 ppm | 0.0391 ppm | 0.0504 ppm | 0.0074 ppm |
| Concentration RSD | 2.0 % | 0.7 % | 7.4 % | 0.5 % | 2.7 % | 0.5 % | 44.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | 4.3549 ppm | 0.0040 ppm | 0.0059 ppm | 0.5264 ppm | -0.0008 ppm | 0.2786 ppm |
| Concentration per Run 1 | -0.0004 ppm | 4.5104 ppm | 0.0038 ppm | 0.0060 ppm | 0.5366 ppm | 0.0005 ppm | 0.2845 ppm |
| Concentration per Run 2 | -0.0027 ppm | 4.2779 ppm | 0.0040 ppm | 0.0059 ppm | 0.5219 ppm | -0.0016 ppm | 0.2754 ppm |
| Concentration per Run 3 | -0.0004 ppm | 4.2765 ppm | 0.0042 ppm | 0.0059 ppm | 0.5206 ppm | -0.0014 ppm | 0.2760 ppm |
| Concentration RSD | 115.0 % | 3.1 % | 4.3 % | 1.1 % | 1.7 % | 143.4 % | 1.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0968 ppm | 113.0032 % | 132.9396 % | 100.0230 % | 100.5684 % | 124.1716 % | 102.0905 % |
| Concentration per Run 1 | 0.0990 ppm | 110.9757 % | 131.6757 % | 100.0364 % | 97.5218 % | 123.2207 % | 101.9024 % |
| Concentration per Run 2 | 0.0953 ppm | 114.1919 % | 134.1926 % | 99.7877 % | 102.2642 % | 125.1716 % | 101.7170 % |
| Concentration per Run 3 | 0.0961 ppm | 113.8419 % | 132.9504 % | 100.2449 % | 101.9193 % | 124.1227 % | 102.6522 % |
| Concentration RSD | 2.0 % | 1.6 % | 0.9 % | 0.2 % | 2.6 % | 0.8 % | 0.5 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: CCV
Analysis started at: 3/14/2025 2:53:26 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5187 ppm | 0.5095 ppm | 0.4908 ppm | 0.5122 ppm | 0.5147 ppm | 0.5023 ppm | 0.4822 ppm |
| Concentration per Run 1 | 0.5132 ppm | 0.5232 ppm | 0.4949 ppm | 0.5101 ppm | 0.5214 ppm | 0.5121 ppm | 0.4971 ppm |
| Concentration per Run 2 | 0.4848 ppm | 0.5116 ppm | 0.4924 ppm | 0.4776 ppm | 0.5242 ppm | 0.5084 ppm | 0.4816 ppm |
| Concentration per Run 3 | 0.5583 ppm | 0.4937 ppm | 0.4850 ppm | 0.5489 ppm | 0.4983 ppm | 0.4863 ppm | 0.4679 ppm |
| Recovery Percentage 1 | 103.748 % | 101.903 % | 98.154 % | 102.440 % | 102.931 % | 100.454 % | 96.440 % |
| Concentration RSD | 7.1 % | 2.9 % | 1.1 % | 7.0 % | 2.8 % | 2.8 % | 3.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5143 ppm | 0.5283 ppm | 0.5177 ppm | 0.5332 ppm | 0.5182 ppm | 5.3071 ppm | 0.5321 ppm |
| Concentration per Run 1 | 0.5077 ppm | 0.5133 ppm | 0.5113 ppm | 0.5263 ppm | 0.5285 ppm | 5.4898 ppm | 0.5475 ppm |
| Concentration per Run 2 | 0.4838 ppm | 0.4909 ppm | 0.4850 ppm | 0.4992 ppm | 0.5242 ppm | 5.2805 ppm | 0.5397 ppm |
| Concentration per Run 3 | 0.5514 ppm | 0.5807 ppm | 0.5567 ppm | 0.5741 ppm | 0.5018 ppm | 5.1511 ppm | 0.5092 ppm |
| Recovery Percentage 1 | 102.855 % | 105.654 % | 103.533 % | 106.642 % | 103.638 % | 106.143 % | 106.428 % |
| Concentration RSD | 6.7 % | 8.8 % | 7.0 % | 7.1 % | 2.8 % | 3.2 % | 3.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5216 ppm | 0.4791 ppm | 0.5201 ppm | 10.7037 ppm | 0.5289 ppm | 0.5152 ppm | 0.5306 ppm |
| Concentration per Run 1 | 0.5194 ppm | 0.4905 ppm | 0.5122 ppm | 10.9037 ppm | 0.5220 ppm | 0.5205 ppm | 0.5136 ppm |
| Concentration per Run 2 | 0.4861 ppm | 0.4823 ppm | 0.4868 ppm | 10.8071 ppm | 0.4966 ppm | 0.5155 ppm | 0.4953 ppm |
| Concentration per Run 3 | 0.5591 ppm | 0.4646 ppm | 0.5612 ppm | 10.4002 ppm | 0.5680 ppm | 0.5097 ppm | 0.5829 ppm |
| Recovery Percentage 1 | 104.311 % | 95.821 % | 104.015 % | 107.037 % | 105.776 % | 103.049 % | 106.122 % |
| Concentration RSD | 7.0 % | 2.8 % | 7.3 % | 2.5 % | 6.8 % | 1.0 % | 8.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5006 ppm | 5.9050 ppm | 0.5172 ppm | 0.5178 ppm | 0.5276 ppm | 0.5238 ppm | 0.5246 ppm |
| Concentration per Run 1 | 0.5027 ppm | 5.7599 ppm | 0.5125 ppm | 0.5267 ppm | 0.5212 ppm | 0.5289 ppm | 0.5170 ppm |
| Concentration per Run 2 | 0.5012 ppm | 5.4676 ppm | 0.4866 ppm | 0.5264 ppm | 0.4925 ppm | 0.5241 ppm | 0.4919 ppm |
| Concentration per Run 3 | 0.4977 ppm | 6.4876 ppm | 0.5525 ppm | 0.5004 ppm | 0.5691 ppm | 0.5185 ppm | 0.5650 ppm |
| Recovery Percentage 1 | 100.112 % | 112.477 % | 103.437 % | 103.564 % | 105.518 % | 104.765 % | 104.925 % |
| Concentration RSD | 0.5 % | 8.9 % | 6.4 % | 2.9 % | 7.3 % | 1.0 % | 7.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5118 ppm | 103.7317 % | 125.1430 % | 95.9827 % | 97.9636 % | 122.3662 % | 98.7909 % |
| Concentration per Run 1 | 0.5070 ppm | 104.7176 % | 122.4551 % | 95.2926 % | 100.1084 % | 120.2610 % | 98.2929 % |
| Concentration per Run 2 | 0.4796 ppm | 108.8440 % | 124.6108 % | 95.6577 % | 103.7870 % | 121.5234 % | 98.4619 % |
| Concentration per Run 3 | 0.5487 ppm | 97.6334 % | 128.3632 % | 96.9979 % | 89.9954 % | 125.3141 % | 99.6179 % |
| Recovery Percentage 1 | 102.357 % | | | | | | |
| Concentration RSD | 6.8 % | 5.5 % | 2.4 % | 0.9 % | 7.3 % | 2.1 % | 0.7 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: CCB
Analysis started at: 3/14/2025 2:57:52 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0137 ppm | -0.0007 ppm | -0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0043 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0152 ppm | -0.0005 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0054 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0126 ppm | -0.0013 ppm | -0.0008 ppm | 0.0000 ppm | 0.0000 ppm | 0.0038 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0134 ppm | -0.0002 ppm | -0.0003 ppm | 0.0001 ppm | 0.0000 ppm | 0.0038 ppm |
| Recovery Percentage 1 | 8.921 % | 13.730 % | -13.274 % | -1.222 % | 0.312 % | 0.432 % | 4.337 % |
| Concentration RSD | 59.8 % | 9.7 % | 81.5 % | 112.1 % | 113.1 % | 74.7 % | 21.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0001 ppm | -0.0001 ppm | 0.0001 ppm | 0.0053 ppm | 0.0054 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm | 0.0057 ppm | 0.0141 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0003 ppm | -0.0001 ppm | 0.0000 ppm | 0.0055 ppm | 0.0170 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0002 ppm | -0.0003 ppm | 0.0003 ppm | 0.0047 ppm | -0.0150 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 2.158 % | 0.680 % | -1.250 % | 1.047 % | 10.596 % | 0.214 % | 1.462 % |
| Concentration RSD | 105.2 % | 434.6 % | 109.1 % | 164.9 % | 10.0 % | 330.9 % | 353.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0023 ppm | -0.0131 ppm | 0.0003 ppm | -0.0009 ppm | 0.0011 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0001 ppm | 0.0023 ppm | -0.0126 ppm | 0.0007 ppm | -0.0004 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0000 ppm | 0.0024 ppm | -0.0132 ppm | -0.0001 ppm | -0.0018 ppm | 0.0018 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0002 ppm | 0.0023 ppm | -0.0136 ppm | 0.0003 ppm | -0.0006 ppm | 0.0005 ppm |
| Recovery Percentage 1 | -0.043 % | 1.044 % | 4.676 % | -0.657 % | 1.243 % | -9.393 % | 2.204 % |
| Concentration RSD | 779.8 % | 134.8 % | 0.6 % | 3.8 % | 132.9 % | 76.2 % | 60.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | -0.0031 ppm | 0.0003 ppm | 0.0000 ppm | 0.0001 ppm | -0.0013 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0073 ppm | 0.0010 ppm | 0.0000 ppm | 0.0002 ppm | -0.0026 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0024 ppm | -0.0066 ppm | -0.0002 ppm | 0.0001 ppm | 0.0001 ppm | -0.0005 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0046 ppm | 0.0001 ppm | 0.0000 ppm | -0.0001 ppm | -0.0008 ppm | 0.0000 ppm |
| Recovery Percentage 1 | -6.551 % | -0.614 % | 0.588 % | 0.254 % | 0.602 % | -6.422 % | -0.024 % |
| Concentration RSD | 225.1 % | 218.1 % | 216.7 % | 208.9 % | 220.0 % | 87.9 % | 4,405.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 99.9763 % | 122.8369 % | 98.3094 % | 100.0737 % | 122.0614 % | 100.3767 % |
| Concentration per Run 1 | 0.0005 ppm | 97.1638 % | 122.3287 % | 98.0258 % | 98.2701 % | 122.3699 % | 100.5996 % |
| Concentration per Run 2 | 0.0000 ppm | 99.9055 % | 123.1610 % | 98.5001 % | 99.9067 % | 121.7248 % | 100.6049 % |
| Concentration per Run 3 | 0.0003 ppm | 102.8597 % | 123.0211 % | 98.4023 % | 102.0445 % | 122.0895 % | 99.9256 % |
| Recovery Percentage 1 | 4.752 % | | | | | | |
| Concentration RSD | 100.8 % | 2.8 % | 0.4 % | 0.3 % | 1.9 % | 0.3 % | 0.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2040264-1 WG2040264
Analysis started at: 3/14/2025 3:17:21 PM
Rack 1
Vial 38
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0166 ppm | -0.0007 ppm | 0.0001 ppm | -0.0001 ppm | 0.0000 ppm | 0.0108 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0189 ppm | -0.0007 ppm | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0129 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0135 ppm | -0.0012 ppm | -0.0002 ppm | -0.0001 ppm | 0.0001 ppm | 0.0097 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0173 ppm | -0.0003 ppm | 0.0005 ppm | -0.0001 ppm | 0.0000 ppm | 0.0097 ppm |
| Recovery Percentage 1 | 11.733 % | 16.574 % | -14.663 % | 0.395 % | -0.692 % | 0.749 % | 10.786 % |
| Concentration RSD | 5.5 % | 17.0 % | 59.1 % | 288.9 % | 23.3 % | 75.0 % | 17.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0002 ppm | -0.0002 ppm | 0.0005 ppm | 0.0020 ppm | 0.0072 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0003 ppm | -0.0001 ppm | 0.0006 ppm | 0.0008 ppm | 0.0178 ppm | -0.0007 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0005 ppm | -0.0004 ppm | 0.0005 ppm | 0.0026 ppm | -0.0052 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0004 ppm | -0.0001 ppm | 0.0004 ppm | 0.0027 ppm | 0.0090 ppm | 0.0005 ppm |
| Recovery Percentage 1 | 1.228 % | 1.947 % | -2.067 % | 4.985 % | 4.055 % | 0.288 % | -1.283 % |
| Concentration RSD | 112.6 % | 232.9 % | 96.5 % | 19.3 % | 52.2 % | 161.1 % | 474.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 0.0004 ppm | -0.0002 ppm | -0.0105 ppm | 0.0006 ppm | -0.0003 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0018 ppm | 0.0004 ppm | -0.0002 ppm | -0.0104 ppm | 0.0002 ppm | -0.0012 ppm | 0.0026 ppm |
| Concentration per Run 2 | 0.0025 ppm | 0.0004 ppm | -0.0001 ppm | -0.0113 ppm | 0.0002 ppm | -0.0001 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0003 ppm | -0.0003 ppm | -0.0099 ppm | 0.0013 ppm | 0.0003 ppm | -0.0018 ppm |
| Recovery Percentage 1 | 1.747 % | 3.703 % | -0.372 % | -0.526 % | 2.300 % | -3.307 % | 0.767 % |
| Concentration RSD | 43.6 % | 8.7 % | 46.4 % | 7.0 % | 109.4 % | 226.2 % | 578.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0018 ppm | -0.0014 ppm | -0.0002 ppm | 0.0000 ppm | 0.0000 ppm | -0.0015 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0025 ppm | -0.0005 ppm | 0.0006 ppm | 0.0000 ppm | 0.0001 ppm | -0.0004 ppm | -0.0002 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0020 ppm | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | -0.0029 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0028 ppm | -0.0017 ppm | -0.0012 ppm | 0.0000 ppm | -0.0001 ppm | -0.0011 ppm | -0.0001 ppm |
| Recovery Percentage 1 | -18.326 % | -0.281 % | -0.432 % | 0.292 % | 0.218 % | -7.414 % | -0.487 % |
| Concentration RSD | 75.7 % | 54.6 % | 425.6 % | 54.0 % | 577.0 % | 87.4 % | 327.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 100.1246 % | 118.6717 % | 99.3210 % | 98.8521 % | 118.3280 % | 98.9968 % |
| Concentration per Run 1 | 0.0005 ppm | 99.8441 % | 117.6776 % | 99.0525 % | 98.8577 % | 117.7801 % | 99.2399 % |
| Concentration per Run 2 | 0.0006 ppm | 99.6138 % | 118.8397 % | 99.9638 % | 98.1940 % | 118.1286 % | 99.3245 % |
| Concentration per Run 3 | 0.0006 ppm | 100.9160 % | 119.4978 % | 98.9467 % | 99.5045 % | 119.0752 % | 98.4262 % |
| Recovery Percentage 1 | 11.166 % | | | | | | |
| Concentration RSD | 7.8 % | 0.7 % | 0.8 % | 0.6 % | 0.7 % | 0.6 % | 0.5 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2040264-2 WG2040264
Analysis started at: 3/14/2025 3:22:04 PM
Rack 1
Vial 39
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0530 ppm | 2.0380 ppm | 0.1187 ppm | 1.0251 ppm | 2.0492 ppm | 0.0494 ppm | 9.7998 ppm |
| Concentration per Run 1 | 0.0526 ppm | 2.0582 ppm | 0.1270 ppm | 1.0178 ppm | 2.0590 ppm | 0.0498 ppm | 9.8796 ppm |
| Concentration per Run 2 | 0.0523 ppm | 2.0180 ppm | 0.1160 ppm | 1.0184 ppm | 2.0409 ppm | 0.0492 ppm | 9.7935 ppm |
| Concentration per Run 3 | 0.0540 ppm | 2.0378 ppm | 0.1132 ppm | 1.0391 ppm | 2.0476 ppm | 0.0492 ppm | 9.7262 ppm |
| Concentration RSD | 1.8 % | 1.0 % | 6.1 % | 1.2 % | 0.4 % | 0.7 % | 0.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0539 ppm | 0.4993 ppm | 0.2063 ppm | 0.2709 ppm | 0.9837 ppm | 10.8152 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0536 ppm | 0.4940 ppm | 0.2053 ppm | 0.2686 ppm | 0.9885 ppm | 10.9558 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0539 ppm | 0.4985 ppm | 0.2043 ppm | 0.2696 ppm | 0.9835 ppm | 10.7495 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0543 ppm | 0.5054 ppm | 0.2092 ppm | 0.2745 ppm | 0.9792 ppm | 10.7404 ppm | -0.0007 ppm |
| Concentration RSD | 0.6 % | 1.2 % | 1.3 % | 1.2 % | 0.5 % | 1.1 % | 909.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.7887 ppm | 0.4879 ppm | 0.9440 ppm | 11.0993 ppm | 0.5234 ppm | 0.5776 ppm | 0.4405 ppm |
| Concentration per Run 1 | 10.7406 ppm | 0.4922 ppm | 0.9317 ppm | 11.2236 ppm | 0.5199 ppm | 0.6085 ppm | 0.4361 ppm |
| Concentration per Run 2 | 10.7179 ppm | 0.4871 ppm | 0.9357 ppm | 10.9716 ppm | 0.5180 ppm | 0.5691 ppm | 0.4356 ppm |
| Concentration per Run 3 | 10.9075 ppm | 0.4842 ppm | 0.9646 ppm | 11.1028 ppm | 0.5323 ppm | 0.5551 ppm | 0.4498 ppm |
| Concentration RSD | 1.0 % | 0.8 % | 1.9 % | 1.1 % | 1.5 % | 4.8 % | 1.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1216 ppm | 0.9985 ppm | 1.0121 ppm | 1.0313 ppm | 1.0519 ppm | 0.1240 ppm | 0.5306 ppm |
| Concentration per Run 1 | 0.1258 ppm | 0.9844 ppm | 1.0011 ppm | 1.0355 ppm | 1.0456 ppm | 0.1296 ppm | 0.5271 ppm |
| Concentration per Run 2 | 0.1216 ppm | 0.9957 ppm | 0.9992 ppm | 1.0300 ppm | 1.0437 ppm | 0.1233 ppm | 0.5277 ppm |
| Concentration per Run 3 | 0.1173 ppm | 1.0154 ppm | 1.0360 ppm | 1.0284 ppm | 1.0662 ppm | 0.1190 ppm | 0.5369 ppm |
| Concentration RSD | 3.5 % | 1.6 % | 2.0 % | 0.4 % | 1.2 % | 4.3 % | 1.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5123 ppm | 99.9419 % | 120.5252 % | 88.9276 % | 97.6937 % | 117.9503 % | 94.2867 % |
| Concentration per Run 1 | 0.5097 ppm | 99.9527 % | 119.5341 % | 84.8463 % | 98.0987 % | 117.0604 % | 89.2961 % |
| Concentration per Run 2 | 0.5072 ppm | 100.5276 % | 120.6276 % | 89.9537 % | 98.0400 % | 117.6526 % | 96.1643 % |
| Concentration per Run 3 | 0.5199 ppm | 99.3455 % | 121.4140 % | 91.9828 % | 96.9424 % | 119.1378 % | 97.3998 % |
| Concentration RSD | 1.3 % | 0.6 % | 0.8 % | 4.1 % | 0.7 % | 0.9 % | 4.6 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2512983-07 WG2040264
Analysis started at: 3/14/2025 3:26:30 PM
Rack 1
Vial 51
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0392 ppm | 0.0003 ppm | 0.0279 ppm | 0.0197 ppm | 0.0000 ppm | 18.7472 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0365 ppm | -0.0003 ppm | 0.0269 ppm | 0.0201 ppm | 0.0000 ppm | 18.8298 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0440 ppm | -0.0014 ppm | 0.0271 ppm | 0.0194 ppm | 0.0000 ppm | 18.6350 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0372 ppm | 0.0026 ppm | 0.0296 ppm | 0.0197 ppm | 0.0000 ppm | 18.7767 ppm |
| Concentration RSD | 45.9 % | 10.7 % | 636.1 % | 5.4 % | 1.8 % | 131.7 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0002 ppm | 0.0000 ppm | 0.0656 ppm | 0.0218 ppm | 5.2178 ppm | 0.0024 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0635 ppm | 0.0223 ppm | 5.2457 ppm | 0.0032 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0004 ppm | 0.0002 ppm | 0.0609 ppm | 0.0212 ppm | 5.2069 ppm | 0.0015 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0002 ppm | 0.0000 ppm | 0.0725 ppm | 0.0219 ppm | 5.2007 ppm | 0.0024 ppm |
| Concentration RSD | 137.6 % | 113.2 % | 233.0 % | 9.3 % | 2.4 % | 0.5 % | 34.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.5969 ppm | 0.0092 ppm | 0.0094 ppm | 136.1931 ppm | 0.0021 ppm | 0.0000 ppm | 0.0037 ppm |
| Concentration per Run 1 | 4.4963 ppm | 0.0095 ppm | 0.0092 ppm | 137.1644 ppm | 0.0022 ppm | -0.0001 ppm | 0.0018 ppm |
| Concentration per Run 2 | 4.2895 ppm | 0.0091 ppm | 0.0089 ppm | 135.0418 ppm | 0.0015 ppm | 0.0001 ppm | 0.0060 ppm |
| Concentration per Run 3 | 5.0048 ppm | 0.0091 ppm | 0.0100 ppm | 136.3732 ppm | 0.0025 ppm | -0.0002 ppm | 0.0032 ppm |
| Concentration RSD | 8.0 % | 2.1 % | 6.3 % | 0.8 % | 25.6 % | 494.5 % | 57.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0023 ppm | 2.9643 ppm | 0.0032 ppm | 0.1262 ppm | 0.0002 ppm | -0.0020 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0026 ppm | 2.8603 ppm | 0.0036 ppm | 0.1283 ppm | 0.0002 ppm | -0.0016 ppm | 0.0004 ppm |
| Concentration per Run 2 | -0.0022 ppm | 2.7401 ppm | 0.0023 ppm | 0.1243 ppm | 0.0002 ppm | -0.0021 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0022 ppm | 3.2926 ppm | 0.0035 ppm | 0.1260 ppm | 0.0003 ppm | -0.0024 ppm | 0.0003 ppm |
| Concentration RSD | 11.3 % | 9.8 % | 22.8 % | 1.6 % | 33.7 % | 20.5 % | 8.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0401 ppm | 94.9060 % | 120.2451 % | 87.6893 % | 92.4754 % | 117.9632 % | 94.5626 % |
| Concentration per Run 1 | 0.0395 ppm | 96.9913 % | 119.4293 % | 86.7615 % | 95.3474 % | 117.7143 % | 93.9806 % |
| Concentration per Run 2 | 0.0371 ppm | 100.5783 % | 120.9024 % | 87.4376 % | 98.6187 % | 118.3286 % | 94.3827 % |
| Concentration per Run 3 | 0.0437 ppm | 87.1482 % | 120.4035 % | 88.8688 % | 83.4602 % | 117.8468 % | 95.3243 % |
| Concentration RSD | 8.3 % | 7.3 % | 0.6 % | 1.2 % | 8.6 % | 0.3 % | 0.7 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2512983-08 WG2040264
Analysis started at: 3/14/2025 3:31:00 PM
Rack 1
Vial 52
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0384 ppm | 0.0007 ppm | 0.0251 ppm | 0.0198 ppm | 0.0000 ppm | 18.9069 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0383 ppm | 0.0009 ppm | 0.0230 ppm | 0.0187 ppm | 0.0000 ppm | 17.7037 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0373 ppm | 0.0010 ppm | 0.0268 ppm | 0.0204 ppm | 0.0000 ppm | 19.4409 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0395 ppm | 0.0003 ppm | 0.0254 ppm | 0.0203 ppm | 0.0000 ppm | 19.5761 ppm |
| Concentration RSD | 38.5 % | 2.8 % | 53.9 % | 7.6 % | 4.7 % | 106.1 % | 5.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0004 ppm | 0.0000 ppm | 0.1098 ppm | 0.0600 ppm | 5.6801 ppm | 0.0027 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0002 ppm | 0.0002 ppm | 0.1017 ppm | 0.0545 ppm | 5.2572 ppm | 0.0028 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0010 ppm | -0.0003 ppm | 0.1187 ppm | 0.0623 ppm | 5.9114 ppm | 0.0018 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0005 ppm | 0.0000 ppm | 0.1089 ppm | 0.0631 ppm | 5.8718 ppm | 0.0035 ppm |
| Concentration RSD | 171.2 % | 149.8 % | 847.4 % | 7.8 % | 7.9 % | 6.5 % | 30.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.8892 ppm | 0.0093 ppm | 0.0018 ppm | 138.3361 ppm | 0.0010 ppm | 0.0002 ppm | 0.0006 ppm |
| Concentration per Run 1 | 4.5442 ppm | 0.0086 ppm | 0.0015 ppm | 129.8091 ppm | 0.0014 ppm | -0.0002 ppm | 0.0021 ppm |
| Concentration per Run 2 | 5.2683 ppm | 0.0095 ppm | 0.0021 ppm | 143.1158 ppm | 0.0009 ppm | -0.0003 ppm | -0.0011 ppm |
| Concentration per Run 3 | 4.8551 ppm | 0.0098 ppm | 0.0017 ppm | 142.0833 ppm | 0.0006 ppm | 0.0010 ppm | 0.0009 ppm |
| Concentration RSD | 7.4 % | 6.7 % | 18.9 % | 5.4 % | 38.3 % | 434.4 % | 261.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0015 ppm | 3.0713 ppm | 0.0011 ppm | 0.1283 ppm | 0.0000 ppm | -0.0014 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0031 ppm | 2.8821 ppm | 0.0015 ppm | 0.1207 ppm | 0.0000 ppm | -0.0015 ppm | 0.0004 ppm |
| Concentration per Run 2 | -0.0006 ppm | 3.3039 ppm | 0.0010 ppm | 0.1322 ppm | 0.0000 ppm | -0.0020 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0007 ppm | 3.0281 ppm | 0.0009 ppm | 0.1319 ppm | -0.0001 ppm | -0.0007 ppm | 0.0003 ppm |
| Concentration RSD | 99.6 % | 7.0 % | 28.6 % | 5.1 % | 193.8 % | 46.7 % | 23.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0386 ppm | 92.9330 % | 124.0117 % | 85.7685 % | 92.7565 % | 121.5544 % | 94.5097 % |
| Concentration per Run 1 | 0.0357 ppm | 98.3983 % | 131.3376 % | 85.2772 % | 97.0161 % | 130.3680 % | 94.1115 % |
| Concentration per Run 2 | 0.0416 ppm | 87.0289 % | 121.1857 % | 86.0107 % | 87.2839 % | 118.0462 % | 94.8906 % |
| Concentration per Run 3 | 0.0385 ppm | 93.3717 % | 119.5117 % | 86.0175 % | 93.9695 % | 116.2490 % | 94.5270 % |
| Concentration RSD | 7.7 % | 6.1 % | 5.2 % | 0.5 % | 5.4 % | 6.3 % | 0.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2512983-09 WG2040264
Analysis started at: 3/14/2025 3:35:25 PM
Rack 1
Vial 53
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0320 ppm | -0.0004 ppm | 0.0193 ppm | 0.0225 ppm | 0.0000 ppm | 22.7607 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0304 ppm | -0.0009 ppm | 0.0208 ppm | 0.0224 ppm | 0.0000 ppm | 22.6816 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0335 ppm | -0.0004 ppm | 0.0183 ppm | 0.0225 ppm | 0.0000 ppm | 22.7085 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0323 ppm | 0.0003 ppm | 0.0188 ppm | 0.0225 ppm | 0.0000 ppm | 22.8921 ppm |
| Concentration RSD | 102.7 % | 4.9 % | 173.0 % | 6.9 % | 0.2 % | 257.6 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0002 ppm | 0.0000 ppm | 0.1933 ppm | 0.0357 ppm | 8.2578 ppm | 0.0022 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.1950 ppm | 0.0353 ppm | 8.2803 ppm | 0.0018 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0004 ppm | -0.0003 ppm | 0.1936 ppm | 0.0359 ppm | 8.1928 ppm | 0.0024 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0002 ppm | 0.0002 ppm | 0.1914 ppm | 0.0360 ppm | 8.3005 ppm | 0.0025 ppm |
| Concentration RSD | 271.1 % | 109.9 % | 887.1 % | 0.9 % | 1.1 % | 0.7 % | 18.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.5495 ppm | 0.0062 ppm | 0.0009 ppm | 131.4339 ppm | 0.0274 ppm | 0.0007 ppm | -0.0005 ppm |
| Concentration per Run 1 | 5.6058 ppm | 0.0064 ppm | 0.0014 ppm | 131.0259 ppm | 0.0278 ppm | 0.0008 ppm | -0.0010 ppm |
| Concentration per Run 2 | 5.5323 ppm | 0.0061 ppm | 0.0005 ppm | 131.0585 ppm | 0.0269 ppm | 0.0005 ppm | 0.0024 ppm |
| Concentration per Run 3 | 5.5103 ppm | 0.0061 ppm | 0.0009 ppm | 132.2172 ppm | 0.0274 ppm | 0.0010 ppm | -0.0029 ppm |
| Concentration RSD | 0.9 % | 3.4 % | 52.4 % | 0.5 % | 1.7 % | 32.9 % | 519.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0018 ppm | 2.5871 ppm | 0.0055 ppm | 0.1524 ppm | 0.0000 ppm | -0.0011 ppm | 0.0005 ppm |
| Concentration per Run 1 | -0.0029 ppm | 2.5897 ppm | 0.0059 ppm | 0.1516 ppm | -0.0003 ppm | -0.0005 ppm | 0.0004 ppm |
| Concentration per Run 2 | -0.0005 ppm | 2.5801 ppm | 0.0057 ppm | 0.1524 ppm | 0.0001 ppm | -0.0012 ppm | 0.0005 ppm |
| Concentration per Run 3 | -0.0019 ppm | 2.5916 ppm | 0.0050 ppm | 0.1532 ppm | 0.0001 ppm | -0.0017 ppm | 0.0005 ppm |
| Concentration RSD | 69.6 % | 0.2 % | 8.5 % | 0.5 % | 671.3 % | 51.6 % | 21.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7977 ppm | 96.1778 % | 117.5694 % | 88.4392 % | 94.0714 % | 116.5017 % | 94.7520 % |
| Concentration per Run 1 | 0.8090 ppm | 94.3882 % | 117.8321 % | 88.1643 % | 92.7889 % | 116.8394 % | 94.4485 % |
| Concentration per Run 2 | 0.7902 ppm | 96.8200 % | 117.7718 % | 88.8488 % | 95.0852 % | 116.2126 % | 95.2317 % |
| Concentration per Run 3 | 0.7939 ppm | 97.3253 % | 117.1043 % | 88.3043 % | 94.3400 % | 116.4532 % | 94.5759 % |
| Concentration RSD | 1.2 % | 1.6 % | 0.3 % | 0.4 % | 1.2 % | 0.3 % | 0.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2512981-01 WG2040264
Analysis started at: 3/14/2025 3:39:51 PM
Rack 1
Vial 40
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0316 ppm | 0.0352 ppm | -0.0009 ppm | 0.0213 ppm | 0.0378 ppm | 0.0000 ppm | 1.6113 ppm |
| Concentration per Run 1 | 0.0314 ppm | 0.0349 ppm | -0.0009 ppm | 0.0227 ppm | 0.0379 ppm | 0.0000 ppm | 1.6039 ppm |
| Concentration per Run 2 | 0.0320 ppm | 0.0375 ppm | -0.0014 ppm | 0.0206 ppm | 0.0381 ppm | 0.0000 ppm | 1.6198 ppm |
| Concentration per Run 3 | 0.0314 ppm | 0.0331 ppm | -0.0004 ppm | 0.0207 ppm | 0.0374 ppm | 0.0000 ppm | 1.6103 ppm |
| Concentration RSD | 1.1 % | 6.2 % | 59.8 % | 5.6 % | 0.8 % | 259.5 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0007 ppm | 0.0000 ppm | 0.0021 ppm | 0.0214 ppm | 1.6370 ppm | 0.0058 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0003 ppm | -0.0002 ppm | 0.0022 ppm | 0.0204 ppm | 1.6311 ppm | 0.0060 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0009 ppm | 0.0002 ppm | 0.0018 ppm | 0.0212 ppm | 1.6533 ppm | 0.0065 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0009 ppm | 0.0001 ppm | 0.0023 ppm | 0.0225 ppm | 1.6264 ppm | 0.0050 ppm |
| Concentration RSD | 77.2 % | 49.7 % | 860.0 % | 13.8 % | 5.1 % | 0.9 % | 12.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3937 ppm | 0.1298 ppm | -0.0001 ppm | 1,037.3854 [SIC 500] | 0.0049 ppm | 0.0003 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.3975 ppm | 0.1292 ppm | -0.0001 ppm | 1,039.2716 ppm | 0.0055 ppm | 0.0002 ppm | 0.0019 ppm |
| Concentration per Run 2 | 0.3909 ppm | 0.1299 ppm | 0.0001 ppm | 1,034.0105 ppm | 0.0045 ppm | -0.0004 ppm | 0.0023 ppm |
| Concentration per Run 3 | 0.3928 ppm | 0.1303 ppm | -0.0004 ppm | 1,038.8742 ppm | 0.0047 ppm | 0.0011 ppm | -0.0013 ppm |
| Concentration RSD | 0.9 % | 0.4 % | 220.5 % | 0.3 % | 10.9 % | 279.5 % | 204.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0280 ppm | 0.3404 ppm | 0.4190 ppm | 0.0190 ppm | -0.0002 ppm | -0.0024 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0262 ppm | 0.3412 ppm | 0.4167 ppm | 0.0190 ppm | -0.0002 ppm | -0.0023 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0282 ppm | 0.3426 ppm | 0.4168 ppm | 0.0192 ppm | 0.0001 ppm | -0.0043 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0294 ppm | 0.3373 ppm | 0.4234 ppm | 0.0189 ppm | -0.0004 ppm | -0.0008 ppm | -0.0001 ppm |
| Concentration RSD | 5.8 % | 0.8 % | 0.9 % | 0.7 % | 159.7 % | 72.0 % | 493.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0052 ppm | 84.0748 % | 97.2614 % | 73.5042 % | 83.0082 % | 96.2099 % | 85.6642 % |
| Concentration per Run 1 | 0.0052 ppm | 83.5699 % | 99.3816 % | 73.4678 % | 82.8982 % | 98.8039 % | 86.0590 % |
| Concentration per Run 2 | 0.0056 ppm | 84.4378 % | 96.7990 % | 76.0894 % | 83.1943 % | 95.8658 % | 88.8000 % |
| Concentration per Run 3 | 0.0049 ppm | 84.2167 % | 95.6034 % | 70.9556 % | 82.9322 % | 93.9599 % | 82.1338 % |
| Concentration RSD | 6.8 % | 0.5 % | 2.0 % | 3.5 % | 0.2 % | 2.5 % | 3.9 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2040264-3 WG2040264
Analysis started at: 3/14/2025 3:44:16 PM
Rack 1
Vial 41
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0852 ppm | 2.0247 ppm | 0.1295 ppm | 0.9996 ppm | 2.0092 ppm | 0.0494 ppm | 11.4735 ppm |
| Concentration per Run 1 | 0.0850 ppm | 2.0093 ppm | 0.1301 ppm | 1.0019 ppm | 2.0081 ppm | 0.0490 ppm | 11.3564 ppm |
| Concentration per Run 2 | 0.0843 ppm | 2.0331 ppm | 0.1269 ppm | 0.9936 ppm | 2.0197 ppm | 0.0498 ppm | 11.5563 ppm |
| Concentration per Run 3 | 0.0863 ppm | 2.0317 ppm | 0.1315 ppm | 1.0033 ppm | 1.9997 ppm | 0.0495 ppm | 11.5077 ppm |
| Concentration RSD | 1.2 % | 0.7 % | 1.8 % | 0.5 % | 0.5 % | 0.8 % | 0.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0557 ppm | 0.4841 ppm | 0.2042 ppm | 0.2573 ppm | 0.9944 ppm | 12.1772 ppm | 0.0060 ppm |
| Concentration per Run 1 | 0.0556 ppm | 0.4840 ppm | 0.2042 ppm | 0.2577 ppm | 0.9795 ppm | 11.9870 ppm | 0.0052 ppm |
| Concentration per Run 2 | 0.0558 ppm | 0.4840 ppm | 0.2037 ppm | 0.2555 ppm | 1.0013 ppm | 12.3103 ppm | 0.0064 ppm |
| Concentration per Run 3 | 0.0556 ppm | 0.4842 ppm | 0.2048 ppm | 0.2588 ppm | 1.0023 ppm | 12.2344 ppm | 0.0066 ppm |
| Concentration RSD | 0.2 % | 0.0 % | 0.3 % | 0.6 % | 1.3 % | 1.4 % | 12.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.2336 ppm | 0.6174 ppm | 0.8989 ppm | 1,044.6131 [SIC 500] | 0.5090 ppm | 0.5536 ppm | 0.4289 ppm |
| Concentration per Run 1 | 10.2386 ppm | 0.6106 ppm | 0.8924 ppm | 1,039.1287 ppm | 0.5075 ppm | 0.5599 ppm | 0.4273 ppm |
| Concentration per Run 2 | 10.2020 ppm | 0.6224 ppm | 0.8976 ppm | 1,048.5898 ppm | 0.5089 ppm | 0.5513 ppm | 0.4288 ppm |
| Concentration per Run 3 | 10.2603 ppm | 0.6193 ppm | 0.9067 ppm | 1,046.1207 ppm | 0.5107 ppm | 0.5496 ppm | 0.4304 ppm |
| Concentration RSD | 0.3 % | 1.0 % | 0.8 % | 0.5 % | 0.3 % | 1.0 % | 0.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1540 ppm | 1.3453 ppm | 1.5095 ppm | 1.0115 ppm | 1.0453 ppm | 0.1071 ppm | 0.5336 ppm |
| Concentration per Run 1 | 0.1534 ppm | 1.3404 ppm | 1.5019 ppm | 1.0051 ppm | 1.0454 ppm | 0.1089 ppm | 0.5327 ppm |
| Concentration per Run 2 | 0.1544 ppm | 1.3468 ppm | 1.5036 ppm | 1.0208 ppm | 1.0415 ppm | 0.1062 ppm | 0.5320 ppm |
| Concentration per Run 3 | 0.1542 ppm | 1.3486 ppm | 1.5230 ppm | 1.0085 ppm | 1.0492 ppm | 0.1063 ppm | 0.5360 ppm |
| Concentration RSD | 0.3 % | 0.3 % | 0.8 % | 0.8 % | 0.4 % | 1.4 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5429 ppm | 85.6357 % | 101.9569 % | 74.0665 % | 83.4016 % | 99.5741 % | 86.0485 % |
| Concentration per Run 1 | 0.5451 ppm | 85.8330 % | 104.2915 % | 73.5796 % | 83.9171 % | 101.3804 % | 85.8054 % |
| Concentration per Run 2 | 0.5408 ppm | 85.5383 % | 101.6358 % | 74.2800 % | 83.0809 % | 99.6578 % | 86.4223 % |
| Concentration per Run 3 | 0.5427 ppm | 85.5358 % | 99.9435 % | 74.3399 % | 83.2067 % | 97.6840 % | 85.9178 % |
| Concentration RSD | 0.4 % | 0.2 % | 2.1 % | 0.6 % | 0.5 % | 1.9 % | 0.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2040264-4 WG2040264
Analysis started at: 3/14/2025 3:48:41 PM
Rack 1
Vial 42
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0318 ppm | 0.0326 ppm | 0.0010 ppm | 0.0217 ppm | 0.0382 ppm | 0.0000 ppm | 1.5798 ppm |
| Concentration per Run 1 | 0.0318 ppm | 0.0318 ppm | 0.0009 ppm | 0.0226 ppm | 0.0382 ppm | 0.0000 ppm | 1.5857 ppm |
| Concentration per Run 2 | 0.0321 ppm | 0.0302 ppm | 0.0015 ppm | 0.0213 ppm | 0.0380 ppm | -0.0001 ppm | 1.5734 ppm |
| Concentration per Run 3 | 0.0315 ppm | 0.0357 ppm | 0.0006 ppm | 0.0214 ppm | 0.0384 ppm | 0.0000 ppm | 1.5802 ppm |
| Concentration RSD | 1.0 % | 8.7 % | 44.3 % | 3.3 % | 0.5 % | 147.7 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0009 ppm | 0.0001 ppm | 0.0020 ppm | 0.0207 ppm | 1.6549 ppm | 0.0061 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0009 ppm | 0.0000 ppm | 0.0023 ppm | 0.0209 ppm | 1.6809 ppm | 0.0062 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0007 ppm | 0.0000 ppm | 0.0018 ppm | 0.0213 ppm | 1.6597 ppm | 0.0058 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0010 ppm | 0.0002 ppm | 0.0018 ppm | 0.0198 ppm | 1.6240 ppm | 0.0063 ppm |
| Concentration RSD | 402.6 % | 16.7 % | 193.0 % | 14.7 % | 3.8 % | 1.7 % | 4.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3959 ppm | 0.1318 ppm | 0.0092 ppm | 1,050.3246 [SIC 500] | 0.0052 ppm | -0.0002 ppm | 0.0024 ppm |
| Concentration per Run 1 | 0.3971 ppm | 0.1318 ppm | 0.0091 ppm | 1,045.3459 ppm | 0.0048 ppm | 0.0004 ppm | 0.0020 ppm |
| Concentration per Run 2 | 0.3971 ppm | 0.1318 ppm | 0.0093 ppm | 1,052.2637 ppm | 0.0055 ppm | -0.0007 ppm | 0.0020 ppm |
| Concentration per Run 3 | 0.3935 ppm | 0.1318 ppm | 0.0092 ppm | 1,053.3644 ppm | 0.0053 ppm | -0.0003 ppm | 0.0030 ppm |
| Concentration RSD | 0.5 % | 0.0 % | 1.0 % | 0.4 % | 6.7 % | 248.3 % | 25.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0279 ppm | 0.3454 ppm | 0.4522 ppm | 0.0192 ppm | 0.0001 ppm | -0.0010 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0270 ppm | 0.3422 ppm | 0.4525 ppm | 0.0192 ppm | 0.0002 ppm | -0.0030 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0268 ppm | 0.3434 ppm | 0.4498 ppm | 0.0190 ppm | 0.0001 ppm | 0.0007 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0299 ppm | 0.3507 ppm | 0.4543 ppm | 0.0192 ppm | -0.0001 ppm | -0.0008 ppm | 0.0002 ppm |
| Concentration RSD | 6.1 % | 1.3 % | 0.5 % | 0.6 % | 230.8 % | 185.1 % | 68.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0041 ppm | 84.5396 % | 95.7584 % | 72.7418 % | 83.2271 % | 94.5712 % | 85.3210 % |
| Concentration per Run 1 | 0.0043 ppm | 84.7152 % | 96.2019 % | 75.0640 % | 83.9287 % | 95.2702 % | 88.2055 % |
| Concentration per Run 2 | 0.0039 ppm | 84.4795 % | 96.2492 % | 69.9313 % | 83.0284 % | 94.9073 % | 82.1291 % |
| Concentration per Run 3 | 0.0039 ppm | 84.4242 % | 94.8241 % | 73.2302 % | 82.7243 % | 93.5363 % | 85.6284 % |
| Concentration RSD | 5.9 % | 0.2 % | 0.8 % | 3.6 % | 0.8 % | 1.0 % | 3.6 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2040264-5 WG2040264
Analysis started at: 3/14/2025 3:53:07 PM
Rack 1
Vial 43
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0668 ppm | 2.0635 ppm | 0.1430 ppm | 1.0014 ppm | 2.0340 ppm | 0.0503 ppm | 11.5615 ppm |
| Concentration per Run 1 | 0.0557 ppm | 2.0669 ppm | 0.1456 ppm | 1.0073 ppm | 2.0293 ppm | 0.0501 ppm | 11.4512 ppm |
| Concentration per Run 2 | 0.0542 ppm | 2.0804 ppm | 0.1421 ppm | 0.9953 ppm | 2.0506 ppm | 0.0508 ppm | 11.6924 ppm |
| Concentration per Run 3 | 0.0903 ppm | 2.0431 ppm | 0.1412 ppm | 1.0014 ppm | 2.0220 ppm | 0.0499 ppm | 11.5407 ppm |
| Concentration RSD | 30.6 % | 0.9 % | 1.6 % | 0.6 % | 0.7 % | 0.9 % | 1.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0562 ppm | 0.4839 ppm | 0.2060 ppm | 0.2591 ppm | 1.0095 ppm | 12.5841 ppm | 0.0057 ppm |
| Concentration per Run 1 | 0.0566 ppm | 0.4915 ppm | 0.2084 ppm | 0.2618 ppm | 1.0077 ppm | 12.6067 ppm | 0.0054 ppm |
| Concentration per Run 2 | 0.0559 ppm | 0.4848 ppm | 0.2047 ppm | 0.2579 ppm | 1.0131 ppm | 12.6955 ppm | 0.0064 ppm |
| Concentration per Run 3 | 0.0562 ppm | 0.4753 ppm | 0.2050 ppm | 0.2575 ppm | 1.0077 ppm | 12.4500 ppm | 0.0054 ppm |
| Concentration RSD | 0.6 % | 1.7 % | 1.0 % | 0.9 % | 0.3 % | 1.0 % | 9.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.3256 ppm | 0.6173 ppm | 0.8990 ppm | 1,011.3836 [SIC 500] | 0.5127 ppm | 0.5769 ppm | 0.3606 ppm |
| Concentration per Run 1 | 10.4416 ppm | 0.6142 ppm | 0.8979 ppm | 1,012.9083 ppm | 0.5200 ppm | 0.5873 ppm | 0.3569 ppm |
| Concentration per Run 2 | 10.2597 ppm | 0.6233 ppm | 0.8937 ppm | 1,017.1599 ppm | 0.5062 ppm | 0.5744 ppm | 0.3678 ppm |
| Concentration per Run 3 | 10.2756 ppm | 0.6144 ppm | 0.9052 ppm | 1,004.0828 ppm | 0.5120 ppm | 0.5689 ppm | 0.3572 ppm |
| Concentration RSD | 1.0 % | 0.8 % | 0.6 % | 0.7 % | 1.4 % | 1.6 % | 1.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1645 ppm | 1.2521 ppm | 1.4010 ppm | 1.0406 ppm | 1.0582 ppm | 0.1182 ppm | 0.5385 ppm |
| Concentration per Run 1 | 0.1664 ppm | 1.2676 ppm | 1.4047 ppm | 1.0359 ppm | 1.0710 ppm | 0.1209 ppm | 0.5441 ppm |
| Concentration per Run 2 | 0.1639 ppm | 1.2541 ppm | 1.3928 ppm | 1.0513 ppm | 1.0511 ppm | 0.1189 ppm | 0.5366 ppm |
| Concentration per Run 3 | 0.1632 ppm | 1.2345 ppm | 1.4055 ppm | 1.0345 ppm | 1.0524 ppm | 0.1148 ppm | 0.5348 ppm |
| Concentration RSD | 1.0 % | 1.3 % | 0.5 % | 0.9 % | 1.0 % | 2.7 % | 0.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5505 ppm | 87.4025 % | 107.0498 % | 74.3004 % | 85.5596 % | 103.7860 % | 85.6489 % |
| Concentration per Run 1 | 0.5552 ppm | 86.7232 % | 109.3695 % | 73.0771 % | 84.2906 % | 105.7614 % | 84.1513 % |
| Concentration per Run 2 | 0.5467 ppm | 87.6303 % | 105.6931 % | 74.8384 % | 85.2265 % | 102.9188 % | 86.5427 % |
| Concentration per Run 3 | 0.5495 ppm | 87.8541 % | 106.0869 % | 74.9859 % | 87.1617 % | 102.6779 % | 86.2526 % |
| Concentration RSD | 0.8 % | 0.7 % | 1.9 % | 1.4 % | 1.7 % | 1.7 % | 1.5 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2040264-6D5 WG2040264
Analysis started at: 3/14/2025 3:57:32 PM
Rack 1
Vial 44
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0061 ppm | 0.0162 ppm | 0.0007 ppm | 0.0047 ppm | 0.0075 ppm | 0.0000 ppm | 0.3242 ppm |
| Concentration per Run 1 | 0.0062 ppm | 0.0133 ppm | 0.0014 ppm | 0.0028 ppm | 0.0076 ppm | 0.0000 ppm | 0.3249 ppm |
| Concentration per Run 2 | 0.0057 ppm | 0.0154 ppm | 0.0001 ppm | 0.0050 ppm | 0.0074 ppm | 0.0000 ppm | 0.3228 ppm |
| Concentration per Run 3 | 0.0064 ppm | 0.0198 ppm | 0.0008 ppm | 0.0064 ppm | 0.0075 ppm | 0.0000 ppm | 0.3248 ppm |
| Concentration RSD | 5.6 % | 20.5 % | 91.6 % | 37.8 % | 1.1 % | 319.0 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0005 ppm | -0.0002 ppm | 0.0006 ppm | 0.0063 ppm | 0.3637 ppm | 0.0024 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0001 ppm | -0.0005 ppm | 0.0007 ppm | 0.0066 ppm | 0.3658 ppm | 0.0031 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0005 ppm | 0.0000 ppm | 0.0004 ppm | 0.0064 ppm | 0.3442 ppm | 0.0017 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0008 ppm | -0.0002 ppm | 0.0006 ppm | 0.0057 ppm | 0.3809 ppm | 0.0023 ppm |
| Concentration RSD | 20.7 % | 70.7 % | 113.4 % | 25.6 % | 7.4 % | 5.1 % | 29.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0792 ppm | 0.0258 ppm | 0.0115 ppm | 214.2951 ppm | 0.0017 ppm | -0.0001 ppm | 0.0132 ppm |
| Concentration per Run 1 | 0.0771 ppm | 0.0258 ppm | 0.0109 ppm | 213.7147 ppm | 0.0021 ppm | -0.0008 ppm | 0.0125 ppm |
| Concentration per Run 2 | 0.0795 ppm | 0.0257 ppm | 0.0120 ppm | 215.0147 ppm | 0.0016 ppm | 0.0015 ppm | 0.0132 ppm |
| Concentration per Run 3 | 0.0811 ppm | 0.0259 ppm | 0.0118 ppm | 214.1560 ppm | 0.0013 ppm | -0.0009 ppm | 0.0140 ppm |
| Concentration RSD | 2.5 % | 0.6 % | 5.1 % | 0.3 % | 23.4 % | 1,551.8 % | 5.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0038 ppm | 0.0637 ppm | 0.0878 ppm | 0.0037 ppm | 0.0004 ppm | -0.0013 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0645 ppm | 0.0893 ppm | 0.0037 ppm | 0.0003 ppm | -0.0009 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0054 ppm | 0.0633 ppm | 0.0871 ppm | 0.0038 ppm | 0.0004 ppm | -0.0007 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0052 ppm | 0.0633 ppm | 0.0868 ppm | 0.0037 ppm | 0.0006 ppm | -0.0022 ppm | 0.0001 ppm |
| Concentration RSD | 65.6 % | 1.1 % | 1.6 % | 1.4 % | 27.5 % | 64.5 % | 79.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 95.6928 % | 101.4488 % | 82.7598 % | 91.0428 % | 100.1423 % | 89.9360 % |
| Concentration per Run 1 | 0.0015 ppm | 95.1202 % | 103.8110 % | 86.9323 % | 90.4687 % | 102.6420 % | 92.7165 % |
| Concentration per Run 2 | 0.0012 ppm | 95.4007 % | 100.5521 % | 78.3567 % | 90.9234 % | 99.3131 % | 85.5753 % |
| Concentration per Run 3 | 0.0013 ppm | 96.5576 % | 99.9834 % | 82.9904 % | 91.7363 % | 98.4717 % | 91.5162 % |
| Concentration RSD | 11.7 % | 0.8 % | 2.0 % | 5.2 % | 0.7 % | 2.2 % | 4.3 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: CCV
Analysis started at: 3/14/2025 4:01:58 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5073 ppm | 0.5109 ppm | 0.4805 ppm | 0.5099 ppm | 0.5144 ppm | 0.5142 ppm | 0.4968 ppm |
| Concentration per Run 1 | 0.5212 ppm | 0.5133 ppm | 0.4794 ppm | 0.5242 ppm | 0.5142 ppm | 0.5182 ppm | 0.4997 ppm |
| Concentration per Run 2 | 0.5016 ppm | 0.5066 ppm | 0.4793 ppm | 0.5036 ppm | 0.5167 ppm | 0.5129 ppm | 0.4974 ppm |
| Concentration per Run 3 | 0.4991 ppm | 0.5129 ppm | 0.4827 ppm | 0.5018 ppm | 0.5122 ppm | 0.5114 ppm | 0.4934 ppm |
| Recovery Percentage 1 | 101.463 % | 102.179 % | 96.090 % | 101.975 % | 102.870 % | 102.832 % | 99.370 % |
| Concentration RSD | 2.4 % | 0.7 % | 0.4 % | 2.4 % | 0.4 % | 0.7 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5180 ppm | 0.5316 ppm | 0.5137 ppm | 0.5192 ppm | 0.5115 ppm | 5.4416 ppm | 0.5493 ppm |
| Concentration per Run 1 | 0.5281 ppm | 0.5473 ppm | 0.5247 ppm | 0.5327 ppm | 0.5155 ppm | 5.4979 ppm | 0.5573 ppm |
| Concentration per Run 2 | 0.5154 ppm | 0.5252 ppm | 0.5115 ppm | 0.5107 ppm | 0.5118 ppm | 5.3880 ppm | 0.5418 ppm |
| Concentration per Run 3 | 0.5104 ppm | 0.5221 ppm | 0.5050 ppm | 0.5143 ppm | 0.5073 ppm | 5.4388 ppm | 0.5488 ppm |
| Recovery Percentage 1 | 103.595 % | 106.314 % | 102.743 % | 103.847 % | 102.301 % | 108.832 % | 109.863 % |
| Concentration RSD | 1.8 % | 2.6 % | 2.0 % | 2.3 % | 0.8 % | 1.0 % | 1.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5232 ppm | 0.4885 ppm | 0.5198 ppm | 10.7211 ppm | 0.5271 ppm | 0.5058 ppm | 0.5431 ppm |
| Concentration per Run 1 | 0.5334 ppm | 0.4927 ppm | 0.5267 ppm | 10.6937 ppm | 0.5396 ppm | 0.5090 ppm | 0.5584 ppm |
| Concentration per Run 2 | 0.5217 ppm | 0.4873 ppm | 0.5156 ppm | 10.6737 ppm | 0.5228 ppm | 0.5022 ppm | 0.5404 ppm |
| Concentration per Run 3 | 0.5144 ppm | 0.4855 ppm | 0.5172 ppm | 10.7958 ppm | 0.5189 ppm | 0.5061 ppm | 0.5304 ppm |
| Recovery Percentage 1 | 104.635 % | 97.699 % | 103.967 % | 107.211 % | 105.417 % | 101.152 % | 108.613 % |
| Concentration RSD | 1.8 % | 0.8 % | 1.2 % | 0.6 % | 2.1 % | 0.7 % | 2.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4888 ppm | 5.8167 ppm | 0.5207 ppm | 0.5227 ppm | 0.5198 ppm | 0.5078 ppm | 0.5193 ppm |
| Concentration per Run 1 | 0.4921 ppm | 6.0111 ppm | 0.5310 ppm | 0.5235 ppm | 0.5322 ppm | 0.5093 ppm | 0.5308 ppm |
| Concentration per Run 2 | 0.4865 ppm | 5.7364 ppm | 0.5205 ppm | 0.5230 ppm | 0.5156 ppm | 0.5054 ppm | 0.5142 ppm |
| Concentration per Run 3 | 0.4878 ppm | 5.7026 ppm | 0.5105 ppm | 0.5216 ppm | 0.5117 ppm | 0.5086 ppm | 0.5130 ppm |
| Recovery Percentage 1 | 97.762 % | 110.794 % | 104.132 % | 104.539 % | 103.968 % | 101.557 % | 103.863 % |
| Concentration RSD | 0.6 % | 2.9 % | 2.0 % | 0.2 % | 2.1 % | 0.4 % | 1.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5152 ppm | 101.5546 % | 118.2269 % | 96.0370 % | 95.2591 % | 115.2372 % | 97.2035 % |
| Concentration per Run 1 | 0.5255 ppm | 100.3922 % | 115.3581 % | 95.4701 % | 93.3262 % | 112.6325 % | 96.6275 % |
| Concentration per Run 2 | 0.5144 ppm | 101.8889 % | 119.2059 % | 96.2774 % | 95.9743 % | 116.0327 % | 97.3241 % |
| Concentration per Run 3 | 0.5057 ppm | 102.3827 % | 120.1166 % | 96.3635 % | 96.4767 % | 117.0464 % | 97.6588 % |
| Recovery Percentage 1 | 103.046 % | | | | | | |
| Concentration RSD | 1.9 % | 1.0 % | 2.1 % | 0.5 % | 1.8 % | 2.0 % | 0.5 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: CCB
Analysis started at: 3/14/2025 4:06:25 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0102 ppm | 0.0008 ppm | 0.0003 ppm | 0.0002 ppm | 0.0000 ppm | 0.0011 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0083 ppm | 0.0008 ppm | 0.0003 ppm | 0.0002 ppm | 0.0000 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0074 ppm | 0.0009 ppm | 0.0005 ppm | 0.0001 ppm | 0.0000 ppm | -0.0013 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0148 ppm | 0.0008 ppm | -0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0046 ppm |
| Recovery Percentage 1 | 11.780 % | 10.167 % | 16.685 % | 0.856 % | 1.525 % | 0.460 % | 1.087 % |
| Concentration RSD | 21.0 % | 39.7 % | 7.0 % | 113.6 % | 39.8 % | 42.5 % | 288.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0003 ppm | -0.0003 ppm | 0.0001 ppm | 0.0023 ppm | 0.0251 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0003 ppm | -0.0001 ppm | 0.0000 ppm | 0.0021 ppm | 0.0343 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0006 ppm | -0.0002 ppm | 0.0002 ppm | 0.0025 ppm | 0.0282 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0001 ppm | -0.0005 ppm | 0.0000 ppm | 0.0025 ppm | 0.0128 ppm | -0.0004 ppm |
| Recovery Percentage 1 | 3.186 % | 2.725 % | -2.532 % | 0.888 % | 4.697 % | 1.004 % | -0.805 % |
| Concentration RSD | 79.3 % | 126.5 % | 85.4 % | 132.1 % | 8.7 % | 44.2 % | 492.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 0.0000 ppm | 0.0037 ppm | 0.0702 ppm | 0.0004 ppm | -0.0007 ppm | 0.0018 ppm |
| Concentration per Run 1 | -0.0007 ppm | -0.0001 ppm | 0.0033 ppm | 0.0737 ppm | 0.0005 ppm | 0.0003 ppm | 0.0034 ppm |
| Concentration per Run 2 | -0.0012 ppm | 0.0001 ppm | 0.0040 ppm | 0.0696 ppm | 0.0005 ppm | -0.0014 ppm | 0.0021 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0001 ppm | 0.0037 ppm | 0.0674 ppm | 0.0001 ppm | -0.0010 ppm | -0.0003 ppm |
| Recovery Percentage 1 | -0.380 % | 0.179 % | 7.340 % | 3.512 % | 1.561 % | -6.834 % | 3.505 % |
| Concentration RSD | 281.6 % | 443.0 % | 9.2 % | 4.5 % | 61.9 % | 131.0 % | 107.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0060 ppm | 0.0008 ppm | 0.0001 ppm | 0.0000 ppm | -0.0014 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0052 ppm | 0.0008 ppm | 0.0000 ppm | 0.0001 ppm | -0.0015 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0005 ppm | -0.0048 ppm | 0.0009 ppm | 0.0001 ppm | 0.0001 ppm | -0.0018 ppm | 0.0002 ppm |
| Concentration per Run 3 | -0.0003 ppm | -0.0081 ppm | 0.0009 ppm | 0.0001 ppm | -0.0001 ppm | -0.0009 ppm | 0.0001 ppm |
| Recovery Percentage 1 | 1.341 % | -1.210 % | 1.683 % | 0.505 % | 0.378 % | -7.030 % | 0.699 % |
| Concentration RSD | 305.9 % | 29.6 % | 4.4 % | 52.9 % | 307.8 % | 35.3 % | 197.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 100.6259 % | 116.4431 % | 94.9478 % | 99.3942 % | 116.0512 % | 97.4637 % |
| Concentration per Run 1 | 0.0003 ppm | 98.6287 % | 115.6796 % | 93.3456 % | 97.4810 % | 115.4209 % | 95.1760 % |
| Concentration per Run 2 | 0.0005 ppm | 99.8123 % | 116.2658 % | 95.0567 % | 98.6899 % | 116.0404 % | 97.8721 % |
| Concentration per Run 3 | 0.0004 ppm | 103.4366 % | 117.3839 % | 96.4411 % | 102.0117 % | 116.6923 % | 99.3431 % |
| Recovery Percentage 1 | 8.397 % | | | | | | |
| Concentration RSD | 25.1 % | 2.5 % | 0.7 % | 1.6 % | 2.4 % | 0.5 % | 2.2 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: zWG2040264-5 WG2040264
Analysis started at: 3/14/2025 4:14:02 PM
Rack 1
Vial 43
Comment rr Ag

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0606 ppm | 2.0783 ppm | 0.1418 ppm | 1.0262 ppm | 2.0576 ppm | 0.0510 ppm | 11.7928 ppm |
| Concentration per Run 1 | 0.0592 ppm | 2.0999 ppm | 0.1470 ppm | 1.0293 ppm | 2.0632 ppm | 0.0513 ppm | 11.8061 ppm |
| Concentration per Run 2 | 0.0657 ppm | 2.0727 ppm | 0.1401 ppm | 1.0286 ppm | 2.0449 ppm | 0.0509 ppm | 11.8342 ppm |
| Concentration per Run 3 | 0.0569 ppm | 2.0622 ppm | 0.1383 ppm | 1.0208 ppm | 2.0647 ppm | 0.0509 ppm | 11.7383 ppm |
| Concentration RSD | 7.5 % | 0.9 % | 3.3 % | 0.5 % | 0.5 % | 0.5 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0567 ppm | 0.4962 ppm | 0.2080 ppm | 0.2661 ppm | 1.0323 ppm | 12.5041 ppm | 0.0061 ppm |
| Concentration per Run 1 | 0.0571 ppm | 0.4956 ppm | 0.2096 ppm | 0.2689 ppm | 1.0296 ppm | 12.7137 ppm | 0.0056 ppm |
| Concentration per Run 2 | 0.0567 ppm | 0.4991 ppm | 0.2087 ppm | 0.2666 ppm | 1.0340 ppm | 12.4242 ppm | 0.0061 ppm |
| Concentration per Run 3 | 0.0562 ppm | 0.4939 ppm | 0.2055 ppm | 0.2627 ppm | 1.0334 ppm | 12.3745 ppm | 0.0066 ppm |
| Concentration RSD | 0.8 % | 0.5 % | 1.0 % | 1.2 % | 0.2 % | 1.5 % | 8.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.5131 ppm | 0.6274 ppm | 0.9129 ppm | 1,010.0782 [SIC 500] | 0.5180 ppm | 0.5603 ppm | 0.3868 ppm |
| Concentration per Run 1 | 10.5866 ppm | 0.6293 ppm | 0.9055 ppm | 1,011.5896 ppm | 0.5201 ppm | 0.5754 ppm | 0.3817 ppm |
| Concentration per Run 2 | 10.5765 ppm | 0.6277 ppm | 0.9136 ppm | 1,006.5096 ppm | 0.5209 ppm | 0.5567 ppm | 0.3873 ppm |
| Concentration per Run 3 | 10.3761 ppm | 0.6251 ppm | 0.9196 ppm | 1,012.1355 ppm | 0.5130 ppm | 0.5487 ppm | 0.3914 ppm |
| Concentration RSD | 1.1 % | 0.3 % | 0.8 % | 0.3 % | 0.8 % | 2.4 % | 1.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1639 ppm | 1.2961 ppm | 1.4193 ppm | 1.0481 ppm | 1.0635 ppm | 0.1144 ppm | 0.5421 ppm |
| Concentration per Run 1 | 0.1664 ppm | 1.3121 ppm | 1.4310 ppm | 1.0515 ppm | 1.0731 ppm | 0.1179 ppm | 0.5468 ppm |
| Concentration per Run 2 | 0.1640 ppm | 1.2941 ppm | 1.4167 ppm | 1.0443 ppm | 1.0662 ppm | 0.1129 ppm | 0.5437 ppm |
| Concentration per Run 3 | 0.1612 ppm | 1.2822 ppm | 1.4103 ppm | 1.0485 ppm | 1.0511 ppm | 0.1124 ppm | 0.5358 ppm |
| Concentration RSD | 1.6 % | 1.2 % | 0.7 % | 0.3 % | 1.1 % | 2.7 % | 1.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5570 ppm | 85.7051 % | 100.8958 % | 75.7997 % | 82.5124 % | 98.3115 % | 87.3010 % |
| Concentration per Run 1 | 0.5600 ppm | 85.3884 % | 102.3716 % | 73.5028 % | 82.4262 % | 99.7164 % | 85.3430 % |
| Concentration per Run 2 | 0.5584 ppm | 84.8832 % | 100.0419 % | 76.7292 % | 81.6291 % | 97.6931 % | 88.7453 % |
| Concentration per Run 3 | 0.5525 ppm | 86.8438 % | 100.2739 % | 77.1671 % | 83.4819 % | 97.5250 % | 87.8146 % |
| Concentration RSD | 0.7 % | 1.2 % | 1.3 % | 2.6 % | 1.1 % | 1.2 % | 2.0 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2512986-01 WG2040264
Analysis started at: 3/14/2025 4:18:45 PM
Rack 1
Vial 54
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.7912 ppm | 0.0003 ppm | 0.0281 ppm | 0.0112 ppm | 0.0001 ppm | 3.4580 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.7938 ppm | 0.0007 ppm | 0.0291 ppm | 0.0113 ppm | 0.0001 ppm | 3.4601 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.7900 ppm | -0.0002 ppm | 0.0271 ppm | 0.0111 ppm | 0.0001 ppm | 3.4427 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.7898 ppm | 0.0006 ppm | 0.0281 ppm | 0.0112 ppm | 0.0001 ppm | 3.4711 ppm |
| Concentration RSD | 24.3 % | 0.3 % | 144.2 % | 3.6 % | 1.1 % | 12.8 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0016 ppm | 0.0015 ppm | 0.3334 ppm | 1.2431 ppm | 1.1693 ppm | 0.0011 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0019 ppm | 0.0014 ppm | 0.3432 ppm | 1.2454 ppm | 1.1781 ppm | 0.0013 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0015 ppm | 0.0016 ppm | 0.3212 ppm | 1.2335 ppm | 1.1754 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0016 ppm | 0.0014 ppm | 0.3358 ppm | 1.2506 ppm | 1.1544 ppm | 0.0015 ppm |
| Concentration RSD | 41.5 % | 11.9 % | 10.3 % | 3.3 % | 0.7 % | 1.1 % | 58.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7441 ppm | 0.0618 ppm | 0.0099 ppm | 10.7186 ppm | 0.0031 ppm | 0.0176 ppm | 0.0161 ppm |
| Concentration per Run 1 | 0.7655 ppm | 0.0614 ppm | 0.0103 ppm | 10.6443 ppm | 0.0041 ppm | 0.0173 ppm | 0.0169 ppm |
| Concentration per Run 2 | 0.7185 ppm | 0.0618 ppm | 0.0092 ppm | 10.6940 ppm | 0.0022 ppm | 0.0171 ppm | 0.0153 ppm |
| Concentration per Run 3 | 0.7482 ppm | 0.0621 ppm | 0.0102 ppm | 10.8175 ppm | 0.0031 ppm | 0.0184 ppm | 0.0159 ppm |
| Concentration RSD | 3.2 % | 0.6 % | 5.8 % | 0.8 % | 29.3 % | 3.9 % | 5.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 1.5218 ppm | 0.0055 ppm | 0.0141 ppm | 0.0253 ppm | -0.0015 ppm | 0.0035 ppm |
| Concentration per Run 1 | -0.0009 ppm | 1.5830 ppm | 0.0062 ppm | 0.0140 ppm | 0.0260 ppm | -0.0009 ppm | 0.0038 ppm |
| Concentration per Run 2 | 0.0010 ppm | 1.4453 ppm | 0.0056 ppm | 0.0140 ppm | 0.0247 ppm | -0.0019 ppm | 0.0033 ppm |
| Concentration per Run 3 | 0.0008 ppm | 1.5369 ppm | 0.0048 ppm | 0.0143 ppm | 0.0253 ppm | -0.0018 ppm | 0.0033 ppm |
| Concentration RSD | 332.1 % | 4.6 % | 12.8 % | 1.1 % | 2.5 % | 34.9 % | 8.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2551 ppm | 102.4145 % | 121.1098 % | 99.2096 % | 101.1563 % | 118.8654 % | 99.9774 % |
| Concentration per Run 1 | 0.2625 ppm | 99.2700 % | 120.5890 % | 98.7757 % | 98.7580 % | 118.4681 % | 99.8759 % |
| Concentration per Run 2 | 0.2466 ppm | 105.3638 % | 121.7372 % | 99.4158 % | 104.6866 % | 118.9098 % | 100.3489 % |
| Concentration per Run 3 | 0.2562 ppm | 102.6097 % | 121.0032 % | 99.4374 % | 100.0243 % | 119.2184 % | 99.7074 % |
| Concentration RSD | 3.1 % | 3.0 % | 0.5 % | 0.4 % | 3.1 % | 0.3 % | 0.3 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2512988-01 WG2040264
Analysis started at: 3/14/2025 4:23:11 PM
Rack 1
Vial 55
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.2319 ppm | -0.0009 ppm | 0.0050 ppm | 0.0084 ppm | 0.0000 ppm | 0.3665 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.2293 ppm | -0.0009 ppm | 0.0045 ppm | 0.0084 ppm | 0.0000 ppm | 0.3659 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.2324 ppm | -0.0021 ppm | 0.0052 ppm | 0.0084 ppm | 0.0000 ppm | 0.3667 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.2339 ppm | 0.0002 ppm | 0.0054 ppm | 0.0084 ppm | 0.0000 ppm | 0.3670 ppm |
| Concentration RSD | 59.4 % | 1.0 % | 123.0 % | 9.4 % | 0.3 % | 58.0 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0002 ppm | 0.0003 ppm | 0.0196 ppm | 0.2682 ppm | 0.1623 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0001 ppm | 0.0001 ppm | 0.0196 ppm | 0.2670 ppm | 0.1649 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0005 ppm | 0.0004 ppm | 0.0197 ppm | 0.2667 ppm | 0.1626 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0003 ppm | 0.0003 ppm | 0.0196 ppm | 0.2709 ppm | 0.1595 ppm | -0.0002 ppm |
| Concentration RSD | 79.9 % | 145.5 % | 57.4 % | 0.2 % | 0.9 % | 1.7 % | 144.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2302 ppm | 0.0070 ppm | 0.0019 ppm | 1.7996 ppm | 0.0009 ppm | 0.0029 ppm | 0.0015 ppm |
| Concentration per Run 1 | 0.2294 ppm | 0.0068 ppm | 0.0017 ppm | 1.8135 ppm | 0.0005 ppm | 0.0033 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.2305 ppm | 0.0072 ppm | 0.0014 ppm | 1.7794 ppm | 0.0007 ppm | 0.0030 ppm | 0.0033 ppm |
| Concentration per Run 3 | 0.2308 ppm | 0.0070 ppm | 0.0026 ppm | 1.8059 ppm | 0.0015 ppm | 0.0024 ppm | 0.0003 ppm |
| Concentration RSD | 0.3 % | 3.0 % | 32.4 % | 1.0 % | 57.4 % | 15.1 % | 110.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.2765 ppm | 0.0142 ppm | 0.0016 ppm | 0.0155 ppm | -0.0009 ppm | 0.0005 ppm |
| Concentration per Run 1 | -0.0006 ppm | 0.2773 ppm | 0.0141 ppm | 0.0015 ppm | 0.0155 ppm | 0.0004 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0014 ppm | 0.2714 ppm | 0.0138 ppm | 0.0015 ppm | 0.0155 ppm | -0.0012 ppm | 0.0005 ppm |
| Concentration per Run 3 | -0.0017 ppm | 0.2810 ppm | 0.0147 ppm | 0.0016 ppm | 0.0156 ppm | -0.0019 ppm | 0.0005 ppm |
| Concentration RSD | 594.3 % | 1.8 % | 3.0 % | 4.0 % | 0.3 % | 127.3 % | 15.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0851 ppm | 101.7729 % | 118.5298 % | 99.2404 % | 99.7699 % | 117.8931 % | 100.4326 % |
| Concentration per Run 1 | 0.0849 ppm | 102.0263 % | 119.8083 % | 99.1431 % | 100.3406 % | 118.4758 % | 100.4840 % |
| Concentration per Run 2 | 0.0856 ppm | 101.2401 % | 117.8479 % | 98.7170 % | 99.5797 % | 117.0604 % | 100.1688 % |
| Concentration per Run 3 | 0.0847 ppm | 102.0524 % | 117.9332 % | 99.8610 % | 99.3894 % | 118.1432 % | 100.6451 % |
| Concentration RSD | 0.5 % | 0.5 % | 0.9 % | 0.6 % | 0.5 % | 0.6 % | 0.2 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2512988-02 WG2040264
Analysis started at: 3/14/2025 4:27:38 PM
Rack 1
Vial 56
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.4043 ppm | -0.0001 ppm | 0.0056 ppm | 0.0654 ppm | 0.0001 ppm | 6.1267 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.4109 ppm | -0.0012 ppm | 0.0064 ppm | 0.0659 ppm | 0.0001 ppm | 6.1677 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.4046 ppm | 0.0018 ppm | 0.0062 ppm | 0.0653 ppm | 0.0001 ppm | 6.1205 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.3975 ppm | -0.0009 ppm | 0.0044 ppm | 0.0651 ppm | 0.0001 ppm | 6.0918 ppm |
| Concentration RSD | 59.3 % | 1.7 % | 1,861.7 % | 20.0 % | 0.7 % | 7.7 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 0.0013 ppm | 0.0007 ppm | 0.0315 ppm | 0.4706 ppm | 0.9468 ppm | 0.0025 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.0010 ppm | 0.0006 ppm | 0.0313 ppm | 0.4759 ppm | 0.9616 ppm | 0.0027 ppm |
| Concentration per Run 2 | 0.0013 ppm | 0.0016 ppm | 0.0011 ppm | 0.0324 ppm | 0.4690 ppm | 0.9431 ppm | 0.0022 ppm |
| Concentration per Run 3 | 0.0012 ppm | 0.0012 ppm | 0.0004 ppm | 0.0309 ppm | 0.4669 ppm | 0.9356 ppm | 0.0027 ppm |
| Concentration RSD | 3.9 % | 22.6 % | 50.9 % | 2.4 % | 1.0 % | 1.4 % | 10.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0083 ppm | 0.0562 ppm | 0.0007 ppm | 29.5127 ppm | 0.0043 ppm | 0.0031 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.9988 ppm | 0.0567 ppm | 0.0007 ppm | 29.6419 ppm | 0.0046 ppm | 0.0039 ppm | -0.0001 ppm |
| Concentration per Run 2 | 1.0453 ppm | 0.0562 ppm | 0.0005 ppm | 29.4391 ppm | 0.0044 ppm | 0.0031 ppm | -0.0021 ppm |
| Concentration per Run 3 | 0.9807 ppm | 0.0559 ppm | 0.0009 ppm | 29.4572 ppm | 0.0039 ppm | 0.0022 ppm | 0.0027 ppm |
| Concentration RSD | 3.3 % | 0.7 % | 25.4 % | 0.4 % | 7.8 % | 26.7 % | 1,330.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0011 ppm | 4.3086 ppm | 0.0011 ppm | 0.0572 ppm | 0.0227 ppm | -0.0018 ppm | 0.0012 ppm |
| Concentration per Run 1 | -0.0018 ppm | 4.2681 ppm | 0.0021 ppm | 0.0577 ppm | 0.0226 ppm | -0.0018 ppm | 0.0013 ppm |
| Concentration per Run 2 | -0.0019 ppm | 4.4133 ppm | 0.0008 ppm | 0.0571 ppm | 0.0234 ppm | -0.0015 ppm | 0.0012 ppm |
| Concentration per Run 3 | 0.0004 ppm | 4.2444 ppm | 0.0004 ppm | 0.0568 ppm | 0.0221 ppm | -0.0022 ppm | 0.0010 ppm |
| Concentration RSD | 114.0 % | 2.1 % | 81.2 % | 0.8 % | 2.9 % | 19.7 % | 12.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2267 ppm | 98.0803 % | 117.6900 % | 95.2791 % | 97.0883 % | 117.5730 % | 98.5683 % |
| Concentration per Run 1 | 0.2253 ppm | 99.0875 % | 116.6011 % | 94.2266 % | 98.3901 % | 117.6071 % | 97.8029 % |
| Concentration per Run 2 | 0.2363 ppm | 94.6281 % | 118.0266 % | 96.1599 % | 94.6206 % | 117.2300 % | 99.4704 % |
| Concentration per Run 3 | 0.2186 ppm | 100.5253 % | 118.4423 % | 95.4506 % | 98.2542 % | 117.8818 % | 98.4316 % |
| Concentration RSD | 3.9 % | 3.1 % | 0.8 % | 1.0 % | 2.2 % | 0.3 % | 0.9 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2512988-03 WG2040264
Analysis started at: 3/14/2025 4:32:05 PM
Rack 1
Vial 57
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 1.4242 ppm | 0.0010 ppm | 0.0090 ppm | 0.0214 ppm | 0.0000 ppm | 3.2865 ppm |
| Concentration per Run 1 | 0.0005 ppm | 1.4189 ppm | 0.0015 ppm | 0.0089 ppm | 0.0213 ppm | 0.0001 ppm | 3.2604 ppm |
| Concentration per Run 2 | 0.0004 ppm | 1.4159 ppm | 0.0002 ppm | 0.0092 ppm | 0.0211 ppm | 0.0000 ppm | 3.2847 ppm |
| Concentration per Run 3 | 0.0006 ppm | 1.4377 ppm | 0.0013 ppm | 0.0088 ppm | 0.0216 ppm | 0.0000 ppm | 3.3143 ppm |
| Concentration RSD | 15.4 % | 0.8 % | 67.2 % | 2.4 % | 1.2 % | 23.1 % | 0.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0013 ppm | 0.0019 ppm | 0.0342 ppm | 1.8564 ppm | 1.1170 ppm | 0.0021 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0016 ppm | 0.0019 ppm | 0.0339 ppm | 1.8497 ppm | 1.1244 ppm | 0.0030 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0009 ppm | 0.0019 ppm | 0.0345 ppm | 1.8389 ppm | 1.1102 ppm | 0.0025 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0014 ppm | 0.0020 ppm | 0.0342 ppm | 1.8806 ppm | 1.1165 ppm | 0.0010 ppm |
| Concentration RSD | 33.7 % | 28.0 % | 1.1 % | 0.9 % | 1.2 % | 0.6 % | 48.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.3232 ppm | 0.0677 ppm | 0.0002 ppm | 57.4407 ppm | 0.0027 ppm | 0.0080 ppm | 0.0009 ppm |
| Concentration per Run 1 | 1.3248 ppm | 0.0677 ppm | 0.0004 ppm | 57.0480 ppm | 0.0018 ppm | 0.0087 ppm | -0.0019 ppm |
| Concentration per Run 2 | 1.3251 ppm | 0.0673 ppm | 0.0002 ppm | 57.4751 ppm | 0.0028 ppm | 0.0084 ppm | 0.0007 ppm |
| Concentration per Run 3 | 1.3196 ppm | 0.0683 ppm | 0.0001 ppm | 57.7990 ppm | 0.0033 ppm | 0.0068 ppm | 0.0040 ppm |
| Concentration RSD | 0.2 % | 0.7 % | 58.7 % | 0.7 % | 28.3 % | 12.5 % | 318.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 1.6982 ppm | 0.0010 ppm | 0.0130 ppm | 0.0919 ppm | -0.0012 ppm | 0.0042 ppm |
| Concentration per Run 1 | -0.0023 ppm | 1.7037 ppm | 0.0015 ppm | 0.0129 ppm | 0.0908 ppm | -0.0020 ppm | 0.0043 ppm |
| Concentration per Run 2 | -0.0003 ppm | 1.6965 ppm | 0.0008 ppm | 0.0128 ppm | 0.0933 ppm | -0.0008 ppm | 0.0041 ppm |
| Concentration per Run 3 | 0.0006 ppm | 1.6944 ppm | 0.0006 ppm | 0.0132 ppm | 0.0916 ppm | -0.0007 ppm | 0.0042 ppm |
| Concentration RSD | 226.3 % | 0.3 % | 49.3 % | 1.5 % | 1.4 % | 62.3 % | 1.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3037 ppm | 100.3513 % | 119.5904 % | 94.3928 % | 98.0942 % | 117.8298 % | 98.5951 % |
| Concentration per Run 1 | 0.3050 ppm | 100.0998 % | 120.2225 % | 93.1566 % | 98.0118 % | 117.3440 % | 97.4308 % |
| Concentration per Run 2 | 0.3030 ppm | 100.3393 % | 119.4469 % | 93.7460 % | 98.3987 % | 117.8979 % | 97.8017 % |
| Concentration per Run 3 | 0.3030 ppm | 100.6148 % | 119.1018 % | 96.2757 % | 97.8721 % | 118.2476 % | 100.5528 % |
| Concentration RSD | 0.4 % | 0.3 % | 0.5 % | 1.8 % | 0.3 % | 0.4 % | 1.7 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2512983-01 WG2040264
Analysis started at: 3/14/2025 4:36:32 PM
Rack 1
Vial 45
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0106 ppm | 0.0330 ppm | 0.0007 ppm | 0.2633 ppm | 0.0057 ppm | 0.0000 ppm | 9.4369 ppm |
| Concentration per Run 1 | 0.0108 ppm | 0.0304 ppm | 0.0003 ppm | 0.2624 ppm | 0.0057 ppm | 0.0000 ppm | 9.3870 ppm |
| Concentration per Run 2 | 0.0106 ppm | 0.0338 ppm | 0.0000 ppm | 0.2584 ppm | 0.0059 ppm | 0.0000 ppm | 9.4718 ppm |
| Concentration per Run 3 | 0.0104 ppm | 0.0347 ppm | 0.0018 ppm | 0.2690 ppm | 0.0056 ppm | 0.0000 ppm | 9.4518 ppm |
| Concentration RSD | 1.6 % | 6.8 % | 147.1 % | 2.0 % | 2.5 % | 43.7 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0003 ppm | 0.0007 ppm | 1.1737 ppm | 0.1772 ppm | 12.0652 ppm | 0.0039 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0005 ppm | 0.0009 ppm | 1.1758 ppm | 0.1762 ppm | 11.9071 ppm | 0.0041 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0005 ppm | 0.0009 ppm | 1.1449 ppm | 0.1793 ppm | 12.1885 ppm | 0.0035 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0000 ppm | 0.0004 ppm | 1.2004 ppm | 0.1760 ppm | 12.1001 ppm | 0.0042 ppm |
| Concentration RSD | 244.7 % | 94.6 % | 43.8 % | 2.4 % | 1.0 % | 1.2 % | 9.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.4179 ppm | 0.0252 ppm | 0.0014 ppm | 230.7970 ppm | 0.0246 ppm | 0.0025 ppm | 0.0002 ppm |
| Concentration per Run 1 | 5.4500 ppm | 0.0254 ppm | 0.0014 ppm | 229.5798 ppm | 0.0242 ppm | 0.0030 ppm | 0.0014 ppm |
| Concentration per Run 2 | 5.2554 ppm | 0.0253 ppm | 0.0008 ppm | 233.2829 ppm | 0.0242 ppm | 0.0021 ppm | -0.0003 ppm |
| Concentration per Run 3 | 5.5482 ppm | 0.0249 ppm | 0.0021 ppm | 229.5284 ppm | 0.0253 ppm | 0.0026 ppm | -0.0005 ppm |
| Concentration RSD | 2.8 % | 1.0 % | 43.7 % | 0.9 % | 2.7 % | 17.7 % | 490.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0017 ppm | 17.8012 ppm | 0.0009 ppm | 0.0534 ppm | 0.0662 ppm | -0.0014 ppm | 0.0013 ppm |
| Concentration per Run 1 | 0.0015 ppm | 17.6436 ppm | 0.0008 ppm | 0.0532 ppm | 0.0662 ppm | -0.0020 ppm | 0.0011 ppm |
| Concentration per Run 2 | -0.0037 ppm | 17.2595 ppm | 0.0005 ppm | 0.0539 ppm | 0.0641 ppm | -0.0011 ppm | 0.0014 ppm |
| Concentration per Run 3 | -0.0029 ppm | 18.5006 ppm | 0.0015 ppm | 0.0532 ppm | 0.0681 ppm | -0.0012 ppm | 0.0013 ppm |
| Concentration RSD | 164.1 % | 3.6 % | 57.5 % | 0.8 % | 3.0 % | 35.5 % | 10.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.8612 ppm | 94.1007 % | 118.3503 % | 85.2590 % | 91.6346 % | 116.1057 % | 93.8646 % |
| Concentration per Run 1 | 0.8630 ppm | 93.1285 % | 118.7121 % | 84.2234 % | 91.5607 % | 116.9481 % | 93.2249 % |
| Concentration per Run 2 | 0.8339 ppm | 96.4883 % | 118.3044 % | 85.4442 % | 94.3599 % | 116.1085 % | 94.0839 % |
| Concentration per Run 3 | 0.8866 ppm | 92.6852 % | 118.0344 % | 86.1094 % | 88.9831 % | 115.2605 % | 94.2849 % |
| Concentration RSD | 3.1 % | 2.2 % | 0.3 % | 1.1 % | 2.9 % | 0.7 % | 0.6 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2040264-7 WG2040264
Analysis started at: 3/14/2025 4:40:58 PM
Rack 1
Vial 46
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0623 ppm | 2.0577 ppm | 0.1252 ppm | 1.2739 ppm | 2.0431 ppm | 0.0496 ppm | 18.5804 ppm |
| Concentration per Run 1 | 0.0625 ppm | 2.0679 ppm | 0.1245 ppm | 1.2724 ppm | 2.0524 ppm | 0.0500 ppm | 18.6329 ppm |
| Concentration per Run 2 | 0.0624 ppm | 2.0608 ppm | 0.1260 ppm | 1.2798 ppm | 2.0445 ppm | 0.0496 ppm | 18.5979 ppm |
| Concentration per Run 3 | 0.0621 ppm | 2.0443 ppm | 0.1252 ppm | 1.2694 ppm | 2.0325 ppm | 0.0493 ppm | 18.5103 ppm |
| Concentration RSD | 0.4 % | 0.6 % | 0.6 % | 0.4 % | 0.5 % | 0.6 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0538 ppm | 0.4900 ppm | 0.2030 ppm | 1.4017 ppm | 1.1419 ppm | 23.1387 ppm | 0.0038 ppm |
| Concentration per Run 1 | 0.0537 ppm | 0.4847 ppm | 0.2029 ppm | 1.4090 ppm | 1.1461 ppm | 23.0648 ppm | 0.0037 ppm |
| Concentration per Run 2 | 0.0539 ppm | 0.4894 ppm | 0.2029 ppm | 1.4070 ppm | 1.1420 ppm | 23.2851 ppm | 0.0040 ppm |
| Concentration per Run 3 | 0.0538 ppm | 0.4958 ppm | 0.2032 ppm | 1.3890 ppm | 1.1375 ppm | 23.0661 ppm | 0.0038 ppm |
| Concentration RSD | 0.2 % | 1.1 % | 0.1 % | 0.8 % | 0.4 % | 0.5 % | 4.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 15.5057 ppm | 0.5036 ppm | 0.8864 ppm | 241.1541 ppm | 0.5351 ppm | 0.5518 ppm | 0.4250 ppm |
| Concentration per Run 1 | 15.5272 ppm | 0.5053 ppm | 0.8797 ppm | 240.0450 ppm | 0.5324 ppm | 0.5538 ppm | 0.4195 ppm |
| Concentration per Run 2 | 15.4973 ppm | 0.5038 ppm | 0.8872 ppm | 243.9198 ppm | 0.5364 ppm | 0.5515 ppm | 0.4273 ppm |
| Concentration per Run 3 | 15.4926 ppm | 0.5018 ppm | 0.8923 ppm | 239.4975 ppm | 0.5365 ppm | 0.5501 ppm | 0.4283 ppm |
| Concentration RSD | 0.1 % | 0.3 % | 0.7 % | 1.0 % | 0.4 % | 0.3 % | 1.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1218 ppm | 18.2854 ppm | 0.9743 ppm | 1.0806 ppm | 1.1045 ppm | 0.1130 ppm | 0.5311 ppm |
| Concentration per Run 1 | 0.1225 ppm | 18.1015 ppm | 0.9669 ppm | 1.0829 ppm | 1.1042 ppm | 0.1125 ppm | 0.5307 ppm |
| Concentration per Run 2 | 0.1225 ppm | 18.3970 ppm | 0.9743 ppm | 1.0873 ppm | 1.1024 ppm | 0.1134 ppm | 0.5319 ppm |
| Concentration per Run 3 | 0.1205 ppm | 18.3576 ppm | 0.9816 ppm | 1.0717 ppm | 1.1070 ppm | 0.1133 ppm | 0.5306 ppm |
| Concentration RSD | 1.0 % | 0.9 % | 0.8 % | 0.7 % | 0.2 % | 0.4 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.3603 ppm | 95.8341 % | 122.8181 % | 84.6789 % | 92.9157 % | 120.2355 % | 94.5934 % |
| Concentration per Run 1 | 1.3572 ppm | 95.9130 % | 121.8332 % | 84.7965 % | 94.1467 % | 119.4314 % | 95.0514 % |
| Concentration per Run 2 | 1.3605 ppm | 95.7209 % | 123.6488 % | 84.5364 % | 92.6413 % | 121.3676 % | 94.2264 % |
| Concentration per Run 3 | 1.3631 ppm | 95.8686 % | 122.9723 % | 84.7037 % | 91.9592 % | 119.9073 % | 94.5023 % |
| Concentration RSD | 0.2 % | 0.1 % | 0.7 % | 0.2 % | 1.2 % | 0.8 % | 0.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2040264-8 WG2040264
Analysis started at: 3/14/2025 4:45:25 PM
Rack 1
Vial 47
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0107 ppm | 0.0345 ppm | 0.0009 ppm | 0.2587 ppm | 0.0062 ppm | 0.0000 ppm | 9.7970 ppm |
| Concentration per Run 1 | 0.0107 ppm | 0.0332 ppm | 0.0010 ppm | 0.2594 ppm | 0.0066 ppm | 0.0000 ppm | 10.5905 ppm |
| Concentration per Run 2 | 0.0106 ppm | 0.0352 ppm | 0.0026 ppm | 0.2599 ppm | 0.0061 ppm | 0.0001 ppm | 9.4552 ppm |
| Concentration per Run 3 | 0.0107 ppm | 0.0351 ppm | -0.0008 ppm | 0.2567 ppm | 0.0059 ppm | 0.0000 ppm | 9.3452 ppm |
| Concentration RSD | 0.5 % | 3.3 % | 187.2 % | 0.7 % | 5.9 % | 70.1 % | 7.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0000 ppm | 0.0009 ppm | 1.1543 ppm | 0.1856 ppm | 12.8275 ppm | 0.0048 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0003 ppm | 0.0008 ppm | 1.1627 ppm | 0.1998 ppm | 13.7448 ppm | 0.0058 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0002 ppm | 0.0011 ppm | 1.1541 ppm | 0.1786 ppm | 12.3286 ppm | 0.0039 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0005 ppm | 0.0008 ppm | 1.1460 ppm | 0.1784 ppm | 12.4091 ppm | 0.0046 ppm |
| Concentration RSD | 31.1 % | 13,051.2 % | 19.3 % | 0.7 % | 6.6 % | 6.2 % | 19.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.2341 ppm | 0.0262 ppm | 0.0106 ppm | 248.0868 ppm | 0.0232 ppm | 0.0030 ppm | 0.0048 ppm |
| Concentration per Run 1 | 5.2590 ppm | 0.0285 ppm | 0.0100 ppm | 267.1745 ppm | 0.0237 ppm | 0.0035 ppm | 0.0048 ppm |
| Concentration per Run 2 | 5.2604 ppm | 0.0255 ppm | 0.0109 ppm | 241.0004 ppm | 0.0229 ppm | 0.0029 ppm | 0.0058 ppm |
| Concentration per Run 3 | 5.1828 ppm | 0.0246 ppm | 0.0108 ppm | 236.0856 ppm | 0.0229 ppm | 0.0025 ppm | 0.0038 ppm |
| Concentration RSD | 0.8 % | 7.8 % | 4.4 % | 6.7 % | 1.9 % | 16.8 % | 20.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 17.3611 ppm | 0.0040 ppm | 0.0568 ppm | 0.0656 ppm | -0.0014 ppm | 0.0014 ppm |
| Concentration per Run 1 | 0.0003 ppm | 17.3708 ppm | 0.0052 ppm | 0.0614 ppm | 0.0662 ppm | -0.0008 ppm | 0.0015 ppm |
| Concentration per Run 2 | 0.0008 ppm | 17.4002 ppm | 0.0036 ppm | 0.0549 ppm | 0.0660 ppm | -0.0014 ppm | 0.0015 ppm |
| Concentration per Run 3 | -0.0020 ppm | 17.3123 ppm | 0.0034 ppm | 0.0539 ppm | 0.0647 ppm | -0.0020 ppm | 0.0013 ppm |
| Concentration RSD | 529.3 % | 0.3 % | 24.3 % | 7.2 % | 1.3 % | 43.3 % | 7.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.8282 ppm | 97.9212 % | 116.5030 % | 87.7762 % | 95.5165 % | 116.1750 % | 96.6601 % |
| Concentration per Run 1 | 0.8323 ppm | 98.1575 % | 108.5661 % | 87.8356 % | 96.1640 % | 109.1273 % | 97.0821 % |
| Concentration per Run 2 | 0.8328 ppm | 97.2713 % | 119.2381 % | 88.3918 % | 94.9232 % | 119.2118 % | 97.2942 % |
| Concentration per Run 3 | 0.8193 ppm | 98.3348 % | 121.7048 % | 87.1012 % | 95.4622 % | 120.1861 % | 95.6040 % |
| Concentration RSD | 0.9 % | 0.6 % | 6.0 % | 0.7 % | 0.7 % | 5.3 % | 1.0 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2040264-9 WG2040264
Analysis started at: 3/14/2025 4:49:52 PM
Rack 1
Vial 48
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0329 ppm | 2.1444 ppm | 0.1395 ppm | 1.2903 ppm | 2.1117 ppm | 0.0513 ppm | 18.6644 ppm |
| Concentration per Run 1 | 0.0338 ppm | 2.1454 ppm | 0.1477 ppm | 1.3088 ppm | 2.1061 ppm | 0.0510 ppm | 18.5075 ppm |
| Concentration per Run 2 | 0.0332 ppm | 2.1464 ppm | 0.1336 ppm | 1.3019 ppm | 2.1187 ppm | 0.0515 ppm | 18.7747 ppm |
| Concentration per Run 3 | 0.0318 ppm | 2.1413 ppm | 0.1373 ppm | 1.2602 ppm | 2.1102 ppm | 0.0513 ppm | 18.7110 ppm |
| Concentration RSD | 3.2 % | 0.1 % | 5.3 % | 2.0 % | 0.3 % | 0.5 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0536 ppm | 0.4960 ppm | 0.2052 ppm | 1.3956 ppm | 1.1673 ppm | 24.2518 ppm | 0.0043 ppm |
| Concentration per Run 1 | 0.0545 ppm | 0.5031 ppm | 0.2080 ppm | 1.4195 ppm | 1.1589 ppm | 24.1308 ppm | 0.0041 ppm |
| Concentration per Run 2 | 0.0539 ppm | 0.4991 ppm | 0.2070 ppm | 1.4146 ppm | 1.1736 ppm | 24.1792 ppm | 0.0042 ppm |
| Concentration per Run 3 | 0.0525 ppm | 0.4857 ppm | 0.2007 ppm | 1.3526 ppm | 1.1695 ppm | 24.4454 ppm | 0.0045 ppm |
| Concentration RSD | 2.0 % | 1.8 % | 1.9 % | 2.7 % | 0.7 % | 0.7 % | 4.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 15.4107 ppm | 0.5150 ppm | 0.8978 ppm | 246.8740 ppm | 0.5396 ppm | 0.5931 ppm | 0.3696 ppm |
| Concentration per Run 1 | 15.6490 ppm | 0.5119 ppm | 0.9026 ppm | 246.6663 ppm | 0.5475 ppm | 0.6151 ppm | 0.3665 ppm |
| Concentration per Run 2 | 15.5695 ppm | 0.5172 ppm | 0.9062 ppm | 245.5845 ppm | 0.5433 ppm | 0.5829 ppm | 0.3753 ppm |
| Concentration per Run 3 | 15.0135 ppm | 0.5160 ppm | 0.8845 ppm | 248.3713 ppm | 0.5281 ppm | 0.5812 ppm | 0.3671 ppm |
| Concentration RSD | 2.2 % | 0.5 % | 1.3 % | 0.6 % | 1.9 % | 3.2 % | 1.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1401 ppm | 17.8245 ppm | 0.9886 ppm | 1.1291 ppm | 1.1183 ppm | 0.1289 ppm | 0.5378 ppm |
| Concentration per Run 1 | 0.1453 ppm | 17.9896 ppm | 0.9964 ppm | 1.1265 ppm | 1.1334 ppm | 0.1315 ppm | 0.5470 ppm |
| Concentration per Run 2 | 0.1371 ppm | 18.0368 ppm | 0.9967 ppm | 1.1310 ppm | 1.1269 ppm | 0.1276 ppm | 0.5423 ppm |
| Concentration per Run 3 | 0.1379 ppm | 17.4472 ppm | 0.9726 ppm | 1.1298 ppm | 1.0946 ppm | 0.1275 ppm | 0.5241 ppm |
| Concentration RSD | 3.3 % | 1.8 % | 1.4 % | 0.2 % | 1.9 % | 1.8 % | 2.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.3200 ppm | 99.8114 % | 126.3586 % | 84.3022 % | 96.8994 % | 124.3958 % | 94.4801 % |
| Concentration per Run 1 | 1.3397 ppm | 98.1021 % | 127.5740 % | 81.5694 % | 95.7003 % | 125.9779 % | 90.7515 % |
| Concentration per Run 2 | 1.3255 ppm | 99.3325 % | 125.0660 % | 85.4381 % | 96.3581 % | 122.9519 % | 96.2593 % |
| Concentration per Run 3 | 1.2948 ppm | 101.9995 % | 126.4357 % | 85.8989 % | 98.6397 % | 124.2578 % | 96.4296 % |
| Concentration RSD | 1.7 % | 2.0 % | 1.0 % | 2.8 % | 1.6 % | 1.2 % | 3.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: WG2040264-10D5 WG2040264
Analysis started at: 3/14/2025 4:54:20 PM
Rack 1
Vial 49
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0024 ppm | 0.0164 ppm | 0.0015 ppm | 0.0544 ppm | 0.0013 ppm | 0.0000 ppm | 1.8714 ppm |
| Concentration per Run 1 | 0.0025 ppm | 0.0211 ppm | 0.0004 ppm | 0.0532 ppm | 0.0013 ppm | 0.0000 ppm | 1.8698 ppm |
| Concentration per Run 2 | 0.0024 ppm | 0.0163 ppm | 0.0022 ppm | 0.0553 ppm | 0.0013 ppm | 0.0000 ppm | 1.8715 ppm |
| Concentration per Run 3 | 0.0023 ppm | 0.0119 ppm | 0.0020 ppm | 0.0547 ppm | 0.0012 ppm | 0.0000 ppm | 1.8728 ppm |
| Concentration RSD | 5.4 % | 28.0 % | 65.1 % | 2.0 % | 3.2 % | 141.0 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0002 ppm | 0.0000 ppm | 0.2348 ppm | 0.0393 ppm | 2.5297 ppm | 0.0019 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0002 ppm | 0.0001 ppm | 0.2328 ppm | 0.0388 ppm | 2.5478 ppm | 0.0014 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0006 ppm | 0.0000 ppm | 0.2381 ppm | 0.0400 ppm | 2.5203 ppm | 0.0020 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0002 ppm | 0.0000 ppm | 0.2336 ppm | 0.0390 ppm | 2.5212 ppm | 0.0021 ppm |
| Concentration RSD | 345.3 % | 167.1 % | 335.0 % | 1.2 % | 1.6 % | 0.6 % | 21.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0649 ppm | 0.0053 ppm | 0.0118 ppm | 49.6995 ppm | 0.0052 ppm | 0.0002 ppm | 0.0173 ppm |
| Concentration per Run 1 | 1.0529 ppm | 0.0052 ppm | 0.0112 ppm | 49.4691 ppm | 0.0050 ppm | -0.0008 ppm | 0.0161 ppm |
| Concentration per Run 2 | 1.0824 ppm | 0.0052 ppm | 0.0123 ppm | 49.5642 ppm | 0.0046 ppm | 0.0003 ppm | 0.0200 ppm |
| Concentration per Run 3 | 1.0594 ppm | 0.0054 ppm | 0.0120 ppm | 50.0652 ppm | 0.0060 ppm | 0.0012 ppm | 0.0159 ppm |
| Concentration RSD | 1.5 % | 2.0 % | 4.8 % | 0.6 % | 14.0 % | 451.7 % | 13.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0021 ppm | 3.4487 ppm | 0.0065 ppm | 0.0109 ppm | 0.0135 ppm | -0.0015 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0021 ppm | 3.4001 ppm | 0.0067 ppm | 0.0110 ppm | 0.0134 ppm | -0.0005 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0013 ppm | 3.4945 ppm | 0.0066 ppm | 0.0108 ppm | 0.0136 ppm | -0.0016 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0028 ppm | 3.4515 ppm | 0.0060 ppm | 0.0109 ppm | 0.0135 ppm | -0.0025 ppm | 0.0005 ppm |
| Concentration RSD | 37.4 % | 1.4 % | 6.1 % | 0.9 % | 0.9 % | 65.2 % | 75.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1640 ppm | 104.3995 % | 126.9638 % | 97.4240 % | 101.4687 % | 124.9472 % | 100.8764 % |
| Concentration per Run 1 | 0.1626 ppm | 105.3280 % | 127.0020 % | 97.9532 % | 102.8373 % | 125.0935 % | 101.5463 % |
| Concentration per Run 2 | 0.1664 ppm | 103.1597 % | 127.4117 % | 97.5403 % | 100.1894 % | 125.4395 % | 101.0853 % |
| Concentration per Run 3 | 0.1631 ppm | 104.7107 % | 126.4776 % | 96.7785 % | 101.3794 % | 124.3087 % | 99.9976 % |
| Concentration RSD | 1.3 % | 1.1 % | 0.4 % | 0.6 % | 1.3 % | 0.5 % | 0.8 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: CCV
Analysis started at: 3/14/2025 4:58:46 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5193 ppm | 0.5170 ppm | 0.4913 ppm | 0.5162 ppm | 0.5256 ppm | 0.5056 ppm | 0.4760 ppm |
| Concentration per Run 1 | 0.5211 ppm | 0.5187 ppm | 0.4933 ppm | 0.5173 ppm | 0.5238 ppm | 0.5033 ppm | 0.4743 ppm |
| Concentration per Run 2 | 0.5208 ppm | 0.5166 ppm | 0.4941 ppm | 0.5147 ppm | 0.5265 ppm | 0.5061 ppm | 0.4764 ppm |
| Concentration per Run 3 | 0.5161 ppm | 0.5158 ppm | 0.4864 ppm | 0.5166 ppm | 0.5263 ppm | 0.5076 ppm | 0.4772 ppm |
| Recovery Percentage 1 | 103.869 % | 103.408 % | 98.250 % | 103.248 % | 105.111 % | 101.127 % | 95.196 % |
| Concentration RSD | 0.5 % | 0.3 % | 0.9 % | 0.3 % | 0.3 % | 0.4 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5014 ppm | 0.5138 ppm | 0.5105 ppm | 0.5348 ppm | 0.4999 ppm | 5.5970 ppm | 0.5673 ppm |
| Concentration per Run 1 | 0.5019 ppm | 0.5131 ppm | 0.5110 ppm | 0.5364 ppm | 0.4989 ppm | 5.5659 ppm | 0.5640 ppm |
| Concentration per Run 2 | 0.5015 ppm | 0.5149 ppm | 0.5123 ppm | 0.5348 ppm | 0.4980 ppm | 5.6473 ppm | 0.5702 ppm |
| Concentration per Run 3 | 0.5010 ppm | 0.5134 ppm | 0.5081 ppm | 0.5332 ppm | 0.5027 ppm | 5.5780 ppm | 0.5679 ppm |
| Recovery Percentage 1 | 100.288 % | 102.762 % | 102.092 % | 106.963 % | 99.974 % | 111.941 % | 113.469 % |
| Concentration RSD | 0.1 % | 0.2 % | 0.4 % | 0.3 % | 0.5 % | 0.8 % | 0.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5183 ppm | 0.4767 ppm | 0.5194 ppm | 11.1076 ppm | 0.5257 ppm | 0.5128 ppm | 0.5414 ppm |
| Concentration per Run 1 | 0.5184 ppm | 0.4768 ppm | 0.5146 ppm | 11.1067 ppm | 0.5252 ppm | 0.5131 ppm | 0.5406 ppm |
| Concentration per Run 2 | 0.5201 ppm | 0.4750 ppm | 0.5204 ppm | 11.2461 ppm | 0.5284 ppm | 0.5143 ppm | 0.5475 ppm |
| Concentration per Run 3 | 0.5164 ppm | 0.4782 ppm | 0.5230 ppm | 10.9699 ppm | 0.5234 ppm | 0.5111 ppm | 0.5361 ppm |
| Recovery Percentage 1 | 103.659 % | 95.332 % | 103.871 % | 111.076 % | 105.136 % | 102.560 % | 108.281 % |
| Concentration RSD | 0.4 % | 0.3 % | 0.8 % | 1.2 % | 0.5 % | 0.3 % | 1.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5011 ppm | 5.8070 ppm | 0.5161 ppm | 0.5310 ppm | 0.5197 ppm | 0.5219 ppm | 0.5203 ppm |
| Concentration per Run 1 | 0.5028 ppm | 5.8061 ppm | 0.5168 ppm | 0.5290 ppm | 0.5211 ppm | 0.5233 ppm | 0.5185 ppm |
| Concentration per Run 2 | 0.5039 ppm | 5.8265 ppm | 0.5196 ppm | 0.5319 ppm | 0.5200 ppm | 0.5237 ppm | 0.5216 ppm |
| Concentration per Run 3 | 0.4967 ppm | 5.7884 ppm | 0.5118 ppm | 0.5321 ppm | 0.5181 ppm | 0.5186 ppm | 0.5208 ppm |
| Recovery Percentage 1 | 100.224 % | 110.610 % | 103.213 % | 106.203 % | 103.947 % | 104.375 % | 104.059 % |
| Concentration RSD | 0.8 % | 0.3 % | 0.8 % | 0.3 % | 0.3 % | 0.5 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4974 ppm | 106.9892 % | 129.6811 % | 98.7392 % | 102.5057 % | 124.7575 % | 100.7181 % |
| Concentration per Run 1 | 0.4983 ppm | 107.5152 % | 130.0735 % | 98.5114 % | 103.4352 % | 124.9917 % | 100.8945 % |
| Concentration per Run 2 | 0.4974 ppm | 106.7520 % | 129.5929 % | 98.8870 % | 101.9616 % | 124.6440 % | 100.9510 % |
| Concentration per Run 3 | 0.4965 ppm | 106.7004 % | 129.3767 % | 98.8193 % | 102.1202 % | 124.6367 % | 100.3089 % |
| Recovery Percentage 1 | 99.483 % | | | | | | |
| Concentration RSD | 0.2 % | 0.4 % | 0.3 % | 0.2 % | 0.8 % | 0.2 % | 0.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: CCB
Analysis started at: 3/14/2025 5:03:13 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0170 ppm | 0.0006 ppm | 0.0008 ppm | 0.0000 ppm | 0.0000 ppm | 0.0025 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0132 ppm | 0.0000 ppm | 0.0014 ppm | 0.0000 ppm | 0.0001 ppm | -0.0005 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0197 ppm | 0.0020 ppm | 0.0014 ppm | 0.0000 ppm | 0.0000 ppm | 0.0033 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0180 ppm | -0.0003 ppm | -0.0003 ppm | 0.0000 ppm | 0.0000 ppm | 0.0049 ppm |
| Recovery Percentage 1 | 11.287 % | 16.953 % | 11.175 % | 2.805 % | -0.122 % | 0.775 % | 2.533 % |
| Concentration RSD | 3.7 % | 19.8 % | 219.6 % | 114.4 % | 179.7 % | 34.9 % | 109.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0001 ppm | -0.0003 ppm | 0.0003 ppm | 0.0021 ppm | 0.0096 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0001 ppm | 0.0001 ppm | 0.0005 ppm | 0.0021 ppm | 0.0037 ppm | -0.0009 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0004 ppm | -0.0005 ppm | 0.0002 ppm | 0.0015 ppm | 0.0125 ppm | 0.0013 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0003 ppm | -0.0004 ppm | 0.0001 ppm | 0.0028 ppm | 0.0125 ppm | 0.0011 ppm |
| Recovery Percentage 1 | 2.300 % | 0.582 % | -2.918 % | 2.651 % | 4.280 % | 0.382 % | 4.972 % |
| Concentration RSD | 31.7 % | 595.9 % | 111.4 % | 72.7 % | 30.2 % | 53.2 % | 245.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 0.0000 ppm | 0.0035 ppm | 0.0348 ppm | 0.0003 ppm | -0.0002 ppm | 0.0023 ppm |
| Concentration per Run 1 | -0.0008 ppm | 0.0000 ppm | 0.0036 ppm | 0.0371 ppm | 0.0012 ppm | -0.0013 ppm | 0.0037 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0033 ppm | 0.0322 ppm | -0.0007 ppm | 0.0004 ppm | 0.0016 ppm |
| Concentration per Run 3 | -0.0011 ppm | -0.0001 ppm | 0.0036 ppm | 0.0351 ppm | 0.0004 ppm | 0.0002 ppm | 0.0015 ppm |
| Recovery Percentage 1 | -0.626 % | -0.023 % | 7.075 % | 1.740 % | 1.247 % | -2.058 % | 4.526 % |
| Concentration RSD | 94.8 % | 3,390.9 % | 5.4 % | 7.0 % | 313.0 % | 466.3 % | 54.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | -0.0052 ppm | 0.0005 ppm | 0.0000 ppm | 0.0002 ppm | -0.0015 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0009 ppm | -0.0047 ppm | 0.0002 ppm | 0.0000 ppm | 0.0000 ppm | -0.0023 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0059 ppm | 0.0005 ppm | 0.0000 ppm | 0.0000 ppm | -0.0005 ppm | 0.0002 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0049 ppm | 0.0008 ppm | 0.0000 ppm | 0.0005 ppm | -0.0017 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 2.913 % | -1.039 % | 1.067 % | 0.006 % | 1.930 % | -7.577 % | 0.227 % |
| Concentration RSD | 190.8 % | 12.3 % | 56.2 % | 3,106.7 % | 149.9 % | 59.7 % | 621.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 106.1108 % | 125.6266 % | 100.5390 % | 105.6279 % | 125.2072 % | 102.8570 % |
| Concentration per Run 1 | 0.0006 ppm | 105.9553 % | 124.0526 % | 100.6291 % | 105.4754 % | 123.2113 % | 103.2815 % |
| Concentration per Run 2 | 0.0005 ppm | 106.8247 % | 127.3438 % | 99.7507 % | 106.0719 % | 127.2623 % | 102.0171 % |
| Concentration per Run 3 | 0.0002 ppm | 105.5523 % | 125.4832 % | 101.2373 % | 105.3363 % | 125.1481 % | 103.2725 % |
| Recovery Percentage 1 | 8.091 % | | | | | | |
| Concentration RSD | 48.7 % | 0.6 % | 1.3 % | 0.7 % | 0.4 % | 1.6 % | 0.7 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2511919-02 WG2040264
Analysis started at: 3/14/2025 5:22:28 PM
Rack 1
Vial 50
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0132 ppm | 0.0007 ppm | 0.0183 ppm | 0.0416 ppm | 0.0000 ppm | 24.5994 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0131 ppm | -0.0002 ppm | 0.0188 ppm | 0.0417 ppm | 0.0000 ppm | 24.5719 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0108 ppm | 0.0011 ppm | 0.0189 ppm | 0.0414 ppm | 0.0000 ppm | 24.7227 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0159 ppm | 0.0014 ppm | 0.0172 ppm | 0.0416 ppm | 0.0000 ppm | 24.5035 ppm |
| Concentration RSD | 16.0 % | 19.3 % | 117.1 % | 5.2 % | 0.4 % | 59.8 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0002 ppm | -0.0001 ppm | 0.0006 ppm | 0.0034 ppm | 0.9506 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0003 ppm | -0.0002 ppm | 0.0008 ppm | 0.0027 ppm | 0.9587 ppm | 0.0005 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0002 ppm | 0.0001 ppm | 0.0005 ppm | 0.0037 ppm | 0.9355 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0001 ppm | -0.0003 ppm | 0.0004 ppm | 0.0037 ppm | 0.9576 ppm | -0.0003 ppm |
| Concentration RSD | 39.5 % | 54.5 % | 162.4 % | 38.2 % | 17.8 % | 1.4 % | 250.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.3411 ppm | 0.0007 ppm | -0.0002 ppm | 10.4870 ppm | 0.0010 ppm | -0.0004 ppm | 0.0007 ppm |
| Concentration per Run 1 | 6.4514 ppm | 0.0007 ppm | -0.0002 ppm | 10.5465 ppm | 0.0009 ppm | -0.0010 ppm | 0.0008 ppm |
| Concentration per Run 2 | 6.2855 ppm | 0.0008 ppm | -0.0004 ppm | 10.3167 ppm | 0.0010 ppm | 0.0003 ppm | 0.0003 ppm |
| Concentration per Run 3 | 6.2864 ppm | 0.0007 ppm | -0.0002 ppm | 10.5976 ppm | 0.0010 ppm | -0.0006 ppm | 0.0012 ppm |
| Concentration RSD | 1.5 % | 13.2 % | 47.7 % | 1.4 % | 7.0 % | 160.6 % | 61.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 3.3994 ppm | 0.0012 ppm | 0.0892 ppm | -0.0002 ppm | -0.0024 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | 3.4424 ppm | 0.0008 ppm | 0.0895 ppm | -0.0002 ppm | -0.0025 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0001 ppm | 3.3787 ppm | 0.0013 ppm | 0.0889 ppm | -0.0004 ppm | -0.0019 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0001 ppm | 3.3771 ppm | 0.0015 ppm | 0.0892 ppm | -0.0001 ppm | -0.0027 ppm | 0.0001 ppm |
| Concentration RSD | 3,227.3 % | 1.1 % | 32.4 % | 0.4 % | 81.1 % | 18.4 % | 137.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 101.0238 % | 125.3482 % | 96.8376 % | 99.4047 % | 125.4314 % | 99.0785 % |
| Concentration per Run 1 | -0.0002 ppm | 99.5300 % | 126.1137 % | 96.7292 % | 98.3554 % | 126.8545 % | 99.3515 % |
| Concentration per Run 2 | -0.0002 ppm | 101.7754 % | 123.6634 % | 96.1973 % | 100.0040 % | 123.5595 % | 98.6470 % |
| Concentration per Run 3 | -0.0002 ppm | 101.7659 % | 126.2676 % | 97.5862 % | 99.8547 % | 125.8801 % | 99.2369 % |
| Concentration RSD | 10.2 % | 1.3 % | 1.2 % | 0.7 % | 0.9 % | 1.3 % | 0.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2512994-01 WG2040264
Analysis started at: 3/14/2025 5:27:10 PM
Rack 1
Vial 58
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 16.5207 ppm | 0.0016 ppm | 0.1340 ppm | 0.2569 ppm | 0.0001 ppm | 145.2402 ppm |
| Concentration per Run 1 | -0.0003 ppm | 17.0351 ppm | 0.0011 ppm | 0.1355 ppm | 0.2643 ppm | 0.0000 ppm | 149.8009 ppm |
| Concentration per Run 2 | 0.0003 ppm | 15.9460 ppm | 0.0009 ppm | 0.1334 ppm | 0.2468 ppm | 0.0001 ppm | 139.2022 ppm |
| Concentration per Run 3 | 0.0001 ppm | 16.5808 ppm | 0.0027 ppm | 0.1331 ppm | 0.2597 ppm | 0.0001 ppm | 146.7173 ppm |
| Concentration RSD | 2,798.0 % | 3.3 % | 64.7 % | 1.0 % | 3.5 % | 33.3 % | 3.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 0.0014 ppm | 0.0098 ppm | 0.0094 ppm | 0.3873 ppm | 43.0836 ppm | 0.0076 ppm |
| Concentration per Run 1 | -0.0006 ppm | 0.0009 ppm | 0.0097 ppm | 0.0092 ppm | 0.3998 ppm | 43.6334 ppm | 0.0081 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0014 ppm | 0.0098 ppm | 0.0093 ppm | 0.3708 ppm | 41.9471 ppm | 0.0072 ppm |
| Concentration per Run 3 | -0.0006 ppm | 0.0018 ppm | 0.0101 ppm | 0.0095 ppm | 0.3913 ppm | 43.6704 ppm | 0.0073 ppm |
| Concentration RSD | 20.3 % | 31.4 % | 2.0 % | 1.7 % | 3.8 % | 2.3 % | 6.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 20.6412 ppm | 0.3152 ppm | 0.0156 ppm | 937.4935 [SIC 500] | 0.0046 ppm | -0.0001 ppm | -0.0007 ppm |
| Concentration per Run 1 | 20.7793 ppm | 0.3246 ppm | 0.0158 ppm | 967.0940 ppm | 0.0048 ppm | 0.0001 ppm | 0.0002 ppm |
| Concentration per Run 2 | 20.6902 ppm | 0.3033 ppm | 0.0153 ppm | 902.5042 ppm | 0.0043 ppm | -0.0004 ppm | -0.0009 ppm |
| Concentration per Run 3 | 20.4541 ppm | 0.3178 ppm | 0.0156 ppm | 942.8823 ppm | 0.0048 ppm | -0.0002 ppm | -0.0015 ppm |
| Concentration RSD | 0.8 % | 3.5 % | 1.7 % | 3.5 % | 6.0 % | 186.5 % | 123.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 6.1000 ppm | -0.0010 ppm | 1.0557 ppm | 0.0126 ppm | -0.0010 ppm | 0.0044 ppm |
| Concentration per Run 1 | -0.0001 ppm | 6.0920 ppm | -0.0017 ppm | 1.0863 ppm | 0.0127 ppm | -0.0006 ppm | 0.0046 ppm |
| Concentration per Run 2 | -0.0013 ppm | 6.0857 ppm | -0.0014 ppm | 1.0130 ppm | 0.0124 ppm | -0.0008 ppm | 0.0043 ppm |
| Concentration per Run 3 | 0.0031 ppm | 6.1223 ppm | 0.0002 ppm | 1.0678 ppm | 0.0127 ppm | -0.0017 ppm | 0.0043 ppm |
| Concentration RSD | 421.0 % | 0.3 % | 108.3 % | 3.6 % | 1.3 % | 55.4 % | 3.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0055 ppm | 88.4941 % | 120.4627 % | 74.6126 % | 86.8633 % | 119.0048 % | 88.3632 % |
| Concentration per Run 1 | 0.0052 ppm | 88.4870 % | 116.9054 % | 74.3229 % | 87.1941 % | 116.4614 % | 88.1776 % |
| Concentration per Run 2 | 0.0055 ppm | 88.0310 % | 125.2552 % | 75.0574 % | 86.9404 % | 122.4694 % | 89.0274 % |
| Concentration per Run 3 | 0.0057 ppm | 88.9643 % | 119.2274 % | 74.4576 % | 86.4554 % | 118.0837 % | 87.8847 % |
| Concentration RSD | 4.8 % | 0.5 % | 3.6 % | 0.5 % | 0.4 % | 2.6 % | 0.7 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2512994-02 WG2040264
Analysis started at: 3/14/2025 5:31:46 PM
Rack 1
Vial 59
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 12.7957 ppm | 0.0022 ppm | 0.1097 ppm | 0.3401 ppm | 0.0001 ppm | 142.8626 ppm |
| Concentration per Run 1 | 0.0002 ppm | 12.8268 ppm | 0.0009 ppm | 0.1116 ppm | 0.3400 ppm | 0.0002 ppm | 143.3727 ppm |
| Concentration per Run 2 | 0.0002 ppm | 12.6944 ppm | 0.0025 ppm | 0.1091 ppm | 0.3379 ppm | 0.0001 ppm | 141.6630 ppm |
| Concentration per Run 3 | 0.0004 ppm | 12.8660 ppm | 0.0031 ppm | 0.1083 ppm | 0.3425 ppm | 0.0001 ppm | 143.5521 ppm |
| Concentration RSD | 46.7 % | 0.7 % | 51.2 % | 1.5 % | 0.7 % | 13.9 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 0.0028 ppm | 0.0031 ppm | 0.0057 ppm | 1.1970 ppm | 45.3303 ppm | 0.0081 ppm |
| Concentration per Run 1 | -0.0005 ppm | 0.0030 ppm | 0.0033 ppm | 0.0057 ppm | 1.1991 ppm | 45.1792 ppm | 0.0080 ppm |
| Concentration per Run 2 | -0.0006 ppm | 0.0029 ppm | 0.0032 ppm | 0.0056 ppm | 1.1873 ppm | 45.4024 ppm | 0.0079 ppm |
| Concentration per Run 3 | -0.0005 ppm | 0.0026 ppm | 0.0030 ppm | 0.0058 ppm | 1.2046 ppm | 45.4093 ppm | 0.0085 ppm |
| Concentration RSD | 16.8 % | 8.4 % | 5.4 % | 1.9 % | 0.7 % | 0.3 % | 4.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 21.4598 ppm | 2.3973 ppm | 0.0198 ppm | 877.3690 [SIC 500] | 0.0043 ppm | 0.0008 ppm | -0.0001 ppm |
| Concentration per Run 1 | 21.8453 ppm | 2.4015 ppm | 0.0201 ppm | 872.2343 ppm | 0.0033 ppm | 0.0002 ppm | -0.0010 ppm |
| Concentration per Run 2 | 21.2370 ppm | 2.3826 ppm | 0.0199 ppm | 872.7975 ppm | 0.0050 ppm | 0.0009 ppm | -0.0010 ppm |
| Concentration per Run 3 | 21.2970 ppm | 2.4078 ppm | 0.0195 ppm | 887.0752 ppm | 0.0044 ppm | 0.0014 ppm | 0.0017 ppm |
| Concentration RSD | 1.6 % | 0.5 % | 1.7 % | 1.0 % | 20.2 % | 69.4 % | 1,644.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0013 ppm | 4.9800 ppm | 0.0002 ppm | 0.9918 ppm | 0.0455 ppm | -0.0044 ppm | 0.0095 ppm |
| Concentration per Run 1 | -0.0014 ppm | 5.0534 ppm | -0.0003 ppm | 0.9932 ppm | 0.0463 ppm | -0.0047 ppm | 0.0100 ppm |
| Concentration per Run 2 | -0.0003 ppm | 4.9258 ppm | 0.0009 ppm | 0.9865 ppm | 0.0452 ppm | -0.0045 ppm | 0.0092 ppm |
| Concentration per Run 3 | -0.0022 ppm | 4.9607 ppm | 0.0001 ppm | 0.9959 ppm | 0.0450 ppm | -0.0040 ppm | 0.0092 ppm |
| Concentration RSD | 75.9 % | 1.3 % | 257.6 % | 0.5 % | 1.6 % | 8.3 % | 4.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0146 ppm | 88.7855 % | 117.5224 % | 75.1563 % | 87.5731 % | 116.9129 % | 88.9674 % |
| Concentration per Run 1 | 0.0148 ppm | 87.2512 % | 117.0366 % | 75.5618 % | 86.2916 % | 116.7568 % | 89.6024 % |
| Concentration per Run 2 | 0.0148 ppm | 89.4378 % | 118.8084 % | 74.9746 % | 88.4505 % | 117.3689 % | 88.9780 % |
| Concentration per Run 3 | 0.0143 ppm | 89.6675 % | 116.7221 % | 74.9326 % | 87.9770 % | 116.6131 % | 88.3219 % |
| Concentration RSD | 2.0 % | 1.5 % | 1.0 % | 0.5 % | 1.3 % | 0.3 % | 0.7 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513071-01 WG2040264
Analysis started at: 3/14/2025 5:36:22 PM
Rack 1
Vial 60
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 1.9298 ppm | 0.0062 ppm | 0.4919 ppm | 0.0614 ppm | 0.0001 ppm | 107.4422 ppm |
| Concentration per Run 1 | 0.0007 ppm | 1.9252 ppm | 0.0075 ppm | 0.4934 ppm | 0.0608 ppm | 0.0001 ppm | 106.6416 ppm |
| Concentration per Run 2 | 0.0002 ppm | 1.9399 ppm | 0.0044 ppm | 0.4901 ppm | 0.0615 ppm | 0.0000 ppm | 107.7793 ppm |
| Concentration per Run 3 | 0.0007 ppm | 1.9244 ppm | 0.0066 ppm | 0.4922 ppm | 0.0617 ppm | 0.0001 ppm | 107.9057 ppm |
| Concentration RSD | 55.8 % | 0.5 % | 26.2 % | 0.3 % | 0.8 % | 30.3 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.0043 ppm | 0.0245 ppm | 0.2101 ppm | 4.8647 ppm | 28.9685 ppm | 0.0651 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.0044 ppm | 0.0247 ppm | 0.2097 ppm | 4.8315 ppm | 28.6672 ppm | 0.0654 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0045 ppm | 0.0245 ppm | 0.2086 ppm | 4.8642 ppm | 29.2384 ppm | 0.0649 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0040 ppm | 0.0245 ppm | 0.2120 ppm | 4.8985 ppm | 28.9999 ppm | 0.0649 ppm |
| Concentration RSD | 8.3 % | 6.4 % | 0.5 % | 0.8 % | 0.7 % | 1.0 % | 0.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.6709 ppm | 0.3126 ppm | 0.0673 ppm | 151.0568 ppm | 0.0254 ppm | 0.1294 ppm | 0.0106 ppm |
| Concentration per Run 1 | 8.7480 ppm | 0.3108 ppm | 0.0667 ppm | 149.4584 ppm | 0.0258 ppm | 0.1294 ppm | 0.0093 ppm |
| Concentration per Run 2 | 8.6042 ppm | 0.3130 ppm | 0.0667 ppm | 152.4861 ppm | 0.0254 ppm | 0.1298 ppm | 0.0109 ppm |
| Concentration per Run 3 | 8.6605 ppm | 0.3139 ppm | 0.0684 ppm | 151.2258 ppm | 0.0251 ppm | 0.1290 ppm | 0.0116 ppm |
| Concentration RSD | 0.8 % | 0.5 % | 1.5 % | 1.0 % | 1.3 % | 0.3 % | 11.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0035 ppm | 5.9211 ppm | 0.0041 ppm | 0.3825 ppm | 0.0799 ppm | -0.0026 ppm | 0.0067 ppm |
| Concentration per Run 1 | 0.0044 ppm | 5.9195 ppm | 0.0036 ppm | 0.3791 ppm | 0.0805 ppm | -0.0023 ppm | 0.0067 ppm |
| Concentration per Run 2 | 0.0038 ppm | 5.8822 ppm | 0.0045 ppm | 0.3829 ppm | 0.0792 ppm | -0.0029 ppm | 0.0067 ppm |
| Concentration per Run 3 | 0.0023 ppm | 5.9614 ppm | 0.0041 ppm | 0.3855 ppm | 0.0799 ppm | -0.0026 ppm | 0.0068 ppm |
| Concentration RSD | 30.8 % | 0.7 % | 10.6 % | 0.8 % | 0.8 % | 12.4 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.9887 ppm | 98.8458 % | 122.3195 % | 86.5476 % | 95.7981 % | 119.7970 % | 94.2047 % |
| Concentration per Run 1 | 1.0008 ppm | 97.9655 % | 123.2158 % | 86.8478 % | 95.2101 % | 120.1708 % | 94.6274 % |
| Concentration per Run 2 | 0.9818 ppm | 99.3886 % | 122.6782 % | 86.3370 % | 96.3648 % | 119.7991 % | 94.0844 % |
| Concentration per Run 3 | 0.9834 ppm | 99.1834 % | 121.0644 % | 86.4579 % | 95.8193 % | 119.4211 % | 93.9023 % |
| Concentration RSD | 1.1 % | 0.8 % | 0.9 % | 0.3 % | 0.6 % | 0.3 % | 0.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513081-01 WG2040264
Analysis started at: 3/14/2025 5:40:56 PM
Rack 2
Vial 1
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.2045 ppm | 0.0000 ppm | 0.0423 ppm | 0.0117 ppm | 0.0000 ppm | 5.1180 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.2047 ppm | 0.0004 ppm | 0.0442 ppm | 0.0118 ppm | 0.0001 ppm | 5.1723 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.2086 ppm | -0.0021 ppm | 0.0418 ppm | 0.0116 ppm | 0.0000 ppm | 5.0821 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.2000 ppm | 0.0017 ppm | 0.0407 ppm | 0.0118 ppm | 0.0000 ppm | 5.0998 ppm |
| Concentration RSD | 17.9 % | 2.1 % | 17,068.5 % | 4.3 % | 0.7 % | 51.8 % | 0.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0003 ppm | 0.0040 ppm | 0.0182 ppm | 0.1305 ppm | 3.4120 ppm | 0.0037 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0002 ppm | 0.0048 ppm | 0.0189 ppm | 0.1326 ppm | 3.3826 ppm | 0.0039 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0003 ppm | 0.0035 ppm | 0.0179 ppm | 0.1290 ppm | 3.4103 ppm | 0.0037 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0003 ppm | 0.0037 ppm | 0.0178 ppm | 0.1298 ppm | 3.4431 ppm | 0.0037 ppm |
| Concentration RSD | 75.4 % | 17.7 % | 16.8 % | 3.1 % | 1.4 % | 0.9 % | 3.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.4126 ppm | 0.0077 ppm | 0.0005 ppm | 231.2861 ppm | 0.0027 ppm | 0.0015 ppm | 0.0009 ppm |
| Concentration per Run 1 | 1.4701 ppm | 0.0077 ppm | 0.0004 ppm | 231.5588 ppm | 0.0030 ppm | 0.0022 ppm | 0.0014 ppm |
| Concentration per Run 2 | 1.3954 ppm | 0.0077 ppm | 0.0004 ppm | 230.1083 ppm | 0.0028 ppm | 0.0015 ppm | -0.0010 ppm |
| Concentration per Run 3 | 1.3724 ppm | 0.0077 ppm | 0.0006 ppm | 232.1912 ppm | 0.0024 ppm | 0.0008 ppm | 0.0023 ppm |
| Concentration RSD | 3.6 % | 0.4 % | 25.3 % | 0.5 % | 12.4 % | 45.5 % | 187.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 5.0203 ppm | 0.0058 ppm | 0.0447 ppm | 0.0886 ppm | -0.0024 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0002 ppm | 5.3067 ppm | 0.0059 ppm | 0.0450 ppm | 0.0963 ppm | -0.0013 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0028 ppm | 4.8634 ppm | 0.0060 ppm | 0.0443 ppm | 0.0871 ppm | -0.0048 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0014 ppm | 4.8907 ppm | 0.0055 ppm | 0.0449 ppm | 0.0825 ppm | -0.0009 ppm | 0.0003 ppm |
| Concentration RSD | 110.8 % | 4.9 % | 4.4 % | 0.9 % | 7.9 % | 91.6 % | 162.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1079 ppm | 94.5637 % | 124.3284 % | 87.1577 % | 93.0742 % | 123.0162 % | 95.1739 % |
| Concentration per Run 1 | 0.1138 ppm | 91.4785 % | 122.9675 % | 86.7613 % | 89.2981 % | 122.4519 % | 95.0050 % |
| Concentration per Run 2 | 0.1057 ppm | 95.2548 % | 125.3038 % | 87.3171 % | 94.2787 % | 123.8353 % | 95.4186 % |
| Concentration per Run 3 | 0.1042 ppm | 96.9578 % | 124.7140 % | 87.3948 % | 95.6457 % | 122.7614 % | 95.0980 % |
| Concentration RSD | 4.8 % | 3.0 % | 1.0 % | 0.4 % | 3.6 % | 0.6 % | 0.2 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513086-01 WG2040264
Analysis started at: 3/14/2025 5:45:25 PM
Rack 2
Vial 2
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0312 ppm | 0.0031 ppm | 0.1724 ppm | 0.0505 ppm | 0.0000 ppm | 22.5549 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0264 ppm | 0.0035 ppm | 0.1768 ppm | 0.0505 ppm | 0.0000 ppm | 22.5141 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0351 ppm | 0.0034 ppm | 0.1711 ppm | 0.0505 ppm | 0.0000 ppm | 22.5493 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0320 ppm | 0.0025 ppm | 0.1692 ppm | 0.0503 ppm | 0.0000 ppm | 22.6014 ppm |
| Concentration RSD | 58.2 % | 14.3 % | 17.2 % | 2.3 % | 0.2 % | 162.9 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0002 ppm | -0.0001 ppm | 0.0169 ppm | 0.0902 ppm | 32.0214 ppm | 0.0105 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | 0.0175 ppm | 0.0924 ppm | 31.8291 ppm | 0.0105 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0004 ppm | -0.0006 ppm | 0.0166 ppm | 0.0908 ppm | 31.9443 ppm | 0.0103 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0167 ppm | 0.0873 ppm | 32.2907 ppm | 0.0108 ppm |
| Concentration RSD | 128.1 % | 114.3 % | 318.0 % | 2.8 % | 2.9 % | 0.8 % | 2.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 7.9225 ppm | 0.0064 ppm | 0.5779 ppm | 1,199.7198 [SIC 500] | 0.0030 ppm | 0.0007 ppm | 0.0005 ppm |
| Concentration per Run 1 | 8.1512 ppm | 0.0065 ppm | 0.5900 ppm | 1,197.1782 ppm | 0.0027 ppm | 0.0010 ppm | 0.0009 ppm |
| Concentration per Run 2 | 7.7521 ppm | 0.0065 ppm | 0.5675 ppm | 1,201.4071 ppm | 0.0035 ppm | 0.0008 ppm | -0.0005 ppm |
| Concentration per Run 3 | 7.8643 ppm | 0.0063 ppm | 0.5762 ppm | 1,200.5740 ppm | 0.0028 ppm | 0.0004 ppm | 0.0011 ppm |
| Concentration RSD | 2.6 % | 1.7 % | 2.0 % | 0.2 % | 15.7 % | 43.4 % | 175.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 6.3896 ppm | -0.0004 ppm | 0.2179 ppm | -0.0001 ppm | -0.0029 ppm | 0.0011 ppm |
| Concentration per Run 1 | -0.0026 ppm | 6.4965 ppm | -0.0007 ppm | 0.2180 ppm | 0.0001 ppm | -0.0035 ppm | 0.0010 ppm |
| Concentration per Run 2 | -0.0009 ppm | 6.2330 ppm | 0.0003 ppm | 0.2181 ppm | -0.0002 ppm | -0.0033 ppm | 0.0010 ppm |
| Concentration per Run 3 | 0.0019 ppm | 6.4394 ppm | -0.0007 ppm | 0.2175 ppm | -0.0002 ppm | -0.0018 ppm | 0.0011 ppm |
| Concentration RSD | 407.9 % | 2.2 % | 152.7 % | 0.1 % | 195.1 % | 33.3 % | 5.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0041 ppm | 91.3893 % | 122.2563 % | 75.2351 % | 88.9177 % | 119.9817 % | 88.1171 % |
| Concentration per Run 1 | 0.0043 ppm | 88.7265 % | 122.4971 % | 73.6845 % | 87.2358 % | 120.7895 % | 85.8822 % |
| Concentration per Run 2 | 0.0038 ppm | 93.0231 % | 121.9044 % | 76.2238 % | 91.1383 % | 119.6395 % | 89.3753 % |
| Concentration per Run 3 | 0.0041 ppm | 92.4184 % | 122.3674 % | 75.7969 % | 88.3790 % | 119.5161 % | 89.0937 % |
| Concentration RSD | 6.9 % | 2.5 % | 0.3 % | 1.8 % | 2.3 % | 0.6 % | 2.2 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513089-01 WG2040264
Analysis started at: 3/14/2025 5:49:57 PM
Rack 2
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.1691 ppm | 0.0003 ppm | 0.0079 ppm | 0.0209 ppm | 0.0000 ppm | 7.1494 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.1711 ppm | -0.0007 ppm | 0.0080 ppm | 0.0210 ppm | 0.0000 ppm | 7.1633 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.1681 ppm | 0.0021 ppm | 0.0081 ppm | 0.0208 ppm | 0.0000 ppm | 7.1766 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.1683 ppm | -0.0005 ppm | 0.0076 ppm | 0.0208 ppm | 0.0001 ppm | 7.1083 ppm |
| Concentration RSD | 12.8 % | 1.0 % | 585.0 % | 3.6 % | 0.6 % | 69.0 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0012 ppm | 0.0019 ppm | 0.0034 ppm | 0.2584 ppm | 2.4294 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0012 ppm | 0.0019 ppm | 0.0034 ppm | 0.2591 ppm | 2.4528 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0011 ppm | 0.0019 ppm | 0.0031 ppm | 0.2617 ppm | 2.4210 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0012 ppm | 0.0021 ppm | 0.0038 ppm | 0.2546 ppm | 2.4143 ppm | 0.0002 ppm |
| Concentration RSD | 86.9 % | 6.8 % | 6.4 % | 11.0 % | 1.4 % | 0.8 % | 103.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.2656 ppm | 0.5476 ppm | 0.0065 ppm | 101.1106 ppm | 0.0010 ppm | 0.0003 ppm | -0.0016 ppm |
| Concentration per Run 1 | 1.2612 ppm | 0.5489 ppm | 0.0070 ppm | 102.6538 ppm | 0.0006 ppm | 0.0008 ppm | 0.0008 ppm |
| Concentration per Run 2 | 1.2518 ppm | 0.5492 ppm | 0.0059 ppm | 100.0481 ppm | 0.0008 ppm | 0.0003 ppm | -0.0032 ppm |
| Concentration per Run 3 | 1.2839 ppm | 0.5447 ppm | 0.0066 ppm | 100.6300 ppm | 0.0014 ppm | -0.0002 ppm | -0.0025 ppm |
| Concentration RSD | 1.3 % | 0.5 % | 9.0 % | 1.4 % | 43.3 % | 167.0 % | 133.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 1.4926 ppm | -0.0002 ppm | 0.0427 ppm | 0.0068 ppm | -0.0020 ppm | 0.0007 ppm |
| Concentration per Run 1 | -0.0003 ppm | 1.4713 ppm | 0.0001 ppm | 0.0428 ppm | 0.0062 ppm | -0.0028 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0003 ppm | 1.4759 ppm | 0.0002 ppm | 0.0427 ppm | 0.0072 ppm | -0.0009 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0017 ppm | 1.5305 ppm | -0.0008 ppm | 0.0425 ppm | 0.0069 ppm | -0.0024 ppm | 0.0007 ppm |
| Concentration RSD | 179.0 % | 2.2 % | 337.0 % | 0.4 % | 7.8 % | 51.5 % | 36.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0518 ppm | 101.6008 % | 129.1875 % | 92.1860 % | 100.4594 % | 127.2275 % | 98.4002 % |
| Concentration per Run 1 | 0.0517 ppm | 102.2631 % | 129.5476 % | 89.9747 % | 101.9592 % | 128.1668 % | 96.6287 % |
| Concentration per Run 2 | 0.0514 ppm | 101.9565 % | 128.5705 % | 92.8530 % | 100.9094 % | 126.2075 % | 98.9662 % |
| Concentration per Run 3 | 0.0524 ppm | 100.5827 % | 129.4445 % | 93.7305 % | 98.5096 % | 127.3082 % | 99.6057 % |
| Concentration RSD | 1.0 % | 0.9 % | 0.4 % | 2.1 % | 1.8 % | 0.8 % | 1.6 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513260-01 WG2040264
Analysis started at: 3/14/2025 5:54:26 PM
Rack 2
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.3065 ppm | 0.0009 ppm | 0.1436 ppm | 0.0729 ppm | 0.0000 ppm | 107.3926 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.3025 ppm | 0.0018 ppm | 0.1471 ppm | 0.0731 ppm | 0.0000 ppm | 107.8747 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.3081 ppm | -0.0003 ppm | 0.1401 ppm | 0.0734 ppm | 0.0001 ppm | 107.9628 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.3091 ppm | 0.0011 ppm | 0.1435 ppm | 0.0723 ppm | 0.0000 ppm | 106.3403 ppm |
| Concentration RSD | 57.3 % | 1.1 % | 127.7 % | 2.4 % | 0.8 % | 121.5 % | 0.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 0.0002 ppm | 0.0015 ppm | 0.0888 ppm | 0.1416 ppm | 6.0230 ppm | 0.0079 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0001 ppm | 0.0015 ppm | 0.0912 ppm | 0.1411 ppm | 6.0751 ppm | 0.0082 ppm |
| Concentration per Run 2 | -0.0005 ppm | 0.0001 ppm | 0.0015 ppm | 0.0875 ppm | 0.1435 ppm | 6.0179 ppm | 0.0076 ppm |
| Concentration per Run 3 | -0.0005 ppm | 0.0004 ppm | 0.0016 ppm | 0.0876 ppm | 0.1403 ppm | 5.9761 ppm | 0.0080 ppm |
| Concentration RSD | 4.6 % | 83.4 % | 2.6 % | 2.3 % | 1.2 % | 0.8 % | 3.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 31.8078 ppm | 0.0055 ppm | 0.0046 ppm | 99.9050 ppm | 0.0090 ppm | 0.0007 ppm | -0.0012 ppm |
| Concentration per Run 1 | 32.8391 ppm | 0.0056 ppm | 0.0041 ppm | 100.9823 ppm | 0.0087 ppm | 0.0006 ppm | -0.0027 ppm |
| Concentration per Run 2 | 31.2654 ppm | 0.0056 ppm | 0.0047 ppm | 100.0172 ppm | 0.0088 ppm | 0.0012 ppm | -0.0004 ppm |
| Concentration per Run 3 | 31.3190 ppm | 0.0054 ppm | 0.0049 ppm | 98.7156 ppm | 0.0094 ppm | 0.0002 ppm | -0.0004 ppm |
| Concentration RSD | 2.8 % | 1.5 % | 8.4 % | 1.1 % | 3.9 % | 75.5 % | 109.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 3.2025 ppm | 0.0007 ppm | 0.5779 ppm | 0.0020 ppm | -0.0015 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0022 ppm | 3.2768 ppm | 0.0015 ppm | 0.5778 ppm | 0.0017 ppm | -0.0018 ppm | 0.0008 ppm |
| Concentration per Run 2 | -0.0001 ppm | 3.1782 ppm | -0.0002 ppm | 0.5792 ppm | 0.0026 ppm | -0.0017 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0035 ppm | 3.1524 ppm | 0.0007 ppm | 0.5765 ppm | 0.0016 ppm | -0.0009 ppm | 0.0006 ppm |
| Concentration RSD | 672.5 % | 2.1 % | 126.5 % | 0.2 % | 26.6 % | 32.3 % | 38.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0740 ppm | 99.1374 % | 126.4016 % | 87.6313 % | 96.2519 % | 124.7249 % | 94.9743 % |
| Concentration per Run 1 | 0.0762 ppm | 95.9438 % | 126.6145 % | 88.1277 % | 93.6149 % | 125.4290 % | 95.6925 % |
| Concentration per Run 2 | 0.0731 ppm | 100.9197 % | 125.1910 % | 87.6111 % | 97.7682 % | 124.0752 % | 94.6032 % |
| Concentration per Run 3 | 0.0727 ppm | 100.5486 % | 127.3992 % | 87.1550 % | 97.3727 % | 124.6705 % | 94.6272 % |
| Concentration RSD | 2.6 % | 2.8 % | 0.9 % | 0.6 % | 2.4 % | 0.5 % | 0.7 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513302-01 WG2040264
Analysis started at: 3/14/2025 5:59:04 PM
Rack 2
Vial 5
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.2861 ppm | -0.0002 ppm | 0.0140 ppm | 0.2252 ppm | 0.0000 ppm | 5.3922 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.2911 ppm | -0.0009 ppm | 0.0127 ppm | 0.2282 ppm | 0.0000 ppm | 5.4160 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.2899 ppm | 0.0001 ppm | 0.0139 ppm | 0.2274 ppm | 0.0000 ppm | 5.4511 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.2771 ppm | 0.0002 ppm | 0.0154 ppm | 0.2201 ppm | 0.0000 ppm | 5.3097 ppm |
| Concentration RSD | 10.7 % | 2.7 % | 287.5 % | 9.7 % | 2.0 % | 56.4 % | 1.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0004 ppm | 0.0010 ppm | 0.0057 ppm | 0.3259 ppm | 1.5807 ppm | 0.0025 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0004 ppm | 0.0011 ppm | 0.0056 ppm | 0.3262 ppm | 1.6116 ppm | 0.0025 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0000 ppm | 0.0011 ppm | 0.0056 ppm | 0.3333 ppm | 1.5949 ppm | 0.0026 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0006 ppm | 0.0007 ppm | 0.0058 ppm | 0.3182 ppm | 1.5356 ppm | 0.0024 ppm |
| Concentration RSD | 81.4 % | 81.4 % | 19.3 % | 1.8 % | 2.3 % | 2.5 % | 4.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.1290 ppm | 0.0099 ppm | 0.0008 ppm | 3.0645 ppm | 0.0007 ppm | -0.0004 ppm | -0.0002 ppm |
| Concentration per Run 1 | 1.1500 ppm | 0.0100 ppm | 0.0008 ppm | 3.1068 ppm | 0.0003 ppm | 0.0001 ppm | -0.0002 ppm |
| Concentration per Run 2 | 1.1169 ppm | 0.0100 ppm | 0.0008 ppm | 3.0786 ppm | 0.0013 ppm | -0.0010 ppm | -0.0020 ppm |
| Concentration per Run 3 | 1.1202 ppm | 0.0096 ppm | 0.0009 ppm | 3.0080 ppm | 0.0004 ppm | -0.0001 ppm | 0.0016 ppm |
| Concentration RSD | 1.6 % | 1.9 % | 8.6 % | 1.7 % | 85.0 % | 162.1 % | 982.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 1.2341 ppm | -0.0001 ppm | 0.0203 ppm | 0.0154 ppm | -0.0027 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.0006 ppm | 1.2329 ppm | 0.0005 ppm | 0.0207 ppm | 0.0162 ppm | -0.0026 ppm | 0.0010 ppm |
| Concentration per Run 2 | -0.0006 ppm | 1.2163 ppm | -0.0011 ppm | 0.0205 ppm | 0.0150 ppm | -0.0027 ppm | 0.0011 ppm |
| Concentration per Run 3 | -0.0008 ppm | 1.2529 ppm | 0.0003 ppm | 0.0198 ppm | 0.0151 ppm | -0.0030 ppm | 0.0010 ppm |
| Concentration RSD | 287.3 % | 1.5 % | 794.2 % | 2.1 % | 4.4 % | 8.2 % | 5.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1192 ppm | 107.3615 % | 132.8549 % | 100.3874 % | 106.7630 % | 131.8794 % | 102.0065 % |
| Concentration per Run 1 | 0.1203 ppm | 105.2214 % | 133.1001 % | 99.6684 % | 105.9467 % | 132.3168 % | 101.5334 % |
| Concentration per Run 2 | 0.1184 ppm | 108.7208 % | 130.6954 % | 101.0320 % | 108.4702 % | 129.4765 % | 102.3409 % |
| Concentration per Run 3 | 0.1190 ppm | 108.1422 % | 134.7690 % | 100.4617 % | 105.8720 % | 133.8449 % | 102.1453 % |
| Concentration RSD | 0.8 % | 1.7 % | 1.5 % | 0.7 % | 1.4 % | 1.7 % | 0.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: L2513304-01 WG2040264
Analysis started at: 3/14/2025 6:03:30 PM
Rack 2
Vial 6
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.7239 ppm | -0.0012 ppm | 0.0282 ppm | 0.0160 ppm | 0.0001 ppm | 3.8311 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.7244 ppm | -0.0013 ppm | 0.0282 ppm | 0.0163 ppm | 0.0001 ppm | 3.8462 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.7210 ppm | 0.0000 ppm | 0.0253 ppm | 0.0159 ppm | 0.0001 ppm | 3.8228 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.7265 ppm | -0.0024 ppm | 0.0312 ppm | 0.0159 ppm | 0.0001 ppm | 3.8245 ppm |
| Concentration RSD | 13.2 % | 0.4 % | 100.2 % | 10.4 % | 1.3 % | 15.0 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.1873 ppm | 0.0313 ppm | 0.0379 ppm | 0.5394 ppm | 0.2266 ppm | 0.0024 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.1836 ppm | 0.0304 ppm | 0.0373 ppm | 0.5417 ppm | 0.2313 ppm | 0.0019 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.1795 ppm | 0.0293 ppm | 0.0355 ppm | 0.5413 ppm | 0.2258 ppm | 0.0023 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.1989 ppm | 0.0342 ppm | 0.0410 ppm | 0.5354 ppm | 0.2226 ppm | 0.0029 ppm |
| Concentration RSD | 48.4 % | 5.4 % | 8.2 % | 7.4 % | 0.7 % | 1.9 % | 19.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2661 ppm | 0.0128 ppm | 0.0150 ppm | 24.6485 ppm | 0.3118 ppm | 0.0023 ppm | 0.0042 ppm |
| Concentration per Run 1 | 0.2612 ppm | 0.0130 ppm | 0.0146 ppm | 24.3519 ppm | 0.3069 ppm | 0.0021 ppm | 0.0030 ppm |
| Concentration per Run 2 | 0.2502 ppm | 0.0129 ppm | 0.0141 ppm | 24.6057 ppm | 0.2900 ppm | 0.0024 ppm | 0.0040 ppm |
| Concentration per Run 3 | 0.2869 ppm | 0.0127 ppm | 0.0161 ppm | 24.9879 ppm | 0.3384 ppm | 0.0024 ppm | 0.0056 ppm |
| Concentration RSD | 7.1 % | 1.2 % | 7.0 % | 1.3 % | 7.9 % | 6.9 % | 31.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0051 ppm | 0.2525 ppm | 0.1800 ppm | 0.0342 ppm | 0.0129 ppm | -0.0032 ppm | 0.0009 ppm |
| Concentration per Run 1 | 0.0033 ppm | 0.2474 ppm | 0.1775 ppm | 0.0346 ppm | 0.0121 ppm | -0.0026 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0055 ppm | 0.2417 ppm | 0.1686 ppm | 0.0341 ppm | 0.0122 ppm | -0.0034 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0065 ppm | 0.2684 ppm | 0.1941 ppm | 0.0341 ppm | 0.0144 ppm | -0.0035 ppm | 0.0010 ppm |
| Concentration RSD | 31.8 % | 5.6 % | 7.2 % | 0.8 % | 9.8 % | 15.4 % | 6.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.9578 ppm | 103.4302 % | 130.3739 % | 97.9219 % | **159.7620 %** | **201.5164 %** | **158.1109 %** |
| Concentration per Run 1 | 0.9434 ppm | 104.2537 % | 130.2234 % | 96.9040 % | **161.1319 %** | **202.0260 %** | **157.4758 %** |
| Concentration per Run 2 | 0.8976 ppm | 109.2385 % | 130.8565 % | 98.1087 % | **164.9014 %** | **202.2828 %** | **158.7763 %** |
| Concentration per Run 3 | 1.0324 ppm | 96.7982 % | 130.0418 % | 98.7529 % | **153.2526 %** | **200.2405 %** | **158.0805 %** |
| Concentration RSD | 7.2 % | 6.1 % | 0.3 % | 1.0 % | **3.7 %** | **0.6 %** | **0.4 %** |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: CCV
Analysis started at: 3/14/2025 6:07:57 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5336 ppm | 0.5136 ppm | 0.4886 ppm | 0.5270 ppm | 0.5231 ppm | 0.5037 ppm | 0.4711 ppm |
| Concentration per Run 1 | 0.5526 ppm | 0.5185 ppm | 0.4883 ppm | 0.5461 ppm | 0.5251 ppm | 0.5057 ppm | 0.4730 ppm |
| Concentration per Run 2 | 0.5315 ppm | 0.5040 ppm | 0.4874 ppm | 0.5253 ppm | 0.5158 ppm | 0.4975 ppm | 0.4692 ppm |
| Concentration per Run 3 | 0.5167 ppm | 0.5181 ppm | 0.4901 ppm | 0.5096 ppm | 0.5284 ppm | 0.5079 ppm | 0.4709 ppm |
| Recovery Percentage 1 | 106.716 % | 102.713 % | 97.719 % | 105.400 % | 104.624 % | 100.738 % | 94.211 % |
| Concentration RSD | 3.4 % | 1.6 % | 0.3 % | 3.5 % | 1.2 % | 1.1 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5123 ppm | 0.5293 ppm | 0.5246 ppm | 0.5478 ppm | 0.4935 ppm | 5.5519 ppm | 0.5666 ppm |
| Concentration per Run 1 | 0.5306 ppm | 0.5559 ppm | 0.5443 ppm | 0.5678 ppm | 0.4940 ppm | 5.5973 ppm | 0.5707 ppm |
| Concentration per Run 2 | 0.5083 ppm | 0.5209 ppm | 0.5213 ppm | 0.5464 ppm | 0.4895 ppm | 5.4676 ppm | 0.5546 ppm |
| Concentration per Run 3 | 0.4981 ppm | 0.5110 ppm | 0.5082 ppm | 0.5293 ppm | 0.4971 ppm | 5.5908 ppm | 0.5745 ppm |
| Recovery Percentage 1 | 102.467 % | 105.853 % | 104.923 % | 109.565 % | 98.705 % | 111.038 % | 113.328 % |
| Concentration RSD | 3.2 % | 4.5 % | 3.5 % | 3.5 % | 0.8 % | 1.3 % | 1.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5280 ppm | 0.4746 ppm | 0.5260 ppm | 11.4325 ppm | 0.5370 ppm | 0.5090 ppm | 0.5392 ppm |
| Concentration per Run 1 | 0.5464 ppm | 0.4754 ppm | 0.5395 ppm | 11.5019 ppm | 0.5574 ppm | 0.5081 ppm | 0.5618 ppm |
| Concentration per Run 2 | 0.5252 ppm | 0.4706 ppm | 0.5222 ppm | 11.2290 ppm | 0.5331 ppm | 0.5111 ppm | 0.5369 ppm |
| Concentration per Run 3 | 0.5124 ppm | 0.4779 ppm | 0.5164 ppm | 11.5666 ppm | 0.5207 ppm | 0.5078 ppm | 0.5189 ppm |
| Recovery Percentage 1 | 105.606 % | 94.930 % | 105.207 % | 114.325 % | 107.409 % | 101.797 % | 107.842 % |
| Concentration RSD | 3.3 % | 0.8 % | 2.3 % | 1.6 % | 3.5 % | 0.4 % | 4.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5049 ppm | 5.9791 ppm | 0.5282 ppm | 0.5333 ppm | 0.5330 ppm | 0.5171 ppm | 0.5297 ppm |
| Concentration per Run 1 | 0.5066 ppm | 6.2783 ppm | 0.5511 ppm | 0.5363 ppm | 0.5534 ppm | 0.5163 ppm | 0.5481 ppm |
| Concentration per Run 2 | 0.5011 ppm | 5.8952 ppm | 0.5228 ppm | 0.5252 ppm | 0.5289 ppm | 0.5181 ppm | 0.5266 ppm |
| Concentration per Run 3 | 0.5068 ppm | 5.7638 ppm | 0.5106 ppm | 0.5386 ppm | 0.5166 ppm | 0.5168 ppm | 0.5146 ppm |
| Recovery Percentage 1 | 100.972 % | 113.887 % | 105.634 % | 106.669 % | 106.595 % | 103.416 % | 105.949 % |
| Concentration RSD | 0.6 % | 4.5 % | 3.9 % | 1.3 % | 3.5 % | 0.2 % | 3.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5142 ppm | 104.2142 % | 129.7108 % | 98.5400 % | 99.8188 % | 126.1274 % | 100.9332 % |
| Concentration per Run 1 | 0.5323 ppm | 101.3837 % | 129.4760 % | 98.6422 % | 95.7244 % | 126.2034 % | 101.0634 % |
| Concentration per Run 2 | 0.5108 ppm | 104.5337 % | 130.8821 % | 97.9321 % | 101.0601 % | 126.9267 % | 100.4926 % |
| Concentration per Run 3 | 0.4994 ppm | 106.7252 % | 128.7743 % | 99.0456 % | 102.6720 % | 125.2521 % | 101.2436 % |
| Recovery Percentage 1 | 102.831 % | | | | | | |
| Concentration RSD | 3.2 % | 2.6 % | 0.8 % | 0.6 % | 3.6 % | 0.7 % | 0.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: CCB
Analysis started at: 3/14/2025 6:12:23 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0112 ppm | -0.0017 ppm | 0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0041 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0156 ppm | -0.0023 ppm | 0.0004 ppm | 0.0000 ppm | 0.0001 ppm | 0.0044 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0086 ppm | -0.0008 ppm | 0.0002 ppm | -0.0001 ppm | 0.0000 ppm | 0.0037 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0096 ppm | -0.0021 ppm | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0042 ppm |
| Recovery Percentage 1 | 6.298 % | 11.241 % | -34.460 % | 0.646 % | -0.412 % | 0.558 % | 4.079 % |
| Concentration RSD | 18.5 % | 33.9 % | 48.7 % | 95.0 % | 101.2 % | 110.1 % | 9.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | -0.0001 ppm | 0.0003 ppm | 0.0026 ppm | 0.0064 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | 0.0026 ppm | 0.0105 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | -0.0002 ppm | 0.0001 ppm | 0.0025 ppm | 0.0136 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0003 ppm | 0.0000 ppm | 0.0005 ppm | 0.0026 ppm | -0.0049 ppm | -0.0008 ppm |
| Recovery Percentage 1 | 0.672 % | -0.994 % | -0.830 % | 2.844 % | 5.117 % | 0.256 % | 0.543 % |
| Concentration RSD | 158.0 % | 166.4 % | 149.8 % | 78.6 % | 1.7 % | 155.4 % | 1,404.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0001 ppm | 0.0022 ppm | 0.0679 ppm | 0.0005 ppm | -0.0008 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0010 ppm | 0.0002 ppm | 0.0023 ppm | 0.0701 ppm | 0.0010 ppm | 0.0002 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0003 ppm | 0.0023 ppm | 0.0695 ppm | -0.0004 ppm | -0.0017 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0000 ppm | 0.0021 ppm | 0.0641 ppm | 0.0009 ppm | -0.0009 ppm | 0.0009 ppm |
| Recovery Percentage 1 | -0.328 % | 1.410 % | 4.457 % | 3.396 % | 2.099 % | -8.053 % | 0.766 % |
| Concentration RSD | 192.3 % | 106.1 % | 5.8 % | 4.9 % | 152.6 % | 117.2 % | 126.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | -0.0017 ppm | 0.0003 ppm | 0.0000 ppm | 0.0001 ppm | -0.0021 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0006 ppm | -0.0002 ppm | 0.0000 ppm | 0.0001 ppm | -0.0031 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0007 ppm | -0.0029 ppm | 0.0007 ppm | -0.0001 ppm | 0.0000 ppm | -0.0015 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0007 ppm | -0.0015 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm | -0.0017 ppm | -0.0001 ppm |
| Recovery Percentage 1 | 4.922 % | -0.330 % | 0.574 % | -0.319 % | 0.555 % | -10.607 % | -1.607 % |
| Concentration RSD | 77.5 % | 70.2 % | 147.9 % | 187.8 % | 64.6 % | 39.6 % | 58.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 105.6863 % | 126.9720 % | 99.8153 % | 104.0045 % | 126.3728 % | 101.8744 % |
| Concentration per Run 1 | 0.0005 ppm | 105.7042 % | 127.7087 % | 97.4985 % | 105.2370 % | 126.9020 % | 100.1017 % |
| Concentration per Run 2 | 0.0003 ppm | 109.7809 % | 127.4667 % | 100.4685 % | 108.5971 % | 127.1401 % | 102.3909 % |
| Concentration per Run 3 | 0.0005 ppm | 101.5739 % | 125.7405 % | 101.4787 % | 98.1795 % | 125.0763 % | 103.1307 % |
| Recovery Percentage 1 | 8.660 % | | | | | | |
| Concentration RSD | 24.6 % | 3.9 % | 0.8 % | 2.1 % | 5.1 % | 0.9 % | 1.6 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: CCV
Analysis started at: 3/14/2025 6:17:15 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5134 ppm | 0.5071 ppm | 0.4862 ppm | 0.5070 ppm | 0.5138 ppm | 0.5017 ppm | 0.4706 ppm |
| Concentration per Run 1 | 0.5157 ppm | 0.5104 ppm | 0.4859 ppm | 0.5105 ppm | 0.5159 ppm | 0.5022 ppm | 0.4689 ppm |
| Concentration per Run 2 | 0.5122 ppm | 0.5095 ppm | 0.4883 ppm | 0.5041 ppm | 0.5133 ppm | 0.5013 ppm | 0.4740 ppm |
| Concentration per Run 3 | 0.5123 ppm | 0.5013 ppm | 0.4842 ppm | 0.5063 ppm | 0.5122 ppm | 0.5014 ppm | 0.4689 ppm |
| Recovery Percentage 1 | 102.679 % | 101.411 % | 97.233 % | 101.390 % | 102.761 % | 100.333 % | 94.125 % |
| Concentration RSD | 0.4 % | 1.0 % | 0.4 % | 0.6 % | 0.4 % | 0.1 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4958 ppm | 0.5096 ppm | 0.5071 ppm | 0.5237 ppm | 0.4908 ppm | 5.4664 ppm | 0.5645 ppm |
| Concentration per Run 1 | 0.4985 ppm | 0.5104 ppm | 0.5104 ppm | 0.5257 ppm | 0.4884 ppm | 5.5460 ppm | 0.5697 ppm |
| Concentration per Run 2 | 0.4965 ppm | 0.5118 ppm | 0.5072 ppm | 0.5226 ppm | 0.4893 ppm | 5.3766 ppm | 0.5576 ppm |
| Concentration per Run 3 | 0.4924 ppm | 0.5064 ppm | 0.5039 ppm | 0.5228 ppm | 0.4948 ppm | 5.4767 ppm | 0.5662 ppm |
| Recovery Percentage 1 | 99.160 % | 101.911 % | 101.427 % | 104.736 % | 98.167 % | 109.329 % | 112.900 % |
| Concentration RSD | 0.6 % | 0.6 % | 0.6 % | 0.3 % | 0.7 % | 1.6 % | 1.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5081 ppm | 0.4740 ppm | 0.5077 ppm | 11.1413 ppm | 0.5194 ppm | 0.5075 ppm | 0.5223 ppm |
| Concentration per Run 1 | 0.5113 ppm | 0.4738 ppm | 0.5073 ppm | 11.2310 ppm | 0.5232 ppm | 0.5078 ppm | 0.5250 ppm |
| Concentration per Run 2 | 0.5060 ppm | 0.4743 ppm | 0.5066 ppm | 10.9964 ppm | 0.5199 ppm | 0.5090 ppm | 0.5244 ppm |
| Concentration per Run 3 | 0.5070 ppm | 0.4739 ppm | 0.5092 ppm | 11.1966 ppm | 0.5152 ppm | 0.5058 ppm | 0.5175 ppm |
| Recovery Percentage 1 | 101.619 % | 94.801 % | 101.541 % | 111.413 % | 103.882 % | 101.503 % | 104.459 % |
| Concentration RSD | 0.6 % | 0.0 % | 0.3 % | 1.1 % | 0.8 % | 0.3 % | 0.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5009 ppm | 5.7610 ppm | 0.5090 ppm | 0.5286 ppm | 0.5133 ppm | 0.5132 ppm | 0.5112 ppm |
| Concentration per Run 1 | 0.5021 ppm | 5.7822 ppm | 0.5148 ppm | 0.5297 ppm | 0.5153 ppm | 0.5113 ppm | 0.5133 ppm |
| Concentration per Run 2 | 0.4974 ppm | 5.7523 ppm | 0.5049 ppm | 0.5279 ppm | 0.5127 ppm | 0.5133 ppm | 0.5106 ppm |
| Concentration per Run 3 | 0.5031 ppm | 5.7485 ppm | 0.5072 ppm | 0.5283 ppm | 0.5118 ppm | 0.5151 ppm | 0.5096 ppm |
| Recovery Percentage 1 | 100.171 % | 109.733 % | 101.793 % | 105.726 % | 102.654 % | 102.649 % | 102.232 % |
| Concentration RSD | 0.6 % | 0.3 % | 1.0 % | 0.2 % | 0.4 % | 0.4 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4989 ppm | 107.0872 % | 129.6136 % | 98.7408 % | 102.4011 % | 126.0624 % | 100.9462 % |
| Concentration per Run 1 | 0.5004 ppm | 106.6560 % | 129.8710 % | 99.0388 % | 102.2016 % | 126.6916 % | 101.3117 % |
| Concentration per Run 2 | 0.4996 ppm | 106.7569 % | 129.3339 % | 98.6414 % | 101.9861 % | 125.7093 % | 100.9618 % |
| Concentration per Run 3 | 0.4966 ppm | 107.8488 % | 129.6359 % | 98.5422 % | 103.0155 % | 125.7862 % | 100.5649 % |
| Recovery Percentage 1 | 99.773 % | | | | | | |
| Concentration RSD | 0.4 % | 0.6 % | 0.2 % | 0.3 % | 0.5 % | 0.4 % | 0.4 % |

# iCAP Pro Trace 8 Data report

3/15/2025 11:59:54 AM

LabBook: WG2040539_03142025T8.imexp

Sample: CCB
Analysis started at: 3/14/2025 6:21:41 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0087 ppm | 0.0002 ppm | 0.0002 ppm | -0.0001 ppm | 0.0000 ppm | 0.0018 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0102 ppm | -0.0016 ppm | 0.0003 ppm | -0.0001 ppm | 0.0001 ppm | 0.0020 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0079 ppm | 0.0011 ppm | -0.0002 ppm | -0.0001 ppm | 0.0000 ppm | 0.0014 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0079 ppm | 0.0012 ppm | 0.0006 ppm | -0.0001 ppm | 0.0000 ppm | 0.0020 ppm |
| Recovery Percentage 1 | 9.779 % | 8.660 % | 4.577 % | 0.812 % | -1.213 % | 0.944 % | 1.806 % |
| Concentration RSD | 11.4 % | 15.3 % | 708.4 % | 155.8 % | 23.3 % | 32.8 % | 21.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0019 ppm | -0.0037 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0003 ppm | 0.0003 ppm | -0.0001 ppm | 0.0018 ppm | -0.0024 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0006 ppm | 0.0002 ppm | -0.0002 ppm | 0.0015 ppm | 0.0025 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0001 ppm | -0.0002 ppm | 0.0004 ppm | 0.0025 ppm | -0.0111 ppm | 0.0009 ppm |
| Recovery Percentage 1 | 0.986 % | -1.403 % | 0.894 % | 0.483 % | 3.854 % | -0.147 % | 6.319 % |
| Concentration RSD | 175.9 % | 305.1 % | 265.1 % | 706.4 % | 28.1 % | 186.9 % | 55.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0002 ppm | 0.0023 ppm | 0.0462 ppm | 0.0000 ppm | -0.0005 ppm | 0.0013 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0002 ppm | 0.0020 ppm | 0.0472 ppm | 0.0001 ppm | -0.0001 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0002 ppm | 0.0021 ppm | 0.0431 ppm | -0.0001 ppm | -0.0006 ppm | 0.0035 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0001 ppm | 0.0027 ppm | 0.0481 ppm | 0.0001 ppm | -0.0009 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 0.067 % | 1.649 % | 4.605 % | 2.308 % | 0.140 % | -5.352 % | 2.544 % |
| Concentration RSD | 300.4 % | 23.2 % | 16.3 % | 5.8 % | 280.7 % | 83.5 % | 151.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | -0.0040 ppm | 0.0005 ppm | 0.0000 ppm | 0.0000 ppm | -0.0015 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0037 ppm | 0.0004 ppm | 0.0000 ppm | 0.0000 ppm | -0.0008 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0017 ppm | -0.0057 ppm | 0.0007 ppm | 0.0000 ppm | 0.0003 ppm | -0.0019 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0026 ppm | -0.0026 ppm | 0.0004 ppm | 0.0000 ppm | -0.0002 ppm | -0.0016 ppm | -0.0002 ppm |
| Recovery Percentage 1 | -2.751 % | -0.799 % | 1.005 % | -0.021 % | 0.238 % | -7.316 % | -0.946 % |
| Concentration RSD | 798.5 % | 39.6 % | 33.7 % | 1,898.2 % | 1,131.6 % | 38.8 % | 100.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 102.8078 % | 128.3828 % | 101.0308 % | 101.4216 % | 127.6167 % | 103.3454 % |
| Concentration per Run 1 | 0.0002 ppm | 106.8813 % | 128.6420 % | 99.1136 % | 105.4453 % | 128.2365 % | 101.8691 % |
| Concentration per Run 2 | 0.0006 ppm | 103.9820 % | 127.6397 % | 99.6759 % | 102.4950 % | 127.3938 % | 102.2285 % |
| Concentration per Run 3 | 0.0008 ppm | 97.5602 % | 128.8668 % | 104.3029 % | 96.3247 % | 127.2197 % | 105.9387 % |
| Recovery Percentage 1 | 10.472 % | | | | | | |
| Concentration RSD | 62.3 % | 4.6 % | 0.5 % | 2.8 % | 4.6 % | 0.4 % | 2.2 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: Blank JMF Trace7
Analysis started at: 3/17/2025 09:23:54
Comments <Comment>
Rack: 0
Vial: 1

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -0.5 % | -1.5 % | 0.1 % | 0.1 % | 0.3 % | -0.1 % | 0.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -0.3 % | -0.4 % | 1.2 % | 0.0 % | -0.5 % | -7.5 % | -0.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -0.4 % | -0.2 % | 0.2 % | -0.6 % | -0.1 % | 0.4 % | -0.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -0.5 % | 0.1 % | 0.6 % | -0.2 % | -0.4 % | 0.0 % | -0.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % |
| Concentration per Run | 0.0000 ppm | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % |
| Concentration RSD | 0.1 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: ICAL
Analysis started at: 3/17/2025 09:29:04
Comments <Comment>
Rack: 0
Vial: 2

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 10.0000 ppm |
| Concentration per Run 1 | 1.0008 ppm | 24.8379 ppm | 0.9883 ppm | 0.9889 ppm | 0.9949 ppm | 0.9958 ppm | 9.9575 ppm |
| Concentration per Run 2 | 1.0006 ppm | 25.1000 ppm | 1.0068 ppm | 1.0100 ppm | 1.0036 ppm | 1.0029 ppm | 10.0291 ppm |
| Concentration per Run 3 | 0.9986 ppm | 25.0621 ppm | 1.0050 ppm | 1.0011 ppm | 1.0015 ppm | 1.0012 ppm | 10.0134 ppm |
| Concentration RSD | 0.1 % | 0.6 % | 1.0 % | 1.1 % | 0.5 % | 0.4 % | 0.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 35.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 0.9891 ppm | 0.9910 ppm | 0.9986 ppm | 0.9998 ppm | 24.8861 ppm | 34.8475 ppm | 0.9965 ppm |
| Concentration per Run 2 | 1.0097 ppm | 1.0080 ppm | 1.0013 ppm | 1.0007 ppm | 25.0792 ppm | 35.1188 ppm | 1.0038 ppm |
| Concentration per Run 3 | 1.0012 ppm | 1.0010 ppm | 1.0001 ppm | 0.9995 ppm | 25.0348 ppm | 35.0338 ppm | 0.9997 ppm |
| Concentration RSD | 1.0 % | 0.9 % | 0.1 % | 0.1 % | 0.4 % | 0.4 % | 0.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.0000 ppm | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 10.0072 ppm | 0.9956 ppm | 0.9888 ppm | 24.8863 ppm | 0.9880 ppm | 0.9889 ppm | 0.9924 ppm |
| Concentration per Run 2 | 10.0015 ppm | 1.0033 ppm | 1.0093 ppm | 25.0941 ppm | 1.0095 ppm | 1.0088 ppm | 1.0072 ppm |
| Concentration per Run 3 | 9.9913 ppm | 1.0011 ppm | 1.0019 ppm | 25.0195 ppm | 1.0024 ppm | 1.0023 ppm | 1.0004 ppm |
| Concentration RSD | 0.1 % | 0.4 % | 1.0 % | 0.4 % | 1.1 % | 1.0 % | 0.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 10.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 0.9877 ppm | 9.9387 ppm | 0.9878 ppm | 0.9946 ppm | 0.9994 ppm | 0.9888 ppm | 0.9994 ppm |
| Concentration per Run 2 | 1.0082 ppm | 10.0519 ppm | 1.0096 ppm | 1.0041 ppm | 1.0008 ppm | 1.0072 ppm | 1.0004 ppm |
| Concentration per Run 3 | 1.0041 ppm | 10.0093 ppm | 1.0027 ppm | 1.0013 ppm | 0.9998 ppm | 1.0040 ppm | 1.0002 ppm |
| Concentration RSD | 1.1 % | 0.6 % | 1.1 % | 0.5 % | 0.1 % | 1.0 % | 0.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 99.6214 % | 97.9676 % | 100.3087 % | 101.4229 % | 101.5986 % | 98.8988 % |
| Concentration per Run 1 | 0.9873 ppm | 99.6805 % | 97.8845 % | 100.8568 % | 101.5467 % | 102.4158 % | 98.9229 % |
| Concentration per Run 2 | 1.0108 ppm | 99.3038 % | 97.9558 % | 99.8935 % | 101.0817 % | 100.8074 % | 98.8437 % |
| Concentration per Run 3 | 1.0020 ppm | 99.8799 % | 98.0624 % | 100.1759 % | 101.6402 % | 101.5725 % | 98.9298 % |
| Concentration RSD | 1.2 % | 0.3 % | 0.1 % | 0.5 % | 0.3 % | 0.8 % | 0.0 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: ICV
Analysis started at: 3/17/2025 09:54:31
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4822 ppm | 0.5049 ppm | 0.5025 ppm | 0.4909 ppm | 0.4818 ppm | 0.5057 ppm | 0.5144 ppm |
| Concentration per Run 1 | 0.4774 ppm | 0.5030 ppm | 0.5033 ppm | 0.4918 ppm | 0.4807 ppm | 0.5052 ppm | 0.5121 ppm |
| Concentration per Run 2 | 0.4771 ppm | 0.5058 ppm | 0.5027 ppm | 0.4901 ppm | 0.4817 ppm | 0.5053 ppm | 0.5183 ppm |
| Concentration per Run 3 | 0.4922 ppm | 0.5061 ppm | 0.5014 ppm | 0.4908 ppm | 0.4831 ppm | 0.5065 ppm | 0.5128 ppm |
| Recovery Percentage 1 | 96.439 % | 100.988 % | 100.492 % | 98.181 % | 96.369 % | 101.132 % | 102.883 % |
| Concentration RSD | 1.8 % | 0.3 % | 0.2 % | 0.2 % | 0.2 % | 0.1 % | 0.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4986 ppm | 0.5029 ppm | 0.5035 ppm | 0.4877 ppm | 0.5178 ppm | 5.2398 ppm | 0.5083 ppm |
| Concentration per Run 1 | 0.4986 ppm | 0.5037 ppm | 0.4984 ppm | 0.4824 ppm | 0.5169 ppm | 5.2543 ppm | 0.5071 ppm |
| Concentration per Run 2 | 0.4988 ppm | 0.5026 ppm | 0.4983 ppm | 0.4829 ppm | 0.5185 ppm | 5.2220 ppm | 0.5083 ppm |
| Concentration per Run 3 | 0.4984 ppm | 0.5025 ppm | 0.5137 ppm | 0.4977 ppm | 0.5181 ppm | 5.2431 ppm | 0.5097 ppm |
| Recovery Percentage 1 | 99.722 % | 100.588 % | 100.694 % | 97.536 % | 103.563 % | 104.796 % | 101.668 % |
| Concentration RSD | 0.0 % | 0.1 % | 1.8 % | 1.8 % | 0.2 % | 0.3 % | 0.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5039 ppm | 0.4935 ppm | 0.4900 ppm | 10.0101 ppm | 0.5035 ppm | 0.4937 ppm | 0.5097 ppm |
| Concentration per Run 1 | 0.4957 ppm | 0.4929 ppm | 0.4898 ppm | 9.9729 ppm | 0.5032 ppm | 0.4937 ppm | 0.5094 ppm |
| Concentration per Run 2 | 0.4994 ppm | 0.4932 ppm | 0.4905 ppm | 10.0156 ppm | 0.5030 ppm | 0.4942 ppm | 0.5090 ppm |
| Concentration per Run 3 | 0.5167 ppm | 0.4946 ppm | 0.4898 ppm | 10.0419 ppm | 0.5043 ppm | 0.4932 ppm | 0.5106 ppm |
| Recovery Percentage 1 | 100.789 % | 98.710 % | 98.010 % | 100.101 % | 100.700 % | 98.745 % | 101.932 % |
| Concentration RSD | 2.2 % | 0.2 % | 0.1 % | 0.3 % | 0.1 % | 0.1 % | 0.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5006 ppm | 5.5739 ppm | 0.5074 ppm | 0.4991 ppm | 0.5061 ppm | 0.4796 ppm | 0.5003 ppm |
| Concentration per Run 1 | 0.5028 ppm | 5.5918 ppm | 0.5078 ppm | 0.4978 ppm | 0.5007 ppm | 0.4801 ppm | 0.4954 ppm |
| Concentration per Run 2 | 0.4987 ppm | 5.5641 ppm | 0.5081 ppm | 0.4991 ppm | 0.5009 ppm | 0.4789 ppm | 0.4935 ppm |
| Concentration per Run 3 | 0.5004 ppm | 5.5657 ppm | 0.5064 ppm | 0.5003 ppm | 0.5167 ppm | 0.4797 ppm | 0.5119 ppm |
| Recovery Percentage 1 | 100.123 % | 106.169 % | 101.482 % | 99.816 % | 101.220 % | 95.913 % | 100.052 % |
| Concentration RSD | 0.4 % | 0.3 % | 0.2 % | 0.3 % | 1.8 % | 0.1 % | 2.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5099 ppm | 100.1595 % | 99.0696 % | 99.9991 % | 101.8288 % | 100.1458 % | 99.8901 % |
| Concentration per Run 1 | 0.5086 ppm | 99.7029 % | 100.0526 % | 99.8100 % | 101.6567 % | 100.1636 % | 100.9090 % |
| Concentration per Run 2 | 0.5104 ppm | 100.0908 % | 99.8473 % | 100.2110 % | 101.7036 % | 100.1583 % | 100.6793 % |
| Concentration per Run 3 | 0.5106 ppm | 100.6849 % | 97.3088 % | 99.9765 % | 102.1262 % | 100.1153 % | 98.0821 % |
| Recovery Percentage 1 | 101.976 % | | | | | | |
| Concentration RSD | 0.2 % | 0.5 % | 1.5 % | 0.2 % | 0.3 % | 0.0 % | 1.6 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: ICB
Analysis started at: 3/17/2025 09:59:24
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0012 ppm | 0.0018 ppm | 0.0005 ppm | 0.0000 ppm | 0.0000 ppm | 0.0030 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0038 ppm | 0.0006 ppm | 0.0007 ppm | -0.0001 ppm | 0.0000 ppm | 0.0010 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0021 ppm | 0.0006 ppm | 0.0008 ppm | 0.0000 ppm | 0.0000 ppm | 0.0062 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0022 ppm | 0.0042 ppm | -0.0001 ppm | 0.0000 ppm | 0.0000 ppm | 0.0018 ppm |
| Recovery Percentage 1 | 0.495 % | -1.214 % | 35.486 % | 1.617 % | -0.165 % | 0.509 % | 3.013 % |
| Concentration RSD | 222.9 % | 251.1 % | 116.4 % | 96.6 % | 229.2 % | 86.3 % | 93.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0002 ppm | 0.0000 ppm | 0.0001 ppm | 0.0011 ppm | -0.0075 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0001 ppm | -0.0001 ppm | 0.0001 ppm | 0.0010 ppm | -0.0053 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0002 ppm | 0.0001 ppm | 0.0001 ppm | 0.0009 ppm | -0.0154 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0003 ppm | -0.0001 ppm | 0.0001 ppm | 0.0014 ppm | -0.0019 ppm | 0.0009 ppm |
| Recovery Percentage 1 | 3.074 % | 1.015 % | -0.189 % | 0.960 % | 2.227 % | -0.302 % | 4.580 % |
| Concentration RSD | 45.7 % | 55.2 % | 572.2 % | 36.3 % | 24.6 % | 93.5 % | 105.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 0.0001 ppm | 0.0000 ppm | -0.0012 ppm | -0.0003 ppm | -0.0009 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0002 ppm | -0.0002 ppm | 0.0001 ppm | -0.0005 ppm | -0.0002 ppm | 0.0010 ppm |
| Concentration per Run 2 | 0.0014 ppm | 0.0001 ppm | 0.0002 ppm | -0.0009 ppm | -0.0001 ppm | -0.0008 ppm | -0.0014 ppm |
| Concentration per Run 3 | 0.0018 ppm | 0.0000 ppm | 0.0001 ppm | -0.0027 ppm | -0.0002 ppm | -0.0018 ppm | 0.0016 ppm |
| Recovery Percentage 1 | 1.367 % | 0.988 % | 0.059 % | -0.060 % | -1.045 % | -9.321 % | 0.747 % |
| Concentration RSD | 35.3 % | 110.0 % | 681.6 % | 117.4 % | 68.1 % | 87.7 % | 428.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0010 ppm | 0.0003 ppm | 0.0010 ppm | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0010 ppm | 0.0004 ppm | 0.0007 ppm | 0.0000 ppm | 0.0000 ppm | -0.0003 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0014 ppm | -0.0003 ppm | 0.0010 ppm | 0.0000 ppm | 0.0000 ppm | 0.0022 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0006 ppm | 0.0008 ppm | 0.0013 ppm | 0.0000 ppm | -0.0001 ppm | -0.0021 ppm | 0.0001 ppm |
| Recovery Percentage 1 | -10.054 % | 0.064 % | 2.030 % | -0.111 % | -0.290 % | -0.361 % | 1.288 % |
| Concentration RSD | 37.0 % | 176.8 % | 32.3 % | 208.7 % | 262.9 % | 2,955.3 % | 53.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 100.4402 % | 101.2472 % | 100.7447 % | 99.6390 % | 99.9514 % | 99.9794 % |
| Concentration per Run 1 | -0.0003 ppm | 100.2607 % | 101.3366 % | 100.7815 % | 99.4997 % | 100.1013 % | 100.0881 % |
| Concentration per Run 2 | -0.0003 ppm | 100.3249 % | 101.1611 % | 100.7618 % | 99.5805 % | 100.0083 % | 99.9267 % |
| Concentration per Run 3 | -0.0002 ppm | 100.7351 % | 101.2439 % | 100.6908 % | 99.8367 % | 99.7446 % | 99.9236 % |
| Recovery Percentage 1 | -5.830 % | | | | | | |
| Concentration RSD | 17.6 % | 0.3 % | 0.1 % | 0.0 % | 0.2 % | 0.2 % | 0.1 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: ICV
Analysis started at: 3/17/2025 10:04:36
Comments POSITION CHANGED
Rack: 0
Vial: 10

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4786 ppm | 0.5073 ppm | 0.5032 ppm | 0.4900 ppm | 0.4851 ppm | 0.5104 ppm | 0.5229 ppm |
| Concentration per Run 1 | 0.4796 ppm | 0.5037 ppm | 0.5011 ppm | 0.4911 ppm | 0.4840 ppm | 0.5096 ppm | 0.5245 ppm |
| Concentration per Run 2 | 0.4790 ppm | 0.5059 ppm | 0.5033 ppm | 0.4888 ppm | 0.4849 ppm | 0.5103 ppm | 0.5225 ppm |
| Concentration per Run 3 | 0.4772 ppm | 0.5124 ppm | 0.5052 ppm | 0.4902 ppm | 0.4864 ppm | 0.5112 ppm | 0.5218 ppm |
| Recovery Percentage 1 | 95.722 % | 101.463 % | 100.637 % | 98.004 % | 97.022 % | 102.073 % | 104.585 % |
| Concentration RSD | 0.3 % | 0.9 % | 0.4 % | 0.2 % | 0.2 % | 0.2 % | 0.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4996 ppm | 0.5037 ppm | 0.5017 ppm | 0.4849 ppm | 0.5269 ppm | 5.2780 ppm | 0.5059 ppm |
| Concentration per Run 1 | 0.4995 ppm | 0.5042 ppm | 0.5025 ppm | 0.4855 ppm | 0.5260 ppm | 5.2668 ppm | 0.5047 ppm |
| Concentration per Run 2 | 0.4987 ppm | 0.5029 ppm | 0.5027 ppm | 0.4850 ppm | 0.5287 ppm | 5.2831 ppm | 0.5049 ppm |
| Concentration per Run 3 | 0.5006 ppm | 0.5039 ppm | 0.5000 ppm | 0.4841 ppm | 0.5261 ppm | 5.2842 ppm | 0.5082 ppm |
| Recovery Percentage 1 | 99.924 % | 100.735 % | 100.349 % | 96.971 % | 105.384 % | 105.560 % | 101.187 % |
| Concentration RSD | 0.2 % | 0.1 % | 0.3 % | 0.1 % | 0.3 % | 0.2 % | 0.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5030 ppm | 0.4990 ppm | 0.4907 ppm | 10.1170 ppm | 0.5050 ppm | 0.4959 ppm | 0.5133 ppm |
| Concentration per Run 1 | 0.5052 ppm | 0.4986 ppm | 0.4903 ppm | 10.1020 ppm | 0.5071 ppm | 0.4970 ppm | 0.5140 ppm |
| Concentration per Run 2 | 0.5007 ppm | 0.4986 ppm | 0.4907 ppm | 10.1092 ppm | 0.5042 ppm | 0.4954 ppm | 0.5125 ppm |
| Concentration per Run 3 | 0.5031 ppm | 0.4998 ppm | 0.4910 ppm | 10.1399 ppm | 0.5036 ppm | 0.4954 ppm | 0.5134 ppm |
| Recovery Percentage 1 | 100.595 % | 99.795 % | 98.135 % | 101.170 % | 100.996 % | 99.182 % | 102.663 % |
| Concentration RSD | 0.5 % | 0.1 % | 0.1 % | 0.2 % | 0.4 % | 0.2 % | 0.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5033 ppm | 5.5767 ppm | 0.4908 ppm | 0.5026 ppm | 0.5052 ppm | 0.4820 ppm | 0.4983 ppm |
| Concentration per Run 1 | 0.5075 ppm | 5.5768 ppm | 0.4920 ppm | 0.5011 ppm | 0.5053 ppm | 0.4831 ppm | 0.4983 ppm |
| Concentration per Run 2 | 0.5016 ppm | 5.5599 ppm | 0.4898 ppm | 0.5027 ppm | 0.5060 ppm | 0.4800 ppm | 0.4988 ppm |
| Concentration per Run 3 | 0.5008 ppm | 5.5934 ppm | 0.4905 ppm | 0.5039 ppm | 0.5043 ppm | 0.4829 ppm | 0.4976 ppm |
| Recovery Percentage 1 | 100.661 % | 106.222 % | 98.156 % | 100.516 % | 101.037 % | 96.398 % | 99.652 % |
| Concentration RSD | 0.7 % | 0.3 % | 0.2 % | 0.3 % | 0.2 % | 0.4 % | 0.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5111 ppm | 101.3272 % | 101.1127 % | 101.0027 % | 102.2776 % | 101.0446 % | 101.2934 % |
| Concentration per Run 1 | 0.5115 ppm | 101.0583 % | 100.9939 % | 100.9449 % | 102.1046 % | 100.8059 % | 101.1727 % |
| Concentration per Run 2 | 0.5098 ppm | 101.4026 % | 100.9337 % | 101.3809 % | 102.3936 % | 101.3934 % | 101.0292 % |
| Concentration per Run 3 | 0.5121 ppm | 101.5207 % | 101.4106 % | 100.6822 % | 102.3347 % | 100.9345 % | 101.6781 % |
| Recovery Percentage 1 | 102.223 % | | | | | | |
| Concentration RSD | 0.2 % | 0.2 % | 0.3 % | 0.3 % | 0.1 % | 0.3 % | 0.3 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: ICB
Analysis started at: 3/17/2025 10:09:36
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0000 ppm | 0.0016 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm | 0.0050 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0017 ppm | 0.0013 ppm | 0.0001 ppm | 0.0000 ppm | 0.0001 ppm | 0.0057 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0002 ppm | 0.0011 ppm | 0.0002 ppm | 0.0000 ppm | 0.0001 ppm | 0.0053 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0014 ppm | 0.0026 ppm | 0.0007 ppm | 0.0000 ppm | 0.0000 ppm | 0.0039 ppm |
| Recovery Percentage 1 | 2.529 % | -0.021 % | 32.620 % | 1.061 % | 0.000 % | 0.996 % | 4.993 % |
| Concentration RSD | 70.0 % | 7,384.0 % | 49.6 % | 103.4 % | 178,297.0 % | 28.7 % | 19.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0002 ppm | 0.0001 ppm | -0.0002 ppm | 0.0009 ppm | 0.0026 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | -0.0002 ppm | 0.0008 ppm | 0.0167 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0005 ppm | 0.0002 ppm | -0.0001 ppm | 0.0010 ppm | 0.0140 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0002 ppm | 0.0002 ppm | -0.0002 ppm | 0.0010 ppm | -0.0229 ppm | 0.0004 ppm |
| Recovery Percentage 1 | 2.376 % | 1.242 % | 1.007 % | -1.689 % | 1.880 % | 0.103 % | 3.269 % |
| Concentration RSD | 94.7 % | 93.0 % | 204.9 % | 38.2 % | 12.2 % | 862.2 % | 96.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 0.0001 ppm | 0.0003 ppm | 0.0014 ppm | -0.0005 ppm | 0.0002 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0012 ppm | -0.0001 ppm | 0.0004 ppm | 0.0043 ppm | -0.0001 ppm | 0.0001 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0013 ppm | 0.0001 ppm | 0.0002 ppm | 0.0025 ppm | -0.0007 ppm | 0.0008 ppm | -0.0007 ppm |
| Concentration per Run 3 | 0.0027 ppm | 0.0002 ppm | 0.0004 ppm | -0.0027 ppm | -0.0008 ppm | -0.0001 ppm | 0.0006 ppm |
| Recovery Percentage 1 | 1.728 % | 0.591 % | 0.590 % | 0.068 % | -2.107 % | 2.356 % | -0.125 % |
| Concentration RSD | 48.2 % | 275.5 % | 36.9 % | 266.4 % | 75.1 % | 207.5 % | 999.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0009 ppm | 0.0002 ppm | 0.0001 ppm | 0.0001 ppm | 0.0001 ppm | 0.0022 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0004 ppm | -0.0002 ppm | -0.0001 ppm | 0.0000 ppm | 0.0001 ppm | -0.0009 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0004 ppm | 0.0002 ppm | 0.0001 ppm | 0.0001 ppm | -0.0014 ppm | 0.0001 ppm |
| Recovery Percentage 1 | -2.354 % | 0.026 % | 0.135 % | 0.461 % | 0.993 % | -0.104 % | 1.340 % |
| Concentration RSD | 350.6 % | 218.1 % | 289.1 % | 81.6 % | 31.5 % | 9,365.1 % | 95.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 100.4053 % | 101.2653 % | 100.7036 % | 100.0475 % | 99.7142 % | 100.1847 % |
| Concentration per Run 1 | -0.0004 ppm | 100.4032 % | 101.2718 % | 100.5870 % | 100.1250 % | 99.6150 % | 100.1762 % |
| Concentration per Run 2 | -0.0001 ppm | 100.5131 % | 101.0429 % | 100.6314 % | 100.1163 % | 99.4099 % | 100.0317 % |
| Concentration per Run 3 | 0.0000 ppm | 100.2996 % | 101.4812 % | 100.8924 % | 99.9012 % | 100.1175 % | 100.3463 % |
| Recovery Percentage 1 | -3.552 % | | | | | | |
| Concentration RSD | 118.8 % | 0.1 % | 0.2 % | 0.2 % | 0.1 % | 0.4 % | 0.2 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: LLOQ
Analysis started at: 3/17/2025 10:14:49
Comments <Comment>
Rack: 0
Vial: 5

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0050 ppm | 0.1066 ppm | 0.0072 ppm | 0.0317 ppm | 0.0101 ppm | 0.0053 ppm | 0.1138 ppm |
| Concentration per Run 1 | 0.0051 ppm | 0.1092 ppm | 0.0073 ppm | 0.0318 ppm | 0.0101 ppm | 0.0053 ppm | 0.1135 ppm |
| Concentration per Run 2 | 0.0048 ppm | 0.1059 ppm | 0.0067 ppm | 0.0318 ppm | 0.0101 ppm | 0.0053 ppm | 0.1145 ppm |
| Concentration per Run 3 | 0.0051 ppm | 0.1047 ppm | 0.0075 ppm | 0.0316 ppm | 0.0101 ppm | 0.0053 ppm | 0.1135 ppm |
| Recovery Percentage 1 | 100.021 % | 106.605 % | 143.117 % | 105.726 % | 100.875 % | 106.123 % | 113.825 % |
| Concentration RSD | 2.8 % | 2.2 % | 5.2 % | 0.2 % | 0.2 % | 0.5 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0042 ppm | 0.0102 ppm | 0.0107 ppm | 0.0102 ppm | 0.0611 ppm | 2.7255 ppm | 0.0103 ppm |
| Concentration per Run 1 | 0.0042 ppm | 0.0101 ppm | 0.0109 ppm | 0.0103 ppm | 0.0619 ppm | 2.7327 ppm | 0.0106 ppm |
| Concentration per Run 2 | 0.0042 ppm | 0.0102 ppm | 0.0103 ppm | 0.0101 ppm | 0.0608 ppm | 2.7300 ppm | 0.0104 ppm |
| Concentration per Run 3 | 0.0043 ppm | 0.0103 ppm | 0.0107 ppm | 0.0102 ppm | 0.0605 ppm | 2.7138 ppm | 0.0099 ppm |
| Recovery Percentage 1 | 106.124 % | 102.320 % | 106.506 % | 101.872 % | 122.195 % | 109.019 % | 102.968 % |
| Concentration RSD | 1.9 % | 0.9 % | 2.8 % | 1.3 % | 1.2 % | 0.4 % | 3.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1090 ppm | 0.0106 ppm | 0.0513 ppm | 2.1041 ppm | 0.0199 ppm | 0.0095 ppm | 0.0542 ppm |
| Concentration per Run 1 | 0.1091 ppm | 0.0107 ppm | 0.0515 ppm | 2.1141 ppm | 0.0200 ppm | 0.0093 ppm | 0.0545 ppm |
| Concentration per Run 2 | 0.1092 ppm | 0.0106 ppm | 0.0513 ppm | 2.0952 ppm | 0.0199 ppm | 0.0103 ppm | 0.0540 ppm |
| Concentration per Run 3 | 0.1086 ppm | 0.0105 ppm | 0.0512 ppm | 2.1031 ppm | 0.0200 ppm | 0.0088 ppm | 0.0542 ppm |
| Recovery Percentage 1 | 108.985 % | 106.147 % | 102.686 % | 105.207 % | 79.784 % | 94.726 % | 108.411 % |
| Concentration RSD | 0.3 % | 1.3 % | 0.3 % | 0.5 % | 0.2 % | 8.0 % | 0.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0102 ppm | 0.5541 ppm | 0.0531 ppm | 0.0105 ppm | 0.0105 ppm | 0.0179 ppm | 0.0103 ppm |
| Concentration per Run 1 | 0.0089 ppm | 0.5555 ppm | 0.0535 ppm | 0.0105 ppm | 0.0106 ppm | 0.0161 ppm | 0.0101 ppm |
| Concentration per Run 2 | 0.0107 ppm | 0.5543 ppm | 0.0524 ppm | 0.0104 ppm | 0.0105 ppm | 0.0192 ppm | 0.0103 ppm |
| Concentration per Run 3 | 0.0108 ppm | 0.5524 ppm | 0.0532 ppm | 0.0105 ppm | 0.0105 ppm | 0.0182 ppm | 0.0105 ppm |
| Recovery Percentage 1 | 101.575 % | 110.815 % | 106.108 % | 104.752 % | 105.300 % | 89.278 % | 103.242 % |
| Concentration RSD | 10.6 % | 0.3 % | 1.1 % | 0.2 % | 0.6 % | 9.0 % | 1.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0048 ppm | 100.1909 % | 100.4062 % | 99.6951 % | 100.5717 % | 98.7180 % | 100.1621 % |
| Concentration per Run 1 | 0.0047 ppm | 100.5702 % | 100.0775 % | 99.3728 % | 100.8271 % | 98.3351 % | 99.8939 % |
| Concentration per Run 2 | 0.0048 ppm | 99.6494 % | 100.6521 % | 99.7350 % | 100.0561 % | 98.8493 % | 100.3768 % |
| Concentration per Run 3 | 0.0050 ppm | 100.3531 % | 100.4889 % | 99.9774 % | 100.8317 % | 98.9696 % | 100.2157 % |
| Recovery Percentage 1 | 96.569 % | | | | | | |
| Concentration RSD | 3.0 % | 0.5 % | 0.3 % | 0.3 % | 0.4 % | 0.3 % | 0.2 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: ICSA
Analysis started at: 3/17/2025 10:19:58
Comments <Comment>
Rack: 0
Vial: 6

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 506.0064 [SIC 500] | 0.0025 ppm | -0.0020 ppm | 0.0014 ppm | 0.0000 ppm | 479.4048 ppm |
| Concentration per Run 1 | 0.0004 ppm | 508.6006 ppm | 0.0028 ppm | -0.0032 ppm | 0.0014 ppm | 0.0000 ppm | 477.1132 ppm |
| Concentration per Run 2 | 0.0004 ppm | 503.6365 ppm | 0.0019 ppm | -0.0014 ppm | 0.0014 ppm | 0.0000 ppm | 482.2086 ppm |
| Concentration per Run 3 | 0.0002 ppm | 505.7821 ppm | 0.0027 ppm | -0.0014 ppm | 0.0014 ppm | 0.0000 ppm | 478.8925 ppm |
| Recovery Percentage 1 | 6.992 % | 506,006.401 % | 49.729 % | -6.601 % | 14.063 % | 0.220 % | 479,404.801 % |
| Concentration RSD | 32.4 % | 0.5 % | 21.1 % | 51.2 % | 1.3 % | 16.9 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0078 ppm | 0.0008 ppm | -0.0008 ppm | 0.0018 ppm | 181.5071 ppm | -0.0404 ppm | -0.0058 ppm |
| Concentration per Run 1 | -0.0077 ppm | 0.0005 ppm | -0.0008 ppm | 0.0016 ppm | 180.9008 ppm | -0.0419 ppm | -0.0056 ppm |
| Concentration per Run 2 | -0.0079 ppm | 0.0011 ppm | -0.0010 ppm | 0.0019 ppm | 181.6393 ppm | -0.0392 ppm | -0.0061 ppm |
| Concentration per Run 3 | -0.0077 ppm | 0.0006 ppm | -0.0005 ppm | 0.0020 ppm | 181.9812 ppm | -0.0401 ppm | -0.0058 ppm |
| Recovery Percentage 1 | -194.211 % | 3.769 % | -7.886 % | 18.265 % | 363,014.209 % | -1.615 % | -58.299 % |
| Concentration RSD | 1.4 % | 42.6 % | 32.3 % | 10.7 % | 0.3 % | 3.4 % | 4.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 468.4066 ppm | 0.0019 ppm | -0.0019 ppm | 0.0158 ppm | -0.0036 ppm | -0.0024 ppm | -0.0207 ppm |
| Concentration per Run 1 | 468.1911 ppm | 0.0018 ppm | -0.0016 ppm | 0.0163 ppm | -0.0030 ppm | -0.0011 ppm | -0.0231 ppm |
| Concentration per Run 2 | 467.1848 ppm | 0.0019 ppm | -0.0021 ppm | 0.0154 ppm | -0.0042 ppm | -0.0005 ppm | -0.0203 ppm |
| Concentration per Run 3 | 469.8439 ppm | 0.0020 ppm | -0.0020 ppm | 0.0156 ppm | -0.0034 ppm | -0.0055 ppm | -0.0188 ppm |
| Recovery Percentage 1 | 468,406.603 % | 19.069 % | -3.807 % | 0.788 % | -14.233 % | -23.648 % | -41.499 % |
| Concentration RSD | 0.3 % | 6.1 % | 14.3 % | 2.8 % | 17.1 % | 117.1 % | 10.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | -0.0027 ppm | 0.0048 ppm | 0.0058 ppm | 0.0002 ppm | -0.0040 ppm | 0.0016 ppm |
| Concentration per Run 1 | 0.0007 ppm | -0.0030 ppm | 0.0064 ppm | 0.0059 ppm | 0.0001 ppm | -0.0045 ppm | 0.0016 ppm |
| Concentration per Run 2 | 0.0006 ppm | -0.0037 ppm | 0.0041 ppm | 0.0057 ppm | 0.0002 ppm | -0.0009 ppm | 0.0015 ppm |
| Concentration per Run 3 | 0.0024 ppm | -0.0014 ppm | 0.0040 ppm | 0.0058 ppm | 0.0002 ppm | -0.0067 ppm | 0.0017 ppm |
| Recovery Percentage 1 | 12.213 % | -0.539 % | 9.599 % | 58.104 % | 1.565 % | -20.177 % | 15.747 % |
| Concentration RSD | 85.0 % | 45.2 % | 28.7 % | 1.2 % | 13.2 % | 72.3 % | 6.5 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0037 ppm | 96.4785 % | 89.8457 % | 91.2420 % | 96.2267 % | 88.0950 % | 89.2140 % |
| Concentration per Run 1 | -0.0036 ppm | 96.4456 % | 89.7849 % | 91.3983 % | 96.2931 % | 88.2414 % | 89.1666 % |
| Concentration per Run 2 | -0.0040 ppm | 96.4759 % | 89.7870 % | 91.0734 % | 95.9552 % | 87.9718 % | 89.2071 % |
| Concentration per Run 3 | -0.0036 ppm | 96.5138 % | 89.9652 % | 91.2542 % | 96.4317 % | 88.0718 % | 89.2683 % |
| Recovery Percentage 1 | -74.438 % | | | | | | |
| Concentration RSD | 5.9 % | 0.0 % | 0.1 % | 0.2 % | 0.3 % | 0.2 % | 0.1 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: SIC Multi
Analysis started at: 3/17/2025 10:25:37
Comments <Comment>
Rack: 0
Vial: 7

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0037 ppm | 0.0105 ppm | 0.0002 ppm | 0.0008 ppm | 0.0002 ppm | -0.0013 ppm | 0.0641 ppm |
| Concentration per Run 1 | -0.0037 ppm | 0.0264 ppm | -0.0017 ppm | 0.0010 ppm | 0.0002 ppm | -0.0013 ppm | 0.0768 ppm |
| Concentration per Run 2 | -0.0037 ppm | 0.0058 ppm | 0.0020 ppm | 0.0005 ppm | 0.0002 ppm | -0.0013 ppm | 0.0610 ppm |
| Concentration per Run 3 | -0.0037 ppm | -0.0007 ppm | 0.0002 ppm | 0.0009 ppm | 0.0002 ppm | -0.0013 ppm | 0.0546 ppm |
| Recovery Percentage 1 | -74.674 % | 10.497 % | 3.311 % | 2.691 % | 2.230 % | -25.808 % | 64.128 % |
| Concentration RSD | 0.6 % | 135.0 % | 1,109.2 % | 38.0 % | 5.3 % | 2.6 % | 17.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0021 ppm | -0.0081 ppm | 20.0209 ppm | 0.0038 ppm | 0.0264 ppm | -0.0087 ppm | 0.0005 ppm |
| Concentration per Run 1 | -0.0021 ppm | -0.0084 ppm | 20.0140 ppm | 0.0036 ppm | 0.0333 ppm | -0.0156 ppm | 0.0006 ppm |
| Concentration per Run 2 | -0.0021 ppm | -0.0079 ppm | 20.0414 ppm | 0.0039 ppm | 0.0246 ppm | 0.0027 ppm | 0.0011 ppm |
| Concentration per Run 3 | -0.0021 ppm | -0.0081 ppm | 20.0072 ppm | 0.0038 ppm | 0.0214 ppm | -0.0132 ppm | -0.0001 ppm |
| Recovery Percentage 1 | -52.511 % | -40.519 % | 200,208.882 % | 37.783 % | 52.854 % | -0.347 % | 5.258 % |
| Concentration RSD | 1.7 % | 3.2 % | 0.1 % | 4.3 % | 23.4 % | 114.9 % | 118.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0837 ppm | 20.1046 [SIC 40] | -0.0034 ppm | 0.0094 ppm | 0.0002 ppm | 0.0014 ppm | -0.0127 ppm |
| Concentration per Run 1 | 0.0627 ppm | 19.9733 ppm | -0.0036 ppm | 0.0098 ppm | 0.0003 ppm | 0.0008 ppm | -0.0135 ppm |
| Concentration per Run 2 | 0.0853 ppm | 20.2291 ppm | -0.0032 ppm | 0.0075 ppm | 0.0001 ppm | 0.0008 ppm | -0.0122 ppm |
| Concentration per Run 3 | 0.1031 ppm | 20.1113 ppm | -0.0034 ppm | 0.0109 ppm | 0.0002 ppm | 0.0027 ppm | -0.0123 ppm |
| Recovery Percentage 1 | 83.709 % | 201,045.854 % | -6.726 % | 0.469 % | 0.720 % | 14.440 % | -25.314 % |
| Concentration RSD | 24.2 % | 0.6 % | 5.9 % | 18.8 % | 40.6 % | 75.5 % | 5.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0039 ppm | 0.0630 ppm | -0.0021 ppm | 0.0003 ppm | 19.6972 ppm | 0.0034 ppm | 10.3383 [SIC 10] |
| Concentration per Run 1 | -0.0043 ppm | 0.0660 ppm | -0.0013 ppm | 0.0003 ppm | 19.6059 ppm | 0.0049 ppm | 10.3237 ppm |
| Concentration per Run 2 | -0.0034 ppm | 0.0622 ppm | -0.0029 ppm | 0.0003 ppm | 19.7907 ppm | 0.0035 ppm | 10.3454 ppm |
| Concentration per Run 3 | -0.0038 ppm | 0.0609 ppm | -0.0021 ppm | 0.0003 ppm | 19.6949 ppm | 0.0016 ppm | 10.3460 ppm |
| Recovery Percentage 1 | -38.594 % | 12.601 % | -4.205 % | 2.713 % | 196,971.740 % | 16.848 % | 103,383.471 % |
| Concentration RSD | 12.0 % | 4.2 % | 39.2 % | 3.1 % | 0.5 % | 49.1 % | 0.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0091 ppm | 101.5413 % | 101.9885 % | 102.3301 % | 102.1129 % | 101.3599 % | 101.9312 % |
| Concentration per Run 1 | -0.0092 ppm | 101.5579 % | 102.0431 % | 102.2267 % | 102.1927 % | 101.3289 % | 102.1171 % |
| Concentration per Run 2 | -0.0090 ppm | 101.3938 % | 101.8136 % | 102.2579 % | 101.9541 % | 101.1581 % | 101.6933 % |
| Concentration per Run 3 | -0.0089 ppm | 101.6722 % | 102.1087 % | 102.5058 % | 102.1921 % | 101.5926 % | 101.9834 % |
| Recovery Percentage 1 | -181.500 % | | | | | | |
| Concentration RSD | 1.7 % | 0.1 % | 0.2 % | 0.1 % | 0.1 % | 0.2 % | 0.2 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: xLLOQ 0.005ppm
Analysis started at: 3/17/2025 10:38:00
Comments <Comment>
Rack: 1
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0049 ppm | **0.0141 ppm** | **0.0065 ppm** | 0.0048 ppm | 0.0051 ppm | 0.0052 ppm | 0.0207 ppm |
| Concentration per Run 1 | 0.0047 ppm | 0.0173 ppm | 0.0061 ppm | 0.0045 ppm | 0.0051 ppm | 0.0052 ppm | 0.0203 ppm |
| Concentration per Run 2 | 0.0050 ppm | 0.0115 ppm | 0.0069 ppm | 0.0050 ppm | 0.0051 ppm | 0.0053 ppm | 0.0225 ppm |
| Concentration per Run 3 | 0.0051 ppm | 0.0134 ppm | 0.0065 ppm | 0.0050 ppm | 0.0051 ppm | 0.0053 ppm | 0.0194 ppm |
| Recovery Percentage 1 | 98.823 % | 281.016 % | 129.570 % | 96.905 % | 102.068 % | 104.907 % | 0.000 % |
| Concentration RSD | 5.1 % | **21.2 %** | **6.2 %** | 5.6 % | 0.4 % | 0.4 % | 7.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0053 ppm | 0.0053 ppm | **0.0074 ppm** | 0.0050 ppm | **0.0139 ppm** | 0.0420 ppm | 0.0053 ppm |
| Concentration per Run 1 | 0.0053 ppm | 0.0051 ppm | 0.0061 ppm | 0.0049 ppm | 0.0140 ppm | 0.0523 ppm | 0.0056 ppm |
| Concentration per Run 2 | 0.0052 ppm | 0.0052 ppm | 0.0066 ppm | 0.0049 ppm | 0.0143 ppm | 0.0371 ppm | 0.0058 ppm |
| Concentration per Run 3 | 0.0053 ppm | 0.0055 ppm | 0.0095 ppm | 0.0052 ppm | 0.0134 ppm | 0.0366 ppm | 0.0044 ppm |
| Recovery Percentage 1 | 105.550 % | 105.485 % | 147.560 % | 100.052 % | 278.015 % | 0.000 % | 0.000 % |
| Concentration RSD | 0.5 % | 4.1 % | **25.2 %** | 3.1 % | **3.4 %** | 21.3 % | 15.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0184 ppm | **0.0065 ppm** | 0.0049 ppm | 0.1074 ppm | 0.0048 ppm | **0.0040 ppm** | 0.0044 ppm |
| Concentration per Run 1 | 0.0111 ppm | 0.0066 ppm | 0.0047 ppm | 0.1091 ppm | 0.0046 ppm | 0.0049 ppm | 0.0049 ppm |
| Concentration per Run 2 | 0.0149 ppm | 0.0066 ppm | 0.0049 ppm | 0.1049 ppm | 0.0050 ppm | 0.0045 ppm | 0.0051 ppm |
| Concentration per Run 3 | 0.0294 ppm | 0.0062 ppm | 0.0052 ppm | 0.1081 ppm | 0.0048 ppm | 0.0025 ppm | 0.0033 ppm |
| Recovery Percentage 1 | 0.000 % | 129.610 % | 98.806 % | 0.000 % | 95.878 % | 79.001 % | 88.288 % |
| Concentration RSD | 52.3 % | **3.2 %** | 4.2 % | 2.0 % | 3.9 % | **31.9 %** | 21.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0052 ppm | **0.0573 ppm** | 0.0051 ppm | 0.0053 ppm | **0.0073 ppm** | 0.0044 ppm | **0.0062 ppm** |
| Concentration per Run 1 | 0.0052 ppm | 0.0572 ppm | 0.0054 ppm | 0.0053 ppm | 0.0063 ppm | 0.0059 ppm | 0.0054 ppm |
| Concentration per Run 2 | 0.0066 ppm | 0.0576 ppm | 0.0059 ppm | 0.0053 ppm | 0.0062 ppm | 0.0039 ppm | 0.0058 ppm |
| Concentration per Run 3 | 0.0037 ppm | 0.0571 ppm | 0.0039 ppm | 0.0053 ppm | 0.0094 ppm | 0.0035 ppm | 0.0072 ppm |
| Recovery Percentage 1 | 103.667 % | 1,146.051 % | 102.114 % | 106.516 % | 146.038 % | 88.367 % | 123.131 % |
| Concentration RSD | 27.9 % | **0.4 %** | 20.4 % | 0.8 % | **24.8 %** | 28.7 % | **15.1 %** |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0051 ppm | 99.7373 % | 101.3957 % | 101.0126 % | 98.8656 % | 100.3110 % | 99.9997 % |
| Concentration per Run 1 | 0.0050 ppm | 100.0412 % | 101.6980 % | 100.8369 % | 99.2509 % | 100.1571 % | 100.2701 % |
| Concentration per Run 2 | 0.0051 ppm | 99.3609 % | 101.1277 % | 101.0222 % | 98.6112 % | 100.4307 % | 99.7762 % |
| Concentration per Run 3 | 0.0050 ppm | 99.8099 % | 101.3614 % | 101.1787 % | 98.7346 % | 100.3453 % | 99.9530 % |
| Recovery Percentage 1 | 101.091 % | | | | | | |
| Concentration RSD | 0.9 % | 0.3 % | 0.3 % | 0.2 % | 0.3 % | 0.1 % | 0.3 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: xLLOQ 0.01ppm
Analysis started at: 3/17/2025 10:43:10
Comments <Comment>
Rack: 1
Vial: 2

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0102 ppm | 0.0142 ppm | 0.0125 ppm | 0.0102 ppm | 0.0100 ppm | 0.0104 ppm | 0.0191 ppm |
| Concentration per Run 1 | 0.0104 ppm | 0.0166 ppm | 0.0131 ppm | 0.0102 ppm | 0.0100 ppm | 0.0103 ppm | 0.0186 ppm |
| Concentration per Run 2 | 0.0101 ppm | 0.0120 ppm | 0.0145 ppm | 0.0101 ppm | 0.0101 ppm | 0.0105 ppm | 0.0200 ppm |
| Concentration per Run 3 | 0.0101 ppm | 0.0138 ppm | 0.0097 ppm | 0.0103 ppm | 0.0100 ppm | 0.0105 ppm | 0.0187 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 124.538 % | 101.784 % | 100.408 % | 0.000 % | 0.000 % |
| Concentration RSD | 1.7 % | 16.5 % | 20.0 % | 1.2 % | 0.1 % | 0.9 % | 4.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0104 ppm | 0.0104 ppm | 0.0112 ppm | 0.0102 ppm | 0.0215 ppm | 0.1080 ppm | 0.0107 ppm |
| Concentration per Run 1 | 0.0104 ppm | 0.0102 ppm | 0.0115 ppm | 0.0106 ppm | 0.0221 ppm | 0.1029 ppm | 0.0105 ppm |
| Concentration per Run 2 | 0.0103 ppm | 0.0106 ppm | 0.0111 ppm | 0.0099 ppm | 0.0218 ppm | 0.1060 ppm | 0.0114 ppm |
| Concentration per Run 3 | 0.0104 ppm | 0.0106 ppm | 0.0112 ppm | 0.0100 ppm | 0.0205 ppm | 0.1151 ppm | 0.0100 ppm |
| Recovery Percentage 1 | 0.000 % | 104.324 % | 112.332 % | 101.681 % | 0.000 % | 0.000 % | 106.542 % |
| Concentration RSD | 0.6 % | 2.3 % | 1.8 % | 3.9 % | 4.0 % | 5.9 % | 6.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0157 ppm | 0.0108 ppm | 0.0098 ppm | 0.2093 ppm | 0.0101 ppm | 0.0095 ppm | 0.0102 ppm |
| Concentration per Run 1 | 0.0161 ppm | 0.0107 ppm | 0.0097 ppm | 0.2058 ppm | 0.0103 ppm | 0.0092 ppm | 0.0090 ppm |
| Concentration per Run 2 | 0.0155 ppm | 0.0109 ppm | 0.0100 ppm | 0.2125 ppm | 0.0100 ppm | 0.0087 ppm | 0.0113 ppm |
| Concentration per Run 3 | 0.0156 ppm | 0.0108 ppm | 0.0098 ppm | 0.2094 ppm | 0.0100 ppm | 0.0107 ppm | 0.0102 ppm |
| Recovery Percentage 1 | 0.000 % | 108.111 % | 98.288 % | 0.000 % | 101.242 % | 95.292 % | 0.000 % |
| Concentration RSD | 2.1 % | 0.9 % | 1.7 % | 1.6 % | 1.9 % | 10.6 % | 11.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0102 ppm | 0.1132 ppm | 0.0107 ppm | 0.0105 ppm | 0.0111 ppm | 0.0101 ppm | 0.0105 ppm |
| Concentration per Run 1 | 0.0097 ppm | 0.1130 ppm | 0.0098 ppm | 0.0104 ppm | 0.0115 ppm | 0.0104 ppm | 0.0107 ppm |
| Concentration per Run 2 | 0.0093 ppm | 0.1139 ppm | 0.0104 ppm | 0.0105 ppm | 0.0111 ppm | 0.0100 ppm | 0.0104 ppm |
| Concentration per Run 3 | 0.0116 ppm | 0.1127 ppm | 0.0118 ppm | 0.0105 ppm | 0.0108 ppm | 0.0100 ppm | 0.0104 ppm |
| Recovery Percentage 1 | 102.077 % | 0.000 % | 106.778 % | 104.620 % | 111.162 % | 100.998 % | 104.984 % |
| Concentration RSD | 11.9 % | 0.6 % | 9.7 % | 0.6 % | 3.1 % | 2.3 % | 1.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0102 ppm | 99.7809 % | 99.5483 % | 100.5093 % | 98.9464 % | 99.5685 % | 97.8650 % |
| Concentration per Run 1 | 0.0100 ppm | 100.1204 % | 97.3482 % | 100.4134 % | 99.3503 % | 99.4343 % | 95.6859 % |
| Concentration per Run 2 | 0.0102 ppm | 99.7919 % | 100.5482 % | 100.4544 % | 99.0244 % | 99.5006 % | 98.9109 % |
| Concentration per Run 3 | 0.0103 ppm | 99.4303 % | 100.7485 % | 100.6601 % | 98.4644 % | 99.7707 % | 98.9984 % |
| Recovery Percentage 1 | 101.801 % | | | | | | |
| Concentration RSD | 1.3 % | 0.3 % | 1.9 % | 0.1 % | 0.5 % | 0.2 % | 1.9 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: LLOQ 0.05ppm Fe
Analysis started at: 3/17/2025 10:48:18
Comments <Comment>
Rack: 1
Vial: 1

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0498 ppm | 0.0539 ppm | 0.0557 ppm | 0.0507 ppm | 0.0503 ppm | 0.0527 ppm | 0.0623 ppm |
| Concentration per Run 1 | 0.0499 ppm | 0.0496 ppm | 0.0566 ppm | 0.0509 ppm | 0.0502 ppm | 0.0526 ppm | 0.0644 ppm |
| Concentration per Run 2 | 0.0500 ppm | 0.0530 ppm | 0.0547 ppm | 0.0505 ppm | 0.0505 ppm | 0.0529 ppm | 0.0597 ppm |
| Concentration per Run 3 | 0.0495 ppm | 0.0590 ppm | 0.0558 ppm | 0.0505 ppm | 0.0502 ppm | 0.0528 ppm | 0.0627 ppm |
| Recovery Percentage 1 | 0.000 % | 107.742 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 124.599 % |
| Concentration RSD | 0.5 % | 8.8 % | 1.7 % | 0.5 % | 0.3 % | 0.3 % | 3.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0519 ppm | 0.0525 ppm | 0.0529 ppm | 0.0500 ppm | 0.0573 ppm | 0.5493 ppm | 0.0526 ppm |
| Concentration per Run 1 | 0.0519 ppm | 0.0526 ppm | 0.0536 ppm | 0.0500 ppm | 0.0573 ppm | 0.5550 ppm | 0.0525 ppm |
| Concentration per Run 2 | 0.0518 ppm | 0.0523 ppm | 0.0522 ppm | 0.0499 ppm | 0.0582 ppm | 0.5456 ppm | 0.0533 ppm |
| Concentration per Run 3 | 0.0522 ppm | 0.0526 ppm | 0.0529 ppm | 0.0501 ppm | 0.0563 ppm | 0.5475 ppm | 0.0521 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 114.515 % | 21.974 % | 0.000 % |
| Concentration RSD | 0.4 % | 0.3 % | 1.4 % | 0.2 % | 1.7 % | 0.9 % | 1.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0548 ppm | 0.0526 ppm | 0.0500 ppm | 1.0685 ppm | 0.0519 ppm | 0.0503 ppm | 0.0525 ppm |
| Concentration per Run 1 | 0.0551 ppm | 0.0526 ppm | 0.0499 ppm | 1.0668 ppm | 0.0518 ppm | 0.0496 ppm | 0.0520 ppm |
| Concentration per Run 2 | 0.0548 ppm | 0.0524 ppm | 0.0497 ppm | 1.0698 ppm | 0.0523 ppm | 0.0507 ppm | 0.0531 ppm |
| Concentration per Run 3 | 0.0545 ppm | 0.0526 ppm | 0.0502 ppm | 1.0687 ppm | 0.0517 ppm | 0.0505 ppm | 0.0524 ppm |
| Recovery Percentage 1 | 109.624 % | 0.000 % | 0.000 % | 106.846 % | 0.000 % | 0.000 % | 104.995 % |
| Concentration RSD | 0.5 % | 0.2 % | 0.5 % | 0.1 % | 0.6 % | 1.2 % | 1.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0529 ppm | 0.5683 ppm | 0.0508 ppm | 0.0523 ppm | 0.0528 ppm | 0.0494 ppm | 0.0520 ppm |
| Concentration per Run 1 | 0.0530 ppm | 0.5695 ppm | 0.0498 ppm | 0.0523 ppm | 0.0527 ppm | 0.0493 ppm | 0.0520 ppm |
| Concentration per Run 2 | 0.0524 ppm | 0.5674 ppm | 0.0512 ppm | 0.0524 ppm | 0.0529 ppm | 0.0501 ppm | 0.0519 ppm |
| Concentration per Run 3 | 0.0534 ppm | 0.5679 ppm | 0.0515 ppm | 0.0523 ppm | 0.0529 ppm | 0.0487 ppm | 0.0521 ppm |
| Recovery Percentage 1 | 0.000 % | 113.653 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % |
| Concentration RSD | 1.0 % | 0.2 % | 1.8 % | 0.1 % | 0.2 % | 1.4 % | 0.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0533 ppm | 100.9379 % | 102.8713 % | 101.7533 % | 100.3831 % | 100.2204 % | 101.4756 % |
| Concentration per Run 1 | 0.0533 ppm | 101.1367 % | 102.6076 % | 101.7833 % | 100.6050 % | 100.3122 % | 101.0856 % |
| Concentration per Run 2 | 0.0532 ppm | 100.5953 % | 102.9884 % | 101.7469 % | 99.9184 % | 100.3174 % | 101.7921 % |
| Concentration per Run 3 | 0.0534 ppm | 101.0818 % | 103.0177 % | 101.7296 % | 100.6258 % | 100.0316 % | 101.5492 % |
| Recovery Percentage 1 | 106.553 % | | | | | | |
| Concentration RSD | 0.1 % | 0.3 % | 0.2 % | 0.0 % | 0.4 % | 0.2 % | 0.4 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: IEC 10 V -TI
Analysis started at: 3/17/2025 11:00:38
Comments <Comment>
Rack: 1
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | -0.0041 ppm | 0.0008 ppm | 0.0000 ppm | 0.0000 ppm | 0.0006 ppm | -0.0013 ppm |
| Concentration per Run 1 | -0.0004 ppm | -0.0027 ppm | 0.0005 ppm | -0.0001 ppm | 0.0001 ppm | 0.0006 ppm | -0.0022 ppm |
| Concentration per Run 2 | -0.0005 ppm | -0.0014 ppm | -0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0006 ppm | -0.0004 ppm |
| Concentration per Run 3 | -0.0004 ppm | -0.0083 ppm | 0.0022 ppm | 0.0000 ppm | 0.0000 ppm | 0.0006 ppm | -0.0013 ppm |
| Recovery Percentage 1 | -8.702 % | -4.129 % | 16.997 % | -0.017 % | 0.477 % | 12.724 % | -1.294 % |
| Concentration RSD | 8.5 % | 88.2 % | 142.1 % | 1,812.9 % | 114.1 % | 1.2 % | 68.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0016 ppm | -0.0002 ppm | 0.0038 ppm | 0.0040 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0016 ppm | -0.0002 ppm | 0.0040 ppm | -0.0081 ppm | -0.0006 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0016 ppm | -0.0002 ppm | 0.0036 ppm | 0.0002 ppm | -0.0004 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0003 ppm | 0.0016 ppm | -0.0002 ppm | 0.0039 ppm | 0.0200 ppm | 0.0013 ppm |
| Recovery Percentage 1 | -0.868 % | 0.709 % | 16.047 % | -2.066 % | 7.656 % | 0.161 % | 0.742 % |
| Concentration RSD | 87.6 % | 72.1 % | 2.1 % | 17.1 % | 5.7 % | 359.7 % | 1,440.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0033 ppm | -0.0003 ppm | -0.0036 ppm | -0.0031 ppm | -0.0008 ppm | -0.0022 ppm | -0.0095 ppm |
| Concentration per Run 1 | 0.0023 ppm | -0.0003 ppm | -0.0038 ppm | 0.0006 ppm | -0.0010 ppm | -0.0028 ppm | -0.0101 ppm |
| Concentration per Run 2 | 0.0037 ppm | -0.0002 ppm | -0.0034 ppm | -0.0041 ppm | -0.0008 ppm | -0.0016 ppm | -0.0097 ppm |
| Concentration per Run 3 | 0.0038 ppm | -0.0003 ppm | -0.0035 ppm | -0.0057 ppm | -0.0005 ppm | -0.0022 ppm | -0.0088 ppm |
| Recovery Percentage 1 | 3.290 % | -2.872 % | -7.123 % | -0.154 % | -3.162 % | -22.212 % | -19.047 % |
| Concentration RSD | 25.3 % | 28.9 % | 6.1 % | 105.8 % | 29.5 % | 27.9 % | 6.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0008 ppm | 0.0001 ppm | 0.0000 ppm | 0.0002 ppm | 0.0000 ppm | 10.3628 [SIC 10] |
| Concentration per Run 1 | 0.0009 ppm | -0.0007 ppm | -0.0002 ppm | 0.0000 ppm | 0.0002 ppm | 0.0000 ppm | 10.4419 ppm |
| Concentration per Run 2 | 0.0008 ppm | -0.0012 ppm | 0.0000 ppm | 0.0000 ppm | 0.0003 ppm | 0.0014 ppm | 10.3169 ppm |
| Concentration per Run 3 | -0.0020 ppm | -0.0006 ppm | 0.0005 ppm | 0.0000 ppm | 0.0001 ppm | -0.0013 ppm | 10.3297 ppm |
| Recovery Percentage 1 | -0.964 % | -0.166 % | 0.165 % | 0.101 % | 1.721 % | 0.054 % | 103,628.175 % |
| Concentration RSD | 1,682.7 % | 41.5 % | 432.8 % | 387.0 % | 62.2 % | 12,378.8 % | 0.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 101.1977 % | 103.6169 % | 101.6633 % | 100.1241 % | 100.9369 % | 101.0578 % |
| Concentration per Run 1 | -0.0007 ppm | 101.6661 % | 103.5405 % | 101.6961 % | 100.6967 % | 101.0866 % | 100.3983 % |
| Concentration per Run 2 | -0.0005 ppm | 100.5541 % | 103.7867 % | 101.9000 % | 99.4335 % | 101.1035 % | 101.5780 % |
| Concentration per Run 3 | -0.0004 ppm | 101.3728 % | 103.5235 % | 101.3939 % | 100.2421 % | 100.6207 % | 101.1971 % |
| Recovery Percentage 1 | -10.691 % | | | | | | |
| Concentration RSD | 23.5 % | 0.6 % | 0.1 % | 0.3 % | 0.6 % | 0.3 % | 0.6 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: LLOQ 0.01ppm
Analysis started at: 3/17/2025 11:05:55
Comments <Comment>
Rack: 1
Vial: 5

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0097 ppm | 0.0113 ppm | 0.0134 ppm | 0.0104 ppm | 0.0102 ppm | 0.0105 ppm | 0.0157 ppm |
| Concentration per Run 1 | 0.0097 ppm | 0.0145 ppm | 0.0147 ppm | 0.0102 ppm | 0.0101 ppm | 0.0104 ppm | 0.0131 ppm |
| Concentration per Run 2 | 0.0096 ppm | 0.0132 ppm | 0.0130 ppm | 0.0103 ppm | 0.0103 ppm | 0.0106 ppm | 0.0182 ppm |
| Concentration per Run 3 | 0.0096 ppm | 0.0062 ppm | 0.0126 ppm | 0.0107 ppm | 0.0102 ppm | 0.0106 ppm | 0.0159 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 134.309 % | 103.796 % | 102.090 % | 0.000 % | 0.000 % |
| Concentration RSD | 0.9 % | 39.6 % | 8.1 % | 2.6 % | 1.0 % | 0.9 % | 16.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0105 ppm | 0.0104 ppm | 0.0107 ppm | 0.0098 ppm | 0.0123 ppm | 0.1058 ppm | 0.0104 ppm |
| Concentration per Run 1 | 0.0104 ppm | 0.0102 ppm | 0.0108 ppm | 0.0100 ppm | 0.0130 ppm | 0.1051 ppm | 0.0100 ppm |
| Concentration per Run 2 | 0.0105 ppm | 0.0107 ppm | 0.0109 ppm | 0.0100 ppm | 0.0119 ppm | 0.1110 ppm | 0.0114 ppm |
| Concentration per Run 3 | 0.0105 ppm | 0.0104 ppm | 0.0103 ppm | 0.0093 ppm | 0.0121 ppm | 0.1014 ppm | 0.0097 ppm |
| Recovery Percentage 1 | 0.000 % | 104.405 % | 106.600 % | 97.532 % | 0.000 % | 0.000 % | 103.545 % |
| Concentration RSD | 0.5 % | 2.1 % | 3.0 % | 4.4 % | 4.7 % | 4.6 % | 8.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0131 ppm | 0.0109 ppm | 0.0102 ppm | 0.2170 ppm | 0.0100 ppm | 0.0100 ppm | 0.0107 ppm |
| Concentration per Run 1 | 0.0121 ppm | 0.0108 ppm | 0.0102 ppm | 0.2136 ppm | 0.0100 ppm | 0.0108 ppm | 0.0112 ppm |
| Concentration per Run 2 | 0.0135 ppm | 0.0109 ppm | 0.0102 ppm | 0.2167 ppm | 0.0098 ppm | 0.0086 ppm | 0.0087 ppm |
| Concentration per Run 3 | 0.0136 ppm | 0.0109 ppm | 0.0101 ppm | 0.2208 ppm | 0.0101 ppm | 0.0106 ppm | 0.0121 ppm |
| Recovery Percentage 1 | 0.000 % | 108.806 % | 101.982 % | 0.000 % | 99.819 % | 100.057 % | 0.000 % |
| Concentration RSD | 6.3 % | 0.8 % | 0.5 % | 1.7 % | 1.6 % | 12.3 % | 16.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0091 ppm | 0.1147 ppm | 0.0108 ppm | 0.0106 ppm | 0.0107 ppm | 0.0099 ppm | 0.0111 ppm |
| Concentration per Run 1 | 0.0110 ppm | 0.1148 ppm | 0.0115 ppm | 0.0105 ppm | 0.0110 ppm | 0.0104 ppm | 0.0113 ppm |
| Concentration per Run 2 | 0.0077 ppm | 0.1153 ppm | 0.0104 ppm | 0.0106 ppm | 0.0109 ppm | 0.0102 ppm | 0.0113 ppm |
| Concentration per Run 3 | 0.0086 ppm | 0.1140 ppm | 0.0104 ppm | 0.0107 ppm | 0.0103 ppm | 0.0092 ppm | 0.0108 ppm |
| Recovery Percentage 1 | 90.782 % | 0.000 % | 107.630 % | 105.871 % | 107.480 % | 99.053 % | 111.266 % |
| Concentration RSD | 18.6 % | 0.6 % | 6.2 % | 0.6 % | 3.7 % | 6.3 % | 2.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0106 ppm | 101.3898 % | 104.6682 % | 100.6605 % | 99.2163 % | 99.0499 % | 101.0291 % |
| Concentration per Run 1 | 0.0106 ppm | 101.2993 % | 102.9387 % | 100.3983 % | 99.3048 % | 98.6094 % | 99.4909 % |
| Concentration per Run 2 | 0.0106 ppm | 101.2357 % | 103.2623 % | 100.6541 % | 98.9989 % | 99.1502 % | 99.7634 % |
| Concentration per Run 3 | 0.0105 ppm | 101.6342 % | 107.8036 % | 100.9291 % | 99.3451 % | 99.3902 % | 103.8330 % |
| Recovery Percentage 1 | 105.795 % | | | | | | |
| Concentration RSD | 0.7 % | 0.2 % | 2.6 % | 0.3 % | 0.2 % | 0.4 % | 2.4 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: LDR Check
Analysis started at: 3/17/2025 11:11:04
Comments <Comment>
Rack: 0
Vial: 8

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | 0.2257 ppm | 19.0657 ppm | 18.8600 ppm | 18.3921 ppm | 4.9743 ppm | 0.0309 ppm |
| Concentration per Run 1 | 0.0025 ppm | 0.2242 ppm | 19.1143 ppm | 18.9176 ppm | 18.2005 ppm | 4.9433 ppm | 0.0324 ppm |
| Concentration per Run 2 | 0.0021 ppm | 0.2253 ppm | 19.0355 ppm | 18.8278 ppm | 18.4638 ppm | 5.0166 ppm | 0.0314 ppm |
| Concentration per Run 3 | 0.0019 ppm | 0.2276 ppm | 19.0474 ppm | 18.8345 ppm | 18.5120 ppm | 4.9630 ppm | 0.0288 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 95.329 % | 94.300 % | 91.960 % | 99.486 % | 0.000 % |
| Concentration RSD | 13.0 % | 0.8 % | 0.2 % | 0.3 % | 0.9 % | 0.8 % | 6.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.4944 ppm | 4.6760 ppm | 0.0011 ppm | 20.0514 [SIC 20] | -0.0210 ppm | 492.0583 ppm | 20.3129 ppm |
| Concentration per Run 1 | 4.5097 ppm | 4.6947 ppm | 0.0011 ppm | 19.9794 ppm | -0.0211 ppm | 508.2803 ppm | 20.2626 ppm |
| Concentration per Run 2 | 4.4912 ppm | 4.6702 ppm | 0.0014 ppm | 20.1149 ppm | -0.0207 ppm | 492.0763 ppm | 20.4698 ppm |
| Concentration per Run 3 | 4.4823 ppm | 4.6632 ppm | 0.0007 ppm | 20.0598 ppm | -0.0211 ppm | 475.8182 ppm | 20.2064 ppm |
| Recovery Percentage 1 | 89.888 % | 93.520 % | 0.000 % | 100.257 % | 0.000 % | 98.412 % | 101.565 % |
| Concentration RSD | 0.3 % | 0.4 % | 33.0 % | 0.3 % | 1.1 % | 3.3 % | 0.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0506 ppm | 0.0019 ppm | 4.6327 ppm | 426.7666 ppm | 9.2503 ppm | 49.5334 ppm | 4.9606 ppm |
| Concentration per Run 1 | -0.0512 ppm | 0.0019 ppm | 4.6417 ppm | 441.9351 ppm | 9.2936 ppm | 49.7257 ppm | 4.9725 ppm |
| Concentration per Run 2 | -0.0521 ppm | 0.0019 ppm | 4.6260 ppm | 426.4391 ppm | 9.2334 ppm | 49.4831 ppm | 4.9517 ppm |
| Concentration per Run 3 | -0.0485 ppm | 0.0019 ppm | 4.6303 ppm | 411.9257 ppm | 9.2241 ppm | 49.3912 ppm | 4.9577 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 92.653 % | 85.353 % | 92.503 % | 99.067 % | 99.213 % |
| Concentration RSD | 3.7 % | 1.2 % | 0.2 % | 3.5 % | 0.4 % | 0.3 % | 0.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.7432 ppm | 22.8011 [SIC 50] | 9.4475 ppm | 5.0167 ppm | 0.0011 ppm | 4.8316 ppm | -0.0090 ppm |
| Concentration per Run 1 | 4.7534 ppm | 22.8238 ppm | 9.4632 ppm | 4.9869 ppm | 0.0014 ppm | 4.8282 ppm | -0.0090 ppm |
| Concentration per Run 2 | 4.7350 ppm | 22.7677 ppm | 9.4301 ppm | 5.0465 ppm | 0.0011 ppm | 4.8228 ppm | -0.0090 ppm |
| Concentration per Run 3 | 4.7413 ppm | 22.8120 ppm | 9.4491 ppm | 5.0168 ppm | 0.0008 ppm | 4.8439 ppm | -0.0089 ppm |
| Recovery Percentage 1 | 94.865 % | 114.006 % | 94.475 % | 100.335 % | 0.000 % | 96.633 % | 0.000 % |
| Concentration RSD | 0.2 % | 0.1 % | 0.2 % | 0.6 % | 27.7 % | 0.2 % | 0.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 18.3768 ppm | 95.4714 % | 88.8570 % | 95.8333 % | 95.3259 % | 103.0619 % | 87.0759 % |
| Concentration per Run 1 | 18.4686 ppm | 95.4808 % | 89.1780 % | 95.5949 % | 95.5116 % | 102.6340 % | 87.3994 % |
| Concentration per Run 2 | 18.3593 ppm | 95.5770 % | 88.6827 % | 95.9678 % | 95.3442 % | 103.2298 % | 86.9199 % |
| Concentration per Run 3 | 18.3027 ppm | 95.3565 % | 88.7102 % | 95.9373 % | 95.1218 % | 103.3220 % | 86.9084 % |
| Recovery Percentage 1 | 91.884 % | | | | | | |
| Concentration RSD | 0.5 % | 0.1 % | 0.3 % | 0.2 % | 0.2 % | 0.4 % | 0.3 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: LDR 300 Na pass
Analysis started at: 3/17/2025 11:30:55
Comments <Comment>
Rack: 1
Vial: 6

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0026 ppm | 0.0075 ppm | 0.0096 ppm | 0.0025 ppm | 0.0006 ppm | 0.0162 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0013 ppm | 0.0077 ppm | 0.0108 ppm | 0.0028 ppm | 0.0007 ppm | 0.0176 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0086 ppm | 0.0075 ppm | 0.0097 ppm | 0.0023 ppm | 0.0005 ppm | 0.0139 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0022 ppm | 0.0073 ppm | 0.0081 ppm | 0.0024 ppm | 0.0006 ppm | 0.0172 ppm |
| Concentration RSD | 169.9 % | 215.0 % | 2.5 % | 14.3 % | 10.1 % | 17.5 % | 12.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 0.0014 ppm | 0.0006 ppm | 0.0034 ppm | -0.0051 ppm | 0.1800 ppm | 0.0036 ppm |
| Concentration per Run 1 | 0.0018 ppm | 0.0017 ppm | 0.0006 ppm | 0.0031 ppm | -0.0050 ppm | 0.1587 ppm | 0.0039 ppm |
| Concentration per Run 2 | 0.0014 ppm | 0.0013 ppm | 0.0004 ppm | 0.0037 ppm | -0.0056 ppm | 0.1734 ppm | 0.0034 ppm |
| Concentration per Run 3 | 0.0012 ppm | 0.0010 ppm | 0.0008 ppm | 0.0035 ppm | -0.0048 ppm | 0.2078 ppm | 0.0035 ppm |
| Concentration RSD | 20.2 % | 24.3 % | 33.1 % | 8.7 % | 8.3 % | 14.0 % | 7.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0043 ppm | 0.0002 ppm | 0.0013 ppm | 287.5717 ppm | 0.0020 ppm | 0.0142 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0039 ppm | 0.0003 ppm | 0.0015 ppm | 287.8007 ppm | 0.0024 ppm | 0.0170 ppm | 0.0020 ppm |
| Concentration per Run 2 | 0.0040 ppm | 0.0001 ppm | 0.0014 ppm | 286.6452 ppm | 0.0015 ppm | 0.0144 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0049 ppm | 0.0002 ppm | 0.0011 ppm | 288.2692 ppm | 0.0021 ppm | 0.0113 ppm | 0.0004 ppm |
| Concentration RSD | 13.1 % | 52.7 % | 17.7 % | 0.3 % | 21.3 % | 19.9 % | 125.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 0.0060 ppm | 0.0030 ppm | 0.0007 ppm | 0.0002 ppm | 0.0045 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0070 ppm | 0.0028 ppm | 0.0008 ppm | 0.0003 ppm | 0.0040 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0013 ppm | 0.0062 ppm | 0.0034 ppm | 0.0006 ppm | 0.0002 ppm | 0.0048 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0049 ppm | 0.0030 ppm | 0.0007 ppm | 0.0001 ppm | 0.0047 ppm | 0.0001 ppm |
| Concentration RSD | 21.3 % | 17.9 % | 10.8 % | 13.0 % | 51.7 % | 10.6 % | 103.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0051 ppm | 98.2985 % | 94.5784 % | 102.5835 % | 98.6031 % | 105.5542 % | 93.6840 % |
| Concentration per Run 1 | 0.0062 ppm | 98.2357 % | 94.6118 % | 102.5892 % | 98.4935 % | 105.7738 % | 93.6848 % |
| Concentration per Run 2 | 0.0051 ppm | 98.1389 % | 94.7265 % | 102.4122 % | 98.2751 % | 105.3242 % | 93.8190 % |
| Concentration per Run 3 | 0.0040 ppm | 98.5210 % | 94.3968 % | 102.7491 % | 99.0407 % | 105.5647 % | 93.5483 % |
| Concentration RSD | 22.3 % | 0.2 % | 0.2 % | 0.2 % | 0.4 % | 0.2 % | 0.1 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: LLOQ 0.1ppm As tclp
Analysis started at: 3/17/2025 11:36:16
Comments <Comment>
Rack: 1
Vial: 7

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0989 ppm | 0.1065 ppm | 0.1076 ppm | 0.1052 ppm | 0.0991 ppm | 0.1036 ppm | 0.1138 ppm |
| Concentration per Run 1 | 0.0980 ppm | 0.1056 ppm | 0.1085 ppm | 0.1055 ppm | 0.0982 ppm | 0.1030 ppm | 0.1133 ppm |
| Concentration per Run 2 | 0.0984 ppm | 0.1052 ppm | 0.1068 ppm | 0.1053 ppm | 0.0997 ppm | 0.1041 ppm | 0.1157 ppm |
| Concentration per Run 3 | 0.1005 ppm | 0.1086 ppm | 0.1075 ppm | 0.1048 ppm | 0.0994 ppm | 0.1039 ppm | 0.1125 ppm |
| Concentration RSD | 1.4 % | 1.7 % | 0.8 % | 0.3 % | 0.8 % | 0.6 % | 1.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1031 ppm | 0.1035 ppm | 0.1052 ppm | 0.0998 ppm | 0.1114 ppm | 1.1421 ppm | 0.1033 ppm |
| Concentration per Run 1 | 0.1034 ppm | 0.1035 ppm | 0.1044 ppm | 0.0987 ppm | 0.1105 ppm | 1.1451 ppm | 0.1016 ppm |
| Concentration per Run 2 | 0.1033 ppm | 0.1040 ppm | 0.1044 ppm | 0.0989 ppm | 0.1119 ppm | 1.1569 ppm | 0.1051 ppm |
| Concentration per Run 3 | 0.1028 ppm | 0.1029 ppm | 0.1068 ppm | 0.1018 ppm | 0.1120 ppm | 1.1242 ppm | 0.1032 ppm |
| Concentration RSD | 0.3 % | 0.5 % | 1.3 % | 1.7 % | 0.7 % | 1.5 % | 1.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1070 ppm | 0.1032 ppm | 0.0996 ppm | 2.1401 ppm | 0.1040 ppm | 0.1051 ppm | 0.1054 ppm |
| Concentration per Run 1 | 0.1070 ppm | 0.1023 ppm | 0.0997 ppm | 2.1212 ppm | 0.1047 ppm | 0.1060 ppm | 0.1058 ppm |
| Concentration per Run 2 | 0.1045 ppm | 0.1037 ppm | 0.1000 ppm | 2.1552 ppm | 0.1036 ppm | 0.1052 ppm | 0.1048 ppm |
| Concentration per Run 3 | 0.1095 ppm | 0.1036 ppm | 0.0990 ppm | 2.1438 ppm | 0.1038 ppm | 0.1041 ppm | 0.1056 ppm |
| Concentration RSD | 2.4 % | 0.8 % | 0.5 % | 0.8 % | 0.6 % | 0.9 % | 0.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1054 ppm | 1.1290 ppm | 0.1010 ppm | 0.1021 ppm | 0.1044 ppm | 0.0968 ppm | 0.1024 ppm |
| Concentration per Run 1 | 0.1070 ppm | 1.1303 ppm | 0.1017 ppm | 0.1010 ppm | 0.1036 ppm | 0.0968 ppm | 0.1016 ppm |
| Concentration per Run 2 | 0.1039 ppm | 1.1293 ppm | 0.1000 ppm | 0.1029 ppm | 0.1037 ppm | 0.0954 ppm | 0.1018 ppm |
| Concentration per Run 3 | 0.1052 ppm | 1.1274 ppm | 0.1015 ppm | 0.1026 ppm | 0.1061 ppm | 0.0982 ppm | 0.1038 ppm |
| Concentration RSD | 1.5 % | 0.1 % | 0.9 % | 1.0 % | 1.4 % | 1.5 % | 1.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1070 ppm | 100.7042 % | 102.0841 % | 101.1062 % | 100.2957 % | 99.8375 % | 100.4525 % |
| Concentration per Run 1 | 0.1071 ppm | 101.0427 % | 102.9813 % | 101.0885 % | 100.7526 % | 99.5011 % | 101.2917 % |
| Concentration per Run 2 | 0.1075 ppm | 100.4618 % | 102.7020 % | 101.1275 % | 99.9418 % | 99.9816 % | 101.0838 % |
| Concentration per Run 3 | 0.1064 ppm | 100.6082 % | 100.5690 % | 101.1027 % | 100.1927 % | 100.0298 % | 98.9821 % |
| Concentration RSD | 0.5 % | 0.3 % | 1.3 % | 0.0 % | 0.4 % | 0.3 % | 1.3 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: CCV
Analysis started at: 3/17/2025 11:57:21
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4762 ppm | 0.5182 ppm | 0.5047 ppm | 0.4930 ppm | 0.4923 ppm | 0.5156 ppm | 0.5357 ppm |
| Concentration per Run 1 | 0.4781 ppm | 0.5129 ppm | 0.5056 ppm | 0.4929 ppm | 0.4909 ppm | 0.5139 ppm | 0.5366 ppm |
| Concentration per Run 2 | 0.4753 ppm | 0.5202 ppm | 0.5057 ppm | 0.4938 ppm | 0.4923 ppm | 0.5154 ppm | 0.5331 ppm |
| Concentration per Run 3 | 0.4753 ppm | 0.5213 ppm | 0.5026 ppm | 0.4922 ppm | 0.4939 ppm | 0.5175 ppm | 0.5375 ppm |
| Recovery Percentage 1 | 95.248 % | 103.631 % | 100.930 % | 98.595 % | 98.466 % | 103.118 % | 107.145 % |
| Concentration RSD | 0.3 % | 0.9 % | 0.3 % | 0.2 % | 0.3 % | 0.3 % | 0.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4974 ppm | 0.5014 ppm | 0.5107 ppm | 0.4846 ppm | 0.5343 ppm | 5.3374 ppm | 0.5104 ppm |
| Concentration per Run 1 | 0.4980 ppm | 0.5025 ppm | 0.5123 ppm | 0.4851 ppm | 0.5327 ppm | 5.3505 ppm | 0.5082 ppm |
| Concentration per Run 2 | 0.4978 ppm | 0.5015 ppm | 0.5093 ppm | 0.4852 ppm | 0.5335 ppm | 5.3531 ppm | 0.5121 ppm |
| Concentration per Run 3 | 0.4964 ppm | 0.5002 ppm | 0.5105 ppm | 0.4833 ppm | 0.5367 ppm | 5.3086 ppm | 0.5108 ppm |
| Recovery Percentage 1 | 99.478 % | 100.279 % | 102.138 % | 96.911 % | 106.861 % | 106.748 % | 102.079 % |
| Concentration RSD | 0.2 % | 0.2 % | 0.3 % | 0.2 % | 0.4 % | 0.5 % | 0.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5103 ppm | 0.5078 ppm | 0.4858 ppm | 10.2524 ppm | 0.5054 ppm | 0.4967 ppm | 0.5138 ppm |
| Concentration per Run 1 | 0.5092 ppm | 0.5063 ppm | 0.4857 ppm | 10.2270 ppm | 0.5061 ppm | 0.4985 ppm | 0.5143 ppm |
| Concentration per Run 2 | 0.5107 ppm | 0.5074 ppm | 0.4869 ppm | 10.2685 ppm | 0.5063 ppm | 0.4958 ppm | 0.5135 ppm |
| Concentration per Run 3 | 0.5111 ppm | 0.5095 ppm | 0.4847 ppm | 10.2617 ppm | 0.5038 ppm | 0.4956 ppm | 0.5135 ppm |
| Recovery Percentage 1 | 102.066 % | 101.552 % | 97.157 % | 102.524 % | 101.083 % | 99.331 % | 102.753 % |
| Concentration RSD | 0.2 % | 0.3 % | 0.2 % | 0.2 % | 0.3 % | 0.3 % | 0.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5030 ppm | 5.5248 ppm | 0.5102 ppm | 0.5069 ppm | 0.5124 ppm | 0.4827 ppm | 0.5024 ppm |
| Concentration per Run 1 | 0.5080 ppm | 5.5224 ppm | 0.5109 ppm | 0.5059 ppm | 0.5136 ppm | 0.4845 ppm | 0.5034 ppm |
| Concentration per Run 2 | 0.5009 ppm | 5.5270 ppm | 0.5124 ppm | 0.5068 ppm | 0.5116 ppm | 0.4819 ppm | 0.5019 ppm |
| Concentration per Run 3 | 0.5001 ppm | 5.5250 ppm | 0.5074 ppm | 0.5081 ppm | 0.5122 ppm | 0.4817 ppm | 0.5018 ppm |
| Recovery Percentage 1 | 100.599 % | 105.234 % | 102.042 % | 101.388 % | 102.488 % | 96.542 % | 100.471 % |
| Concentration RSD | 0.9 % | 0.0 % | 0.5 % | 0.2 % | 0.2 % | 0.3 % | 0.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5144 ppm | 99.4394 % | 101.2103 % | 101.5217 % | 99.2973 % | 100.7737 % | 99.8519 % |
| Concentration per Run 1 | 0.5154 ppm | 99.2674 % | 100.9298 % | 101.5326 % | 99.0872 % | 100.7171 % | 99.6007 % |
| Concentration per Run 2 | 0.5149 ppm | 99.6082 % | 101.5055 % | 101.5396 % | 99.5748 % | 100.7423 % | 100.1216 % |
| Concentration per Run 3 | 0.5130 ppm | 99.4426 % | 101.1957 % | 101.4929 % | 99.2300 % | 100.8619 % | 99.8333 % |
| Recovery Percentage 1 | 102.885 % | | | | | | |
| Concentration RSD | 0.3 % | 0.2 % | 0.3 % | 0.0 % | 0.3 % | 0.1 % | 0.3 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: CCB
Analysis started at: 3/17/2025 12:02:13
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0021 ppm | 0.0016 ppm | 0.0033 ppm | 0.0002 ppm | 0.0001 ppm | 0.0055 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0021 ppm | 0.0011 ppm | 0.0034 ppm | 0.0002 ppm | 0.0001 ppm | 0.0052 ppm |
| Concentration per Run 2 | -0.0003 ppm | -0.0035 ppm | 0.0020 ppm | 0.0033 ppm | 0.0002 ppm | 0.0001 ppm | 0.0037 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0007 ppm | 0.0018 ppm | 0.0033 ppm | 0.0003 ppm | 0.0001 ppm | 0.0076 ppm |
| Recovery Percentage 1 | 1.099 % | -2.100 % | 32.807 % | 11.096 % | 2.137 % | 1.761 % | 5.509 % |
| Concentration RSD | 528.6 % | 66.2 % | 28.9 % | 0.9 % | 20.7 % | 14.8 % | 35.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0003 ppm | 0.0001 ppm | 0.0004 ppm | 0.0059 ppm | 0.0184 ppm | 0.0011 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0004 ppm | 0.0002 ppm | 0.0002 ppm | 0.0054 ppm | 0.0145 ppm | 0.0017 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0003 ppm | 0.0000 ppm | 0.0005 ppm | 0.0059 ppm | 0.0204 ppm | 0.0013 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0002 ppm | 0.0002 ppm | 0.0005 ppm | 0.0064 ppm | 0.0201 ppm | 0.0004 ppm |
| Recovery Percentage 1 | 6.574 % | 1.435 % | 1.214 % | 4.026 % | 11.756 % | 0.734 % | 11.121 % |
| Concentration RSD | 22.9 % | 26.5 % | 106.3 % | 34.7 % | 7.9 % | 18.2 % | 58.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0026 ppm | 0.0003 ppm | 0.0005 ppm | 0.0165 ppm | -0.0005 ppm | 0.0007 ppm | 0.0017 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0003 ppm | 0.0004 ppm | 0.0209 ppm | -0.0003 ppm | 0.0003 ppm | 0.0010 ppm |
| Concentration per Run 2 | 0.0030 ppm | 0.0003 ppm | 0.0005 ppm | 0.0144 ppm | -0.0004 ppm | 0.0008 ppm | 0.0020 ppm |
| Concentration per Run 3 | 0.0042 ppm | 0.0003 ppm | 0.0005 ppm | 0.0143 ppm | -0.0007 ppm | 0.0010 ppm | 0.0019 ppm |
| Recovery Percentage 1 | 2.571 % | 2.862 % | 0.919 % | 0.825 % | -1.842 % | 7.255 % | 3.301 % |
| Concentration RSD | 73.4 % | 8.3 % | 20.9 % | 22.9 % | 45.2 % | 52.9 % | 35.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0018 ppm | 0.0013 ppm | 0.0001 ppm | 0.0002 ppm | 0.0008 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0017 ppm | 0.0005 ppm | 0.0001 ppm | 0.0001 ppm | 0.0004 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0026 ppm | 0.0016 ppm | 0.0001 ppm | 0.0002 ppm | 0.0020 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0009 ppm | 0.0018 ppm | 0.0002 ppm | 0.0004 ppm | 0.0000 ppm | 0.0002 ppm |
| Recovery Percentage 1 | 0.697 % | 0.351 % | 2.618 % | 1.326 % | 2.221 % | 3.960 % | 1.321 % |
| Concentration RSD | 407.3 % | 48.6 % | 53.1 % | 35.0 % | 67.2 % | 137.8 % | 55.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 99.9487 % | 102.0333 % | 100.6558 % | 98.3721 % | 99.1766 % | 99.3245 % |
| Concentration per Run 1 | 0.0001 ppm | 99.7707 % | 102.0863 % | 101.5036 % | 98.3299 % | 99.9450 % | 99.4728 % |
| Concentration per Run 2 | 0.0003 ppm | 100.6628 % | 102.0505 % | 100.3135 % | 99.0062 % | 98.8592 % | 99.3082 % |
| Concentration per Run 3 | 0.0000 ppm | 99.4128 % | 101.9631 % | 100.1502 % | 97.7802 % | 98.7256 % | 99.1925 % |
| Recovery Percentage 1 | 2.781 % | | | | | | |
| Concentration RSD | 117.6 % | 0.6 % | 0.1 % | 0.7 % | 0.6 % | 0.7 % | 0.1 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: L2511919-02 WG2040264
Analysis started at: 3/17/2025 12:18:28
Comments <Comment>
Rack: 1
Vial: 8

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0056 ppm | 0.0023 ppm | 0.0169 ppm | 0.0393 ppm | 0.0001 ppm | 27.5904 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0051 ppm | 0.0013 ppm | 0.0166 ppm | 0.0389 ppm | 0.0001 ppm | 27.2730 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0050 ppm | 0.0038 ppm | 0.0169 ppm | 0.0390 ppm | 0.0001 ppm | 27.5619 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0066 ppm | 0.0018 ppm | 0.0172 ppm | 0.0400 ppm | 0.0001 ppm | 27.9362 ppm |
| Concentration RSD | 139.3 % | 16.1 % | 57.0 % | 1.6 % | 1.5 % | 9.1 % | 1.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0001 ppm | 0.0005 ppm | 0.0002 ppm | 0.0029 ppm | 0.9682 ppm | -0.0004 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0001 ppm | 0.0005 ppm | 0.0002 ppm | 0.0021 ppm | 0.9734 ppm | -0.0005 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0001 ppm | 0.0005 ppm | 0.0002 ppm | 0.0033 ppm | 0.9531 ppm | -0.0010 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0002 ppm | 0.0005 ppm | 0.0001 ppm | 0.0032 ppm | 0.9782 ppm | 0.0001 ppm |
| Concentration RSD | 38.8 % | 27.7 % | 4.9 % | 44.5 % | 22.3 % | 1.4 % | 126.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.0425 ppm | 0.0007 ppm | 0.0001 ppm | 9.7122 ppm | 0.0000 ppm | 0.0003 ppm | -0.0010 ppm |
| Concentration per Run 1 | 6.0360 ppm | 0.0009 ppm | 0.0002 ppm | 9.6151 ppm | -0.0004 ppm | -0.0002 ppm | -0.0008 ppm |
| Concentration per Run 2 | 6.0414 ppm | 0.0006 ppm | 0.0001 ppm | 9.6705 ppm | 0.0001 ppm | 0.0014 ppm | -0.0020 ppm |
| Concentration per Run 3 | 6.0503 ppm | 0.0007 ppm | 0.0000 ppm | 9.8512 ppm | 0.0002 ppm | -0.0001 ppm | -0.0003 ppm |
| Concentration RSD | 0.1 % | 23.9 % | 82.2 % | 1.3 % | 2,699.5 % | 254.4 % | 86.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 3.2605 ppm | 0.0025 ppm | 0.0859 ppm | 0.0003 ppm | 0.0012 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0010 ppm | 3.2628 ppm | 0.0024 ppm | 0.0850 ppm | 0.0003 ppm | 0.0038 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0003 ppm | 3.2523 ppm | 0.0032 ppm | 0.0855 ppm | 0.0003 ppm | 0.0004 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0004 ppm | 3.2663 ppm | 0.0020 ppm | 0.0871 ppm | 0.0002 ppm | -0.0006 ppm | 0.0003 ppm |
| Concentration RSD | 168.7 % | 0.2 % | 24.5 % | 1.3 % | 15.4 % | 195.2 % | 29.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | 100.6055 % | 100.5631 % | 100.6927 % | 100.5734 % | 100.8149 % | 99.5409 % |
| Concentration per Run 1 | -0.0010 ppm | 101.4454 % | 100.7042 % | 100.6800 % | 101.7443 % | 100.6145 % | 99.6794 % |
| Concentration per Run 2 | -0.0007 ppm | 100.5338 % | 100.6393 % | 100.9167 % | 100.4652 % | 100.9353 % | 99.6359 % |
| Concentration per Run 3 | -0.0009 ppm | 99.8372 % | 100.3457 % | 100.4813 % | 99.5106 % | 100.8947 % | 99.3073 % |
| Concentration RSD | 18.4 % | 0.8 % | 0.2 % | 0.2 % | 1.1 % | 0.2 % | 0.2 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: L2513476-01 WG2040647
Analysis started at: 3/17/2025 12:23:38
Comments <Comment>
Rack: 1
Vial: 9

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0529 ppm | 0.0005 ppm | 0.0089 ppm | 0.0314 ppm | 0.0000 ppm | 6.0538 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0561 ppm | 0.0008 ppm | 0.0092 ppm | 0.0312 ppm | 0.0000 ppm | 6.0524 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0528 ppm | 0.0005 ppm | 0.0084 ppm | 0.0315 ppm | 0.0000 ppm | 6.0541 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0500 ppm | 0.0002 ppm | 0.0089 ppm | 0.0315 ppm | 0.0000 ppm | 6.0549 ppm |
| Concentration RSD | 60.8 % | 5.7 % | 50.0 % | 4.7 % | 0.4 % | 34.6 % | 0.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0002 ppm | 0.0006 ppm | 0.0030 ppm | 0.0252 ppm | 0.3752 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0001 ppm | 0.0006 ppm | 0.0031 ppm | 0.0251 ppm | 0.3796 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0001 ppm | 0.0007 ppm | 0.0029 ppm | 0.0256 ppm | 0.3693 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0003 ppm | 0.0004 ppm | 0.0031 ppm | 0.0247 ppm | 0.3766 ppm | 0.0006 ppm |
| Concentration RSD | 155.9 % | 52.3 % | 20.2 % | 2.8 % | 1.8 % | 1.4 % | 36.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2059 ppm | 0.0394 ppm | 0.0003 ppm | 142.7445 ppm | -0.0012 ppm | 0.0091 ppm | 0.0026 ppm |
| Concentration per Run 1 | 0.2059 ppm | 0.0394 ppm | 0.0003 ppm | 141.6822 ppm | -0.0013 ppm | 0.0090 ppm | 0.0021 ppm |
| Concentration per Run 2 | 0.2019 ppm | 0.0394 ppm | 0.0002 ppm | 143.2103 ppm | -0.0014 ppm | 0.0081 ppm | 0.0029 ppm |
| Concentration per Run 3 | 0.2099 ppm | 0.0394 ppm | 0.0003 ppm | 143.3411 ppm | -0.0009 ppm | 0.0101 ppm | 0.0027 ppm |
| Concentration RSD | 2.0 % | 0.0 % | 19.1 % | 0.6 % | 22.9 % | 10.9 % | 15.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 0.3256 ppm | 0.0018 ppm | 0.0304 ppm | 0.0014 ppm | -0.0055 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0017 ppm | 0.3251 ppm | 0.0018 ppm | 0.0304 ppm | 0.0015 ppm | -0.0059 ppm | 0.0006 ppm |
| Concentration per Run 2 | -0.0009 ppm | 0.3265 ppm | 0.0025 ppm | 0.0305 ppm | 0.0013 ppm | -0.0046 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.3253 ppm | 0.0011 ppm | 0.0305 ppm | 0.0013 ppm | -0.0060 ppm | 0.0005 ppm |
| Concentration RSD | 197.4 % | 0.2 % | 39.2 % | 0.1 % | 9.0 % | 14.4 % | 14.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0319 ppm | 98.4497 % | 95.4507 % | 99.9461 % | 98.9093 % | 100.9357 % | 95.1104 % |
| Concentration per Run 1 | 0.0318 ppm | 98.1486 % | 95.9912 % | 99.9944 % | 98.6947 % | 101.0192 % | 95.5238 % |
| Concentration per Run 2 | 0.0320 ppm | 98.3749 % | 96.2028 % | 99.8094 % | 98.8281 % | 100.9257 % | 95.9334 % |
| Concentration per Run 3 | 0.0320 ppm | 98.8255 % | 94.1583 % | 100.0346 % | 99.2052 % | 100.8623 % | 93.8740 % |
| Concentration RSD | 0.3 % | 0.4 % | 1.2 % | 0.1 % | 0.3 % | 0.1 % | 1.1 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: L2513494-01 WG2040647
Analysis started at: 3/17/2025 12:28:57
Comments <Comment>
Rack: 1
Vial: 10

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0268 ppm | 0.0016 ppm | 0.0050 ppm | 0.1082 ppm | 0.0000 ppm | 1.7249 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0278 ppm | 0.0005 ppm | 0.0049 ppm | 0.1077 ppm | 0.0000 ppm | 1.7095 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0266 ppm | 0.0035 ppm | 0.0048 ppm | 0.1082 ppm | 0.0000 ppm | 1.7292 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0259 ppm | 0.0007 ppm | 0.0054 ppm | 0.1089 ppm | 0.0000 ppm | 1.7360 ppm |
| Concentration RSD | 164.0 % | 3.7 % | 105.6 % | 6.6 % | 0.6 % | 55.9 % | 0.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | -0.0001 ppm | 0.0002 ppm | 0.0023 ppm | 0.0042 ppm | 0.2867 ppm | 0.0022 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0001 ppm | 0.0003 ppm | 0.0024 ppm | 0.0038 ppm | 0.2751 ppm | 0.0024 ppm |
| Concentration per Run 2 | 0.0003 ppm | -0.0003 ppm | 0.0001 ppm | 0.0022 ppm | 0.0040 ppm | 0.2939 ppm | 0.0024 ppm |
| Concentration per Run 3 | 0.0003 ppm | -0.0002 ppm | 0.0002 ppm | 0.0024 ppm | 0.0047 ppm | 0.2910 ppm | 0.0019 ppm |
| Concentration RSD | 10.6 % | 133.4 % | 70.7 % | 4.9 % | 11.3 % | 3.5 % | 13.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1311 ppm | 0.0145 ppm | 0.0003 ppm | 138.8655 ppm | -0.0004 ppm | 0.0243 ppm | 0.0007 ppm |
| Concentration per Run 1 | 0.1306 ppm | 0.0146 ppm | 0.0005 ppm | 138.2184 ppm | -0.0001 ppm | 0.0245 ppm | 0.0020 ppm |
| Concentration per Run 2 | 0.1307 ppm | 0.0144 ppm | 0.0003 ppm | 139.6467 ppm | -0.0007 ppm | 0.0239 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.1319 ppm | 0.0146 ppm | 0.0002 ppm | 138.7313 ppm | -0.0003 ppm | 0.0244 ppm | 0.0003 ppm |
| Concentration RSD | 0.6 % | 1.0 % | 52.4 % | 0.5 % | 73.4 % | 1.3 % | 181.0 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.1849 ppm | 0.0023 ppm | 0.0212 ppm | 0.0001 ppm | -0.0070 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.1859 ppm | 0.0019 ppm | 0.0211 ppm | 0.0002 ppm | -0.0075 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0020 ppm | 0.1848 ppm | 0.0031 ppm | 0.0212 ppm | 0.0000 ppm | -0.0071 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.1839 ppm | 0.0020 ppm | 0.0213 ppm | 0.0002 ppm | -0.0063 ppm | -0.0001 ppm |
| Concentration RSD | 144.3 % | 0.5 % | 28.0 % | 0.6 % | 91.1 % | 8.5 % | 214.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3576 ppm | 98.8075 % | 95.9925 % | 100.5949 % | 99.4157 % | 101.3236 % | 95.8268 % |
| Concentration per Run 1 | 0.3580 ppm | 99.3403 % | 95.8321 % | 100.3933 % | 100.1712 % | 101.1174 % | 95.7165 % |
| Concentration per Run 2 | 0.3587 ppm | 98.5479 % | 95.9815 % | 100.6396 % | 99.1590 % | 101.1697 % | 95.7634 % |
| Concentration per Run 3 | 0.3562 ppm | 98.5344 % | 96.1638 % | 100.7517 % | 98.9171 % | 101.6838 % | 96.0004 % |
| Concentration RSD | 0.4 % | 0.5 % | 0.2 % | 0.2 % | 0.7 % | 0.3 % | 0.2 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: L2513495-01 WG2040647
Analysis started at: 3/17/2025 12:34:16
Comments <Comment>
Rack: 1
Vial: 11

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0298 ppm | 0.0019 ppm | 0.0089 ppm | 0.0328 ppm | 0.0000 ppm | 34.5339 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0272 ppm | 0.0012 ppm | 0.0090 ppm | 0.0326 ppm | 0.0000 ppm | 34.1342 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0288 ppm | 0.0005 ppm | 0.0089 ppm | 0.0329 ppm | 0.0000 ppm | 34.6583 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0334 ppm | 0.0038 ppm | 0.0088 ppm | 0.0328 ppm | 0.0000 ppm | 34.8091 ppm |
| Concentration RSD | 58.6 % | 10.8 % | 94.1 % | 1.1 % | 0.6 % | 128.3 % | 1.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0023 ppm | 0.0005 ppm | 0.0034 ppm | 0.0017 ppm | 1.0693 ppm | 0.0008 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0025 ppm | 0.0005 ppm | 0.0033 ppm | 0.0026 ppm | 1.0669 ppm | 0.0018 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0021 ppm | 0.0007 ppm | 0.0035 ppm | 0.0016 ppm | 1.0589 ppm | 0.0008 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0023 ppm | 0.0004 ppm | 0.0033 ppm | 0.0008 ppm | 1.0821 ppm | 0.0000 ppm |
| Concentration RSD | 30.2 % | 7.1 % | 30.2 % | 3.6 % | 53.2 % | 1.1 % | 106.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.1349 ppm | 0.0630 ppm | 0.0003 ppm | 142.8867 ppm | -0.0010 ppm | 0.0298 ppm | 0.0002 ppm |
| Concentration per Run 1 | 2.1416 ppm | 0.0628 ppm | 0.0002 ppm | 142.8557 ppm | -0.0012 ppm | 0.0306 ppm | 0.0001 ppm |
| Concentration per Run 2 | 2.1316 ppm | 0.0630 ppm | 0.0003 ppm | 144.5160 ppm | -0.0007 ppm | 0.0295 ppm | 0.0004 ppm |
| Concentration per Run 3 | 2.1316 ppm | 0.0631 ppm | 0.0004 ppm | 141.2885 ppm | -0.0011 ppm | 0.0293 ppm | -0.0001 ppm |
| Concentration RSD | 0.3 % | 0.3 % | 40.4 % | 1.1 % | 24.9 % | 2.5 % | 148.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.6398 ppm | 0.0017 ppm | 0.0823 ppm | 0.0003 ppm | -0.0067 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.6408 ppm | 0.0019 ppm | 0.0816 ppm | 0.0003 ppm | -0.0070 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.6401 ppm | 0.0018 ppm | 0.0827 ppm | 0.0003 ppm | -0.0054 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0013 ppm | 0.6387 ppm | 0.0013 ppm | 0.0826 ppm | 0.0003 ppm | -0.0078 ppm | 0.0003 ppm |
| Concentration RSD | 133.1 % | 0.2 % | 18.5 % | 0.7 % | 9.1 % | 18.0 % | 18.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0285 ppm | 97.4180 % | 94.6529 % | 99.2392 % | 98.2815 % | 99.6824 % | 94.7336 % |
| Concentration per Run 1 | 0.0285 ppm | 98.0399 % | 94.4996 % | 98.9553 % | 99.0749 % | 99.3396 % | 94.5823 % |
| Concentration per Run 2 | 0.0287 ppm | 97.0439 % | 94.6413 % | 99.2420 % | 98.0004 % | 99.8857 % | 94.7531 % |
| Concentration per Run 3 | 0.0283 ppm | 97.1701 % | 94.8179 % | 99.5201 % | 97.7693 % | 99.8218 % | 94.8655 % |
| Concentration RSD | 0.6 % | 0.6 % | 0.2 % | 0.3 % | 0.7 % | 0.3 % | 0.2 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: L2513643-01 WG2040647
Analysis started at: 3/17/2025 12:39:35
Comments <Comment>
Rack: 1
Vial: 12

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0570 ppm | 0.0019 ppm | 0.0075 ppm | 0.0511 ppm | 0.0001 ppm | 3.2470 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0568 ppm | 0.0002 ppm | 0.0074 ppm | 0.0507 ppm | 0.0001 ppm | 3.1858 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0577 ppm | 0.0030 ppm | 0.0077 ppm | 0.0520 ppm | 0.0001 ppm | 3.3090 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0566 ppm | 0.0025 ppm | 0.0075 ppm | 0.0508 ppm | 0.0001 ppm | 3.2460 ppm |
| Concentration RSD | 103.8 % | 1.1 % | 79.0 % | 2.0 % | 1.4 % | 14.9 % | 1.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0003 ppm | 0.0004 ppm | 0.0059 ppm | 0.0287 ppm | 0.3891 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0003 ppm | 0.0002 ppm | 0.0059 ppm | 0.0277 ppm | 0.3838 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0001 ppm | 0.0004 ppm | 0.0061 ppm | 0.0297 ppm | 0.4003 ppm | 0.0012 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0004 ppm | 0.0005 ppm | 0.0058 ppm | 0.0285 ppm | 0.3830 ppm | 0.0006 ppm |
| Concentration RSD | 3.0 % | 62.4 % | 47.5 % | 2.5 % | 3.5 % | 2.5 % | 40.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2346 ppm | 0.1312 ppm | 0.0003 ppm | 136.5603 ppm | -0.0009 ppm | 0.0108 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.2371 ppm | 0.1293 ppm | 0.0004 ppm | 135.9643 ppm | -0.0008 ppm | 0.0105 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.2330 ppm | 0.1336 ppm | 0.0005 ppm | 138.1736 ppm | -0.0009 ppm | 0.0108 ppm | 0.0012 ppm |
| Concentration per Run 3 | 0.2336 ppm | 0.1307 ppm | 0.0000 ppm | 135.5429 ppm | -0.0011 ppm | 0.0111 ppm | 0.0008 ppm |
| Concentration RSD | 0.9 % | 1.7 % | 91.1 % | 1.0 % | 15.5 % | 2.9 % | 19.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | 0.3741 ppm | 0.0022 ppm | 0.0166 ppm | 0.0011 ppm | -0.0062 ppm | 0.0005 ppm |
| Concentration per Run 1 | -0.0017 ppm | 0.3743 ppm | 0.0020 ppm | 0.0165 ppm | 0.0009 ppm | -0.0074 ppm | 0.0005 ppm |
| Concentration per Run 2 | -0.0021 ppm | 0.3726 ppm | 0.0027 ppm | 0.0169 ppm | 0.0011 ppm | -0.0077 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0015 ppm | 0.3755 ppm | 0.0020 ppm | 0.0165 ppm | 0.0013 ppm | -0.0036 ppm | 0.0006 ppm |
| Concentration RSD | 255.0 % | 0.4 % | 19.5 % | 1.3 % | 17.6 % | 36.5 % | 16.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0644 ppm | 97.6637 % | 95.2322 % | 99.8768 % | 98.2363 % | 100.4998 % | 95.3293 % |
| Concentration per Run 1 | 0.0643 ppm | 99.0907 % | 94.8632 % | 99.7955 % | 99.7068 % | 100.4365 % | 95.0444 % |
| Concentration per Run 2 | 0.0643 ppm | 95.8434 % | 95.3213 % | 99.9868 % | 96.4766 % | 100.4150 % | 95.3081 % |
| Concentration per Run 3 | 0.0645 ppm | 98.0572 % | 95.5122 % | 99.8482 % | 98.5254 % | 100.6480 % | 95.6353 % |
| Concentration RSD | 0.2 % | 1.7 % | 0.4 % | 0.1 % | 1.7 % | 0.1 % | 0.3 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: L2513660-01 WG2040647
Analysis started at: 3/17/2025 12:44:54
Comments <Comment>
Rack: 1
Vial: 13

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.1503 ppm | 0.0020 ppm | 0.0418 ppm | 0.0476 ppm | 0.0000 ppm | 3.5848 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.1458 ppm | 0.0020 ppm | 0.0416 ppm | 0.0469 ppm | 0.0000 ppm | 3.5382 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.1538 ppm | 0.0006 ppm | 0.0419 ppm | 0.0478 ppm | 0.0000 ppm | 3.5906 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.1513 ppm | 0.0034 ppm | 0.0418 ppm | 0.0480 ppm | 0.0000 ppm | 3.6256 ppm |
| Concentration RSD | 585.7 % | 2.7 % | 70.9 % | 0.3 % | 1.2 % | 15.6 % | 1.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0088 ppm | 0.0057 ppm | 0.0182 ppm | 0.0155 ppm | 3.1824 ppm | 2.2993 ppm | 0.0027 ppm |
| Concentration per Run 1 | 0.0088 ppm | 0.0056 ppm | 0.0179 ppm | 0.0155 ppm | 3.1450 ppm | 2.2844 ppm | 0.0022 ppm |
| Concentration per Run 2 | 0.0088 ppm | 0.0057 ppm | 0.0185 ppm | 0.0155 ppm | 3.1912 ppm | 2.2992 ppm | 0.0026 ppm |
| Concentration per Run 3 | 0.0088 ppm | 0.0059 ppm | 0.0181 ppm | 0.0154 ppm | 3.2110 ppm | 2.3142 ppm | 0.0033 ppm |
| Concentration RSD | 0.3 % | 2.5 % | 1.6 % | 0.4 % | 1.1 % | 0.6 % | 19.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.2790 ppm | 0.2249 ppm | 0.0096 ppm | 136.1074 ppm | 0.0463 ppm | 0.0161 ppm | 0.0016 ppm |
| Concentration per Run 1 | 2.2713 ppm | 0.2231 ppm | 0.0097 ppm | 132.5453 ppm | 0.0464 ppm | 0.0142 ppm | 0.0031 ppm |
| Concentration per Run 2 | 2.2864 ppm | 0.2250 ppm | 0.0096 ppm | 139.5349 ppm | 0.0462 ppm | 0.0171 ppm | 0.0022 ppm |
| Concentration per Run 3 | 2.2793 ppm | 0.2264 ppm | 0.0095 ppm | 136.2420 ppm | 0.0462 ppm | 0.0170 ppm | -0.0005 ppm |
| Concentration RSD | 0.3 % | 0.7 % | 0.9 % | 2.6 % | 0.2 % | 10.1 % | 119.0 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.2272 ppm | 0.0022 ppm | 0.0179 ppm | 0.0003 ppm | -0.0065 ppm | 0.0015 ppm |
| Concentration per Run 1 | -0.0007 ppm | 0.2276 ppm | 0.0020 ppm | 0.0177 ppm | 0.0002 ppm | -0.0075 ppm | 0.0014 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.2267 ppm | 0.0016 ppm | 0.0180 ppm | 0.0004 ppm | -0.0056 ppm | 0.0016 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.2273 ppm | 0.0030 ppm | 0.0181 ppm | 0.0002 ppm | -0.0063 ppm | 0.0014 ppm |
| Concentration RSD | 3,281.9 % | 0.2 % | 33.4 % | 1.4 % | 46.3 % | 14.3 % | 8.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3223 ppm | 98.8429 % | 95.5802 % | 98.6263 % | 99.4345 % | 98.8731 % | 95.4924 % |
| Concentration per Run 1 | 0.3215 ppm | 99.8022 % | 95.5623 % | 98.3332 % | 100.3097 % | 98.8243 % | 95.4360 % |
| Concentration per Run 2 | 0.3231 ppm | 98.7108 % | 95.5977 % | 98.9022 % | 99.2438 % | 98.9957 % | 95.5338 % |
| Concentration per Run 3 | 0.3224 ppm | 98.0157 % | 95.5805 % | 98.6436 % | 98.7499 % | 98.7993 % | 95.5075 % |
| Concentration RSD | 0.2 % | 0.9 % | 0.0 % | 0.3 % | 0.8 % | 0.1 % | 0.1 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: L2513666-01 WG2040647
Analysis started at: 3/17/2025 12:50:08
Comments <Comment>
Rack: 1
Vial: 14

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0843 ppm | 0.0010 ppm | 0.0055 ppm | 0.0649 ppm | 0.0001 ppm | 2.9923 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0816 ppm | 0.0014 ppm | 0.0055 ppm | 0.0648 ppm | 0.0001 ppm | 2.9641 ppm |
| Concentration per Run 2 | -0.0006 ppm | 0.0853 ppm | 0.0001 ppm | 0.0058 ppm | 0.0648 ppm | 0.0000 ppm | 3.0091 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0861 ppm | 0.0014 ppm | 0.0053 ppm | 0.0651 ppm | 0.0001 ppm | 3.0037 ppm |
| Concentration RSD | 251.9 % | 2.8 % | 81.5 % | 4.3 % | 0.3 % | 17.9 % | 0.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0020 ppm | 0.0029 ppm | 0.0049 ppm | 0.0099 ppm | 1.6006 ppm | 0.4206 ppm | 0.0013 ppm |
| Concentration per Run 1 | 0.0019 ppm | 0.0029 ppm | 0.0051 ppm | 0.0099 ppm | 1.5879 ppm | 0.4013 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0020 ppm | 0.0029 ppm | 0.0047 ppm | 0.0099 ppm | 1.6080 ppm | 0.4124 ppm | 0.0022 ppm |
| Concentration per Run 3 | 0.0022 ppm | 0.0028 ppm | 0.0050 ppm | 0.0100 ppm | 1.6058 ppm | 0.4482 ppm | 0.0007 ppm |
| Concentration RSD | 6.5 % | 1.7 % | 4.6 % | 0.9 % | 0.7 % | 5.8 % | 64.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1047 ppm | 0.1731 ppm | 0.0003 ppm | 135.6490 ppm | 0.0051 ppm | 0.0233 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.1065 ppm | 0.1717 ppm | 0.0005 ppm | 135.9992 ppm | 0.0052 ppm | 0.0243 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.1032 ppm | 0.1737 ppm | 0.0004 ppm | 136.2077 ppm | 0.0049 ppm | 0.0235 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.1045 ppm | 0.1739 ppm | -0.0001 ppm | 134.7400 ppm | 0.0053 ppm | 0.0222 ppm | 0.0005 ppm |
| Concentration RSD | 1.6 % | 0.7 % | 109.6 % | 0.6 % | 4.7 % | 4.4 % | 385.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0019 ppm | 0.2262 ppm | 0.0025 ppm | 0.0122 ppm | 0.0001 ppm | -0.0063 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0020 ppm | 0.2230 ppm | 0.0027 ppm | 0.0122 ppm | 0.0001 ppm | -0.0042 ppm | 0.0006 ppm |
| Concentration per Run 2 | -0.0029 ppm | 0.2270 ppm | 0.0022 ppm | 0.0122 ppm | 0.0002 ppm | -0.0075 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0008 ppm | 0.2286 ppm | 0.0026 ppm | 0.0122 ppm | 0.0002 ppm | -0.0072 ppm | 0.0002 ppm |
| Concentration RSD | 53.8 % | 1.3 % | 9.3 % | 0.3 % | 55.7 % | 28.8 % | 52.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0627 ppm | 99.6224 % | 97.0058 % | 100.2896 % | 99.7403 % | 100.8645 % | 96.3324 % |
| Concentration per Run 1 | 0.0618 ppm | 100.3825 % | 97.1362 % | 101.2241 % | 100.5745 % | 101.4520 % | 96.5647 % |
| Concentration per Run 2 | 0.0632 ppm | 99.0356 % | 96.8030 % | 99.8005 % | 99.1326 % | 100.5196 % | 96.0358 % |
| Concentration per Run 3 | 0.0632 ppm | 99.4491 % | 97.0783 % | 99.8443 % | 99.5138 % | 100.6218 % | 96.3967 % |
| Concentration RSD | 1.3 % | 0.7 % | 0.2 % | 0.8 % | 0.7 % | 0.5 % | 0.3 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: L2513666-02 WG2040647
Analysis started at: 3/17/2025 12:55:24
Comments <Comment>
Rack: 1
Vial: 15

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.3437 ppm | 0.0020 ppm | 0.0065 ppm | 0.0199 ppm | 0.0001 ppm | 11.2997 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.3416 ppm | 0.0021 ppm | 0.0066 ppm | 0.0198 ppm | 0.0001 ppm | 11.1835 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.3391 ppm | 0.0010 ppm | 0.0063 ppm | 0.0197 ppm | 0.0001 ppm | 11.2167 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.3504 ppm | 0.0030 ppm | 0.0065 ppm | 0.0203 ppm | 0.0001 ppm | 11.4988 ppm |
| Concentration RSD | 889.0 % | 1.7 % | 50.1 % | 2.5 % | 1.7 % | 30.4 % | 1.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0198 ppm | 0.0074 ppm | 0.0051 ppm | 0.8009 ppm | 0.0262 ppm | 0.2164 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0198 ppm | 0.0074 ppm | 0.0053 ppm | 0.8001 ppm | 0.0262 ppm | 0.2108 ppm | 0.0010 ppm |
| Concentration per Run 2 | 0.0198 ppm | 0.0073 ppm | 0.0050 ppm | 0.8004 ppm | 0.0258 ppm | 0.2100 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0198 ppm | 0.0074 ppm | 0.0051 ppm | 0.8023 ppm | 0.0267 ppm | 0.2283 ppm | 0.0002 ppm |
| Concentration RSD | 0.2 % | 1.1 % | 2.4 % | 0.1 % | 1.7 % | 4.8 % | 73.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6512 ppm | 0.0775 ppm | 0.0003 ppm | 137.2357 ppm | 0.0055 ppm | 2.8476 ppm | 0.0009 ppm |
| Concentration per Run 1 | 0.6517 ppm | 0.0766 ppm | 0.0002 ppm | 135.4935 ppm | 0.0052 ppm | 2.8470 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.6515 ppm | 0.0773 ppm | 0.0003 ppm | 136.6298 ppm | 0.0053 ppm | 2.8456 ppm | 0.0012 ppm |
| Concentration per Run 3 | 0.6505 ppm | 0.0785 ppm | 0.0005 ppm | 139.5836 ppm | 0.0059 ppm | 2.8503 ppm | 0.0009 ppm |
| Concentration RSD | 0.1 % | 1.2 % | 57.0 % | 1.5 % | 6.9 % | 0.1 % | 33.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | 0.3090 ppm | 0.0016 ppm | 0.0313 ppm | 0.0000 ppm | -0.0034 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0033 ppm | 0.3080 ppm | 0.0013 ppm | 0.0311 ppm | -0.0001 ppm | -0.0038 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0007 ppm | 0.3101 ppm | 0.0009 ppm | 0.0310 ppm | 0.0000 ppm | -0.0039 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0014 ppm | 0.3089 ppm | 0.0025 ppm | 0.0318 ppm | 0.0001 ppm | -0.0025 ppm | 0.0002 ppm |
| Concentration RSD | 272.9 % | 0.3 % | 53.6 % | 1.5 % | 453.4 % | 23.2 % | 27.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.5175 ppm | 99.4437 % | 97.3023 % | 100.7229 % | 99.5769 % | 100.9034 % | 96.4675 % |
| Concentration per Run 1 | 3.5199 ppm | 100.1860 % | 97.1243 % | 100.8549 % | 100.4182 % | 101.0603 % | 96.2348 % |
| Concentration per Run 2 | 3.5125 ppm | 100.2825 % | 97.3712 % | 100.6046 % | 100.3969 % | 100.7851 % | 96.6424 % |
| Concentration per Run 3 | 3.5201 ppm | 97.8627 % | 97.4116 % | 100.7093 % | 97.9156 % | 100.8647 % | 96.5254 % |
| Concentration RSD | 0.1 % | 1.4 % | 0.2 % | 0.1 % | 1.4 % | 0.1 % | 0.2 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: CCV
Analysis started at: 3/17/2025 13:00:35
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4734 ppm | 0.5097 ppm | 0.5061 ppm | 0.4908 ppm | 0.4890 ppm | 0.5100 ppm | 0.5278 ppm |
| Concentration per Run 1 | 0.4717 ppm | 0.5080 ppm | 0.5062 ppm | 0.4916 ppm | 0.4852 ppm | 0.5062 ppm | 0.5273 ppm |
| Concentration per Run 2 | 0.4747 ppm | 0.5115 ppm | 0.5064 ppm | 0.4902 ppm | 0.4908 ppm | 0.5123 ppm | 0.5268 ppm |
| Concentration per Run 3 | 0.4738 ppm | 0.5097 ppm | 0.5057 ppm | 0.4905 ppm | 0.4910 ppm | 0.5115 ppm | 0.5292 ppm |
| Recovery Percentage 1 | 94.682 % | 101.946 % | 101.224 % | 98.153 % | 97.799 % | 101.993 % | 105.551 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.1 % | 0.2 % | 0.7 % | 0.7 % | 0.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4967 ppm | 0.5029 ppm | 0.5067 ppm | 0.4822 ppm | 0.5267 ppm | 5.2901 ppm | 0.5068 ppm |
| Concentration per Run 1 | 0.4974 ppm | 0.5043 ppm | 0.5057 ppm | 0.4825 ppm | 0.5215 ppm | 5.2380 ppm | 0.5040 ppm |
| Concentration per Run 2 | 0.4966 ppm | 0.5026 ppm | 0.5092 ppm | 0.4821 ppm | 0.5293 ppm | 5.3313 ppm | 0.5084 ppm |
| Concentration per Run 3 | 0.4961 ppm | 0.5017 ppm | 0.5054 ppm | 0.4820 ppm | 0.5293 ppm | 5.3011 ppm | 0.5082 ppm |
| Recovery Percentage 1 | 99.344 % | 100.575 % | 101.349 % | 96.439 % | 105.340 % | 105.802 % | 101.370 % |
| Concentration RSD | 0.1 % | 0.3 % | 0.4 % | 0.1 % | 0.9 % | 0.9 % | 0.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5054 ppm | 0.5019 ppm | 0.4862 ppm | 10.0483 ppm | 0.5073 ppm | 0.4997 ppm | 0.5125 ppm |
| Concentration per Run 1 | 0.5039 ppm | 0.4976 ppm | 0.4864 ppm | 9.9659 ppm | 0.5064 ppm | 0.5012 ppm | 0.5126 ppm |
| Concentration per Run 2 | 0.5084 ppm | 0.5027 ppm | 0.4864 ppm | 10.0926 ppm | 0.5073 ppm | 0.4994 ppm | 0.5103 ppm |
| Concentration per Run 3 | 0.5039 ppm | 0.5054 ppm | 0.4858 ppm | 10.0865 ppm | 0.5082 ppm | 0.4985 ppm | 0.5148 ppm |
| Recovery Percentage 1 | 101.083 % | 100.379 % | 97.243 % | 100.483 % | 101.461 % | 99.938 % | 102.508 % |
| Concentration RSD | 0.5 % | 0.8 % | 0.1 % | 0.7 % | 0.2 % | 0.3 % | 0.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5008 ppm | 5.5228 ppm | 0.5096 ppm | 0.5035 ppm | 0.5097 ppm | 0.4833 ppm | 0.4993 ppm |
| Concentration per Run 1 | 0.4996 ppm | 5.5361 ppm | 0.5100 ppm | 0.4991 ppm | 0.5095 ppm | 0.4823 ppm | 0.4978 ppm |
| Concentration per Run 2 | 0.5004 ppm | 5.5211 ppm | 0.5098 ppm | 0.5057 ppm | 0.5114 ppm | 0.4838 ppm | 0.5013 ppm |
| Concentration per Run 3 | 0.5024 ppm | 5.5113 ppm | 0.5089 ppm | 0.5056 ppm | 0.5083 ppm | 0.4838 ppm | 0.4987 ppm |
| Recovery Percentage 1 | 100.162 % | 105.196 % | 101.913 % | 100.692 % | 101.948 % | 96.663 % | 99.857 % |
| Concentration RSD | 0.3 % | 0.2 % | 0.1 % | 0.7 % | 0.3 % | 0.2 % | 0.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5139 ppm | 100.3702 % | 101.5232 % | 101.2718 % | 100.1479 % | 100.3661 % | 100.1837 % |
| Concentration per Run 1 | 0.5144 ppm | 100.8177 % | 101.7020 % | 101.1069 % | 100.7115 % | 100.3202 % | 100.3107 % |
| Concentration per Run 2 | 0.5142 ppm | 100.0689 % | 101.2953 % | 101.3494 % | 99.8647 % | 100.4606 % | 100.0130 % |
| Concentration per Run 3 | 0.5130 ppm | 100.2239 % | 101.5721 % | 101.3590 % | 99.8675 % | 100.3175 % | 100.2273 % |
| Recovery Percentage 1 | 102.774 % | | | | | | |
| Concentration RSD | 0.1 % | 0.4 % | 0.2 % | 0.1 % | 0.5 % | 0.1 % | 0.2 % |

# ICP Data Trace 7

3/17/2025 13:23:02

LabBook: WG2041355_03172025T7.imexp

Sample: CCB
Analysis started at: 3/17/2025 13:05:28
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0026 ppm | 0.0016 ppm | 0.0014 ppm | 0.0002 ppm | 0.0002 ppm | 0.0062 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0037 ppm | 0.0032 ppm | 0.0015 ppm | 0.0002 ppm | 0.0002 ppm | 0.0080 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0000 ppm | 0.0025 ppm | 0.0016 ppm | 0.0002 ppm | 0.0002 ppm | 0.0033 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0041 ppm | -0.0011 ppm | 0.0012 ppm | 0.0002 ppm | 0.0002 ppm | 0.0072 ppm |
| Recovery Percentage 1 | 1.764 % | 2.630 % | 31.151 % | 4.763 % | 2.058 % | 3.667 % | 6.186 % |
| Concentration RSD | 137.8 % | 85.5 % | 147.5 % | 16.0 % | 13.8 % | 16.6 % | 40.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0004 ppm | 0.0004 ppm | 0.0001 ppm | 0.0072 ppm | 0.0059 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0005 ppm | 0.0004 ppm | 0.0000 ppm | 0.0078 ppm | -0.0043 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0003 ppm | 0.0005 ppm | 0.0001 ppm | 0.0066 ppm | -0.0090 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0004 ppm | 0.0003 ppm | 0.0001 ppm | 0.0071 ppm | 0.0311 ppm | 0.0003 ppm |
| Recovery Percentage 1 | 7.166 % | 1.927 % | 3.905 % | 0.601 % | 14.353 % | 0.237 % | 4.294 % |
| Concentration RSD | 15.7 % | 32.9 % | 25.8 % | 23.4 % | 8.3 % | 370.5 % | 85.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0002 ppm | 0.0006 ppm | 0.0369 ppm | -0.0005 ppm | -0.0002 ppm | 0.0007 ppm |
| Concentration per Run 1 | -0.0005 ppm | 0.0001 ppm | 0.0005 ppm | 0.0401 ppm | -0.0005 ppm | -0.0002 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0003 ppm | 0.0005 ppm | 0.0358 ppm | -0.0004 ppm | 0.0004 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0002 ppm | 0.0008 ppm | 0.0347 ppm | -0.0007 ppm | -0.0008 ppm | 0.0016 ppm |
| Recovery Percentage 1 | 0.203 % | 2.053 % | 1.138 % | 1.843 % | -2.015 % | -1.945 % | 1.381 % |
| Concentration RSD | 447.3 % | 41.1 % | 31.5 % | 7.7 % | 32.3 % | 308.8 % | 116.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 0.0034 ppm | 0.0000 ppm | 0.0002 ppm | 0.0003 ppm | 0.0001 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0022 ppm | 0.0039 ppm | 0.0005 ppm | 0.0002 ppm | 0.0003 ppm | 0.0003 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0035 ppm | 0.0000 ppm | 0.0002 ppm | 0.0001 ppm | 0.0005 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0029 ppm | -0.0004 ppm | 0.0002 ppm | 0.0004 ppm | -0.0005 ppm | 0.0003 ppm |
| Recovery Percentage 1 | -4.844 % | 0.684 % | 0.082 % | 1.697 % | 2.720 % | 0.586 % | 2.590 % |
| Concentration RSD | 299.5 % | 14.0 % | 1,040.4 % | 13.3 % | 48.6 % | 463.3 % | 109.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 100.6310 % | 102.4995 % | 100.4544 % | 99.1000 % | 98.6043 % | 100.0871 % |
| Concentration per Run 1 | 0.0002 ppm | 100.7536 % | 102.6011 % | 100.4154 % | 99.2647 % | 98.3514 % | 100.0769 % |
| Concentration per Run 2 | 0.0002 ppm | 100.5188 % | 102.2766 % | 100.3850 % | 99.0214 % | 98.7302 % | 99.9797 % |
| Concentration per Run 3 | 0.0001 ppm | 100.6207 % | 102.6208 % | 100.5629 % | 99.0139 % | 98.7314 % | 100.2047 % |
| Recovery Percentage 1 | 2.812 % | | | | | | |
| Concentration RSD | 13.5 % | 0.1 % | 0.2 % | 0.1 % | 0.1 % | 0.2 % | 0.1 % |

**QC True Values: Trace 4,5,6,7**

| | Element | True Value (mg/L) |
|---|---|---|
| **ICV/CCV** | All | 0.50 |
| | K | 5.00 |
| | Na | 10.00 |
| | Si | 5.25 |
| **ICSA** | Al | 250 |
| | Ca | 250 |
| | Fe | 100 |
| | Mg | 250 |
| **ICSB** | Al | 9.00 |
| | Sb | 1.00 |
| | As | 1.00 |
| | Ba | 0.30 |
| | Be | 0.10 |
| | Bi | 1.00 |
| | B | 0.50 |
| | Cd | 0.30 |
| | Ca | 45.00 |
| | Cr | 0.30 |
| | Co | 0.30 |
| | Cu | 0.30 |
| | Fe | 37.50 |
| | Pb | 1.00 |
| | Mg | 22.50 |
| | Mn | 0.20 |
| | Mo | 0.30 |
| | Ni | 0.30 |
| | K | 20.00 |
| | Se | 0.50 |
| | Si | 1.23 |
| | Ag | 0.30 |
| | Na | 7.50 |
| | Sr | 1.00 |
| | Tl | 1.00 |
| | Sn | 1.00 |
| | Ti | 1.00 |
| | V | 0.30 |
| | Zn | 0.30 |

| | Element | True Value (mg/L) |
|---|---|---|
| **CRI** | Al | 0.40 |
| | Sb | 0.10 |
| | As | 0.02 |
| | Ba | 0.04 |
| | Be | 0.01 |
| | Bi | 0.02 |
| | B | 0.10 |
| | Cd | 0.01 |
| | Ca | 0.40 |
| | Cr | 0.02 |
| | Co | 0.10 |
| | Cu | 0.05 |
| | Fe | 0.20 |
| | Pb | 0.05 |
| | Mg | 0.40 |
| | Mn | 0.03 |
| | Mo | 0.10 |
| | Ni | 0.08 |
| | K | 5.00 |
| | Se | 0.02 |
| | Si | 1.00 |
| | Ag | 0.02 |
| | Na | 5.00 |
| | Sr | 0.02 |
| | Tl | 0.02 |
| | Sn | 0.02 |
| | Ti | 0.02 |
| | V | 0.10 |
| | Zn | 0.04 |

**LCS & MS Spike Concentrations**

| Element | Liquid concentrations (mg/L) | Soil concentrations (mg/kg) |
|---|---|---|
| Al | 2.00 | 100 |
| Sb | 0.50 | 25.0 |
| As | 0.12 | 6.0 |
| Ba | 2.00 | 100 |
| Be | 0.05 | 2.5 |
| Bi | 1.00 | 50.0 |
| B | 1.00 | 50.0 |
| Cd | 0.05 | 2.55 |
| Ca | 10.00 | 500 |
| Cr | 0.20 | 10.0 |
| Co | 0.50 | 25.0 |
| Cu | 0.25 | 12.5 |
| Fe | 1.00 | 50.0 |
| Pb | 0.51 | 25.5 |
| Mg | 10.00 | 500 |
| Mn | 0.50 | 25.0 |
| Mo | 1.00 | 50.0 |
| Ni | 0.50 | 25.0 |
| K | 10.00 | 500 |
| Se | 0.12 | 6.0 |
| Si | 1.00 | 50.0 |
| Ag | 0.05 | 2.5 |
| Na | 10.00 | 500 |
| Sr | 1.00 | 50.0 |
| Tl | 0.12 | 6.0 |
| Sn | 1.00 | 50.0 |
| Ti | 1.00 | 50.0 |
| V | 0.50 | 25.0 |
| Zn | 0.50 | 25.0 |

# LCS and MS Spike Concentrations—As of 08/09/2011

| Element | Liquid Concentration(mg/L) | Soil Concentration (mg/kg) |
|---|---|---|
| Al | 2.00 | 160 |
| Sb | 0.50 | 40 |
| As | 0.12 | 9.6 |
| Ba | 2.00 | 160 |
| Be | 0.05 | 4.0 |
| Bi | 1.00 | 80 |
| B | 1.00 | 80 |
| Cd | 0.051 | 4.08 |
| Ca | 10.0 | 800 |
| Cr | 0.20 | 16 |
| Co | 0.50 | 40 |
| Cu | 0.25 | 20 |
| Fe | 1.00 | 80 |
| Pb | 0.51 | 40.8 |
| Mg | 10.0 | 800 |
| Mn | 0.50 | 40 |
| Mo | 1.00 | 80 |
| Ni | 0.50 | 40 |
| K | 10.0 | 800 |
| Se | 0.12 | 9.6 |
| Si | 1.00 | 80 |
| Ag | 0.05 | 24 |
| Na | 10.0 | 800 |
| Sr | 1.00 | 80 |
| Tl | 0.12 | 9.6 |
| Sn | 1.00 | 80 |
| Ti | 1.00 | 80 |
| V | 0.50 | 40 |
| Zn | 0.50 | 40 |

Revised 8/9/11 Soil spike is based on (2x water spike)x(50/1.25), where 50 is the final volume of soil digestate and 1.25 is the nominal digestion weight of 1.25g, except in the case of Ag, where additional Ag is added to the spike.

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D102-540
**Certificate Issue Date:** June 22, 2018
**Expiration Date:** January 31, 2022
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8160 | 6.36 | 3960 - 12400 | 4080 - 12200 |
| Antimony | 120 | 60.9 | 9.42 | 0.822 - 121 | 12.0 - 166 |
| Arsenic | 144 | 135 | 5.08 | 112 - 158 | 94.6 - 176 |
| Barium | 469 | 443 | 6.77 | 366 - 521 | 332 - 554 |
| Beryllium | 207 | 197 | 5.86 | 164 - 229 | 148 - 246 |
| Boron | 213 | 174 | 12.6 | 127 - 221 | 105 - 244 |
| Cadmium | 224 | 204 | 6.65 | 169 - 240 | 153 - 256 |
| Calcium | 5190 | 4830 | 9.12 | 3950 - 5700 | 3510 - 6150 |
| Chromium | 138 | 132 | 8.56 | 109 - 155 | 92.2 - 171 |
| Cobalt | 182 | 179 | 7.93 | 151 - 207 | 134 - 224 |
| Copper | 191 | 184 | 6.72 | 155 - 213 | 138 - 230 |
| Iron | 15000 | 14400 | 10.7 | 8770 - 20000 | 5120 - 23600 |
| Lead | 225 | 216 | 7.72 | 178 - 254 | 159 - 274 |
| Magnesium | 2570 | 2340 | 6.13 | 1780 - 2900 | 1460 - 3230 |
| Manganese | 331 | 323 | 6.71 | 266 - 380 | 242 - 404 |
| Mercury | 16.8 | 13.2 | 16.0 | 8.64 - 17.7 | 7.89 - 18.5 |
| Molybdenum | 193 | 175 | 2.39 | 141 - 209 | 125 - 226 |
| Nickel | 163 | 152 | 5.95 | 126 - 178 | 106 - 197 |
| Potassium | 2420 | 2050 | 6.31 | 1440 - 2660 | 1210 - 2890 |
| Selenium | 81.9 | 74.9 | 4.13 | 59.3 - 90.5 | 47.0 - 103 |
| Silver | 57.6 | 53.9 | 9.00 | 43.0 - 64.8 | 37.8 - 70.0 |
| Sodium | 161 | 149 | 12.1 | 111 - 188 | 57.7 - 241 |
| Strontium | 100 | 96.2 | 4.04 | 78.1 - 114 | 69.0 - 123 |
| Thallium | 253 | 232 | 3.54 | 188 - 276 | 168 - 296 |



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# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Tin | 146 | 134 | 10.8 | 106 - 163 | 79.5 - 189 |
| Titanium | 449 | 340 | 7.20 | 70.2 - 609 | 44.9 - 711 |
| Uranium | 114 | 113 | 7.10 | 85.5 - 140 | 71.9 - 153 |
| Vanadium | 180 | 172 | 8.85 | 137 - 207 | 126 - 218 |
| Zinc | 217 | 211 | 6.58 | 171 - 250 | 147 - 274 |

## ANALYTICAL VERIFICATION

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Aluminum | 10100 | 8160 | 80.8 | 138 | - | - |
| Antimony | 120 | 60.9 | 50.8 | 135 | - | - |
| Arsenic | 144 | 135 | 93.8 | 184 | - | - |
| Barium | 469 | 443 | 94.5 | 158 | - | - |
| Beryllium | 207 | 197 | 95.0 | 148 | - | - |
| Boron | 213 | 174 | 81.8 | 107 | - | - |
| Cadmium | 224 | 204 | 91.3 | 199 | - | - |
| Calcium | 5190 | 4830 | 93.0 | 122 | - | - |
| Chromium | 138 | 132 | 95.5 | 172 | - | - |
| Cobalt | 182 | 179 | 98.4 | 140 | - | - |
| Copper | 191 | 184 | 96.3 | 183 | - | - |
| Iron | 15000 | 14400 | 95.6 | 133 | - | - |
| Lead | 225 | 216 | 96.2 | 204 | - | - |
| Magnesium | 2570 | 2340 | 91.2 | 122 | - | - |
| Manganese | 331 | 323 | 97.6 | 147 | - | - |
| Mercury | 16.8 | 13.2 | 78.3 | 128 | - | - |
| Molybdenum | 193 | 175 | 90.8 | 143 | - | - |
| Nickel | 163 | 152 | 93.1 | 185 | - | - |
| Potassium | 2420 | 2050 | 84.7 | 121 | - | - |
| Selenium | 81.9 | 74.9 | 91.5 | 163 | - | - |



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| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Silver | 57.6 | 53.9 | 93.6 | 150 | - | - |
| Sodium | 161 | 149 | 92.8 | 105 | - | - |
| Strontium | 100 | 96.2 | 96.2 | 90 | - | - |
| Thallium | 253 | 232 | 91.6 | 147 | - | - |
| Tin | 146 | 134 | 92.0 | 100 | - | - |
| Titanium | 449 | 340 | 75.6 | 93 | - | - |
| Uranium | 114 | 113 | 98.8 | 35 | - | - |
| Vanadium | 180 | 172 | 95.4 | 139 | - | - |
| Zinc | 217 | 211 | 97.0 | 180 | - | - |

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
**Traceability Recovery (%)** = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.**

**Certifying Officer**

**Brian Miller**

**Quality Officer**

**Matthew Seebeck**

ISO/IEC GUIDE 34:2009 ACCREDITED REFERENCE MATERIAL PRODUCER CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005 ACCREDITED CHEMICAL TESTING LABORATORY CERTIFICATE NO. 1539.02



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Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D105-540
**Certificate Issue Date:** March 19, 2019
**Expiration Date:** October 12, 2022
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8800 | 8.32 | 4600 - 13000 | 4470 - 13100 |
| Antimony | 282 | 147 | 7.70 | 6.17 - 289 | 28.2 - 366 |
| Arsenic | 155 | 143 | 6.34 | 119 - 168 | 100 - 186 |
| Barium | 439 | 415 | 5.37 | 343 - 488 | 311 - 519 |
| Beryllium | 192 | 179 | 2.78 | 149 - 210 | 134 - 224 |
| Boron | 216 | 160 | 7.08 | 113 - 208 | 96.1 - 238 |
| Cadmium | 61.5 | 56.2 | 0.528 | 46.6 - 65.9 | 42.2 - 70.3 |
| Calcium | 5190 | 4960 | 6.64 | 4090 - 5840 | 3610 - 6310 |
| Chromium | 104 | 101 | 4.75 | 83.2 - 118 | 70.5 - 131 |
| Cobalt | 196 | 189 | 0.500 | 158 - 219 | 141 - 236 |
| Copper | 65.0 | 63.1 | 2.65 | 53.1 - 73.1 | 47.3 - 78.9 |
| Iron | 15000 | 15700 | 8.94 | 10100 - 21300 | 6000 - 25400 |
| Lead | 126 | 125 | 4.77 | 103 - 146 | 89.3 - 160 |
| Magnesium | 2570 | 2410 | 6.26 | 1860 - 2970 | 1520 - 3310 |
| Manganese | 387 | 382 | 5.37 | 315 - 449 | 290 - 474 |
| Mercury | 7.76 | 7.61 | 13.7 | 5.53 - 9.69 | 4.57 - 10.7 |
| Molybdenum | 120 | 107 | 0.500 | 86.0 - 128 | 75.5 - 139 |
| Nickel | 117 | 108 | 0.514 | 89.5 - 127 | 75.7 - 141 |
| Potassium | 2420 | 2110 | 5.62 | 1500 - 2720 | 1260 - 2960 |
| Selenium | 84.6 | 77.9 | 7.10 | 61.8 - 94.0 | 49.2 - 107 |
| Silver | 34.6 | 34.3 | 8.34 | 27.8 - 40.9 | 23.6 - 45.1 |
| Sodium | 161 | 145 | 6.72 | 106 - 183 | 54.3 - 235 |
| Strontium | 104 | 104 | 3.95 | 85.1 - 123 | 74.8 - 133 |
| Thallium | 123 | 113 | 0.500 | 91.3 - 134 | 77.1 - 149 |



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# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Tin | 118 | 107 | 0.500 | 83.5 - 130 | 61.2 - 152 |
| Titanium | 512 | 421 | 5.80 | 114 - 728 | 0.00 - 854 |
| Uranium | 103 | 104 | 6.18 | 79.1 - 128 | 71.9 - 135 |
| Vanadium | 87.3 | 83.7 | 8.55 | 66.8 - 101 | 54.2 - 113 |
| Zinc | 251 | 240 | 3.98 | 194 - 285 | 168 - 312 |

## ANALYTICAL VERIFICATION

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Aluminum | 10100 | 8800 | 87.1 | 193 | - | - |
| Antimony | 282 | 147 | 52.3 | 216 | - | - |
| Arsenic | 155 | 143 | 92.5 | 240 | - | - |
| Barium | 439 | 415 | 94.6 | 222 | - | - |
| Beryllium | 192 | 179 | 93.4 | 220 | - | - |
| Boron | 216 | 160 | 74.2 | 152 | - | - |
| Cadmium | 61.5 | 56.2 | 91.5 | 239 | - | - |
| Calcium | 5190 | 4960 | 95.6 | 175 | - | - |
| Chromium | 104 | 101 | 96.8 | 237 | - | - |
| Cobalt | 196 | 189 | 96.2 | 215 | - | - |
| Copper | 65.0 | 63.1 | 97.1 | 237 | - | - |
| Iron | 15000 | 15700 | 105 | 195 | - | - |
| Lead | 126 | 125 | 99.0 | 243 | - | - |
| Magnesium | 2570 | 2410 | 93.9 | 177 | - | - |
| Manganese | 387 | 382 | 98.7 | 215 | - | - |
| Mercury | 7.76 | 7.61 | 98.0 | 157 | - | - |
| Molybdenum | 120 | 107 | 89.4 | 216 | - | - |
| Nickel | 117 | 108 | 92.5 | 235 | - | - |
| Potassium | 2420 | 2110 | 87.2 | 181 | - | - |
| Selenium | 84.6 | 77.9 | 92.1 | 231 | - | - |



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# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Silver | 34.6 | 34.3 | 99.3 | 216 | - | - |
| Sodium | 161 | 145 | 89.8 | 166 | - | - |
| Strontium | 104 | 104 | 99.9 | 148 | - | - |
| Thallium | 123 | 113 | 91.8 | 215 | - | - |
| Tin | 118 | 107 | 90.4 | 164 | - | - |
| Titanium | 512 | 421 | 82.2 | 157 | - | - |
| Uranium | 103 | 104 | 101 | 61 | - | - |
| Vanadium | 87.3 | 83.7 | 95.9 | 214 | - | - |
| Zinc | 251 | 240 | 95.5 | 234 | - | - |

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
**Traceability Recovery (%)** = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.**

**Certifying Officer**

**Brian Miller**

Brian Miller

**Quality Officer**

**Matthew Seebeck**



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Certified Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D109-540
**Certificate Issue Date:** March 24, 2020
**Expiration Date:** October 03, 2023
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value[7] | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8130 | 2.54 | 3920 - 12300 | 4060 - 12200 |
| Antimony | 259 | 134 | 5.03 | 4.56 - 264 | 25.9 - 335 |
| Arsenic | 171 | 156 | 3.38 | 129 - 183 | 109 - 203 |
| Barium | 253 | 239 | 4.81 | 197 - 280 | 179 - 298 |
| Beryllium | 179 | 169 | 6.59 | 141 - 198 | 127 - 212 |
| Boron | 114 | 87.5 | 10.3 | 62.5 - 113 | 52.5 - 125 |
| Cadmium | 149 | 137 | 5.43 | 113 - 160 | 103 - 171 |
| Calcium | 5190 | 4760 | 3.48 | 3890 - 5640 | 3460 - 6070 |
| Chromium | 163 | 154 | 3.79 | 126 - 181 | 108 - 200 |
| Cobalt | 127 | 121 | 5.07 | 101 - 141 | 90.8 - 151 |
| Copper | 57.0 | 54.9 | 4.13 | 46.1 - 63.6 | 41.1 - 68.6 |
| Iron | 15000 | 14100 | 6.27 | 8470 - 19700 | 4920 - 23200 |
| Lead | 133 | 130 | 3.00 | 107 - 152 | 93.3 - 167 |
| Magnesium | 2570 | 2320 | 3.32 | 1760 - 2880 | 1440 - 3200 |
| Manganese | 277 | 269 | 2.67 | 221 - 317 | 199 - 340 |
| Mercury | 21.6 | 20.5 | 7.72 | 14.7 - 26.3 | 12.3 - 28.6 |
| Molybdenum | 108 | 95.4 | 2.61 | 76.4 - 114 | 66.9 - 124 |
| Nickel | 58.7 | 53.9 | 4.97 | 44.5 - 63.3 | 37.7 - 70.0 |
| Potassium | 2420 | 2020 | 3.06 | 1410 - 2630 | 1190 - 2850 |
| Selenium | 181 | 167 | 5.63 | 132 - 201 | 113 - 221 |
| Silver | 35.5 | 33.6 | 5.20 | 26.8 - 40.3 | 23.0 - 44.1 |
| Sodium | 161 | 133 | 2.76 | 95.1 - 171 | 46.5 - 220 |
| Strontium | 89.7 | 87.9 | 4.59 | 71.7 - 104 | 62.8 - 113 |
| Thallium | 121 | 112 | 5.19 | 90.3 - 133 | 76.1 - 147 |



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| Parameter | Certified Value[1] | Reference Value[7] | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Tin | 83.5 | 74.0 | 5.42 | 57.6 - 90.4 | 39.7 - 108 |
| Titanium | 474 | 333 | 7.17 | 48.6 - 617 | 46.3 - 620 |
| Uranium | 51.9 | 51.9 | 3.36 | 39.6 - 64.3 | 35.9 - 68.0 |
| Vanadium | 68.1 | 62.6 | 6.00 | 49.4 - 75.8 | 37.0 - 88.3 |
| Zinc | 165 | 158 | 2.34 | 128 - 188 | 111 - 205 |



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## ANALYTICAL VERIFICATION

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number[6] | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Aluminum | 10100 | 8130 | 80.5 | 196 | - | - |
| Antimony | 259 | 134 | 51.8 | 217 | - | - |
| Arsenic | 171 | 156 | 91.3 | 243 | - | - |
| Barium | 253 | 239 | 94.3 | 230 | - | - |
| Beryllium | 179 | 169 | 94.6 | 223 | - | - |
| Boron | 114 | 87.5 | 76.7 | 150 | - | - |
| Cadmium | 149 | 137 | 91.8 | 249 | - | - |
| Calcium | 5190 | 4760 | 91.8 | 184 | - | - |
| Chromium | 163 | 154 | 94.4 | 245 | - | - |
| Cobalt | 127 | 121 | 95.3 | 221 | - | - |
| Copper | 57.0 | 54.9 | 96.2 | 243 | - | - |
| Iron | 15000 | 14100 | 93.9 | 199 | - | - |
| Lead | 133 | 130 | 97.7 | 251 | - | - |
| Magnesium | 2570 | 2320 | 90.1 | 182 | - | - |
| Manganese | 277 | 269 | 97.2 | 220 | - | - |
| Mercury | 21.6 | 20.5 | 94.7 | 172 | - | - |
| Molybdenum | 108 | 95.4 | 88.3 | 218 | - | - |
| Nickel | 58.7 | 53.9 | 91.8 | 242 | - | - |
| Potassium | 2420 | 2020 | 83.5 | 187 | - | - |
| Selenium | 181 | 167 | 92.2 | 235 | - | - |
| Silver | 35.5 | 33.6 | 94.5 | 222 | - | - |
| Sodium | 161 | 133 | 82.7 | 177 | - | - |
| Strontium | 89.7 | 87.9 | 98.0 | 151 | - | - |
| Thallium | 121 | 112 | 92.2 | 219 | - | - |
| Tin | 83.5 | 74.0 | 88.6 | 170 | - | - |
| Titanium | 474 | 333 | 70.3 | 157 | - | - |
| Uranium | 51.9 | 51.9 | 100 | 60 | - | - |
| Vanadium | 68.1 | 62.6 | 91.9 | 213 | - | - |
| Zinc | 165 | 158 | 95.8 | 238 | - | - |



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1. The **Certified Values** are the actual gravimetric/volumetric "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$Uexpanded = k * SQRT((Uchar^2) + (Uhomogen^2) + (ULTS^2) + (USTS^2) + (URSS^2))$

Where:

Uexpanded = Expanded uncertainty.
k = Coverage factor.
Uchar = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
Uhomogen = Standard uncertainty of the homogeneity assessment.
ULTS = Standard uncertainty associated with long-term stability.
USTS = Standard uncertainty associated with short-term (transport) stability.
URSS = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this certified reference material alongside USEPA and NELAC compliant PT study materials. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and therefore, the acceptance limits of this certified reference material and any PT study material may differ relative to their difference in concentrations.

5. The **PT Performance Data** include the mean value, percent recovery and number of data points reported by laboratories in our Proficiency Testing study compared to the Certified Values. In the event this lot was not used in a proficiency testing scheme, the data displayed was generated internally by ERA.

6. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

7. The **Reference Values** are equal to the mean recoveries for the parameters as determined in an interlaboratory round robin study. The **Reference Values** represent the expected performance for the analytes in this standard. ERA recommends using the **Reference Values** when assessing or evaluating your results.

8. **Metrological Traceability**. This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

9. For additional information on this product such as intended use, storage information, instructions for use, minimum sample size, and safety information, please refer to the Product Use Instructions provided.

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.**

| Certifying Officer | Quality Officer |
|---|---|
| Brian Miller | Matthew Seebeck |



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ERA
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Certified Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D113-540
**Certificate Issue Date:** March 23, 2021
**Expiration Date:** October 13, 2024
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8630 | 12.0 | 4420 - 12800 | 4370 - 12900 |
| Antimony | 256 | 129 | 16.8 | 0.742 - 257 | 25.6 - 323 |
| Arsenic | 91.6 | 84.5 | 15.1 | 70.0 - 99.0 | 59.2 - 110 |
| Barium | 259 | 249 | 9.94 | 206 - 292 | 187 - 311 |
| Beryllium | 175 | 163 | 3.89 | 135 - 191 | 122 - 204 |
| Boron | 95.7 | 76.7 | 12.8 | 55.7 - 97.7 | 48.0 - 107 |
| Cadmium | 107 | 99.0 | 11.5 | 82.2 - 116 | 74.2 - 124 |
| Calcium | 5190 | 4760 | 11.8 | 3890 - 5640 | 3460 - 6070 |
| Chromium | 129 | 122 | 14.6 | 101 - 144 | 85.7 - 159 |
| Cobalt | 63.6 | 61.7 | 11.5 | 51.9 - 71.6 | 46.3 - 77.2 |
| Copper | 62.3 | 61.5 | 12.3 | 51.9 - 71.0 | 46.1 - 76.8 |
| Iron | 15000 | 14500 | 15.7 | 8860 - 20100 | 5190 - 23800 |
| Lead | 122 | 123 | 13.9 | 103 - 144 | 88.3 - 158 |
| Lithium | 6.42 | 7.30 | 18.7 | 5.13 - 9.48 | 3.20 - 11.4 |
| Magnesium | 2570 | 2360 | 8.87 | 1810 - 2920 | 1480 - 3250 |
| Manganese | 470 | 456 | 13.4 | 375 - 538 | 350 - 563 |
| Mercury | 22.1 | 18.9 | 14.5 | 13.0 - 24.8 | 11.3 - 26.4 |
| Molybdenum | 80.1 | 72.8 | 11.0 | 58.7 - 87.0 | 50.5 - 95.2 |
| Nickel | 143 | 135 | 14.2 | 112 - 158 | 94.7 - 176 |
| Potassium | 2420 | 2090 | 8.21 | 1480 - 2700 | 1240 - 2940 |
| Selenium | 128 | 121 | 11.7 | 96.9 - 146 | 80.4 - 162 |
| Silver | 45.4 | 44.1 | 6.69 | 35.5 - 52.8 | 30.7 - 57.6 |
| Sodium | 161 | 136 | 9.34 | 97.4 - 174 | 48.1 - 223 |
| Strontium | 82.2 | 82.3 | 8.42 | 67.4 - 97.1 | 58.6 - 106 |



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# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Thallium | 154 | 144 | 7.54 | 117 - 171 | 101 - 187 |
| Tin | 89.7 | 79.8 | 14.0 | 62.2 - 97.4 | 43.5 - 116 |
| Titanium | 705 | 546 | 10.3 | 123 - 969 | 118 - 974 |
| Uranium | 29.5 | 30.9 | 3.38 | 23.9 - 37.9 | 21.3 - 40.5 |
| Vanadium | 196 | 186 | 14.2 | 148 - 224 | 138 - 235 |
| Zinc | 307 | 295 | 10.4 | 240 - 351 | 207 - 384 |



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# Calculation of 6010B Metals

## Aqueous Samples

The instrument will calculate the concentration (µg/L). This value is divided by 1000 to convert the units to mg/L. If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

$$\text{Result, mg/L} = C_s \times (1\text{mg}/1000\mu\text{g}) \times (DF)$$

Where:

$C_s$ = Concentration of sample (µg/L)

DF = Dilution Factor

## Soil or Solid Samples

Soil samples are calculated as follows:

$$\text{Result, mg/Kg} = \frac{C_s \times (1\text{mg}/1000\mu\text{g}) \times (DF)}{A}$$

Where:

$C_s$ = Concentration of sample (µg/L)

DF = Dilution Factor

$$A = \frac{\text{Sample weight (grams)}}{\text{Final Volume (mL)}}$$

## Dry weight correction

Dry weight correction is calculated as follows:

$$\text{Final concentration in mg/Kg, dry weight} = \frac{\text{Result, mg/Kg}}{\%_{solids}}$$

Where:

$\%_{solids}$ = Percent Solids, as a decimal value

# Sequence Trace 9

3/12/2025 9:29:20 AM

LabBook: WG2038860_03112025T9.imexp

## Summary

| Index | Label | Rack | Vial | Started at |
|---|---|---|---|---|
| 1 | Blank DHL Trace9 | 0 | 1 | 3/11/2025 6:16:56 AM |
| 2 | ICAL | 0 | 2 | 3/11/2025 6:20:46 AM |
| 3 | ICV | 0 | 3 | 3/11/2025 6:24:13 AM |
| 4 | ICB | 0 | 4 | 3/11/2025 6:27:40 AM |
| 5 | ICV | 0 | 10 | 3/11/2025 6:31:08 AM |
| 6 | ICB | 0 | 4 | 3/11/2025 6:34:39 AM |
| 7 | LLOQ | 0 | 5 | 3/11/2025 6:38:45 AM |
| 8 | ICSA | 0 | 6 | 3/11/2025 6:42:13 AM |
| 9 | SIC Multi | 0 | 7 | 3/11/2025 6:47:43 AM |
| 10 | LDR Check | 0 | 8 | 3/11/2025 6:52:16 AM |
| 11 | CCV | 0 | 3 | 3/11/2025 7:22:53 AM |
| 12 | CCB | 0 | 4 | 3/11/2025 7:26:40 AM |
| 13 | WG2038582-1 WG2038582 | 1 | 1 | 3/11/2025 7:48:03 AM |
| 14 | WG2038582-2 WG2038582 | 1 | 2 | 3/11/2025 7:54:04 AM |
| 15 | L2512432-01 WG2038582 | 1 | 3 | 3/11/2025 7:57:39 AM |
| 16 | WG2038582-3 WG2038582 | 1 | 4 | 3/11/2025 8:01:05 AM |
| 17 | WG2038582-4 WG2038582 | 1 | 5 | 3/11/2025 8:04:31 AM |
| 18 | WG2038582-5 WG2038582 | 1 | 6 | 3/11/2025 8:07:57 AM |
| 19 | WG2038582-6D5 WG2038582 | 1 | 7 | 3/11/2025 8:11:24 AM |
| 20 | L2511830-04 WG2038582 | 1 | 8 | 3/11/2025 8:14:51 AM |
| 21 | CCV | 0 | 3 | 3/11/2025 8:18:18 AM |
| 22 | CCB | 0 | 4 | 3/11/2025 8:21:46 AM |
| 23 | WG2038730-1 WG2038730 | 1 | 9 | 3/11/2025 9:05:35 AM |
| 24 | WG2038730-2 WG2038730 | 1 | 10 | 3/11/2025 9:09:09 AM |
| 25 | L2511724-01 WG2038730 | 1 | 16 | 3/11/2025 9:12:37 AM |
| 26 | L2511828-01 WG2038730 | 1 | 17 | 3/11/2025 9:16:03 AM |
| 27 | L2511831-01 WG2038730 | 1 | 18 | 3/11/2025 9:19:29 AM |
| 28 | L2512325-02 WG2038730 | 1 | 11 | 3/11/2025 9:22:56 AM |
| 29 | WG2038730-3 WG2038730 | 1 | 12 | 3/11/2025 9:26:24 AM |
| 30 | WG2038730-4 WG2038730 | 1 | 13 | 3/11/2025 9:29:52 AM |
| 31 | WG2038730-5 WG2038730 | 1 | 14 | 3/11/2025 9:33:17 AM |
| 32 | WG2038730-6D5 WG2038730 | 1 | 15 | 3/11/2025 9:36:43 AM |
| 33 | CCV | 0 | 3 | 3/11/2025 9:40:09 AM |
| 34 | CCB | 0 | 4 | 3/11/2025 9:43:37 AM |
| 35 | WG2038904-1 WG2038904 | 1 | 19 | 3/11/2025 11:34:20 AM |
| 36 | WG2038904-2D2 WG2038904 | 1 | 20 | 3/11/2025 11:38:01 AM |
| 37 | L2513340-03D2 WG2038904 | 1 | 26 | 3/11/2025 11:41:29 AM |
| 38 | L2513340-04D2 WG2038904 | 1 | 27 | 3/11/2025 11:44:54 AM |
| 39 | L2513340-05D2 WG2038904 | 1 | 28 | 3/11/2025 11:48:20 AM |
| 40 | L2513340-02D2 WG2038904 | 1 | 21 | 3/11/2025 11:51:47 AM |
| 41 | WG2038904-3D2 WG2038904 | 1 | 22 | 3/11/2025 11:55:14 AM |
| 42 | WG2038904-4D2 WG2038904 | 1 | 23 | 3/11/2025 11:58:42 AM |
| 43 | WG2038904-5D2 WG2038904 | 1 | 24 | 3/11/2025 12:02:11 PM |
| 44 | WG2038904-6D10 WG2038904 | 1 | 25 | 3/11/2025 12:05:39 PM |
| 45 | CCV | 0 | 3 | 3/11/2025 12:09:05 PM |
| 46 | CCB | 0 | 4 | 3/11/2025 12:12:33 PM |
| 47 | L2513340-06D2 WG2038904 | 1 | 29 | 3/11/2025 12:20:48 PM |
| 48 | L2513340-07D2 WG2038904 | 1 | 30 | 3/11/2025 12:24:20 PM |
| 49 | CCV | 0 | 3 | 3/11/2025 12:27:48 PM |
| 50 | CCB | 0 | 4 | 3/11/2025 12:31:16 PM |
| 51 | WG2037772-1 WG2037772 | 1 | 31 | 3/11/2025 12:55:07 PM |
| 52 | WG2037772-2 WG2037772 | 1 | 32 | 3/11/2025 12:58:49 PM |
| 53 | L2511747-02 WG2037772 | 1 | 38 | 3/11/2025 1:02:17 PM |
| 54 | L2511752-01 WG2037772 | 1 | 39 | 3/11/2025 1:05:43 PM |
| 55 | L2511752-02 WG2037772 | 1 | 40 | 3/11/2025 1:09:09 PM |
| 56 | L2511747-01 WG2037772 | 1 | 33 | 3/11/2025 1:12:36 PM |
| 57 | WG2037772-3 WG2037772 | 1 | 34 | 3/11/2025 1:16:04 PM |
| 58 | WG2037772-4 WG2037772 | 1 | 35 | 3/11/2025 1:19:32 PM |
| 59 | WG2037772-5 WG2037772 | 1 | 36 | 3/11/2025 1:23:00 PM |
| 60 | WG2037772-6D5 WG2037772 | 1 | 37 | 3/11/2025 1:26:29 PM |
| 61 | CCV | 0 | 3 | 3/11/2025 1:29:56 PM |
| 62 | CCB | 0 | 4 | 3/11/2025 1:33:23 PM |
| 63 | L2511834-01 WG2037772 | 1 | 41 | 3/11/2025 2:01:22 PM |
| 64 | L2511834-02 WG2037772 | 1 | 42 | 3/11/2025 2:04:55 PM |
| 65 | L2511834-03 WG2037772 | 1 | 43 | 3/11/2025 2:08:22 PM |
| 66 | CCV | 0 | 3 | 3/11/2025 2:11:50 PM |
| 67 | CCB | 0 | 4 | 3/11/2025 2:15:18 PM |
| 68 | XNO EXPOSURE | 1 | 44 | 3/11/2025 2:18:46 PM |

# Sequence Trace 9

3/12/2025 9:29:20 AM

| Index | Label | Rack | Vial | Started at |
|---|---|---|---|---|
| 69 | L2512315-01d2 WG2038509 | 1 | 44 | 3/11/2025 2:23:21 PM |
| 70 | L2512340-01d2 WG2038509 | 1 | 45 | 3/11/2025 2:26:43 PM |
| 71 | L2512345-01d2 WG2038509 | 1 | 46 | 3/11/2025 2:30:11 PM |
| 72 | L2512345-02d2 WG2038509 | 1 | 47 | 3/11/2025 2:33:40 PM |
| 73 | L2512345-03d2 WG2038509 | 1 | 48 | 3/11/2025 2:37:08 PM |
| 74 | L2512345-04d2 WG2038509 | 1 | 49 | 3/11/2025 2:40:37 PM |
| 75 | CCV | 0 | 3 | 3/11/2025 2:44:04 PM |
| 76 | CCB | 0 | 4 | 3/11/2025 2:47:32 PM |
| 77 | CCV | 0 | 3 | 3/11/2025 3:41:17 PM |
| 78 | CCB | 0 | 4 | 3/11/2025 3:44:51 PM |
| 79 | WG2038695-1 WG2038695 | 1 | 50 | 3/11/2025 3:50:00 PM |
| 80 | zWG2038695-2 WG2038695 | 1 | 51 | 3/11/2025 3:53:28 PM |
| 81 | L2511902-01 WG2038695 | 2 | 2 | 3/11/2025 3:59:00 PM |
| 82 | L2511902-02 WG2038695 | 2 | 3 | 3/11/2025 4:02:40 PM |
| 83 | L2511919-04 WG2038695 | 2 | 4 | 3/11/2025 4:06:08 PM |
| 84 | L2511919-01 WG2038695 | 1 | 52 | 3/11/2025 4:09:36 PM |
| 85 | WG2038695-3 WG2038695 | 1 | 53 | 3/11/2025 4:13:04 PM |
| 86 | WG2038695-4 WG2038695 | 1 | 54 | 3/11/2025 4:16:31 PM |
| 87 | WG2038695-5 WG2038695 | 1 | 55 | 3/11/2025 4:19:58 PM |
| 88 | WG2038695-6d5 WG2038695 | 1 | 56 | 3/11/2025 4:23:26 PM |
| 89 | CCV | 0 | 3 | 3/11/2025 4:26:55 PM |
| 90 | CCB | 0 | 4 | 3/11/2025 4:30:23 PM |
| 91 | L2511919-05 WG2038695 | 2 | 5 | 3/11/2025 4:37:47 PM |
| 92 | L2511919-07 WG2038695 | 2 | 6 | 3/11/2025 4:41:21 PM |
| 93 | L2511919-08 WG2038695 | 2 | 7 | 3/11/2025 4:44:50 PM |
| 94 | L2511986-01 WG2038695 | 2 | 8 | 3/11/2025 4:48:18 PM |
| 95 | L2511986-02 WG2038695 | 2 | 9 | 3/11/2025 4:51:46 PM |
| 96 | L2512156-01 WG2038695 | 1 | 57 | 3/11/2025 4:55:14 PM |
| 97 | WG2038695-7 WG2038695 | 1 | 58 | 3/11/2025 4:58:43 PM |
| 98 | WG2038695-8 WG2038695 | 1 | 59 | 3/11/2025 5:02:11 PM |
| 99 | WG2038695-9 WG2038695 | 1 | 60 | 3/11/2025 5:05:40 PM |
| 100 | WG2038695-10d5 WG2038695 | 2 | 1 | 3/11/2025 5:09:10 PM |
| 101 | CCV | 0 | 3 | 3/11/2025 5:12:38 PM |
| 102 | CCB | 0 | 4 | 3/11/2025 5:16:06 PM |
| 103 | zL2511828-01 WG2038695 | 2 | 13 | 3/11/2025 5:19:43 PM |
| 104 | L2511828-01 WG2038695 | 2 | 14 | 3/11/2025 5:23:12 PM |
| 105 | L2511986-03 WG2038695 | 2 | 10 | 3/11/2025 5:26:40 PM |
| 106 | L2511986-04 WG2038695 | 2 | 11 | 3/11/2025 5:30:09 PM |
| 107 | L2512155-01 WG2038695 | 2 | 12 | 3/11/2025 5:33:38 PM |
| 108 | CCV | 0 | 3 | 3/11/2025 5:37:07 PM |
| 109 | CCB | 0 | 4 | 3/11/2025 5:40:35 PM |
| 110 | L2512086-01 WG2037645 | 2 | 20 | 3/11/2025 5:57:52 PM |
| 111 | L2512087-01 WG2037645 | 2 | 21 | 3/11/2025 6:01:27 PM |
| 112 | L2512088-01 WG2037645 | 2 | 22 | 3/11/2025 6:04:55 PM |
| 113 | L2512197-01 WG2037645 | 2 | 23 | 3/11/2025 6:08:24 PM |
| 114 | L2512197-02 WG2037645 | 2 | 24 | 3/11/2025 6:11:53 PM |
| 115 | L2512085-01 WG2037645 | 2 | 15 | 3/11/2025 6:15:22 PM |
| 116 | WG2037645-7 WG2037645 | 2 | 16 | 3/11/2025 6:18:51 PM |
| 117 | WG2037645-8 WG2037645 | 2 | 17 | 3/11/2025 6:22:19 PM |
| 118 | WG2037645-9 WG2037645 | 2 | 18 | 3/11/2025 6:25:48 PM |
| 119 | WG2037645-10d5 WG2037645 | 2 | 19 | 3/11/2025 6:29:16 PM |
| 120 | CCV | 0 | 3 | 3/11/2025 6:32:45 PM |
| 121 | CCB | 0 | 4 | 3/11/2025 6:36:13 PM |
| 122 | L2512197-03 WG2037645 | 2 | 25 | 3/11/2025 6:46:32 PM |
| 123 | L2512197-04 WG2037645 | 2 | 26 | 3/11/2025 6:50:07 PM |
| 124 | L2512197-05 WG2037645 | 2 | 27 | 3/11/2025 6:53:36 PM |
| 125 | L2512197-06 WG2037645 | 2 | 28 | 3/11/2025 6:57:04 PM |
| 126 | L2512197-07 WG2037645 | 2 | 29 | 3/11/2025 7:00:33 PM |
| 127 | L2512197-08 WG2037645 | 2 | 30 | 3/11/2025 7:04:02 PM |
| 128 | CCV | 0 | 3 | 3/11/2025 7:07:31 PM |
| 129 | CCB | 0 | 4 | 3/11/2025 7:11:00 PM |
| 130 | L2512011-01 WG2038582 | 2 | 31 | 3/11/2025 7:20:27 PM |
| 131 | L2512360-01 WG2038582 | 2 | 32 | 3/11/2025 7:29:20 PM |
| 132 | L2512447-01 WG2038582 | 2 | 33 | 3/11/2025 7:33:07 PM |
| 133 | L2512483-01 WG2038582 | 2 | 34 | 3/11/2025 7:36:36 PM |
| 134 | L2512499-01 WG2038582 | 2 | 35 | 3/11/2025 7:40:05 PM |
| 135 | L2512500-01 WG2038582 | 2 | 36 | 3/11/2025 7:43:34 PM |
| 136 | L2512611-01 WG2038582 | 2 | 37 | 3/11/2025 7:47:04 PM |
| 137 | L2512624-01 WG2038582 | 2 | 38 | 3/11/2025 7:50:33 PM |
| 138 | L2512667-02 WG2038582 | 2 | 39 | 3/11/2025 7:54:02 PM |
| 139 | L2512667-05 WG2038582 | 2 | 40 | 3/11/2025 7:57:31 PM |
| 140 | CCV | 0 | 3 | 3/11/2025 8:01:00 PM |
| 141 | CCB | 0 | 4 | 3/11/2025 8:04:29 PM |
| 142 | WG2038695-2 WG2038695 | 2 | 45 | 3/11/2025 8:17:57 PM |

# Sequence Trace 9

3/12/2025 9:29:20 AM

| Index | Label | Rack | Vial | Started at |
|---|---|---|---|---|
| 143 | L2512667-08 WG2038582 | 2 | 41 | 3/11/2025 8:21:32 PM |
| 144 | L2512877-02 WG2038582 | 2 | 42 | 3/11/2025 8:25:01 PM |
| 145 | L2512877-04 WG2038582 | 2 | 43 | 3/11/2025 8:28:30 PM |
| 146 | L2512877-07 WG2038582 | 2 | 44 | 3/11/2025 8:31:59 PM |
| 147 | CCV | 0 | 3 | 3/11/2025 8:35:28 PM |
| 148 | CCB | 0 | 4 | 3/11/2025 8:38:57 PM |
| 149 | L2512255-01 WG2038730 | 2 | 51 | 3/11/2025 9:15:02 PM |
| 150 | L2512255-02 WG2038730 | 2 | 52 | 3/11/2025 9:18:53 PM |
| 151 | L2512325-03 WG2038730 | 2 | 46 | 3/11/2025 9:22:23 PM |
| 152 | WG2038730-7 WG2038730 | 2 | 47 | 3/11/2025 9:25:53 PM |
| 153 | WG2038730-8 WG2038730 | 2 | 48 | 3/11/2025 9:29:22 PM |
| 154 | WG2038730-9 WG2038730 | 2 | 49 | 3/11/2025 9:32:52 PM |
| 155 | WG2038730-10d5 WG2038730 | 2 | 50 | 3/11/2025 9:36:21 PM |
| 156 | CCV | 0 | 3 | 3/11/2025 9:39:51 PM |
| 157 | CCB | 0 | 4 | 3/11/2025 9:43:20 PM |
| 158 | L2512255-03 WG2038730 | 2 | 53 | 3/11/2025 9:52:26 PM |
| 159 | L2512255-04 WG2038730 | 2 | 54 | 3/11/2025 9:56:02 PM |
| 160 | L2512255-05 WG2038730 | 2 | 55 | 3/11/2025 9:59:32 PM |
| 161 | L2512325-01 WG2038730 | 2 | 56 | 3/11/2025 10:03:02 PM |
| 162 | L2512325-04 WG2038730 | 2 | 57 | 3/11/2025 10:06:31 PM |
| 163 | L2512325-05 WG2038730 | 2 | 58 | 3/11/2025 10:10:01 PM |
| 164 | L2512325-06 WG2038730 | 2 | 59 | 3/11/2025 10:13:31 PM |
| 165 | L2512325-07 WG2038730 | 2 | 60 | 3/11/2025 10:17:01 PM |
| 166 | L2512325-08 WG2038730 | 3 | 1 | 3/11/2025 10:20:31 PM |
| 167 | L2512325-09 WG2038730 | 3 | 2 | 3/11/2025 10:24:02 PM |
| 168 | CCV | 0 | 3 | 3/11/2025 10:27:33 PM |
| 169 | CCB | 0 | 4 | 3/11/2025 10:31:02 PM |
| 170 | WG2038690-1 WG2038690 | 3 | 3 | 3/11/2025 10:35:18 PM |
| 171 | WG2038690-2 WG2038690 | 3 | 4 | 3/11/2025 10:38:48 PM |
| 172 | L2511919-01 WG2038690 | 3 | 10 | 3/11/2025 10:42:19 PM |
| 173 | L2511919-02 WG2038690 | 3 | 11 | 3/11/2025 10:45:49 PM |
| 174 | L2511919-04 WG2038690 | 3 | 12 | 3/11/2025 10:49:19 PM |
| 175 | L2511919-08 WG2038690 | 3 | 5 | 3/11/2025 10:52:50 PM |
| 176 | WG2038690-3 WG2038690 | 3 | 6 | 3/11/2025 10:56:20 PM |
| 177 | WG2038690-4 WG2038690 | 3 | 7 | 3/11/2025 10:59:51 PM |
| 178 | WG2038690-5 WG2038690 | 3 | 8 | 3/11/2025 11:03:21 PM |
| 179 | WG2038690-6d5 WG2038690 | 3 | 9 | 3/11/2025 11:06:52 PM |
| 180 | CCV | 0 | 3 | 3/11/2025 11:10:22 PM |
| 181 | CCB | 0 | 4 | 3/11/2025 11:13:52 PM |
| 182 | L2511919-05 WG2038690 | 3 | 13 | 3/11/2025 11:17:21 PM |
| 183 | L2511919-07 WG2038690 | 3 | 14 | 3/11/2025 11:20:52 PM |
| 184 | CCV | 0 | 3 | 3/11/2025 11:24:23 PM |
| 185 | CCB | 0 | 4 | 3/11/2025 11:27:53 PM |
| 186 | CCV | 0 | 10 | 3/11/2025 11:31:23 PM |
| 187 | CCB | 0 | 4 | 3/11/2025 11:34:56 PM |
| 188 | LLOQ | 0 | 5 | 3/11/2025 11:38:26 PM |

# Sequence Trace 7

3/12/2025 19:23:28

LabBook: WG2039409_03122025T7.imexp

| Index: | Label: | Rack | Vial | Start time: |
|---|---|---|---|---|
| 1 | Blank DHL Trace7 | 0 | 1 | 3/12/2025 06:30:23 |
| 2 | ICAL | 0 | 2 | 3/12/2025 06:35:34 |
| 3 | ICV | 0 | 3 | 3/12/2025 06:45:15 |
| 4 | ICB | 0 | 4 | 3/12/2025 06:50:08 |
| 5 | ICV | 0 | 10 | 3/12/2025 06:55:21 |
| 6 | ICB | 0 | 4 | 3/12/2025 07:00:17 |
| 7 | LLOQ | 0 | 5 | 3/12/2025 07:05:29 |
| 8 | ICSA | 0 | 6 | 3/12/2025 07:10:39 |
| 9 | SIC Multi | 0 | 7 | 3/12/2025 07:33:57 |
| 10 | LDR Check | 0 | 8 | 3/12/2025 07:39:33 |
| 11 | LLOQ 0.005ppm As | 1 | 1 | 3/12/2025 08:13:50 |
| 12 | LLOQ 0.01ppm Ni | 1 | 2 | 3/12/2025 08:19:00 |
| 13 | LDR 200 Fe | 1 | 3 | 3/12/2025 08:24:09 |
| 14 | LDR 10 Ni pass | 1 | 4 | 3/12/2025 08:29:28 |
| 15 | LDR 20 Zn pass | 1 | 5 | 3/12/2025 08:34:39 |
| 16 | LDR 400 K pass | 1 | 6 | 3/12/2025 08:39:50 |
| 17 | xLDR 400 Na | 1 | 7 | 3/12/2025 08:45:10 |
| 18 | LLOQ 0.01ppm Tl | 1 | 8 | 3/12/2025 09:11:12 |
| 19 | CCV | 0 | 3 | 3/12/2025 09:31:03 |
| 20 | CCB | 0 | 4 | 3/12/2025 09:35:56 |
| 21 | CCV | 0 | 10 | 3/12/2025 09:41:08 |
| 22 | CCB | 0 | 4 | 3/12/2025 09:46:04 |
| 23 | WG2039342-1 WG2039342 | 1 | 10 | 3/12/2025 10:05:31 |
| 24 | WG2038690-2 WG2038690 | 1 | 9 | 3/12/2025 10:10:44 |
| 25 | WG2039342-2D2 WG2039342 | 1 | 11 | 3/12/2025 10:15:45 |
| 26 | L2513681-02D2 WG2039342 | 1 | 17 | 3/12/2025 10:20:47 |
| 27 | L2513681-03D2 WG2039342 | 1 | 18 | 3/12/2025 10:25:50 |
| 28 | L2513681-01D2 WG2039342 | 1 | 12 | 3/12/2025 10:31:01 |
| 29 | WG2039342-3D2 WG2039342 | 1 | 13 | 3/12/2025 10:36:06 |
| 30 | WG2039342-4D2 WG2039342 | 1 | 14 | 3/12/2025 10:41:04 |
| 31 | WG2039342-5D2 WG2039342 | 1 | 15 | 3/12/2025 10:46:05 |
| 32 | WG2039342-6D10 WG2039342 | 1 | 16 | 3/12/2025 10:51:03 |
| 33 | CCV | 0 | 3 | 3/12/2025 10:56:09 |
| 34 | CCB | 0 | 4 | 3/12/2025 11:01:01 |
| 35 | WG2039454-1 WG2039454 | 1 | 20 | 3/12/2025 11:14:32 |
| 36 | WG2039454-2D2 WG2039454 | 1 | 21 | 3/12/2025 11:19:44 |
| 37 | L2513681-04D2 WG2039342 | 1 | 19 | 3/12/2025 11:24:45 |
| 38 | L2513827-02D2 WG2039454 | 1 | 27 | 3/12/2025 11:29:51 |
| 39 | L2513827-03D2 WG2039454 | 1 | 28 | 3/12/2025 11:34:55 |
| 40 | L2513695-01D2 WG2039454 | 1 | 22 | 3/12/2025 11:40:02 |
| 41 | WG2039454-3D2 WG2039454 | 1 | 23 | 3/12/2025 11:45:22 |
| 42 | WG2039454-4D2 WG2039454 | 1 | 24 | 3/12/2025 11:50:42 |
| 43 | WG2039454-5D2 WG2039454 | 1 | 25 | 3/12/2025 11:56:02 |
| 44 | WG2039454-6D10 WG2039454 | 1 | 26 | 3/12/2025 12:01:18 |
| 45 | CCV | 0 | 3 | 3/12/2025 12:06:22 |
| 46 | CCB | 0 | 4 | 3/12/2025 12:11:14 |
| 47 | WG2039523-1 WG2039523 | 1 | 29 | 3/12/2025 13:29:51 |
| 48 | L2513827-01 WG2039523 | 1 | 36 | 3/12/2025 13:35:03 |
| 49 | WG2039523-2 WG2039523 | 1 | 30 | 3/12/2025 13:40:17 |
| 50 | L2512412-01d100 WG2039523 | 1 | 31 | 3/12/2025 13:45:40 |
| 51 | WG2039523-3d100 WG2039523 | 1 | 32 | 3/12/2025 13:50:52 |
| 52 | WG2039523-4d100 WG2039523 | 1 | 33 | 3/12/2025 13:56:03 |
| 53 | WG2039523-5d100 WG2039523 | 1 | 34 | 3/12/2025 14:01:16 |
| 54 | WG2039523-6d500 WG2039523 | 1 | 35 | 3/12/2025 14:06:17 |
| 55 | CCV | 0 | 3 | 3/12/2025 14:11:31 |
| 56 | CCB | 0 | 4 | 3/12/2025 14:16:24 |
| 57 | WG2039234-1 WG2039234 | 1 | 37 | 3/12/2025 15:24:23 |
| 58 | WG2039234-2 WG2039234 | 1 | 38 | 3/12/2025 15:29:34 |
| 59 | WG2039234-3 WG2039234 | 1 | 39 | 3/12/2025 15:36:16 |
| 60 | L2512154-01 WG2039234 | 1 | 40 | 3/12/2025 15:41:14 |
| 61 | L2512154-03 WG2039234 | 1 | 41 | 3/12/2025 15:46:21 |
| 62 | L2512154-04 WG2039234 | 1 | 42 | 3/12/2025 15:51:30 |
| 63 | L2512154-06 WG2039234 | 1 | 43 | 3/12/2025 15:56:39 |
| 64 | L2512168-01 WG2039234 | 1 | 44 | 3/12/2025 16:01:47 |
| 65 | L2512169-01 WG2039234 | 1 | 45 | 3/12/2025 16:07:04 |
| 66 | L2512169-02 WG2039234 | 1 | 46 | 3/12/2025 16:12:21 |
| 67 | CCV | 0 | 3 | 3/12/2025 16:17:39 |
| 68 | CCB | 0 | 4 | 3/12/2025 16:22:32 |
| 69 | CCV | 0 | 3 | 3/12/2025 16:35:23 |
| 70 | CCB | 0 | 4 | 3/12/2025 16:40:16 |
| 71 | xLDR 150 Na Fail | 1 | 47 | 3/12/2025 18:30:12 |
| 72 | xLDR 200 Na Fail | 1 | 48 | 3/12/2025 18:37:17 |

# Sequence Trace 7

3/12/2025 19:23:28

| Index: | Label: | Rack | Vial | Start time: |
|---|---|---|---|---|
| 73 | LDR Na 150 | 1 | 49 | 3/12/2025 18:44:23 |
| 74 | L2512169-01d20 WG2039234 | 1 | 50 | 3/12/2025 19:07:12 |
| 75 | CCV | 0 | 3 | 3/12/2025 19:12:19 |
| 76 | CCB | 0 | 4 | 3/12/2025 19:17:11 |
| 77 | | 1 | 51 | |
| 78 | | 1 | 52 | |
| 79 | | 1 | 53 | |
| 80 | | 1 | 54 | |
| 81 | | 1 | 55 | |
| 82 | | 1 | 56 | |
| 83 | | 1 | 57 | |
| 84 | CCV | 0 | 3 | |
| 85 | CCB | 0 | 4 | |

# Sequence Trace 8

3/15/2025 12:00:26 PM

LabBook: WG2040539_03142025T8.imexp

## Summary

| Index | Label | Rack | Vial | Started at |
|---|---|---|---|---|
| 1 | Blank JMF Trace8 | 0 | 1 | 3/14/2025 9:04:40 AM |
| 2 | ICAL | 0 | 2 | 3/14/2025 9:09:16 AM |
| 3 | ICV | 0 | 3 | 3/14/2025 9:18:14 AM |
| 4 | ICB | 0 | 4 | 3/14/2025 9:22:51 AM |
| 5 | ICV | 0 | 10 | 3/14/2025 9:27:17 AM |
| 6 | ICB | 0 | 4 | 3/14/2025 9:31:45 AM |
| 7 | LLOQ | 0 | 5 | 3/14/2025 9:36:11 AM |
| 8 | ICSA | 0 | 6 | 3/14/2025 9:40:41 AM |
| 9 | LDR 500 Ca | 1 | 1 | 3/14/2025 9:46:57 AM |
| 10 | SIC Multi | 0 | 7 | 3/14/2025 9:51:24 AM |
| 11 | LDR Check | 0 | 8 | 3/14/2025 9:57:45 AM |
| 12 | LDR 400 Fe pass | 1 | 2 | 3/14/2025 10:20:47 AM |
| 13 | LLOQ 0.005ppm As | 1 | 3 | 3/14/2025 10:25:24 AM |
| 14 | zLLOQ 0.01ppm | 1 | 4 | 3/14/2025 10:29:49 AM |
| 15 | LDR 5 As pass | 1 | 5 | 3/14/2025 10:34:14 AM |
| 16 | CCV | 0 | 3 | 3/14/2025 11:10:14 AM |
| 17 | CCB | 0 | 4 | 3/14/2025 11:14:53 AM |
| 18 | WG2039207-1 WG2039207 | 1 | 6 | 3/14/2025 11:31:21 AM |
| 19 | WG2039207-2D2 WG2039207 | 1 | 7 | 3/14/2025 11:35:54 AM |
| 20 | L2513195-01D2 WG2039207 | 1 | 27 | 3/14/2025 11:40:20 AM |
| 21 | L2513173-02D2 WG2039207 | 1 | 13 | 3/14/2025 11:44:44 AM |
| 22 | L2513173-04D2 WG2039207 | 1 | 14 | 3/14/2025 11:49:08 AM |
| 23 | L2513119-04D2 WG2039207 | 1 | 8 | 3/14/2025 11:53:32 AM |
| 24 | WG2039207-3D2 WG2039207 | 1 | 9 | 3/14/2025 11:57:58 AM |
| 25 | WG2039207-4D2 WG2039207 | 1 | 10 | 3/14/2025 12:02:24 PM |
| 26 | WG2039207-5D2 WG2039207 | 1 | 11 | 3/14/2025 12:06:51 PM |
| 27 | WG2039207-6D10 WG2039207 | 1 | 12 | 3/14/2025 12:11:18 PM |
| 28 | CCV | 0 | 3 | 3/14/2025 12:15:45 PM |
| 29 | CCB | 0 | 4 | 3/14/2025 12:20:11 PM |
| 30 | L2513173-06D2 WG2039207 | 1 | 15 | 3/14/2025 12:36:06 PM |
| 31 | L2513173-08D2 WG2039207 | 1 | 16 | 3/14/2025 12:40:44 PM |
| 32 | L2513173-10D2 WG2039207 | 1 | 17 | 3/14/2025 12:45:08 PM |
| 33 | L2513173-12D2 WG2039207 | 1 | 18 | 3/14/2025 12:49:33 PM |
| 34 | L2513173-14D2 WG2039207 | 1 | 19 | 3/14/2025 12:53:58 PM |
| 35 | L2513173-16D2 WG2039207 | 1 | 20 | 3/14/2025 12:58:24 PM |
| 36 | L2513173-18D2 WG2039207 | 1 | 21 | 3/14/2025 1:02:49 PM |
| 37 | L2513173-20D2 WG2039207 | 1 | 22 | 3/14/2025 1:07:16 PM |
| 38 | L2513173-22D2 WG2039207 | 1 | 23 | 3/14/2025 1:11:42 PM |
| 39 | L2513173-24D2 WG2039207 | 1 | 24 | 3/14/2025 1:16:09 PM |
| 40 | CCV | 0 | 3 | 3/14/2025 1:20:37 PM |
| 41 | CCB | 0 | 4 | 3/14/2025 1:25:02 PM |
| 42 | WG2040096-1 WG2040096 | 1 | 28 | 3/14/2025 1:38:53 PM |
| 43 | WG2040096-2D2 WG2040096 | 1 | 29 | 3/14/2025 1:43:31 PM |
| 44 | L2511136-01D2 WG2040096 | 1 | 35 | 3/14/2025 1:47:56 PM |
| 45 | L2513609-09D2 WG2040096 | 1 | 36 | 3/14/2025 1:52:23 PM |
| 46 | L2513609-10D2 WG2040096 | 1 | 37 | 3/14/2025 1:56:50 PM |
| 47 | L2513655-13D2 WG2040096 | 1 | 30 | 3/14/2025 2:01:15 PM |
| 48 | WG2040096-3D2 WG2040096 | 1 | 31 | 3/14/2025 2:05:40 PM |
| 49 | WG2040096-4D2 WG2040096 | 1 | 32 | 3/14/2025 2:10:06 PM |
| 50 | xWG2040096-5D2 WG2040096 | 1 | 33 | 3/14/2025 2:14:32 PM |
| 51 | WG2040096-6D10 WG2040096 | 1 | 34 | 3/14/2025 2:18:57 PM |
| 52 | CCV | 0 | 3 | 3/14/2025 2:23:24 PM |
| 53 | CCB | 0 | 4 | 3/14/2025 2:27:50 PM |
| 54 | WG2040096-5D2 WG2040096 | 1 | 33 | 3/14/2025 2:39:57 PM |
| 55 | L2513173-26D2 WG2039207 | 1 | 25 | 3/14/2025 2:44:38 PM |
| 56 | L2513173-28D2 WG2039207 | 1 | 26 | 3/14/2025 2:49:02 PM |
| 57 | CCV | 0 | 3 | 3/14/2025 2:53:26 PM |
| 58 | CCB | 0 | 4 | 3/14/2025 2:57:52 PM |
| 59 | WG2040264-1 WG2040264 | 1 | 38 | 3/14/2025 3:17:21 PM |
| 60 | WG2040264-2 WG2040264 | 1 | 39 | 3/14/2025 3:22:04 PM |
| 61 | L2512983-07 WG2040264 | 1 | 51 | 3/14/2025 3:26:30 PM |
| 62 | L2512983-08 WG2040264 | 1 | 52 | 3/14/2025 3:31:00 PM |
| 63 | L2512983-09 WG2040264 | 1 | 53 | 3/14/2025 3:35:25 PM |
| 64 | L2512981-01 WG2040264 | 1 | 40 | 3/14/2025 3:39:51 PM |
| 65 | WG2040264-3 WG2040264 | 1 | 41 | 3/14/2025 3:44:16 PM |
| 66 | WG2040264-4 WG2040264 | 1 | 42 | 3/14/2025 3:48:41 PM |
| 67 | WG2040264-5 WG2040264 | 1 | 43 | 3/14/2025 3:53:07 PM |
| 68 | WG2040264-6D5 WG2040264 | 1 | 44 | 3/14/2025 3:57:32 PM |

# Sequence Trace 8

3/15/2025 12:00:26 PM

| Index | Label | Rack | Vial | Started at |
|---|---|---|---|---|
| 69 | CCV | 0 | 3 | 3/14/2025 4:01:58 PM |
| 70 | CCB | 0 | 4 | 3/14/2025 4:06:25 PM |
| 71 | zWG2040264-5 WG2040264 | 1 | 43 | 3/14/2025 4:14:02 PM |
| 72 | L2512986-01 WG2040264 | 1 | 54 | 3/14/2025 4:18:45 PM |
| 73 | L2512988-01 WG2040264 | 1 | 55 | 3/14/2025 4:23:11 PM |
| 74 | L2512988-02 WG2040264 | 1 | 56 | 3/14/2025 4:27:38 PM |
| 75 | L2512988-03 WG2040264 | 1 | 57 | 3/14/2025 4:32:05 PM |
| 76 | L2512983-01 WG2040264 | 1 | 45 | 3/14/2025 4:36:32 PM |
| 77 | WG2040264-7 WG2040264 | 1 | 46 | 3/14/2025 4:40:58 PM |
| 78 | WG2040264-8 WG2040264 | 1 | 47 | 3/14/2025 4:45:25 PM |
| 79 | WG2040264-9 WG2040264 | 1 | 48 | 3/14/2025 4:49:52 PM |
| 80 | WG2040264-10D5 WG2040264 | 1 | 49 | 3/14/2025 4:54:20 PM |
| 81 | CCV | 0 | 3 | 3/14/2025 4:58:46 PM |
| 82 | CCB | 0 | 4 | 3/14/2025 5:03:13 PM |
| 83 | L2511919-02 WG2040264 | 1 | 50 | 3/14/2025 5:22:28 PM |
| 84 | L2512994-01 WG2040264 | 1 | 58 | 3/14/2025 5:27:10 PM |
| 85 | L2512994-02 WG2040264 | 1 | 59 | 3/14/2025 5:31:46 PM |
| 86 | L2513071-01 WG2040264 | 1 | 60 | 3/14/2025 5:36:22 PM |
| 87 | L2513081-01 WG2040264 | 2 | 1 | 3/14/2025 5:40:56 PM |
| 88 | L2513086-01 WG2040264 | 2 | 2 | 3/14/2025 5:45:25 PM |
| 89 | L2513089-01 WG2040264 | 2 | 3 | 3/14/2025 5:49:57 PM |
| 90 | L2513260-01 WG2040264 | 2 | 4 | 3/14/2025 5:54:26 PM |
| 91 | L2513302-01 WG2040264 | 2 | 5 | 3/14/2025 5:59:04 PM |
| 92 | L2513304-01 WG2040264 | 2 | 6 | 3/14/2025 6:03:30 PM |
| 93 | CCV | 0 | 3 | 3/14/2025 6:07:57 PM |
| 94 | CCB | 0 | 4 | 3/14/2025 6:12:23 PM |
| 95 | CCV | 0 | 3 | 3/14/2025 6:17:15 PM |
| 96 | CCB | 0 | 4 | 3/14/2025 6:21:41 PM |

# Sequence Trace 7

3/17/2025 13:23:10

LabBook: WG2041355_03172025T7.imexp

| Index: | Label: | Rack | Vial | Start time: |
|---|---|---|---|---|
| 1 | Blank JMF Trace7 | 0 | 1 | 3/17/2025 09:23:54 |
| 2 | ICAL | 0 | 2 | 3/17/2025 09:29:04 |
| 3 | ICV | 0 | 3 | 3/17/2025 09:54:31 |
| 4 | ICB | 0 | 4 | 3/17/2025 09:59:24 |
| 5 | ICV | 0 | 10 | 3/17/2025 10:04:36 |
| 6 | ICB | 0 | 4 | 3/17/2025 10:09:36 |
| 7 | LLOQ | 0 | 5 | 3/17/2025 10:14:49 |
| 8 | ICSA | 0 | 6 | 3/17/2025 10:19:58 |
| 9 | SIC Multi | 0 | 7 | 3/17/2025 10:25:37 |
| 10 | xLLOQ 0.005ppm | 1 | 3 | 3/17/2025 10:38:00 |
| 11 | xLLOQ 0.01ppm | 1 | 2 | 3/17/2025 10:43:10 |
| 12 | LLOQ 0.05ppm Fe | 1 | 1 | 3/17/2025 10:48:18 |
| 13 | xno sample | 1 | 4 | 3/17/2025 10:53:25 |
| 14 | IEC 10 V -Tl | 1 | 4 | 3/17/2025 11:00:38 |
| 15 | LLOQ 0.01ppm | 1 | 5 | 3/17/2025 11:05:55 |
| 16 | LDR Check | 0 | 8 | 3/17/2025 11:11:04 |
| 17 | LDR 300 Na pass | 1 | 6 | 3/17/2025 11:30:55 |
| 18 | LLOQ 0.1ppm As tclp | 1 | 7 | 3/17/2025 11:36:16 |
| 19 | CCV | 0 | 3 | 3/17/2025 11:57:21 |
| 20 | CCB | 0 | 4 | 3/17/2025 12:02:13 |
| 21 | L2511919-02 WG2040264 | 1 | 8 | 3/17/2025 12:18:28 |
| 22 | L2513476-01 WG2040647 | 1 | 9 | 3/17/2025 12:23:38 |
| 23 | L2513494-01 WG2040647 | 1 | 10 | 3/17/2025 12:28:57 |
| 24 | L2513495-01 WG2040647 | 1 | 11 | 3/17/2025 12:34:16 |
| 25 | L2513643-01 WG2040647 | 1 | 12 | 3/17/2025 12:39:35 |
| 26 | L2513660-01 WG2040647 | 1 | 13 | 3/17/2025 12:44:54 |
| 27 | L2513666-01 WG2040647 | 1 | 14 | 3/17/2025 12:50:08 |
| 28 | L2513666-02 WG2040647 | 1 | 15 | 3/17/2025 12:55:24 |
| 29 | CCV | 0 | 3 | 3/17/2025 13:00:35 |
| 30 | CCB | 0 | 4 | 3/17/2025 13:05:28 |
| 31 | | 1 | 16 | |
| 32 | | 1 | 17 | |
| 33 | | 1 | 18 | |
| 34 | | 1 | 19 | |
| 35 | | 1 | 20 | |
| 36 | | 1 | 21 | |
| 37 | | 1 | 22 | |
| 38 | | 1 | 23 | |
| 39 | | 1 | 24 | |
| 40 | | 1 | 25 | |
| 41 | | 1 | 26 | |
| 42 | | 1 | 27 | |
| 43 | | 1 | 28 | |
| 44 | | 1 | 29 | |
| 45 | | 1 | 30 | |
| 46 | | 1 | 31 | |
| 47 | | 1 | 32 | |
| 48 | | 1 | 33 | |
| 49 | CCV | 0 | 3 | |
| 50 | CCB | 0 | 4 | |
| 51 | CCV | 0 | 3 | |
| 52 | CCB | 0 | 4 | |
| 53 | CCV | 0 | 3 | |
| 54 | CCB | 0 | 4 | |

# METALS ELN REPORT

**Workgroup: WG2038690**

## Digestion

| Prep Method | Acid Type 1 | Acid 1 Lot | Acid Type 2 | Acid 2 Lot | Spike Type | Lims Spike Lot | Spike Lot | Post Spike Spikelot | Spike Lot | Pipette Id |
|---|---|---|---|---|---|---|---|---|---|---|
| EPA 3005A | 1:1 HNO3 | tHNO3250821324AJT | 1:1 HCl | tHCL2510100813ARM | METALS | METSPIKE2 | IPS,FPS,MIX | METSPIKE2 | IPS,FPS,MIX | 140, 326 |

**Additional Reagent/Std**

| Sample/ Type | Digestion Date | Analyst | Lab Filtration Date | Sample Vol | Ph | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol ml | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L2511919-01 SAMP | 03/10/25 16:52 | German Nimaja | NA | 50 | <2 | | 03/10/25 16:52 | 10 | 95.0 | 03/10/25 19:52 | 50 | |
| L2511919-02 SAMP | 03/10/25 16:52 | German Nimaja | NA | 50 | <2 | | 03/10/25 16:52 | 10 | 95.0 | 03/10/25 19:52 | 50 | |
| L2511919-04 SAMP | 03/10/25 16:52 | German Nimaja | NA | 50 | <2 | | 03/10/25 16:52 | 10 | 95.0 | 03/10/25 19:52 | 50 | |
| L2511919-05 SAMP | 03/10/25 16:52 | German Nimaja | NA | 50 | <2 | | 03/10/25 16:52 | 10 | 95.0 | 03/10/25 19:52 | 50 | |
| L2511919-07 SAMP | 03/10/25 16:52 | German Nimaja | NA | 50 | <2 | | 03/10/25 16:52 | 10 | 95.0 | 03/10/25 19:52 | 50 | |
| L2511919-08 SAMP | 03/10/25 16:52 | German Nimaja | NA | 50 | <2 | | 03/10/25 16:52 | 10 | 95.0 | 03/10/25 19:52 | 50 | |
| WG2038690-1 BLANK | 03/10/25 16:52 | German Nimaja | NA | 50 | <2 | | 03/10/25 16:52 | 10 | 95.0 | 03/10/25 19:52 | 50 | ELN: mgm |
| WG2038690-2 LCS | 03/10/25 16:52 | German Nimaja | NA | 50 | <2 | .5 | 03/10/25 16:52 | 10 | 95.0 | 03/10/25 19:52 | 50 | FM2509051006AJT |
| WG2038690-3 MS | 03/10/25 16:52 | German Nimaja | NA | 50 | <2 | .5 | 03/10/25 16:52 | 10 | 95.0 | 03/10/25 19:52 | 50 | IPS2507180833AJT |
| WG2038690-4 DUP | 03/10/25 16:52 | German Nimaja | NA | 50 | <2 | | 03/10/25 16:52 | 10 | 95.0 | 03/10/25 19:52 | 50 | |



Reported: 17-MAR-25 02:38 PM

# METALS ELN REPORT

**Workgroup: WG2038690**

| Sample/ Type | Digestion Date | Analyst | Lab Filtration Date | Sample Vol | Ph | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol ml | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WG2038690-5 PS | 03/10/25 16:52 | German Nimaja | NA | 50 | <2 | | 03/10/25 16:52 | 10 | 95.0 | 03/10/25 19:52 | 50 | |
| WG2038690-6 SERDIL | 03/10/25 16:52 | German Nimaja | NA | 50 | <2 | | 03/10/25 16:52 | 10 | 95.0 | 03/10/25 19:52 | 50 | |

| Reagent | Actual Volume | Units |
|---|---|---|
| 1:1 Hydrochloric Acid (H | .5 | ml |
| 1:1 Nitric Acid (HNO3) | 1 | ml |



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# METALS ELN REPORT

**Workgroup: WG2038695**

## Digestion

| Prep Method | Acid Type 1 | Acid 1 Lot | Acid Type 2 | Acid 2 Lot | Spike Type | Lims Spike Lot | Spike Lot | Post Spike Spikelot | Spike Lot | Pipette Id |
|---|---|---|---|---|---|---|---|---|---|---|
| EPA 3005A | 1:1 HNO3 | tHNO3250906080 8ADG | 1:1 HCl | tHCL2508280920JDH | METALS | METSPIKE2 | IPS,FPS,MIX | METSPIKE2 | IPS,FPS,MIX | 140, 326 |

**Additional Reagent/Std**

| Sample/ Type | Digestion Date | Analyst | Sample Vol ml | Ph | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| L2511828-01 SAMP | 03/11/25 10:28 | Aidan Martin | 5 | <2 | | 03/11/25 10:28 | 8 | 96 | 03/11/25 13:28 | 50 | 5x and 10x re prep requested. ELN:AJT |
| L2511902-01 WATER | 03/11/25 04:33 | Christine Hamor | 50 | <2 | | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | |
| L2511902-02 WATER | 03/11/25 04:33 | Christine Hamor | 50 | <2 | | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | |
| L2511919-01 SAMP | 03/11/25 04:33 | Christine Hamor | 50 | <2 | | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | |
| L2511919-04 SAMP | 03/11/25 04:33 | Christine Hamor | 50 | <2 | | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | |
| L2511919-05 SAMP | 03/11/25 04:33 | Christine Hamor | 50 | <2 | | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | |
| L2511919-07 SAMP | 03/11/25 04:33 | Christine Hamor | 50 | <2 | | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | |
| L2511919-08 SAMP | 03/11/25 04:33 | Christine Hamor | 50 | <2 | | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | |
| L2511986-01 SAMP | 03/11/25 04:33 | Christine Hamor | 50 | <2 | | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | |
| L2511986-02 SAMP | 03/11/25 04:33 | Christine Hamor | 50 | <2 | | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | |



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# METALS ELN REPORT

**Workgroup: WG2038695**

| Sample/ Type | Digestion Date | Analyst | Sample Vol ml | Ph | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| L2511986-03 SAMP | 03/11/25 04:33 | Christine Hamor | 50 | <2 | | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | |
| L2511986-04 SAMP | 03/11/25 04:33 | Christine Hamor | 50 | <2 | | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | |
| L2512155-01 SAMP | 03/11/25 04:33 | Christine Hamor | 50 | <2 | | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | |
| L2512156-01 SAMP | 03/11/25 04:33 | Christine Hamor | 50 | <2 | | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | |
| WG2038695-1 BLANK | 03/11/25 04:33 | Christine Hamor | 50 | <2 | | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | FM2509051006 AJT |
| WG2038695-2 LCS | 03/11/25 04:33 | Christine Hamor | 50 | <2 | 0.5 | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | ELN check:ajt |
| WG2038695-3 MS | 03/11/25 04:33 | Christine Hamor | 50 | <2 | 0.5 | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | |
| WG2038695-4 DUP | 03/11/25 04:33 | Christine Hamor | 50 | <2 | | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | |
| WG2038695-5 PS | 03/11/25 04:33 | Christine Hamor | 50 | <2 | | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | |
| WG2038695-6 SERDIL | 03/11/25 04:33 | Christine Hamor | 50 | <2 | | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | |
| WG2038695-7 MS | 03/11/25 04:33 | Christine Hamor | 50 | <2 | 0.5 | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | |
| WG2038695-8 DUP | 03/11/25 04:33 | Christine Hamor | 50 | <2 | | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | |



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# METALS ELN REPORT

**Workgroup: WG2038695**

| Sample/ Type | Digestion Date | Analyst | Sample Vol ml | Ph | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WG2038695-9 PS | 03/11/25 04:33 | Christine Hamor | 50 | <2 | | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | |
| WG2038695-10 SERDIL | 03/11/25 04:33 | Christine Hamor | 50 | <2 | | 03/11/25 04:33 | 7 | 94.2 | 03/11/25 07:33 | 50 | IPS2507180833AJT |

| Reagent | Actual Volume | Units |
|---|---|---|
| 1:1 Hydrochloric Acid (H | .5 | ml |
| 1:1 Nitric Acid (HNO3) | 1 | ml |



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# METALS ELN REPORT

**Workgroup: WG2040264**

## Digestion

| Prep Method | Acid Type 1 | Acid 1 Lot | Acid Type 2 | Acid 2 Lot | Spike Type | Lims Spike Lot | Spike Lot | Post Spike Spikelot | Spike Lot | Pipette Id |
|---|---|---|---|---|---|---|---|---|---|---|
| EPA 3005A | 1:1 HNO3 | tHNO3250821324AJT | 1:1 HCl | tHCL2510100813ARM | METALS | METSPIKE2 | IPS,FPS,MIX | METSPIKE2 | IPS,FPS,MIX | 140, 326 |

**Additional Reagent/Std**

| Sample/ Type | Digestion Date | Analyst | Sample Vol ml | Ph | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| L2511919-02 SAMP | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| L2512981-01 WATER | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| L2512983-01 SAMP | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| L2512983-07 SAMP | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| L2512983-08 SAMP | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| L2512983-09 SAMP | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| L2512986-01 WATER | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| L2512988-01 WATER | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| L2512988-02 WATER | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| L2512988-03 WATER | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |



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# METALS ELN REPORT

**Workgroup: WG2040264**

| Sample/ Type | Digestion Date | Analyst | Sample Vol ml | Ph | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| L2512994-01 SAMP | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| L2512994-02 SAMP | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| L2513071-01 SAMP | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| L2513081-01 SAMP | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| L2513086-01 SAMP | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| L2513089-01 SAMP | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| L2513260-01 WATER | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| L2513302-01 SAMP | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| L2513304-01 SAMP | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| WG2040264-1 BLANK | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | FM2509081041 NDD |
| WG2040264-2 LCS | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | 0.5 | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| WG2040264-3 MS | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | 0.5 | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | ELN CHECK:SAM |



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# METALS ELN REPORT

**Workgroup: WG2040264**

| Sample/ Type | Digestion Date | Analyst | Sample Vol ml | Ph | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WG2040264-4 DUP | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| WG2040264-5 PS | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| WG2040264-6 SERDIL | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| WG2040264-7 MS | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | 0.5 | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| WG2040264-8 DUP | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| WG2040264-9 PS | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | |
| WG2040264-10 SERDIL | 03/14/25 10:54 | Joshua Holmes | 50 | <2 | | 03/14/25 10:54 | 10 | 94.9 | 03/14/25 13:54 | 50 | IPS2507180833AJT |

| Reagent | Actual Volume | Units |
|---|---|---|
| 1:1 Hydrochloric Acid (H | .5 | ml |
| 1:1 Nitric Acid (HNO3) | 1 | ml |



Reported: 17-MAR-25 02:38 PM

# Inorganic Data
# (Mercury Analysis)

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-01 | Date Collected | : 03/04/25 14:43 |
| Client ID | : 2A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 12:10 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039100.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-02 | Date Collected | : 03/04/25 14:40 |
| Client ID | : 2B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 12:00 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039100.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-04 | Date Collected | : 03/04/25 12:25 |
| Client ID | : 3A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 12:14 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039100.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-05 | Date Collected | : 03/04/25 12:45 |
| Client ID | : 3B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 12:17 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039100.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-07 | Date Collected | : 03/04/25 09:25 |
| Client ID | : 4A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 12:20 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039100.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-08 | Date Collected | : 03/04/25 10:10 |
| Client ID | : 4B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 12:23 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039100.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038707-1 | Date Collected | : NA |
| Client ID | : WG2038707-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/11/25 11:51 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039100.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038707-4 | Date Collected | : 03/04/25 14:40 |
| Client ID | : 2BDUP | Date Received | : 03/04/25 |
| Sample Location | : | Date Analyzed | : 03/11/25 12:07 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039100.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.0001 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-01 | Date Collected | : 03/04/25 14:43 |
| Client ID | : 2A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:06 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039100.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-04 | Date Collected | : 03/04/25 12:25 |
| Client ID | : 3A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:10 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039100.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-05 | Date Collected | : 03/04/25 12:45 |
| Client ID | : 3B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:13 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039100.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-07 | Date Collected | : 03/04/25 09:25 |
| Client ID | : 4A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:16 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039100.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-08 | Date Collected | : 03/04/25 10:10 |
| Client ID | : 4B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:19 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039100.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038704-1 | Date Collected | : NA |
| Client ID | : WG2038704-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/11/25 15:50 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039100.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038704-4 | Date Collected | : 03/05/25 09:24 |
| Client ID | : WG2038704-4 DUP | Date Received | : 03/05/25 |
| Sample Location | : | Date Analyzed | : 03/11/25 16:03 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039100.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.0001 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-02 | Date Collected | : 03/04/25 14:40 |
| Client ID | : 2B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/14/25 15:05 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : MJR |
| Lab File ID | : WG2040580.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/14/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2040265-1 | Date Collected | : NA |
| Client ID | : WG2040265-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/14/25 14:33 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : MJR |
| Lab File ID | : WG2040580.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/14/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2040265-4 | Date Collected | : 03/07/25 10:20 |
| Client ID | : WG2040265-4 DUP | Date Received | : 03/07/25 |
| Sample Location | : | Date Analyzed | : 03/14/25 15:02 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : MJR |
| Lab File ID | : WG2040580.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/14/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.0001 | U |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC3 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939155-1 | | | R1939155-3 | | | | | | |
| Date Analyzed : | 03/11/25 11:35 | | | 03/11/25 12:27 | | | | | | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Mercury | 0.00300 | 0.0029 | 97 | 0.0050 | 0.00500 | 100 | | | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC3 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939155-1 | | | R1939155-3 | | | R1939155-5 | | R1939155-7 | |
| Date Analyzed : | 03/11/25 11:35 | | | 03/11/25 12:27 | | | 03/11/25 13:12 | | 03/11/25 13:45 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Mercury | 0.00300 | 0.0029 | 97 | 0.0050 | 0.00500 | 100 | 0.00510 | 101 | 0.00500 | 101 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC3 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1939155-9 | | | R1939155-11 | | | |
| Date Analyzed : | | | | 03/11/25 15:38 | | | 03/11/25 16:23 | | | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Mercury | | | | 0.0050 | 0.00500 | 101 | 0.00500 | 100 | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC3 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1940645-1 | | | R1940645-3 | | | R1940645-5 | | R1940645-7 | |
| Date Analyzed : | 03/14/25 10:03 | | | 03/14/25 10:57 | | | 03/14/25 11:33 | | 03/14/25 12:37 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Mercury | 0.00300 | 0.0029 | 97 | 0.0050 | 0.00500 | 100 | 0.00500 | 99 | 0.00500 | 100 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC3 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1940645-9 | | | R1940645-11 | | R1940645-13 | |
| Date Analyzed : | | | | 03/14/25 13:47 | | | 03/14/25 14:55 | | 03/14/25 15:54 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Mercury | | | | 0.0050 | 0.00500 | 100 | 0.00510 | 103 | 0.00510 | 103 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC3 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939155-2 | | R1939155-4 | | | | | | WG2038707-1 | |
| Date Analyzed : | 03/11/25 11:38 | | 03/11/25 12:30 | | | | | | 03/11/25 11:51 | |
| **Parameter** | **mg/l** | **Q** | **mg/l** | **Q** | **mg/l** | **Q** | **mg/l** | **Q** | **mg/l** | **Q** |
| Mercury | 0.0000910 | U | 0.0000910 | U | | | | | 0.00009 | U |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC3 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939155-2 | | R1939155-4 | | R1939155-6 | | R1939155-8 | | WG2038704-1 | |
| Date Analyzed : | 03/11/25 11:38 | | 03/11/25 12:30 | | 03/11/25 13:16 | | 03/11/25 13:49 | | 03/11/25 15:50 | |
| **Parameter** | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q |
| Mercury | 0.0000910 | U | 0.0000910 | U | 0.0000910 | U | 0.0000910 | U | 0.00009 | U |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC3 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939155-10 | | R1939155-12 | | | | | |
| Date Analyzed : | | | 03/11/25 15:42 | | 03/11/25 16:26 | | | | | |
| **Parameter** | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Mercury | | | 0.0000910 | U | 0.0000910 | U | | | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC3 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1940645-2 | | R1940645-4 | | R1940645-6 | | R1940645-8 | | WG2040265-1 | |
| Date Analyzed : | 03/14/25 10:06 | | 03/14/25 11:01 | | 03/14/25 11:36 | | 03/14/25 12:40 | | 03/14/25 14:33 | |
| **Parameter** | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q |
| Mercury | 0.0000910 | U | 0.0000910 | U | 0.0000910 | U | 0.0000910 | U | 0.00009 | U |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC3 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1940645-10 | | R1940645-12 | | R1940645-14 | | | |
| Date Analyzed : | | | 03/14/25 13:50 | | 03/14/25 14:58 | | 03/14/25 15:58 | | | |
| **Parameter** | **mg/l** | **Q** | **mg/l** | **Q** | **mg/l** | **Q** | **mg/l** | **Q** | | **Q** |
| Mercury | | | 0.0000910 | U | 0.0000910 | U | 0.0000910 | U | | |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 2B | **Matrix** | : WATER |
| **Lab Sample ID** | : L2511919-02 | | |
| **Matrix Spike** | : WG2038707-3 | **MS Analysis Date** | : 03/11/25 12:04 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Mercury, Dissolved | ND | 0.005 | 0.00472 | 94 | | | | | 75-125 | 20 |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : L2511986-01 | | |
| **Matrix Spike** | : WG2038704-3 | **MS Analysis Date** | : 03/11/25 16:00 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Mercury, Total | ND | 0.005 | 0.00496 | 99 | | | | | 70-130 | 20 |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : L2513130-01 | | |
| **Matrix Spike** | : WG2040265-3 | **MS Analysis Date** | : 03/14/25 14:52 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Mercury, Total | ND | 0.005 | 0.00478 | 96 | | | | | 70-130 | 20 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 2B | **Matrix** | : WATER |
| **Lab Sample ID** | : L2511919-02 | **Analysis Date** | : 03/11/25 12:00 |
| **Dup Sample ID** | : WG2038707-4 | **DUP Analysis Date** | : 03/11/25 12:07 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Mercury, Dissolved | ND | ND | NC | 20 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : NA | **Analysis Date** | : 03/11/25 15:56 |
| **Dup Sample ID** | : WG2038704-4 | **DUP Analysis Date** | : 03/11/25 16:03 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Mercury, Total | ND | ND | NC | 20 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : NA | **Analysis Date** | : 03/14/25 14:49 |
| **Dup Sample ID** | : WG2040265-4 | **DUP Analysis Date** | : 03/14/25 15:02 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Mercury, Total | ND | ND | NC | 20 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2038707-2 | **LCS Analysis Date** | : 03/11/25 11:55 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Mercury, Dissolved | 0.00100 | 0.000990 | 100. | | | | | 85-115 | 20 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2038704-2 | **LCS Analysis Date** | : 03/11/25 15:53 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Mercury, Total | 0.00100 | 0.00104 | 104. | | | | | 85-115 | 20 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2040265-2 | **LCS Analysis Date** | : 03/14/25 14:37 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Mercury, Total | 0.00100 | 0.000970 | 98. | | | | | 85-115 | 20 |

# Form 12
# Preparation Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Matrix** | : WATER | **Prep Method** | : EPA 245.1 |

| Sample Number | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| L2511919-01 | 03/10/25 17:40 | - | 25 |
| L2511919-02 | 03/10/25 17:40 | - | 25 |
| L2511919-04 | 03/10/25 17:40 | - | 25 |
| L2511919-05 | 03/10/25 17:40 | - | 25 |
| L2511919-07 | 03/10/25 17:40 | - | 25 |
| L2511919-08 | 03/10/25 17:40 | - | 25 |
| WG2038707-1 | 03/10/25 17:40 | - | 25 |
| WG2038707-2 | 03/10/25 17:40 | - | 25 |
| WG2038707-3 | 03/10/25 17:40 | - | 25 |
| WG2038707-4 | 03/10/25 17:40 | - | 25 |

# Form 12
# Preparation Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Matrix** | : WATER | **Prep Method** | : EPA 245.1 |

| Sample Number | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| L2511919-01 | 03/11/25 04:08 | - | 25 |
| L2511919-04 | 03/11/25 04:08 | - | 25 |
| L2511919-05 | 03/11/25 04:08 | - | 25 |
| L2511919-07 | 03/11/25 04:08 | - | 25 |
| L2511919-08 | 03/11/25 04:08 | - | 25 |
| WG2038704-1 | 03/11/25 04:08 | - | 25 |
| WG2038704-2 | 03/11/25 04:08 | - | 25 |
| WG2038704-3 | 03/11/25 04:08 | - | 25 |
| WG2038704-4 | 03/11/25 04:08 | - | 25 |

# Form 12
# Preparation Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Matrix** | : WATER | **Prep Method** | : EPA 245.1 |

| Sample Number | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| L2511919-02 | 03/14/25 11:54 | - | 25 |
| WG2040265-1 | 03/14/25 11:54 | - | 25 |
| WG2040265-2 | 03/14/25 11:54 | - | 25 |
| WG2040265-3 | 03/14/25 11:54 | - | 25 |
| WG2040265-4 | 03/14/25 11:54 | - | 25 |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC3 | **Analysis Method** | : 3,245.1 |
| **Start Date** | : 03/11/25 11:35 | **End Date** | : 03/11/25 12:30 |

| Sample Number | Dilution Factor | Analysis Time | Mercury, Dissolved |
|---|---|---|---|
| R1939155-1 ICV | 1 | 11:35:04 | X |
| R1939155-2 ICB | 1 | 11:38:24 | X |
| WG2038707-1 BLANK | 1 | 11:51:48 | X |
| WG2038707-2 LCS | 1 | 11:55:07 | X |
| L2511919-02 | 1 | 12:00:41 | X |
| WG2038707-3 MS | 1 | 12:04:00 | X |
| WG2038707-4 DUP | 1 | 12:07:20 | X |
| L2511919-01 | 1 | 12:10:40 | X |
| L2511919-04 | 1 | 12:14:00 | X |
| L2511919-05 | 1 | 12:17:19 | X |
| L2511919-07 | 1 | 12:20:39 | X |
| L2511919-08 | 1 | 12:23:59 | X |
| R1939155-3 CCV | 1 | 12:27:19 | X |
| R1939155-4 CCB | 1 | 12:30:39 | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC3 | **Analysis Method** | : 3,245.1 |
| **Start Date** | : 03/11/25 11:35 | **End Date** | : 03/11/25 16:26 |

| Sample Number | Dilution Factor | Analysis Time | Mercury, Total |
|---|---|---|---|
| R1939155-1 ICV | 1 | 11:35:04 | X |
| R1939155-2 ICB | 1 | 11:38:24 | X |
| R1939155-3 CCV | 1 | 12:27:19 | X |
| R1939155-4 CCB | 1 | 12:30:39 | X |
| R1939155-5 CCV | 1 | 13:12:43 | X |
| R1939155-6 CCB | 1 | 13:16:01 | X |
| R1939155-7 CCV | 1 | 13:45:45 | X |
| R1939155-8 CCB | 1 | 13:49:04 | X |
| R1939155-9 CCV | 1 | 15:38:49 | X |
| R1939155-10 CCB | 1 | 15:42:07 | X |
| WG2038704-1 BLANK | 1 | 15:50:11 | X |
| WG2038704-2 LCS | 1 | 15:53:29 | X |
| WG2038704-3 MS | 1 | 16:00:08 | X |
| WG2038704-4 DUP | 1 | 16:03:26 | X |
| L2511919-01 | 1 | 16:06:44 | X |
| L2511919-04 | 1 | 16:10:02 | X |
| L2511919-05 | 1 | 16:13:20 | X |
| L2511919-07 | 1 | 16:16:37 | X |
| L2511919-08 | 1 | 16:19:55 | X |
| R1939155-11 CCV | 1 | 16:23:13 | X |
| R1939155-12 CCB | 1 | 16:26:31 | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC3 | **Analysis Method** | : 3,245.1 |
| **Start Date** | : 03/14/25 10:03 | **End Date** | : 03/14/25 15:58 |

| Sample Number | Dilution Factor | Analysis Time | Mercury, Total |
|---|---|---|---|
| R1940645-1 ICV | 1 | 10:03:19 | X |
| R1940645-2 ICB | 1 | 10:06:38 | X |
| R1940645-3 CCV | 1 | 10:57:52 | X |
| R1940645-4 CCB | 1 | 11:01:12 | X |
| R1940645-5 CCV | 1 | 11:33:06 | X |
| R1940645-6 CCB | 1 | 11:36:23 | X |
| R1940645-7 CCV | 1 | 12:37:41 | X |
| R1940645-8 CCB | 1 | 12:40:59 | X |
| R1940645-9 CCV | 1 | 13:47:07 | X |
| R1940645-10 CCB | 1 | 13:50:25 | X |
| WG2040265-1 BLANK | 1 | 14:33:51 | X |
| WG2040265-2 LCS | 1 | 14:37:08 | X |
| WG2040265-3 MS | 1 | 14:52:19 | X |
| R1940645-11 CCV | 1 | 14:55:37 | X |
| R1940645-12 CCB | 1 | 14:58:54 | X |
| WG2040265-4 DUP | 1 | 15:02:13 | X |
| L2511919-02 | 1 | 15:05:31 | X |
| R1940645-13 CCV | 1 | 15:54:44 | X |
| R1940645-14 CCB | 1 | 15:58:02 | X |

**Date Created:** 03/19/18
**Created By:** Jason Hebert
**File:** PM4631-1
**Page:** 1

**MERCURY by 7470A, 245.1 (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury, Total | 7439-97-6 | 0.0002 | 0.0000915 | mg/l | 80-120 | 20 | 75-125 | 20 | 20 | | 28 days | 1 - Plastic 500ml HNO3 preserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

**Date Created:** 01/22/21
**Created By:** Jason Hebert
**File:** PM9836-1
**Page:** 1

**METALS by 7470A (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury, Total | 7439-97-6 | 0.0002 | 0.0000915 | mg/l | 80-120 | | 75-125 | 20 | 20 | | 28 days | 1 - Plastic 500ml HNO3 preserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

**Date Created:** 01/22/21
**Created By:** Jason Hebert
**File:** PM9837-1
**Page:** 1

**METALS by 7471B (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury, Total | 7439-97-6 | 0.08 | 0.05216 | mg/kg | 72-128 | | 80-120 | 20 | 20 | | 28 days | Metals Only-Glass 60mL/2oz unpreserv |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

Title :
Date : 03/11/2025
Name :

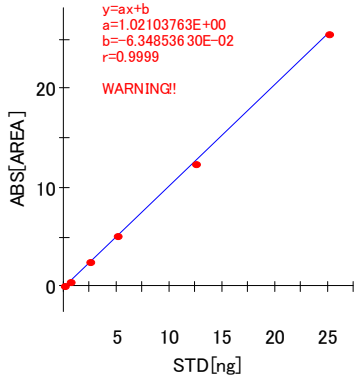
Method

STD
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

SMP
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

Measurement Time(sec) : 120sec

Calib




STD

| No. | STD [ug/L] | SVOL [mL] | CVOL [mL] | DVOL [mL] | STD [ng] | AREA [ON] | MEAS [ng] | Dev [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.000 | 2.500 | 2.500 | 2.500 | 0.000 | 0.0136 | 0.0755 | - | 03/11/2025 11:14 | JWN,NIC3 |
| 2 | 0.200 | 2.500 | 2.500 | 2.500 | 0.500 | 0.5250 | 0.5764 | 15.3 | 03/11/2025 11:18 | JWN,NIC3 |
| 3 | 1.000 | 2.500 | 2.500 | 2.500 | 2.500 | 2.4388 | 2.4507 | 2.0 | 03/11/2025 11:21 | JWN,NIC3 |
| 4 | 2.000 | 2.500 | 2.500 | 2.500 | 5.000 | 5.0693 | 5.0270 | 0.5 | 03/11/2025 11:24 | JWN,NIC3 |
| 5 | 5.000 | 2.500 | 2.500 | 2.500 | 12.500 | 12.4389 | 12.2448 | 2.0 | 03/11/2025 11:28 | JWN,NIC3 |
| 6 | 10.000 | 2.500 | 2.500 | 2.500 | 25.000 | 25.5907 | 25.1256 | 0.5 | 03/11/2025 11:31 | JWN,NIC3 |

SMP

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ICV | 2.500 | 2.500 | 2.500 | 7.3263 | 7.2375 | 2.895 | - | 03/11/2025 11:35 | JWN,NIC3 |
| 2 | ICB | 2.500 | 2.500 | 2.500 | 0.0172 | 0.0790 | 0.032 | - | 03/11/2025 11:38 | JWN,NIC3 |
| 3 | wg2038707-1 wg2038707 | 2.500 | 2.500 | 2.500 | 0.0227 | 0.0844 | 0.034 | - | 03/11/2025 11:51 | JWN,NIC3 |
| 4 | wg2038707-2 wg2038707 | 2.500 | 2.500 | 2.500 | 2.4802 | 2.4913 | 0.997 | - | 03/11/2025 11:55 | JWN,NIC3 |
| 5 | I2511919-02 wg2038707 | 2.500 | 2.500 | 2.500 | 0.0484 | 0.1096 | 0.044 | - | 03/11/2025 12:00 | JWN,NIC3 |
| 6 | wg2038707-3 wg2038707 | 2.500 | 2.500 | 2.500 | 12.0078 | 11.8226 | 4.729 | - | 03/11/2025 12:04 | JWN,NIC3 |

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 7 | wg2038707-4 wg2038707 | 2.500 | 2.500 | 2.500 | 0.0489 | 0.1101 | 0.044 | - | 03/11/2025 12:07 | JWN,NIC3 |
| 8 | I2511919-01 wg2038707 | 2.500 | 2.500 | 2.500 | 0.0252 | 0.0869 | 0.035 | - | 03/11/2025 12:10 | JWN,NIC3 |
| 9 | I2511919-04 wg2038707 | 2.500 | 2.500 | 2.500 | 0.0216 | 0.0833 | 0.033 | - | 03/11/2025 12:14 | JWN,NIC3 |
| 10 | I2511919-05 wg2038707 | 2.500 | 2.500 | 2.500 | 0.0236 | 0.0853 | 0.034 | - | 03/11/2025 12:17 | JWN,NIC3 |
| 11 | I2511919-07 wg2038707 | 2.500 | 2.500 | 2.500 | 0.0239 | 0.0856 | 0.034 | - | 03/11/2025 12:20 | JWN,NIC3 |
| 12 | I2511919-08 wg2038707 | 2.500 | 2.500 | 2.500 | 0.0240 | 0.0857 | 0.034 | - | 03/11/2025 12:23 | JWN,NIC3 |
| 13 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.7512 | 12.5506 | 5.020 | 100.4 | 03/11/2025 12:27 | JWN,NIC3 |
| 14 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0166 | 0.0784 | 0.031 | - | 03/11/2025 12:30 | JWN,NIC3 |
| 15 | wg2038549-1 wg2038549 | 2.500 | 2.500 | 2.500 | 0.0144 | 0.0763 | 0.031 | - | 03/11/2025 12:39 | JWN,NIC3 |
| 16 | wg2038549-2 wg2038549 | 2.500 | 2.500 | 2.500 | 2.1731 | 2.1905 | 0.876 | - | 03/11/2025 12:42 | JWN,NIC3 |
| 17 | I2511799-03 wg2038549 | 2.500 | 2.500 | 2.500 | 0.0415 | 0.1028 | 0.041 | - | 03/11/2025 12:46 | JWN,NIC3 |
| 18 | wg2038549-3 wg2038549 | 2.500 | 2.500 | 2.500 | 11.1569 | 10.9892 | 4.396 | - | 03/11/2025 12:49 | JWN,NIC3 |
| 19 | wg2038549-4 wg2038549 | 2.500 | 2.500 | 2.500 | 0.0567 | 0.1177 | 0.047 | - | 03/11/2025 12:52 | JWN,NIC3 |
| 20 | I2511799-04 wg2038549 | 2.500 | 2.500 | 2.500 | 0.0948 | 0.1550 | 0.062 | - | 03/11/2025 12:56 | JWN,NIC3 |
| 21 | wg2038549-5 wg2038549 | 2.500 | 2.500 | 2.500 | 12.6371 | 12.4389 | 4.976 | - | 03/11/2025 12:59 | JWN,NIC3 |
| 22 | wg2038549-6 wg2038549 | 2.500 | 2.500 | 2.500 | 0.0464 | 0.1076 | 0.043 | - | 03/11/2025 13:02 | JWN,NIC3 |
| 23 | I2511799-01 wg2038549 | 2.500 | 2.500 | 2.500 | 0.0629 | 0.1238 | 0.050 | - | 03/11/2025 13:06 | JWN,NIC3 |
| 24 | I2511799-02 wg2038549 | 2.500 | 2.500 | 2.500 | 0.1099 | 0.1698 | 0.068 | - | 03/11/2025 13:09 | JWN,NIC3 |
| 25 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.8313 | 12.6291 | 5.052 | 101.0 | 03/11/2025 13:12 | JWN,NIC3 |
| 26 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0179 | 0.0797 | 0.032 | - | 03/11/2025 13:16 | JWN,NIC3 |
| 27 | I2511799-10 wg2038549 | 2.500 | 2.500 | 2.500 | 0.0816 | 0.1421 | 0.057 | - | 03/11/2025 13:19 | JWN,NIC3 |
| 28 | I2511799-11 wg2038549 | 2.500 | 2.500 | 2.500 | 0.1013 | 0.1614 | 0.065 | - | 03/11/2025 13:22 | JWN,NIC3 |
| 29 | I2511799-12 wg2038549 | 2.500 | 2.500 | 2.500 | 0.0916 | 0.1519 | 0.061 | - | 03/11/2025 13:25 | JWN,NIC3 |
| 30 | I2511799-13 wg2038549 | 2.500 | 2.500 | 2.500 | 0.0854 | 0.1458 | 0.058 | - | 03/11/2025 13:29 | JWN,NIC3 |
| 31 | I2511799-14 wg2038549 | 2.500 | 2.500 | 2.500 | 0.1332 | 0.1926 | 0.077 | - | 03/11/2025 13:32 | JWN,NIC3 |
| 32 | I2511799-15 wg2038549 | 2.500 | 2.500 | 2.500 | 0.1239 | 0.1835 | 0.073 | - | 03/11/2025 13:35 | JWN,NIC3 |
| 33 | I2511799-16 wg2038549 | 2.500 | 2.500 | 2.500 | 0.0693 | 0.1300 | 0.052 | - | 03/11/2025 13:39 | JWN,NIC3 |
| 34 | I2511799-17 wg2038549 | 2.500 | 2.500 | 2.500 | 0.0764 | 0.1370 | 0.055 | - | 03/11/2025 13:42 | JWN,NIC3 |
| 35 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.7922 | 12.5908 | 5.036 | 100.7 | 03/11/2025 13:45 | JWN,NIC3 |
| 36 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0169 | 0.0787 | 0.031 | - | 03/11/2025 13:49 | JWN,NIC3 |
| 37 | WG2038720-1 WG2038720 | 2.500 | 2.500 | 2.500 | 0.0131 | 0.0750 | 0.030 | - | 03/11/2025 15:19 | JWN,NIC3 |
| 38 | WG2038720-2 WG2038720 | 2.500 | 2.500 | 2.500 | 2.4954 | 2.5062 | 1.002 | - | 03/11/2025 15:22 | JWN,NIC3 |

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 39 | I2511871-01 WG2038720 | 2.500 | 2.500 | 2.500 | 0.0146 | 0.0765 | 0.031 | - | 03/11/2025 15:25 | JWN,NIC3 |
| 40 | WG2038720-3 WG2038720 | 2.500 | 2.500 | 2.500 | 12.5522 | 12.3557 | 4.942 | - | 03/11/2025 15:28 | JWN,NIC3 |
| 41 | WG2038720-4 WG2038720 | 2.500 | 2.500 | 2.500 | 0.0198 | 0.0816 | 0.033 | - | 03/11/2025 15:32 | JWN,NIC3 |
| 42 | I2512921-03 WG2038720 | 2.500 | 2.500 | 2.500 | 0.0127 | 0.0746 | 0.030 | - | 03/11/2025 15:35 | JWN,NIC3 |
| 43 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.7947 | 12.5933 | 5.037 | 100.7 | 03/11/2025 15:38 | JWN,NIC3 |
| 44 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0173 | 0.0791 | 0.032 | - | 03/11/2025 15:42 | JWN,NIC3 |
| 45 | wg2038704-1 wg2038704 | 2.500 | 2.500 | 2.500 | 0.0138 | 0.0757 | 0.030 | - | 03/11/2025 15:50 | JWN,NIC3 |
| 46 | wg2038704-2 wg2038704 | 2.500 | 2.500 | 2.500 | 2.6043 | 2.6128 | 1.045 | - | 03/11/2025 15:53 | JWN,NIC3 |
| 47 | L2511986-01 wg2038704 | 2.500 | 2.500 | 2.500 | 0.0178 | 0.0796 | 0.032 | - | 03/11/2025 15:56 | JWN,NIC3 |
| 48 | wg2038704-3 wg2038704 | 2.500 | 2.500 | 2.500 | 12.6001 | 12.4027 | 4.961 | - | 03/11/2025 16:00 | JWN,NIC3 |
| 49 | wg2038704-4 wg2038704 | 2.500 | 2.500 | 2.500 | 0.0198 | 0.0816 | 0.033 | - | 03/11/2025 16:03 | JWN,NIC3 |
| 50 | L2511919-01 wg2038704 | 2.500 | 2.500 | 2.500 | 0.0257 | 0.0873 | 0.035 | - | 03/11/2025 16:06 | JWN,NIC3 |
| 51 | L2511919-04 wg2038704 | 2.500 | 2.500 | 2.500 | 0.0224 | 0.0841 | 0.034 | - | 03/11/2025 16:10 | JWN,NIC3 |
| 52 | L2511919-05 wg2038704 | 2.500 | 2.500 | 2.500 | 0.0190 | 0.0808 | 0.032 | - | 03/11/2025 16:13 | JWN,NIC3 |
| 53 | L2511919-07 wg2038704 | 2.500 | 2.500 | 2.500 | 0.0219 | 0.0836 | 0.033 | - | 03/11/2025 16:16 | JWN,NIC3 |
| 54 | L2511919-08 wg2038704 | 2.500 | 2.500 | 2.500 | 0.0241 | 0.0858 | 0.034 | - | 03/11/2025 16:19 | JWN,NIC3 |
| 55 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.6903 | 12.4910 | 4.996 | 99.9 | 03/11/2025 16:23 | JWN,NIC3 |
| 56 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0165 | 0.0783 | 0.031 | - | 03/11/2025 16:26 | JWN,NIC3 |
| 57 | L2511986-02 wg2038704 | 2.500 | 2.500 | 2.500 | 0.0197 | 0.0815 | 0.033 | - | 03/11/2025 16:29 | JWN,NIC3 |
| 58 | L2511986-03 wg2038704 | 2.500 | 2.500 | 2.500 | 0.0208 | 0.0825 | 0.033 | - | 03/11/2025 16:33 | JWN,NIC3 |
| 59 | L2511986-04 wg2038704 | 2.500 | 2.500 | 2.500 | 0.0203 | 0.0821 | 0.033 | - | 03/11/2025 16:36 | JWN,NIC3 |
| 60 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.6714 | 12.4725 | 4.989 | 99.8 | 03/11/2025 16:42 | JWN,NIC3 |
| 61 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0164 | 0.0782 | 0.031 | - | 03/11/2025 16:46 | JWN,NIC3 |

Title :
Date : 03/14/2025
Name :

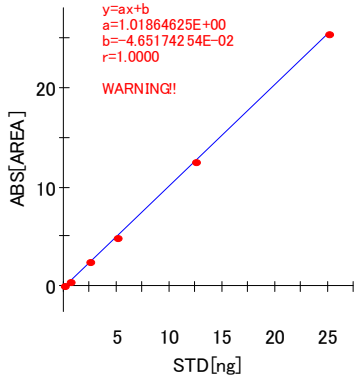
Method

STD
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

SMP
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

Measurement Time(sec) : 120sec

Calib




STD

| No. | STD [ug/L] | SVOL [mL] | CVOL [mL] | DVOL [mL] | STD [ng] | AREA [ON] | MEAS [ng] | Dev [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.000 | 2.500 | 2.500 | 2.500 | 0.000 | 0.0072 | 0.0527 | - | 03/14/2025 09:43 | MJR,NIC3 |
| 2 | 0.200 | 2.500 | 2.500 | 2.500 | 0.500 | 0.4909 | 0.5276 | 5.5 | 03/14/2025 09:46 | MJR,NIC3 |
| 3 | 1.000 | 2.500 | 2.500 | 2.500 | 2.500 | 2.5245 | 2.5240 | 1.0 | 03/14/2025 09:49 | MJR,NIC3 |
| 4 | 2.000 | 2.500 | 2.500 | 2.500 | 5.000 | 4.9908 | 4.9451 | 1.1 | 03/14/2025 09:53 | MJR,NIC3 |
| 5 | 5.000 | 2.500 | 2.500 | 2.500 | 12.500 | 12.5696 | 12.3852 | 0.9 | 03/14/2025 09:56 | MJR,NIC3 |
| 6 | 10.000 | 2.500 | 2.500 | 2.500 | 25.000 | 25.4863 | 25.0654 | 0.3 | 03/14/2025 09:59 | MJR,NIC3 |

SMP

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ICV | 2.500 | 2.500 | 2.500 | 7.3446 | 7.2558 | 2.902 | - | 03/14/2025 10:03 | MJR,NIC3 |
| 2 | ICB | 2.500 | 2.500 | 2.500 | 0.0072 | 0.0527 | 0.021 | - | 03/14/2025 10:06 | MJR,NIC3 |
| 3 | XHG2510121205NRS | 2.500 | 2.500 | 2.500 | 2.5684 | 2.5671 | 1.027 | - | 03/14/2025 10:09 | MJR,NIC3 |
| 4 | I2512537-02 wg2038324 | 2.500 | 2.500 | 2.500 | 0.0358 | 0.0808 | 0.032 | - | 03/14/2025 10:27 | MJR,NIC3 |
| 5 | I2512537-03 wg2038324 | 2.500 | 2.500 | 2.500 | 0.0703 | 0.1147 | 0.046 | - | 03/14/2025 10:30 | MJR,NIC3 |
| 6 | I2512537-04 wg2038324 | 2.500 | 2.500 | 2.500 | 0.0593 | 0.1039 | 0.042 | - | 03/14/2025 10:34 | MJR,NIC3 |

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 7 | I2512537-05 wg2038324 | 2.500 | 2.500 | 2.500 | 0.0492 | 0.0940 | 0.038 | - | 03/14/2025 10:37 | MJR,NIC3 |
| 8 | I2512537-06 wg2038324 | 2.500 | 2.500 | 2.500 | 0.0328 | 0.0779 | 0.031 | - | 03/14/2025 10:40 | MJR,NIC3 |
| 9 | I2512537-07 wg2038324 | 2.500 | 2.500 | 2.500 | 0.0304 | 0.0755 | 0.030 | - | 03/14/2025 10:44 | MJR,NIC3 |
| 10 | I2512537-08 wg2038324 | 2.500 | 2.500 | 2.500 | 0.0301 | 0.0752 | 0.030 | - | 03/14/2025 10:47 | MJR,NIC3 |
| 11 | I2512537-10 wg2038324 | 2.500 | 2.500 | 2.500 | 0.1171 | 0.1606 | 0.064 | - | 03/14/2025 10:51 | MJR,NIC3 |
| 12 | I2512537-11 wg2038324 | 2.500 | 2.500 | 2.500 | 0.1406 | 0.1837 | 0.073 | - | 03/14/2025 10:54 | MJR,NIC3 |
| 13 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.7016 | 12.5148 | 5.006 | 100.1 | 03/14/2025 10:57 | MJR,NIC3 |
| 14 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0085 | 0.0540 | 0.022 | - | 03/14/2025 11:01 | MJR,NIC3 |
| 15 | I2512537-12 wg2038324 | 2.500 | 2.500 | 2.500 | 0.1117 | 0.1553 | 0.062 | - | 03/14/2025 11:04 | MJR,NIC3 |
| 16 | I2512537-13 wg2038324 | 2.500 | 2.500 | 2.500 | 0.1072 | 0.1509 | 0.060 | - | 03/14/2025 11:07 | MJR,NIC3 |
| 17 | I2512537-14 wg2038324 | 2.500 | 2.500 | 2.500 | 0.0788 | 0.1230 | 0.049 | - | 03/14/2025 11:11 | MJR,NIC3 |
| 18 | I2512537-15 wg2038324 | 2.500 | 2.500 | 2.500 | 0.0600 | 0.1046 | 0.042 | - | 03/14/2025 11:14 | MJR,NIC3 |
| 19 | I2512537-16 wg2038324 | 2.500 | 2.500 | 2.500 | 0.0757 | 0.1200 | 0.048 | - | 03/14/2025 11:17 | MJR,NIC3 |
| 20 | I2513015-01 wg2038324 | 2.500 | 2.500 | 2.500 | 0.0629 | 0.1074 | 0.043 | - | 03/14/2025 11:21 | MJR,NIC3 |
| 21 | I2513065-01 wg2038324 | 2.500 | 2.500 | 2.500 | 0.0492 | 0.0940 | 0.038 | - | 03/14/2025 11:24 | MJR,NIC3 |
| 22 | I2513065-02 wg2038324 | 2.500 | 2.500 | 2.500 | 0.0556 | 0.1002 | 0.040 | - | 03/14/2025 11:27 | MJR,NIC3 |
| 23 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.6123 | 12.4271 | 4.971 | 99.4 | 03/14/2025 11:33 | MJR,NIC3 |
| 24 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0085 | 0.0540 | 0.022 | - | 03/14/2025 11:36 | MJR,NIC3 |
| 25 | wg2040176-1 wg2040176 | 2.500 | 2.500 | 2.500 | 0.0025 | 0.0481 | 0.019 | - | 03/14/2025 12:04 | MJR,NIC3 |
| 26 | wg2040176-2 wg2040176 | 2.500 | 2.500 | 2.500 | 2.4928 | 2.4928 | 0.997 | - | 03/14/2025 12:07 | MJR,NIC3 |
| 27 | I2513124-01 wg2040176 | 2.500 | 2.500 | 2.500 | 0.3094 | 0.3494 | 0.140 | - | 03/14/2025 12:11 | MJR,NIC3 |
| 28 | wg2040176-3 wg2040176 | 2.500 | 2.500 | 2.500 | 12.6481 | 12.4622 | 4.985 | - | 03/14/2025 12:14 | MJR,NIC3 |
| 29 | wg2040176-4 wg2040176 | 2.500 | 2.500 | 2.500 | 0.2952 | 0.3355 | 0.134 | - | 03/14/2025 12:17 | MJR,NIC3 |
| 30 | I2512993-01 wg2040176 | 2.500 | 2.500 | 2.500 | 0.0089 | 0.0544 | 0.022 | - | 03/14/2025 12:21 | MJR,NIC3 |
| 31 | I2512993-11 wg2040176 | 2.500 | 2.500 | 2.500 | 0.0956 | 0.1395 | 0.056 | - | 03/14/2025 12:24 | MJR,NIC3 |
| 32 | I2513446-01 wg2040176 | 2.500 | 2.500 | 2.500 | 0.0077 | 0.0532 | 0.021 | - | 03/14/2025 12:27 | MJR,NIC3 |
| 33 | I2513491-01 wg2040176 | 2.500 | 2.500 | 2.500 | 0.0298 | 0.0749 | 0.030 | - | 03/14/2025 12:31 | MJR,NIC3 |
| 34 | I2513491-02 wg2040176 | 2.500 | 2.500 | 2.500 | 0.0410 | 0.0859 | 0.034 | - | 03/14/2025 12:34 | MJR,NIC3 |
| 35 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.7087 | 12.5217 | 5.009 | 100.2 | 03/14/2025 12:37 | MJR,NIC3 |
| 36 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0068 | 0.0523 | 0.021 | - | 03/14/2025 12:40 | MJR,NIC3 |
| 37 | I2513491-03 wg2040176 | 2.500 | 2.500 | 2.500 | 0.0549 | 0.0996 | 0.040 | - | 03/14/2025 12:44 | MJR,NIC3 |
| 38 | I2513491-04 wg2040176 | 2.500 | 2.500 | 2.500 | 0.8288 | 0.8593 | 0.344 | - | 03/14/2025 12:47 | MJR,NIC3 |

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 39 | I2513491-05 wg2040176 | 2.500 | 2.500 | 2.500 | 0.3944 | 0.4328 | 0.173 | - | 03/14/2025 12:50 | MJR,NIC3 |
| 40 | I2513491-06 wg2040176 | 2.500 | 2.500 | 2.500 | 0.0624 | 0.1069 | 0.043 | - | 03/14/2025 12:54 | MJR,NIC3 |
| 41 | I2513491-07 wg2040176 | 2.500 | 2.500 | 2.500 | 0.0063 | 0.0519 | 0.021 | - | 03/14/2025 12:57 | MJR,NIC3 |
| 42 | wg2040444-1 wg2040444 | 2.500 | 2.500 | 2.500 | 0.0020 | 0.0476 | 0.019 | - | 03/14/2025 13:30 | MJR,NIC3 |
| 43 | wg2040444-2 wg2040444 | 2.500 | 2.500 | 2.500 | 2.4810 | 2.4813 | 0.993 | - | 03/14/2025 13:33 | MJR,NIC3 |
| 44 | I2513350-01 wg2040444 | 2.500 | 2.500 | 2.500 | 0.0009 | 0.0465 | 0.019 | - | 03/14/2025 13:37 | MJR,NIC3 |
| 45 | wg2040444-3 wg2040444 | 2.500 | 2.500 | 2.500 | 12.2382 | 12.0598 | 4.824 | - | 03/14/2025 13:40 | MJR,NIC3 |
| 46 | wg2040444-4 wg2040444 | 2.500 | 2.500 | 2.500 | 0.0041 | 0.0497 | 0.020 | - | 03/14/2025 13:43 | MJR,NIC3 |
| 47 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.6514 | 12.4655 | 4.986 | 99.7 | 03/14/2025 13:47 | MJR,NIC3 |
| 48 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0060 | 0.0516 | 0.021 | - | 03/14/2025 13:50 | MJR,NIC3 |
| 49 | I2513385-01 wg2040444 | 2.500 | 2.500 | 2.500 | 0.0358 | 0.0808 | 0.032 | - | 03/14/2025 13:53 | MJR,NIC3 |
| 50 | I2513385-02 wg2040444 | 2.500 | 2.500 | 2.500 | 0.0244 | 0.0696 | 0.028 | - | 03/14/2025 13:57 | MJR,NIC3 |
| 51 | I2513385-03 wg2040444 | 2.500 | 2.500 | 2.500 | 0.0113 | 0.0568 | 0.023 | - | 03/14/2025 14:00 | MJR,NIC3 |
| 52 | I2513385-04 wg2040444 | 2.500 | 2.500 | 2.500 | 0.0288 | 0.0739 | 0.030 | - | 03/14/2025 14:03 | MJR,NIC3 |
| 53 | I2513385-05 wg2040444 | 2.500 | 2.500 | 2.500 | 0.0046 | 0.0502 | 0.020 | - | 03/14/2025 14:06 | MJR,NIC3 |
| 54 | CLR SOL TEST | 2.500 | 2.500 | 2.500 | -0.0007 | 0.0450 | 0.018 | - | 03/14/2025 14:30 | MJR,NIC3 |
| 55 | wg2040265-1 wg2040265 | 2.500 | 2.500 | 2.500 | 0.0078 | 0.0533 | 0.021 | - | 03/14/2025 14:33 | MJR,NIC3 |
| 56 | wg2040265-2 wg2040265 | 2.500 | 2.500 | 2.500 | 2.4469 | 2.4478 | 0.979 | - | 03/14/2025 14:37 | MJR,NIC3 |
| 57 | I2513130-01 wg2040265 | 2.500 | 2.500 | 2.500 | 0.0450 | 0.0898 | 0.036 | - | 03/14/2025 14:49 | MJR,NIC3 |
| 58 | wg2040265-3 wg2040265 | 2.500 | 2.500 | 2.500 | 12.1447 | 11.9681 | 4.787 | - | 03/14/2025 14:52 | MJR,NIC3 |
| 59 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 13.0463 | 12.8532 | 5.141 | 102.8 | 03/14/2025 14:55 | MJR,NIC3 |
| 60 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0020 | 0.0476 | 0.019 | - | 03/14/2025 14:58 | MJR,NIC3 |
| 61 | wg2040265-4 wg2040265 | 2.500 | 2.500 | 2.500 | 0.0624 | 0.1069 | 0.043 | - | 03/14/2025 15:02 | MJR,NIC3 |
| 62 | I2511919-02 wg2040265 | 2.500 | 2.500 | 2.500 | 0.0204 | 0.0657 | 0.026 | - | 03/14/2025 15:05 | MJR,NIC3 |
| 63 | I2512981-01 wg2040265 | 2.500 | 2.500 | 2.500 | 0.0785 | 0.1227 | 0.049 | - | 03/14/2025 15:08 | MJR,NIC3 |
| 64 | I2512983-01 wg2040265 | 2.500 | 2.500 | 2.500 | 0.0050 | 0.0506 | 0.020 | - | 03/14/2025 15:12 | MJR,NIC3 |
| 65 | I2512983-07 wg2040265 | 2.500 | 2.500 | 2.500 | 0.0075 | 0.0530 | 0.021 | - | 03/14/2025 15:15 | MJR,NIC3 |
| 66 | I2512983-08 wg2040265 | 2.500 | 2.500 | 2.500 | -0.0051 | 0.0407 | 0.016 | - | 03/14/2025 15:38 | MJR,NIC3 |
| 67 | I2512983-09 wg2040265 | 2.500 | 2.500 | 2.500 | 0.0030 | 0.0486 | 0.019 | - | 03/14/2025 15:41 | MJR,NIC3 |
| 68 | I2513081-01 wg2040265 | 2.500 | 2.500 | 2.500 | 0.0298 | 0.0749 | 0.030 | - | 03/14/2025 15:44 | MJR,NIC3 |
| 69 | I2513086-01 wg2040265 | 2.500 | 2.500 | 2.500 | 0.0405 | 0.0854 | 0.034 | - | 03/14/2025 15:48 | MJR,NIC3 |
| 70 | I2513130-02 wg2040265 | 2.500 | 2.500 | 2.500 | 0.0004 | 0.0461 | 0.018 | - | 03/14/2025 15:51 | MJR,NIC3 |

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 71 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 13.0538 | 12.8605 | 5.144 | 102.9 | 03/14/2025 15:54 | MJR,NIC3 |
| 72 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0034 | 0.0490 | 0.020 | - | 03/14/2025 15:58 | MJR,NIC3 |

MERCURY TRUE VALUE CRITERIA

| | |
|---|---|
| ICV | 3 ug/l |
| LCSW | 1 ug/l |
| MS | 1 ug/l |
| CCV | 5 ug/l |

As of 6/1/13, Mercury True Value criteria is as follows:

| | |
|---|---|
| ICV | 3 ug/l |
| LCSW | 1 ug/l |
| MS(aq) | 5 ug/l |
| MS(soil) | 1 ug/l |
| CCV | 10 ug/l |

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D102-540
**Certificate Issue Date:** June 22, 2018
**Expiration Date:** January 31, 2022
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8160 | 6.36 | 3960 - 12400 | 4080 - 12200 |
| Antimony | 120 | 60.9 | 9.42 | 0.822 - 121 | 12.0 - 166 |
| Arsenic | 144 | 135 | 5.08 | 112 - 158 | 94.6 - 176 |
| Barium | 469 | 443 | 6.77 | 366 - 521 | 332 - 554 |
| Beryllium | 207 | 197 | 5.86 | 164 - 229 | 148 - 246 |
| Boron | 213 | 174 | 12.6 | 127 - 221 | 105 - 244 |
| Cadmium | 224 | 204 | 6.65 | 169 - 240 | 153 - 256 |
| Calcium | 5190 | 4830 | 9.12 | 3950 - 5700 | 3510 - 6150 |
| Chromium | 138 | 132 | 8.56 | 109 - 155 | 92.2 - 171 |
| Cobalt | 182 | 179 | 7.93 | 151 - 207 | 134 - 224 |
| Copper | 191 | 184 | 6.72 | 155 - 213 | 138 - 230 |
| Iron | 15000 | 14400 | 10.7 | 8770 - 20000 | 5120 - 23600 |
| Lead | 225 | 216 | 7.72 | 178 - 254 | 159 - 274 |
| Magnesium | 2570 | 2340 | 6.13 | 1780 - 2900 | 1460 - 3230 |
| Manganese | 331 | 323 | 6.71 | 266 - 380 | 242 - 404 |
| Mercury | 16.8 | 13.2 | 16.0 | 8.64 - 17.7 | 7.89 - 18.5 |
| Molybdenum | 193 | 175 | 2.39 | 141 - 209 | 125 - 226 |
| Nickel | 163 | 152 | 5.95 | 126 - 178 | 106 - 197 |
| Potassium | 2420 | 2050 | 6.31 | 1440 - 2660 | 1210 - 2890 |
| Selenium | 81.9 | 74.9 | 4.13 | 59.3 - 90.5 | 47.0 - 103 |
| Silver | 57.6 | 53.9 | 9.00 | 43.0 - 64.8 | 37.8 - 70.0 |
| Sodium | 161 | 149 | 12.1 | 111 - 188 | 57.7 - 241 |
| Strontium | 100 | 96.2 | 4.04 | 78.1 - 114 | 69.0 - 123 |
| Thallium | 253 | 232 | 3.54 | 188 - 276 | 168 - 296 |



16341 Table Mountain Pkwy ▪ Golden, CO 80403 ▪ T: 800.372.0122 ▪ 303.431.8454 ▪ www.eraqc.com

# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Tin | 146 | 134 | 10.8 | 106 - 163 | 79.5 - 189 |
| Titanium | 449 | 340 | 7.20 | 70.2 - 609 | 44.9 - 711 |
| Uranium | 114 | 113 | 7.10 | 85.5 - 140 | 71.9 - 153 |
| Vanadium | 180 | 172 | 8.85 | 137 - 207 | 126 - 218 |
| Zinc | 217 | 211 | 6.58 | 171 - 250 | 147 - 274 |

## ANALYTICAL VERIFICATION

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Aluminum | 10100 | 8160 | 80.8 | 138 | - | - |
| Antimony | 120 | 60.9 | 50.8 | 135 | - | - |
| Arsenic | 144 | 135 | 93.8 | 184 | - | - |
| Barium | 469 | 443 | 94.5 | 158 | - | - |
| Beryllium | 207 | 197 | 95.0 | 148 | - | - |
| Boron | 213 | 174 | 81.8 | 107 | - | - |
| Cadmium | 224 | 204 | 91.3 | 199 | - | - |
| Calcium | 5190 | 4830 | 93.0 | 122 | - | - |
| Chromium | 138 | 132 | 95.5 | 172 | - | - |
| Cobalt | 182 | 179 | 98.4 | 140 | - | - |
| Copper | 191 | 184 | 96.3 | 183 | - | - |
| Iron | 15000 | 14400 | 95.6 | 133 | - | - |
| Lead | 225 | 216 | 96.2 | 204 | - | - |
| Magnesium | 2570 | 2340 | 91.2 | 122 | - | - |
| Manganese | 331 | 323 | 97.6 | 147 | - | - |
| Mercury | 16.8 | 13.2 | 78.3 | 128 | - | - |
| Molybdenum | 193 | 175 | 90.8 | 143 | - | - |
| Nickel | 163 | 152 | 93.1 | 185 | - | - |
| Potassium | 2420 | 2050 | 84.7 | 121 | - | - |
| Selenium | 81.9 | 74.9 | 91.5 | 163 | - | - |



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| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Silver | 57.6 | 53.9 | 93.6 | 150 | - | - |
| Sodium | 161 | 149 | 92.8 | 105 | - | - |
| Strontium | 100 | 96.2 | 96.2 | 90 | - | - |
| Thallium | 253 | 232 | 91.6 | 147 | - | - |
| Tin | 146 | 134 | 92.0 | 100 | - | - |
| Titanium | 449 | 340 | 75.6 | 93 | - | - |
| Uranium | 114 | 113 | 98.8 | 35 | - | - |
| Vanadium | 180 | 172 | 95.4 | 139 | - | - |
| Zinc | 217 | 211 | 97.0 | 180 | - | - |

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
**Traceability Recovery (%)** = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.**

**Certifying Officer**

**Brian Miller**

**Quality Officer**

**Matthew Seebeck**

ISO/IEC GUIDE 34:2009 ACCREDITED REFERENCE MATERIAL PRODUCER CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005 ACCREDITED CHEMICAL TESTING LABORATORY CERTIFICATE NO. 1539.02



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Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D105-540
**Certificate Issue Date:** March 19, 2019
**Expiration Date:** October 12, 2022
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8800 | 8.32 | 4600 - 13000 | 4470 - 13100 |
| Antimony | 282 | 147 | 7.70 | 6.17 - 289 | 28.2 - 366 |
| Arsenic | 155 | 143 | 6.34 | 119 - 168 | 100 - 186 |
| Barium | 439 | 415 | 5.37 | 343 - 488 | 311 - 519 |
| Beryllium | 192 | 179 | 2.78 | 149 - 210 | 134 - 224 |
| Boron | 216 | 160 | 7.08 | 113 - 208 | 96.1 - 238 |
| Cadmium | 61.5 | 56.2 | 0.528 | 46.6 - 65.9 | 42.2 - 70.3 |
| Calcium | 5190 | 4960 | 6.64 | 4090 - 5840 | 3610 - 6310 |
| Chromium | 104 | 101 | 4.75 | 83.2 - 118 | 70.5 - 131 |
| Cobalt | 196 | 189 | 0.500 | 158 - 219 | 141 - 236 |
| Copper | 65.0 | 63.1 | 2.65 | 53.1 - 73.1 | 47.3 - 78.9 |
| Iron | 15000 | 15700 | 8.94 | 10100 - 21300 | 6000 - 25400 |
| Lead | 126 | 125 | 4.77 | 103 - 146 | 89.3 - 160 |
| Magnesium | 2570 | 2410 | 6.26 | 1860 - 2970 | 1520 - 3310 |
| Manganese | 387 | 382 | 5.37 | 315 - 449 | 290 - 474 |
| Mercury | 7.76 | 7.61 | 13.7 | 5.53 - 9.69 | 4.57 - 10.7 |
| Molybdenum | 120 | 107 | 0.500 | 86.0 - 128 | 75.5 - 139 |
| Nickel | 117 | 108 | 0.514 | 89.5 - 127 | 75.7 - 141 |
| Potassium | 2420 | 2110 | 5.62 | 1500 - 2720 | 1260 - 2960 |
| Selenium | 84.6 | 77.9 | 7.10 | 61.8 - 94.0 | 49.2 - 107 |
| Silver | 34.6 | 34.3 | 8.34 | 27.8 - 40.9 | 23.6 - 45.1 |
| Sodium | 161 | 145 | 6.72 | 106 - 183 | 54.3 - 235 |
| Strontium | 104 | 104 | 3.95 | 85.1 - 123 | 74.8 - 133 |
| Thallium | 123 | 113 | 0.500 | 91.3 - 134 | 77.1 - 149 |



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| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Tin | 118 | 107 | 0.500 | 83.5 - 130 | 61.2 - 152 |
| Titanium | 512 | 421 | 5.80 | 114 - 728 | 0.00 - 854 |
| Uranium | 103 | 104 | 6.18 | 79.1 - 128 | 71.9 - 135 |
| Vanadium | 87.3 | 83.7 | 8.55 | 66.8 - 101 | 54.2 - 113 |
| Zinc | 251 | 240 | 3.98 | 194 - 285 | 168 - 312 |

## ANALYTICAL VERIFICATION

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Aluminum | 10100 | 8800 | 87.1 | 193 | - | - |
| Antimony | 282 | 147 | 52.3 | 216 | - | - |
| Arsenic | 155 | 143 | 92.5 | 240 | - | - |
| Barium | 439 | 415 | 94.6 | 222 | - | - |
| Beryllium | 192 | 179 | 93.4 | 220 | - | - |
| Boron | 216 | 160 | 74.2 | 152 | - | - |
| Cadmium | 61.5 | 56.2 | 91.5 | 239 | - | - |
| Calcium | 5190 | 4960 | 95.6 | 175 | - | - |
| Chromium | 104 | 101 | 96.8 | 237 | - | - |
| Cobalt | 196 | 189 | 96.2 | 215 | - | - |
| Copper | 65.0 | 63.1 | 97.1 | 237 | - | - |
| Iron | 15000 | 15700 | 105 | 195 | - | - |
| Lead | 126 | 125 | 99.0 | 243 | - | - |
| Magnesium | 2570 | 2410 | 93.9 | 177 | - | - |
| Manganese | 387 | 382 | 98.7 | 215 | - | - |
| Mercury | 7.76 | 7.61 | 98.0 | 157 | - | - |
| Molybdenum | 120 | 107 | 89.4 | 216 | - | - |
| Nickel | 117 | 108 | 92.5 | 235 | - | - |
| Potassium | 2420 | 2110 | 87.2 | 181 | - | - |
| Selenium | 84.6 | 77.9 | 92.1 | 231 | - | - |



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| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Silver | 34.6 | 34.3 | 99.3 | 216 | - | - |
| Sodium | 161 | 145 | 89.8 | 166 | - | - |
| Strontium | 104 | 104 | 99.9 | 148 | - | - |
| Thallium | 123 | 113 | 91.8 | 215 | - | - |
| Tin | 118 | 107 | 90.4 | 164 | - | - |
| Titanium | 512 | 421 | 82.2 | 157 | - | - |
| Uranium | 103 | 104 | 101 | 61 | - | - |
| Vanadium | 87.3 | 83.7 | 95.9 | 214 | - | - |
| Zinc | 251 | 240 | 95.5 | 234 | - | - |

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
**Traceability Recovery (%)** = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.**

**Certifying Officer**

**Brian Miller**

Brian Miller

**Quality Officer**

**Matthew Seebeck**



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Certified Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D109-540
**Certificate Issue Date:** March 24, 2020
**Expiration Date:** October 03, 2023
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value[7] | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8130 | 2.54 | 3920 - 12300 | 4060 - 12200 |
| Antimony | 259 | 134 | 5.03 | 4.56 - 264 | 25.9 - 335 |
| Arsenic | 171 | 156 | 3.38 | 129 - 183 | 109 - 203 |
| Barium | 253 | 239 | 4.81 | 197 - 280 | 179 - 298 |
| Beryllium | 179 | 169 | 6.59 | 141 - 198 | 127 - 212 |
| Boron | 114 | 87.5 | 10.3 | 62.5 - 113 | 52.5 - 125 |
| Cadmium | 149 | 137 | 5.43 | 113 - 160 | 103 - 171 |
| Calcium | 5190 | 4760 | 3.48 | 3890 - 5640 | 3460 - 6070 |
| Chromium | 163 | 154 | 3.79 | 126 - 181 | 108 - 200 |
| Cobalt | 127 | 121 | 5.07 | 101 - 141 | 90.8 - 151 |
| Copper | 57.0 | 54.9 | 4.13 | 46.1 - 63.6 | 41.1 - 68.6 |
| Iron | 15000 | 14100 | 6.27 | 8470 - 19700 | 4920 - 23200 |
| Lead | 133 | 130 | 3.00 | 107 - 152 | 93.3 - 167 |
| Magnesium | 2570 | 2320 | 3.32 | 1760 - 2880 | 1440 - 3200 |
| Manganese | 277 | 269 | 2.67 | 221 - 317 | 199 - 340 |
| Mercury | 21.6 | 20.5 | 7.72 | 14.7 - 26.3 | 12.3 - 28.6 |
| Molybdenum | 108 | 95.4 | 2.61 | 76.4 - 114 | 66.9 - 124 |
| Nickel | 58.7 | 53.9 | 4.97 | 44.5 - 63.3 | 37.7 - 70.0 |
| Potassium | 2420 | 2020 | 3.06 | 1410 - 2630 | 1190 - 2850 |
| Selenium | 181 | 167 | 5.63 | 132 - 201 | 113 - 221 |
| Silver | 35.5 | 33.6 | 5.20 | 26.8 - 40.3 | 23.0 - 44.1 |
| Sodium | 161 | 133 | 2.76 | 95.1 - 171 | 46.5 - 220 |
| Strontium | 89.7 | 87.9 | 4.59 | 71.7 - 104 | 62.8 - 113 |
| Thallium | 121 | 112 | 5.19 | 90.3 - 133 | 76.1 - 147 |



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# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Reference Value[7] | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Tin | 83.5 | 74.0 | 5.42 | 57.6 - 90.4 | 39.7 - 108 |
| Titanium | 474 | 333 | 7.17 | 48.6 - 617 | 46.3 - 620 |
| Uranium | 51.9 | 51.9 | 3.36 | 39.6 - 64.3 | 35.9 - 68.0 |
| Vanadium | 68.1 | 62.6 | 6.00 | 49.4 - 75.8 | 37.0 - 88.3 |
| Zinc | 165 | 158 | 2.34 | 128 - 188 | 111 - 205 |



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## ANALYTICAL VERIFICATION

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number[6] | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Aluminum | 10100 | 8130 | 80.5 | 196 | - | - |
| Antimony | 259 | 134 | 51.8 | 217 | - | - |
| Arsenic | 171 | 156 | 91.3 | 243 | - | - |
| Barium | 253 | 239 | 94.3 | 230 | - | - |
| Beryllium | 179 | 169 | 94.6 | 223 | - | - |
| Boron | 114 | 87.5 | 76.7 | 150 | - | - |
| Cadmium | 149 | 137 | 91.8 | 249 | - | - |
| Calcium | 5190 | 4760 | 91.8 | 184 | - | - |
| Chromium | 163 | 154 | 94.4 | 245 | - | - |
| Cobalt | 127 | 121 | 95.3 | 221 | - | - |
| Copper | 57.0 | 54.9 | 96.2 | 243 | - | - |
| Iron | 15000 | 14100 | 93.9 | 199 | - | - |
| Lead | 133 | 130 | 97.7 | 251 | - | - |
| Magnesium | 2570 | 2320 | 90.1 | 182 | - | - |
| Manganese | 277 | 269 | 97.2 | 220 | - | - |
| Mercury | 21.6 | 20.5 | 94.7 | 172 | - | - |
| Molybdenum | 108 | 95.4 | 88.3 | 218 | - | - |
| Nickel | 58.7 | 53.9 | 91.8 | 242 | - | - |
| Potassium | 2420 | 2020 | 83.5 | 187 | - | - |
| Selenium | 181 | 167 | 92.2 | 235 | - | - |
| Silver | 35.5 | 33.6 | 94.5 | 222 | - | - |
| Sodium | 161 | 133 | 82.7 | 177 | - | - |
| Strontium | 89.7 | 87.9 | 98.0 | 151 | - | - |
| Thallium | 121 | 112 | 92.2 | 219 | - | - |
| Tin | 83.5 | 74.0 | 88.6 | 170 | - | - |
| Titanium | 474 | 333 | 70.3 | 157 | - | - |
| Uranium | 51.9 | 51.9 | 100 | 60 | - | - |
| Vanadium | 68.1 | 62.6 | 91.9 | 213 | - | - |
| Zinc | 165 | 158 | 95.8 | 238 | - | - |



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# ▪ Certificate of Analysis ▪

1. The **Certified Values** are the actual gravimetric/volumetric "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$Uexpanded = k * SQRT((Uchar^2) + (Uhomogen^2) + (ULTS^2) + (USTS^2) + (URSS^2))$

Where:

Uexpanded = Expanded uncertainty.
k = Coverage factor.
Uchar = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
Uhomogen = Standard uncertainty of the homogeneity assessment.
ULTS = Standard uncertainty associated with long-term stability.
USTS = Standard uncertainty associated with short-term (transport) stability.
URSS = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this certified reference material alongside USEPA and NELAC compliant PT study materials. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and therefore, the acceptance limits of this certified reference material and any PT study material may differ relative to their difference in concentrations.

5. The **PT Performance Data** include the mean value, percent recovery and number of data points reported by laboratories in our Proficiency Testing study compared to the Certified Values. In the event this lot was not used in a proficiency testing scheme, the data displayed was generated internally by ERA.

6. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

7. The **Reference Values** are equal to the mean recoveries for the parameters as determined in an interlaboratory round robin study. The **Reference Values** represent the expected performance for the analytes in this standard. ERA recommends using the **Reference Values** when assessing or evaluating your results.

8. **Metrological Traceability**. This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

9. For additional information on this product such as intended use, storage information, instructions for use, minimum sample size, and safety information, please refer to the Product Use Instructions provided.

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.**

| Certifying Officer | Quality Officer |
|---|---|
| Brian Miller | Matthew Seebeck |



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Certified Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D113-540
**Certificate Issue Date:** March 23, 2021
**Expiration Date:** October 13, 2024
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8630 | 12.0 | 4420 - 12800 | 4370 - 12900 |
| Antimony | 256 | 129 | 16.8 | 0.742 - 257 | 25.6 - 323 |
| Arsenic | 91.6 | 84.5 | 15.1 | 70.0 - 99.0 | 59.2 - 110 |
| Barium | 259 | 249 | 9.94 | 206 - 292 | 187 - 311 |
| Beryllium | 175 | 163 | 3.89 | 135 - 191 | 122 - 204 |
| Boron | 95.7 | 76.7 | 12.8 | 55.7 - 97.7 | 48.0 - 107 |
| Cadmium | 107 | 99.0 | 11.5 | 82.2 - 116 | 74.2 - 124 |
| Calcium | 5190 | 4760 | 11.8 | 3890 - 5640 | 3460 - 6070 |
| Chromium | 129 | 122 | 14.6 | 101 - 144 | 85.7 - 159 |
| Cobalt | 63.6 | 61.7 | 11.5 | 51.9 - 71.6 | 46.3 - 77.2 |
| Copper | 62.3 | 61.5 | 12.3 | 51.9 - 71.0 | 46.1 - 76.8 |
| Iron | 15000 | 14500 | 15.7 | 8860 - 20100 | 5190 - 23800 |
| Lead | 122 | 123 | 13.9 | 103 - 144 | 88.3 - 158 |
| Lithium | 6.42 | 7.30 | 18.7 | 5.13 - 9.48 | 3.20 - 11.4 |
| Magnesium | 2570 | 2360 | 8.87 | 1810 - 2920 | 1480 - 3250 |
| Manganese | 470 | 456 | 13.4 | 375 - 538 | 350 - 563 |
| Mercury | 22.1 | 18.9 | 14.5 | 13.0 - 24.8 | 11.3 - 26.4 |
| Molybdenum | 80.1 | 72.8 | 11.0 | 58.7 - 87.0 | 50.5 - 95.2 |
| Nickel | 143 | 135 | 14.2 | 112 - 158 | 94.7 - 176 |
| Potassium | 2420 | 2090 | 8.21 | 1480 - 2700 | 1240 - 2940 |
| Selenium | 128 | 121 | 11.7 | 96.9 - 146 | 80.4 - 162 |
| Silver | 45.4 | 44.1 | 6.69 | 35.5 - 52.8 | 30.7 - 57.6 |
| Sodium | 161 | 136 | 9.34 | 97.4 - 174 | 48.1 - 223 |
| Strontium | 82.2 | 82.3 | 8.42 | 67.4 - 97.1 | 58.6 - 106 |



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# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Thallium | 154 | 144 | 7.54 | 117 - 171 | 101 - 187 |
| Tin | 89.7 | 79.8 | 14.0 | 62.2 - 97.4 | 43.5 - 116 |
| Titanium | 705 | 546 | 10.3 | 123 - 969 | 118 - 974 |
| Uranium | 29.5 | 30.9 | 3.38 | 23.9 - 37.9 | 21.3 - 40.5 |
| Vanadium | 196 | 186 | 14.2 | 148 - 224 | 138 - 235 |
| Zinc | 307 | 295 | 10.4 | 240 - 351 | 207 - 384 |



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# Calculation of 7470A Mercury

Calculate Mercury concentration from the daily calibration curve. The curve is generated utilizing a straight-line equation defined as:

$$A = k1 + k2C$$

Where:

A = Average peak height of the sample/standard integrations
C = Sample/Standard Concentration, µg/L
k1 = y-intercept
k2 = slope

The instrument will plot peak height against concentration (µg/L). The result is generated in µg/L . This value is divided by 1000 to convert the units to mg/L. If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

Result, mg/L = (concentration, µg/L) x ( 1mg/1000µg) x (DF)

# Calculation of 7471B Mercury

Calculate Mercury concentration from the daily calibration curve. The curve is generated utilizing a straight-line equation defined as:

$$A = k1 + k2C$$

Where:

A = Average peak height of the sample/standard integrations
C = Sample/Standard Concentration, µg/L
k1 = y-intercept
k2 = slope

The instrument will plot peak height against concentration (µg/L). The result is generated in µg/L . This value is divided by 1000 to convert the units to mg/L. If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

Result, mg/L = (concentration, µg/L) x ( 1mg/1000µg) x (DF)

The result in mg/kg is calculated on a dry weight basis using the sample weight digested(Wt), the final volume of the digestate(FV), and the percent total solids(%TS).

Result, mg/kg, wet = ((result, mg/L) x (FV)) /Wt

Result, mg/kg, dry wt = (Result, mg/kg wet)/(%TS)

| No. | Sample No. | NAME curve: WG2038787 |
|---|---|---|
| 1 | 1 | STD |
| 2 | 2 | STD |
| 3 | 3 | STD |
| 4 | 4 | STD |
| 5 | 5 | STD |
| 6 | 6 | STD |
| 1 | 7 | ICV |
| 2 | 8 | ICB |
| 3 | 9 | wg2038707-1 wg2038707 |
| 4 | 10 | wg2038707-2 wg2038707 |
| 5 | 11 | l2511919-02 wg2038707 |
| 6 | 12 | wg2038707-3 wg2038707 |
| 7 | 13 | wg2038707-4 wg2038707 |
| 8 | 14 | l2511919-01 wg2038707 |
| 9 | 15 | l2511919-04 wg2038707 |
| 10 | 16 | l2511919-05 wg2038707 |
| 11 | 17 | l2511919-07 wg2038707 |
| 12 | 18 | l2511919-08 wg2038707 |
| 13 | 19 | Check STD(5ug/L) |
| 14 | 20 | Check Blank |
| 15 | 21 | wg2038549-1 wg2038549 |
| 16 | 22 | wg2038549-2 wg2038549 |
| 17 | 23 | l2511799-03 wg2038549 |
| 18 | 24 | wg2038549-3 wg2038549 |
| 19 | 25 | wg2038549-4 wg2038549 |
| 20 | 26 | l2511799-04 wg2038549 |
| 21 | 27 | wg2038549-5 wg2038549 |
| 22 | 28 | wg2038549-6 wg2038549 |
| 23 | 29 | l2511799-01 wg2038549 |
| 24 | 30 | l2511799-02 wg2038549 |
| 25 | 31 | Check STD(5ug/L) |
| 26 | 32 | Check Blank |
| 27 | 33 | l2511799-10 wg2038549 |
| 28 | 34 | l2511799-11 wg2038549 |
| 29 | 35 | l2511799-12 wg2038549 |
| 30 | 36 | l2511799-13 wg2038549 |
| 31 | 37 | l2511799-14 wg2038549 |
| 32 | 38 | l2511799-15 wg2038549 |
| 33 | 39 | l2511799-16 wg2038549 |
| 34 | 40 | l2511799-17 wg2038549 |
| 35 | 43 | Check STD(5ug/L) |
| 36 | 44 | Check Blank |
| 37 | 45 | WG2038720-1 WG2038720 |

| | | |
|---|---|---|
| 38 | 46 | WG2038720-2 WG2038720 |
| 39 | 47 | l2511871-01 WG2038720 |
| 40 | 48 | WG2038720-3 WG2038720 |
| 41 | 49 | WG2038720-4 WG2038720 |
| 42 | 50 | l2512921-03 WG2038720 |
| 43 | 55 | Check STD(5ug/L) |
| 44 | 56 | Check Blank |
| 45 | 57 | wg2038704-1 wg2038704 |
| 46 | 58 | wg2038704-2 wg2038704 |
| 47 | 59 | L2511986-01 wg2038704 |
| 48 | 60 | wg2038704-3 wg2038704 |
| 49 | 61 | wg2038704-4 wg2038704 |
| 50 | 62 | L2511919-01 wg2038704 |
| 51 | 63 | L2511919-04 wg2038704 |
| 52 | 64 | L2511919-05 wg2038704 |
| 53 | 65 | L2511919-07 wg2038704 |
| 54 | 66 | L2511919-08 wg2038704 |
| 55 | 67 | Check STD(5ug/L) |
| 56 | 68 | Check Blank |
| 57 | 69 | L2511986-02 wg2038704 |
| 58 | 70 | L2511986-03 wg2038704 |
| 59 | 71 | L2511986-04 wg2038704 |
| 60 | 79 | Check STD(5ug/L) |
| 61 | 80 | Check Blank |

| No. | Sample No. | NAME CURVE: WG2040297 |
|---|---|---|
| 1 | 1 | STD |
| 2 | 2 | STD |
| 3 | 3 | STD |
| 4 | 4 | STD |
| 5 | 5 | STD |
| 6 | 6 | STD |
| 1 | 7 | ICV |
| 2 | 8 | ICB |
| 3 | 9 | XHG2510121205NRS |
| 4 | 10 | l2512537-02 wg2038324 |
| 5 | 11 | l2512537-03 wg2038324 |
| 6 | 12 | l2512537-04 wg2038324 |
| 7 | 13 | l2512537-05 wg2038324 |
| 8 | 14 | l2512537-06 wg2038324 |
| 9 | 15 | l2512537-07 wg2038324 |
| 10 | 16 | l2512537-08 wg2038324 |
| 11 | 17 | l2512537-10 wg2038324 |
| 12 | 18 | l2512537-11 wg2038324 |
| 13 | 19 | Check STD(5ug/L) |
| 14 | 20 | Check Blank |
| 15 | 21 | l2512537-12 wg2038324 |
| 16 | 22 | l2512537-13 wg2038324 |
| 17 | 23 | l2512537-14 wg2038324 |
| 18 | 24 | l2512537-15 wg2038324 |
| 19 | 25 | l2512537-16 wg2038324 |
| 20 | 26 | l2513015-01 wg2038324 |
| 21 | 27 | l2513065-01 wg2038324 |
| 22 | 28 | l2513065-02 wg2038324 |
| 23 | 31 | Check STD(5ug/L) |
| 24 | 32 | Check Blank |
| 25 | 33 | wg2040176-1 wg2040176 |
| 26 | 34 | wg2040176-2 wg2040176 |
| 27 | 35 | l2513124-01 wg2040176 |
| 28 | 36 | wg2040176-3 wg2040176 |
| 29 | 37 | wg2040176-4 wg2040176 |
| 30 | 38 | l2512993-01 wg2040176 |
| 31 | 39 | l2512993-11 wg2040176 |
| 32 | 40 | l2513446-01 wg2040176 |
| 33 | 41 | l2513491-01 wg2040176 |
| 34 | 42 | l2513491-02 wg2040176 |
| 35 | 43 | Check STD(5ug/L) |
| 36 | 44 | Check Blank |
| 37 | 45 | l2513491-03 wg2040176 |

| | | |
|---|---|---|
| 38 | 46 | l2513491-04 wg2040176 |
| 39 | 47 | l2513491-05 wg2040176 |
| 40 | 48 | l2513491-06 wg2040176 |
| 41 | 49 | l2513491-07 wg2040176 |
| 42 | 50 | wg2040444-1 wg2040444 |
| 43 | 51 | wg2040444-2 wg2040444 |
| 44 | 52 | l2513350-01 wg2040444 |
| 45 | 53 | wg2040444-3 wg2040444 |
| 46 | 54 | wg2040444-4 wg2040444 |
| 47 | 55 | Check STD(5ug/L) |
| 48 | 56 | Check Blank |
| 49 | 57 | l2513385-01 wg2040444 |
| 50 | 58 | l2513385-02 wg2040444 |
| 51 | 59 | l2513385-03 wg2040444 |
| 52 | 60 | l2513385-04 wg2040444 |
| 53 | 61 | l2513385-05 wg2040444 |
| 54 | 62 | CLR SOL TEST |
| 55 | 63 | wg2040265-1 wg2040265 |
| 56 | 64 | wg2040265-2 wg2040265 |
| 57 | 65 | l2513130-01 wg2040265 |
| 58 | 66 | wg2040265-3 wg2040265 |
| 59 | 67 | Check STD(5ug/L) |
| 60 | 68 | Check Blank |
| 61 | 69 | wg2040265-4 wg2040265 |
| 62 | 70 | l2511919-02 wg2040265 |
| 63 | 71 | l2512981-01 wg2040265 |
| 64 | 72 | l2512983-01 wg2040265 |
| 65 | 73 | l2512983-07 wg2040265 |
| 66 | 74 | l2512983-08 wg2040265 |
| 67 | 75 | l2512983-09 wg2040265 |
| 68 | 76 | l2513081-01 wg2040265 |
| 69 | 77 | l2513086-01 wg2040265 |
| 70 | 78 | l2513130-02 wg2040265 |
| 71 | 79 | Check STD(5ug/L) |
| 72 | 80 | Check Blank |

# METALS ELN REPORT

**Workgroup: WG2038704**

## Digestion

| Prep Method | Acid Type 1 | Acid 1 Lot | Acid Type 2 | Acid 2 Lot | Spike Type | Lims Spike Lot | Spike Lot | Post Spike Spikelot | Spike Lot | Pipette Id |
|---|---|---|---|---|---|---|---|---|---|---|
| EPA 245.1 | HNO3 | 24015917 | H2SO4 | 24016430 | METALS | METSPIKE | HG25080616 10NRS | METSPIKE | HG25080616 10NRS | 320, 344 |

| | | |
|---|---|---|
| **Additional Reagent/Std** | K2O8S2 | PS2509031333AJT |
| | KMnO4 | PP25010101205NRS |
| | NaCl-NH2OH.HCl | HH2509071510MJR |
| | | ICV2508241205CME |

| **Sample/ Type** | Digestion Date | Analyst | Sample Vol **ml** | Spike Amt **ml** | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | **Comments** |
|---|---|---|---|---|---|---|---|---|---|---|
| L2511919-01 SAMP | 03/11/25 04:08 | Christine Hamor | 25 | | 03/11/25 04:08 | 5 | 94.4 | 03/11/25 06:08 | 25 | |
| L2511919-04 SAMP | 03/11/25 04:08 | Christine Hamor | 25 | | 03/11/25 04:08 | 5 | 94.4 | 03/11/25 06:08 | 25 | |
| L2511919-05 SAMP | 03/11/25 04:08 | Christine Hamor | 25 | | 03/11/25 04:08 | 5 | 94.4 | 03/11/25 06:08 | 25 | |
| L2511919-07 SAMP | 03/11/25 04:08 | Christine Hamor | 25 | | 03/11/25 04:08 | 5 | 94.4 | 03/11/25 06:08 | 25 | |
| L2511919-08 SAMP | 03/11/25 04:08 | Christine Hamor | 25 | | 03/11/25 04:08 | 5 | 94.4 | 03/11/25 06:08 | 25 | |
| L2511986-01 SAMP | 03/11/25 04:08 | Christine Hamor | 25 | | 03/11/25 04:08 | 5 | 94.4 | 03/11/25 06:08 | 25 | |
| L2511986-02 SAMP | 03/11/25 04:08 | Christine Hamor | 25 | | 03/11/25 04:08 | 5 | 94.4 | 03/11/25 06:08 | 25 | |
| L2511986-03 SAMP | 03/11/25 04:08 | Christine Hamor | 25 | | 03/11/25 04:08 | 5 | 94.4 | 03/11/25 06:08 | 25 | |



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# METALS ELN REPORT

**Workgroup: WG2038704**

| Sample/ Type | Digestion Date | Analyst | Sample Vol ml | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| L2511986-04 SAMP | 03/11/25 04:08 | Christine Hamor | 25 | | 03/11/25 04:08 | 5 | 94.4 | 03/11/25 06:08 | 25 | |
| WG2038704-1 BLANK | 03/11/25 04:08 | Christine Hamor | 25 | | 03/11/25 04:08 | 5 | 94.4 | 03/11/25 06:08 | 25 | ELN check:ajt |
| WG2038704-2 LCS | 03/11/25 04:08 | Christine Hamor | 25 | .25 | 03/11/25 04:08 | 5 | 94.4 | 03/11/25 06:08 | 25 | |
| WG2038704-3 MS | 03/11/25 04:08 | Christine Hamor | 25 | 1.25 | 03/11/25 04:08 | 5 | 94.4 | 03/11/25 06:08 | 25 | |
| WG2038704-4 DUP | 03/11/25 04:08 | Christine Hamor | 25 | | 03/11/25 04:08 | 5 | 94.4 | 03/11/25 06:08 | 25 | |

| Reagent | Actual Volume | Units |
|---|---|---|
| Sulfuric Acid (H2SO4) | 1.25 | ml |
| Nitric Acid (HNO3) | .625 | ml |
| Potassium Permanganat | 3.75 | ml |
| Potassium Persulfate (K | 2 | ml |
| NaCl-Hydroxylamine Hy | 1.5 | ml |



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# METALS ELN REPORT

**Workgroup: WG2038707**

## Digestion

| Prep Method | Acid Type 1 | Acid 1 Lot | Acid Type 2 | Acid 2 Lot | Spike Type | Lims Spike Lot | Spike Lot | Post Spike Spikelot | Spike Lot | Pipette Id |
|---|---|---|---|---|---|---|---|---|---|---|
| EPA 245.1 | HNO3 | 24015917 | H2SO4 | 24016430 | METALS | METSPIKE | HG25080616 10NRS | METSPIKE | HG25080616 10NRS | 320, 344 |

| | | |
|---|---|---|
| **Additional Reagent/Std** | K2O8S2 | PS2509031333AJT |
| | KMnO4 | PP25010101205NRS |
| | NaCl-NH2OH.HCl | HH2509071510MJR |
| | | ICV2508241205CME |

| Sample/ Type | Digestion Date | Analyst | Lab Filtration Date | Sample Vol ml | Spike Amt | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| L2511919-01 SAMP | 03/10/25 17:40 | German Nimaja | NA | 25 | | 03/10/25 17:40 | 8 | 96.0 | 03/10/25 19:40 | 25 | |
| L2511919-02 SAMP | 03/10/25 17:40 | German Nimaja | NA | 25 | | 03/10/25 17:40 | 8 | 96.0 | 03/10/25 19:40 | 25 | |
| L2511919-04 SAMP | 03/10/25 17:40 | German Nimaja | NA | 25 | | 03/10/25 17:40 | 8 | 96.0 | 03/10/25 19:40 | 25 | |
| L2511919-05 SAMP | 03/10/25 17:40 | German Nimaja | NA | 25 | | 03/10/25 17:40 | 8 | 96.0 | 03/10/25 19:40 | 25 | |
| L2511919-07 SAMP | 03/10/25 17:40 | German Nimaja | NA | 25 | | 03/10/25 17:40 | 8 | 96.0 | 03/10/25 19:40 | 25 | |
| L2511919-08 SAMP | 03/10/25 17:40 | German Nimaja | NA | 25 | | 03/10/25 17:40 | 8 | 96.0 | 03/10/25 19:40 | 25 | |
| WG2038707-1 BLANK | 03/10/25 17:40 | German Nimaja | NA | 25 | | 03/10/25 17:40 | 8 | 96.0 | 03/10/25 19:40 | 25 | ELN: mgm |
| WG2038707-2 LCS | 03/10/25 17:40 | German Nimaja | NA | 25 | .25 | 03/10/25 17:40 | 8 | 96.0 | 03/10/25 19:40 | 25 | |



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# METALS ELN REPORT

**Workgroup: WG2038707**

| Sample/ Type | Digestion Date | Analyst | Lab Filtration Date | Sample Vol | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WG2038707-3 MS | 03/10/25 17:40 | German Nimaja | NA | 25 | 1.25 | 03/10/25 17:40 | 8 | 96.0 | 03/10/25 19:40 | 25 | |
| WG2038707-4 DUP | 03/10/25 17:40 | German Nimaja | NA | 25 | | 03/10/25 17:40 | 8 | 96.0 | 03/10/25 19:40 | 25 | |

| Reagent | Actual Volume | Units |
|---|---|---|
| Sulfuric Acid (H2SO4) | 1.25 | ml |
| Nitric Acid (HNO3) | .625 | ml |
| Potassium Permanganat | 3.75 | ml |
| Potassium Persulfate (K | 2 | ml |
| NaCl-Hydroxylamine Hy | 1.5 | ml |



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# METALS ELN REPORT

**Workgroup: WG2040265**

## Digestion

| Prep Method | Acid Type 1 | Acid 1 Lot | Acid Type 2 | Acid 2 Lot | Spike Type | Lims Spike Lot | Spike Lot | Post Spike Spikelot | Spike Lot | Pipette Id |
|---|---|---|---|---|---|---|---|---|---|---|
| EPA 245.1 | HNO3 | 24015917 | H2SO4 | 24016430 | METALS | METSPIKE | HG25080616 10NRS | METSPIKE | HG25080616 10NRS | 320, 344 |

| | | |
|---|---|---|
| **Additional Reagent/Std** | K2O8S2 | PS2509061645NRS |
| | KMnO4 | PP2510111151SAM |
| | NaCl-NH2OH.HCl | HH2510111326JWN |
| | | ICV2510101724NRS |

| **Sample/ Type** | Digestion Date | Analyst | Sample Vol **ml** | Spike Amt **ml** | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | **Comments** |
|---|---|---|---|---|---|---|---|---|---|---|
| L2511919-02 SAMP | 03/14/25 11:54 | Joshua Holmes | 25 | | 03/14/25 11:54 | 5 | 95.0 | 03/14/25 13:54 | 25 | |
| L2512981-01 WATER | 03/14/25 11:54 | Joshua Holmes | 25 | | 03/14/25 11:54 | 5 | 95.0 | 03/14/25 13:54 | 25 | |
| L2512983-01 SAMP | 03/14/25 11:54 | Joshua Holmes | 25 | | 03/14/25 11:54 | 5 | 95.0 | 03/14/25 13:54 | 25 | |
| L2512983-07 SAMP | 03/14/25 11:54 | Joshua Holmes | 25 | | 03/14/25 11:54 | 5 | 95.0 | 03/14/25 13:54 | 25 | |
| L2512983-08 SAMP | 03/14/25 11:54 | Joshua Holmes | 25 | | 03/14/25 11:54 | 5 | 95.0 | 03/14/25 13:54 | 25 | |
| L2512983-09 SAMP | 03/14/25 11:54 | Joshua Holmes | 25 | | 03/14/25 11:54 | 5 | 95.0 | 03/14/25 13:54 | 25 | |
| L2513081-01 SAMP | 03/14/25 11:54 | Joshua Holmes | 25 | | 03/14/25 11:54 | 5 | 95.0 | 03/14/25 13:54 | 25 | |
| L2513086-01 SAMP | 03/14/25 11:54 | Joshua Holmes | 25 | | 03/14/25 11:54 | 5 | 95.0 | 03/14/25 13:54 | 25 | |



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# METALS ELN REPORT

**Workgroup: WG2040265**

| Sample/ Type | Digestion Date | Analyst | Sample Vol ml | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| L2513130-01 SAMP | 03/14/25 11:54 | Joshua Holmes | 25 | | 03/14/25 11:54 | 5 | 95.0 | 03/14/25 13:54 | 25 | |
| L2513130-02 SAMP | 03/14/25 11:54 | Joshua Holmes | 25 | | 03/14/25 11:54 | 5 | 95.0 | 03/14/25 13:54 | 25 | |
| WG2040265-1 BLANK | 03/14/25 11:54 | Joshua Holmes | 25 | | 03/14/25 11:54 | 5 | 95.0 | 03/14/25 13:54 | 25 | ELN CHECK: ADG |
| WG2040265-2 LCS | 03/14/25 11:54 | Joshua Holmes | 25 | 0.25 | 03/14/25 11:54 | 5 | 95.0 | 03/14/25 13:54 | 25 | |
| WG2040265-3 MS | 03/14/25 11:54 | Joshua Holmes | 25 | 1.25 | 03/14/25 11:54 | 5 | 95.0 | 03/14/25 13:54 | 25 | |
| WG2040265-4 DUP | 03/14/25 11:54 | Joshua Holmes | 25 | | 03/14/25 11:54 | 5 | 95.0 | 03/14/25 13:54 | 25 | |

| Reagent | Actual Volume | Units |
|---|---|---|
| Sulfuric Acid (H2SO4) | 1.25 | ml |
| Nitric Acid (HNO3) | .625 | ml |
| Potassium Permanganat | 3.75 | ml |
| Potassium Persulfate (K | 2 | ml |
| NaCl-Hydroxylamine Hy | 1.5 | ml |



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# Metals

# Inorganic Data
# ( ICP Analysis)

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-01 | Date Collected | : 03/05/25 11:20 |
| Client ID | : 5A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 15:42 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2039408.pdf | Instrument ID | : TRACE6 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| CAS NO. | Parameter | mg/l Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.0152 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 24.1 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | 0.0097 | 0.0500 | 0.0090 | J |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 4.70 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | 0.0180 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | 1.89 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 9.18 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | 0.0134 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-04 | Date Collected | : 03/05/25 09:25 |
| Client ID | : 6A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 15:09 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2039408.pdf | Instrument ID | : TRACE6 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| CAS NO. | Parameter | mg/l Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.0180 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 26.9 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | 0.0176 | 0.0500 | 0.0090 | J |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 5.55 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | 0.0027 | 0.0100 | 0.0016 | J |
| 7440-02-0 | Nickel, Total | 0.0157 | 0.0250 | 0.0024 | J |
| 7440-09-7 | Potassium, Total | 1.19 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 9.50 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | 0.0131 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-05 | Date Collected | : 03/05/25 09:27 |
| Client ID | : 6B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 15:16 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2039408.pdf | Instrument ID | : TRACE6 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| CAS NO. | Parameter | mg/l Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.0391 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 22.5 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | 0.0236 | 0.0500 | 0.0090 | J |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 4.84 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | ND | 0.0100 | 0.0016 | U |
| 7440-02-0 | Nickel, Total | 0.0089 | 0.0250 | 0.0024 | J |
| 7440-09-7 | Potassium, Total | 1.21 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 10.5 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | 0.0121 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-07 | Date Collected | : 03/05/25 08:15 |
| Client ID | : 7A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 15:22 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2039408.pdf | Instrument ID | : TRACE6 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.116 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 78.5 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | 0.0024 | 0.0100 | 0.0022 | J |
| 7439-89-6 | Iron, Total | 0.0139 | 0.0500 | 0.0090 | J |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 14.3 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | 3.31 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | 12.0 | 2.50 | 0.237 | |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 14.1 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | 0.0067 | 0.0100 | 0.0020 | J |
| 7440-66-6 | Zinc, Total | 0.0152 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-08 | Date Collected | : 03/05/25 08:13 |
| Client ID | : 7B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 15:29 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2039408.pdf | Instrument ID | : TRACE6 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.0319 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 31.5 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | 0.0022 | 0.0100 | 0.0021 | J |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | 0.0644 | 0.0500 | 0.0090 | |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 5.78 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | 0.0147 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Total | 0.0043 | 0.0250 | 0.0024 | J |
| 7440-09-7 | Potassium, Total | 1.62 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 12.5 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | 0.0135 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-10 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 14:08 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2039408.pdf | Instrument ID | : TRACE6 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| CAS NO. | Parameter | mg/l Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.0308 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 13.8 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | 0.0168 | 0.0500 | 0.0090 | J |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 2.72 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | 0.0016 | 0.0100 | 0.0016 | J |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | 2.19 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 12.2 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | 0.0125 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-11 | Date Collected | : 03/05/25 16:45 |
| Client ID | : 8B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 15:35 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2039408.pdf | Instrument ID | : TRACE6 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Total | 0.119 | 0.100 | 0.0318 | |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.0026 | 0.0100 | 0.0021 | J |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 8.54 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | 1.18 | 0.0500 | 0.0090 | |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 3.26 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | 0.0352 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | 1.05 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 5.96 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | 0.0117 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-13 | Date Collected | : 03/05/25 14:10 |
| Client ID | : 9A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 20:35 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2039408.pdf | Instrument ID | : TRACE6 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.0401 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 12.9 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 4.46 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | 0.0043 | 0.0100 | 0.0016 | J |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | 1.83 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 10.4 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | 0.0124 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-14 | Date Collected | : 03/05/25 15:15 |
| Client ID | : 9B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 20:42 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2039408.pdf | Instrument ID | : TRACE6 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Total | 0.0491 | 0.100 | 0.0318 | J |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 31.9 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | 0.0068 | 0.0100 | 0.0021 | J |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | 0.182 | 0.0500 | 0.0090 | |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 3.89 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | 0.0623 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Total | 0.0029 | 0.0250 | 0.0024 | J |
| 7440-09-7 | Potassium, Total | 1.65 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 7.83 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | 0.0139 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-16 | Date Collected | : 03/05/25 12:45 |
| Client ID | : 10A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 20:49 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2039408.pdf | Instrument ID | : TRACE6 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.0405 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 20.5 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 6.01 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | 0.0047 | 0.0100 | 0.0016 | J |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | 1.99 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 10.5 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | 0.0125 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-17 | Date Collected | : 03/05/25 12:55 |
| Client ID | : 10B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 20:55 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2039408.pdf | Instrument ID | : TRACE6 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.0231 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 14.5 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | 0.0029 | 0.0200 | 0.0017 | J |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | 0.340 | 0.0500 | 0.0090 | |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 6.18 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | 0.0245 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Total | 0.0048 | 0.0250 | 0.0024 | J |
| 7440-09-7 | Potassium, Total | 1.24 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 14.2 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | 0.0257 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-19 | Date Collected | : 03/05/25 00:00 |
| Client ID | : DUP001 | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 21:02 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2039408.pdf | Instrument ID | : TRACE6 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.0410 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 20.9 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 6.11 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | 0.0029 | 0.0100 | 0.0016 | J |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | 2.03 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 10.6 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | 0.0129 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2039059-1 | Date Collected | : NA |
| Client ID | : WG2039059-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/12/25 13:42 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2039408.pdf | Instrument ID | : TRACE6 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 0.0502 | 0.100 | 0.0350 | J |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | ND | 0.100 | 0.0153 | U |
| 7439-96-5 | Manganese, Total | ND | 0.0100 | 0.0016 | U |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | ND | 2.50 | 0.237 | U |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | ND | 2.00 | 0.120 | U |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | ND | 0.0050 | 0.0021 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2039059-6 | Date Collected | : |
| Client ID | : Serial Dilution | Date Received | : |
| Sample Location | : | Date Analyzed | : 03/12/25 14:33 |
| Sample Matrix | : WATER | Dilution Factor | : 5 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2039408.pdf | Instrument ID | : TRACE6 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7440-70-2 | Calcium, Total | 13.8 | 0.500 | 0.175 | |
| 7439-95-4 | Magnesium, Total | 2.70 | 0.500 | 0.077 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2039059-8 | Date Collected | : 03/05/25 11:20 |
| Client ID | : 5ADUP | Date Received | : 03/05/25 |
| Sample Location | : | Date Analyzed | : 03/12/25 15:55 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2039408.pdf | Instrument ID | : TRACE6 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| CAS NO. | Parameter | mg/l Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.032 | U |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.007 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.002 | U |
| 7440-39-3 | Barium, Total | 0.0151 | 0.0100 | 0.002 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.001 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.001 | U |
| 7440-70-2 | Calcium, Total | 23.8 | 0.100 | 0.035 | |
| 7440-47-3 | Chromium, Total | ND | 0.0100 | 0.002 | U |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.002 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.002 | U |
| 7439-89-6 | Iron, Total | ND | 0.0500 | 0.009 | U |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.003 | U |
| 7439-95-4 | Magnesium, Total | 4.66 | 0.100 | 0.015 | |
| 7439-96-5 | Manganese, Total | ND | 0.0100 | 0.002 | U |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.002 | U |
| 7440-09-7 | Potassium, Total | 1.88 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.004 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.003 | U |
| 7440-23-5 | Sodium, Total | 9.12 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.003 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.002 | U |
| 7440-66-6 | Zinc, Total | 0.0132 | 0.0050 | 0.002 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2039059-10 | Date Collected | : |
| Client ID | : Serial Dilution | Date Received | : |
| Sample Location | : | Date Analyzed | : 03/12/25 16:08 |
| Sample Matrix | : WATER | Dilution Factor | : 5 |
| Analytical Method | : 19,200.7 | Analyst | : DHL |
| Lab File ID | : WG2039408.pdf | Instrument ID | : TRACE6 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7440-70-2 | Calcium, Total | 23.8 | 0.500 | 0.175 | |
| 7439-95-4 | Magnesium, Total | 4.75 | 0.500 | 0.077 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-01 | Date Collected | : 03/05/25 11:20 |
| Client ID | : 5A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 20:21 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DMC |
| Lab File ID | : WG2039392.pdf | Instrument ID | : TRACE5 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0145 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 22.8 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | 0.0061 | 0.0100 | 0.0022 | J |
| 7439-89-6 | Iron, Dissolved | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 4.71 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | ND | 0.0100 | 0.0016 | U |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | 1.66 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 8.71 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0272 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-02 | Date Collected | : 03/05/25 11:25 |
| Client ID | : 5B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 21:05 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DMC |
| Lab File ID | : WG2039392.pdf | Instrument ID | : TRACE5 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0680 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 16.6 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | 0.0040 | 0.0100 | 0.0022 | J |
| 7439-89-6 | Iron, Dissolved | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 7.61 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | ND | 0.0100 | 0.0016 | U |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | 1.04 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 12.1 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0233 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-04 | Date Collected | : 03/05/25 09:25 |
| Client ID | : 6A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 21:11 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DMC |
| Lab File ID | : WG2039392.pdf | Instrument ID | : TRACE5 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| CAS NO. | Parameter | mg/l Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0173 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 25.0 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | 0.0080 | 0.0100 | 0.0022 | J |
| 7439-89-6 | Iron, Dissolved | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 5.56 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | 0.0026 | 0.0100 | 0.0016 | J |
| 7440-02-0 | Nickel, Dissolved | 0.0162 | 0.0250 | 0.0024 | J |
| 7440-09-7 | Potassium, Dissolved | 1.03 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 8.80 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0308 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-05 | Date Collected | : 03/05/25 09:27 |
| Client ID | : 6B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 21:18 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DMC |
| Lab File ID | : WG2039392.pdf | Instrument ID | : TRACE5 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0406 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 23.1 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | 0.0122 | 0.0100 | 0.0022 | |
| 7439-89-6 | Iron, Dissolved | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 4.96 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | 0.0047 | 0.0100 | 0.0016 | J |
| 7440-02-0 | Nickel, Dissolved | 0.0094 | 0.0250 | 0.0024 | J |
| 7440-09-7 | Potassium, Dissolved | 1.18 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 10.7 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0310 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-07 | Date Collected | : 03/05/25 08:15 |
| Client ID | : 7A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 21:24 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DMC |
| Lab File ID | : WG2039392.pdf | Instrument ID | : TRACE5 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.105 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 77.0 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | 0.0067 | 0.0100 | 0.0022 | J |
| 7439-89-6 | Iron, Dissolved | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 14.0 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | 2.98 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | 11.0 | 2.50 | 0.237 | |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 13.2 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | 0.0033 | 0.0100 | 0.0020 | J |
| 7440-66-6 | Zinc, Dissolved | 0.0216 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-08 | Date Collected | : 03/05/25 08:13 |
| Client ID | : 7B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 21:30 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DMC |
| Lab File ID | : WG2039392.pdf | Instrument ID | : TRACE5 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0321 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 31.9 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Dissolved | 0.0500 | 0.0500 | 0.0090 | |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 5.92 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | 0.0115 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Dissolved | 0.0042 | 0.0250 | 0.0024 | J |
| 7440-09-7 | Potassium, Dissolved | 1.53 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 12.6 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0185 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-10 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 19:50 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DMC |
| Lab File ID | : WG2039392.pdf | Instrument ID | : TRACE5 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0304 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 13.1 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Dissolved | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 2.67 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | ND | 0.0100 | 0.0016 | U |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | 2.02 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 11.1 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0173 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-11 | Date Collected | : 03/05/25 16:45 |
| Client ID | : 8B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 21:37 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DMC |
| Lab File ID | : WG2039392.pdf | Instrument ID | : TRACE5 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0026 | 0.0100 | 0.0021 | J |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 8.51 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | 0.0144 | 0.0100 | 0.0022 | |
| 7439-89-6 | Iron, Dissolved | 0.986 | 0.0500 | 0.0090 | |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 3.32 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | 0.0328 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | 0.941 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 6.00 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0319 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-13 | Date Collected | : 03/05/25 14:10 |
| Client ID | : 9A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 21:43 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DMC |
| Lab File ID | : WG2039392.pdf | Instrument ID | : TRACE5 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0427 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 15.0 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Dissolved | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 4.74 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | 0.0026 | 0.0100 | 0.0016 | J |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | 2.03 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 11.8 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0139 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-14 | Date Collected | : 03/05/25 15:15 |
| Client ID | : 9B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 21:49 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DMC |
| Lab File ID | : WG2039392.pdf | Instrument ID | : TRACE5 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 31.0 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Dissolved | 0.0291 | 0.0500 | 0.0090 | J |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 3.97 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | 0.0526 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | 1.49 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 7.54 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0147 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-16 | Date Collected | : 03/05/25 12:45 |
| Client ID | : 10A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 22:08 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DMC |
| Lab File ID | : WG2039392.pdf | Instrument ID | : TRACE5 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0446 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 21.5 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | 0.0113 | 0.0100 | 0.0022 | |
| 7439-89-6 | Iron, Dissolved | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 6.27 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | 0.0032 | 0.0100 | 0.0016 | J |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | 2.01 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 11.2 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0354 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-17 | Date Collected | : 03/05/25 12:55 |
| Client ID | : 10B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 22:15 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DMC |
| Lab File ID | : WG2039392.pdf | Instrument ID | : TRACE5 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0227 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 13.9 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | 0.0034 | 0.0200 | 0.0017 | J |
| 7440-50-8 | Copper, Dissolved | 0.0104 | 0.0100 | 0.0022 | |
| 7439-89-6 | Iron, Dissolved | 0.325 | 0.0500 | 0.0090 | |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 6.42 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | 0.0262 | 0.0100 | 0.0016 | |
| 7440-02-0 | Nickel, Dissolved | 0.0054 | 0.0250 | 0.0024 | J |
| 7440-09-7 | Potassium, Dissolved | 1.11 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 13.3 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0402 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-19 | Date Collected | : 03/05/25 00:00 |
| Client ID | : DUP001 | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 22:21 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DMC |
| Lab File ID | : WG2039392.pdf | Instrument ID | : TRACE5 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | 0.0409 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | 19.9 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Dissolved | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | 6.29 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Dissolved | 0.0025 | 0.0100 | 0.0016 | J |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | 1.84 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | 10.5 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0157 | 0.0050 | 0.0021 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2039054-1 | Date Collected | : NA |
| Client ID | : WG2039054-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/12/25 19:37 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DMC |
| Lab File ID | : WG2039392.pdf | Instrument ID | : TRACE5 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Dissolved | ND | 0.100 | 0.0350 | U |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.0021 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Dissolved | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Dissolved | ND | 0.0500 | 0.0090 | U |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Dissolved | ND | 0.100 | 0.0153 | U |
| 7439-96-5 | Manganese, Dissolved | 0.0033 | 0.0100 | 0.0016 | J |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Dissolved | ND | 2.50 | 0.237 | U |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Dissolved | ND | 2.00 | 0.120 | U |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Dissolved | ND | 0.0050 | 0.0021 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2039054-6 | Date Collected | : |
| Client ID | : Serial Dilution | Date Received | : |
| Sample Location | : | Date Analyzed | : 03/12/25 20:14 |
| Sample Matrix | : WATER | Dilution Factor | : 5 |
| Analytical Method | : 19,200.7 | Analyst | : DMC |
| Lab File ID | : WG2039392.pdf | Instrument ID | : TRACE5 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7440-70-2 | Calcium, Dissolved | 14.1 | 0.500 | 0.175 | |
| 7439-95-4 | Magnesium, Dissolved | 2.74 | 0.500 | 0.077 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2039054-8 | Date Collected | : 03/05/25 11:20 |
| Client ID | : 5ADUP | Date Received | : 03/05/25 |
| Sample Location | : | Date Analyzed | : 03/12/25 20:33 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : DMC |
| Lab File ID | : WG2039392.pdf | Instrument ID | : TRACE5 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| CAS NO. | Parameter | mg/l Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum, Dissolved | ND | 0.100 | 0.032 | U |
| 7440-36-0 | Antimony, Dissolved | ND | 0.0500 | 0.007 | U |
| 7440-38-2 | Arsenic, Dissolved | ND | 0.0050 | 0.002 | U |
| 7440-39-3 | Barium, Dissolved | 0.0156 | 0.0100 | 0.002 | |
| 7440-41-7 | Beryllium, Dissolved | ND | 0.0050 | 0.001 | U |
| 7440-43-9 | Cadmium, Dissolved | ND | 0.0050 | 0.001 | U |
| 7440-70-2 | Calcium, Dissolved | 23.8 | 0.100 | 0.035 | |
| 7440-47-3 | Chromium, Dissolved | ND | 0.0100 | 0.002 | U |
| 7440-48-4 | Cobalt, Dissolved | ND | 0.0200 | 0.002 | U |
| 7440-50-8 | Copper, Dissolved | 0.0061 | 0.0100 | 0.002 | J |
| 7439-89-6 | Iron, Dissolved | ND | 0.0500 | 0.009 | U |
| 7439-92-1 | Lead, Dissolved | ND | 0.0100 | 0.003 | U |
| 7439-95-4 | Magnesium, Dissolved | 4.85 | 0.100 | 0.015 | |
| 7439-96-5 | Manganese, Dissolved | ND | 0.0100 | 0.002 | U |
| 7440-02-0 | Nickel, Dissolved | ND | 0.0250 | 0.002 | U |
| 7440-09-7 | Potassium, Dissolved | 1.76 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Dissolved | ND | 0.0100 | 0.004 | U |
| 7440-22-4 | Silver, Dissolved | ND | 0.0070 | 0.003 | U |
| 7440-23-5 | Sodium, Dissolved | 9.09 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Dissolved | ND | 0.0200 | 0.003 | U |
| 7440-62-2 | Vanadium, Dissolved | ND | 0.0100 | 0.002 | U |
| 7440-66-6 | Zinc, Dissolved | 0.0278 | 0.0050 | 0.002 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2039054-10 | Date Collected | : |
| Client ID | : Serial Dilution | Date Received | : |
| Sample Location | : | Date Analyzed | : 03/12/25 20:59 |
| Sample Matrix | : WATER | Dilution Factor | : 5 |
| Analytical Method | : 19,200.7 | Analyst | : DMC |
| Lab File ID | : WG2039392.pdf | Instrument ID | : TRACE5 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7440-70-2 | Calcium, Dissolved | 24.2 | 0.500 | 0.175 | |
| 7439-95-4 | Magnesium, Dissolved | 4.81 | 0.500 | 0.077 | |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-02 | Date Collected | : 03/05/25 11:25 |
| Client ID | : 5B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 13:04 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 19,200.7 | Analyst | : JMF |
| Lab File ID | : WG2039956.pdf | Instrument ID | : TRACE9 |
| Sample Amount | : 50ml | %Solids | : N/A |
| Digestion Method | : EPA 3005A | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7429-90-5 | Aluminum, Total | ND | 0.100 | 0.0318 | U |
| 7440-36-0 | Antimony, Total | ND | 0.0500 | 0.0071 | U |
| 7440-38-2 | Arsenic, Total | ND | 0.0050 | 0.0019 | U |
| 7440-39-3 | Barium, Total | 0.0708 | 0.0100 | 0.0021 | |
| 7440-41-7 | Beryllium, Total | ND | 0.0050 | 0.0009 | U |
| 7440-43-9 | Cadmium, Total | ND | 0.0050 | 0.0010 | U |
| 7440-70-2 | Calcium, Total | 17.1 | 0.100 | 0.0350 | |
| 7440-47-3 | Chromium, Total | 0.0030 | 0.0100 | 0.0021 | J |
| 7440-48-4 | Cobalt, Total | ND | 0.0200 | 0.0017 | U |
| 7440-50-8 | Copper, Total | ND | 0.0100 | 0.0022 | U |
| 7439-89-6 | Iron, Total | 0.0108 | 0.0500 | 0.0090 | J |
| 7439-92-1 | Lead, Total | ND | 0.0100 | 0.0027 | U |
| 7439-95-4 | Magnesium, Total | 7.28 | 0.100 | 0.0153 | |
| 7439-96-5 | Manganese, Total | ND | 0.0100 | 0.0016 | U |
| 7440-02-0 | Nickel, Total | ND | 0.0250 | 0.0024 | U |
| 7440-09-7 | Potassium, Total | 1.08 | 2.50 | 0.237 | J |
| 7782-49-2 | Selenium, Total | ND | 0.0100 | 0.0035 | U |
| 7440-22-4 | Silver, Total | ND | 0.0070 | 0.0028 | U |
| 7440-23-5 | Sodium, Total | 12.5 | 2.00 | 0.120 | |
| 7440-28-0 | Thallium, Total | ND | 0.0200 | 0.0025 | U |
| 7440-62-2 | Vanadium, Total | ND | 0.0100 | 0.0020 | U |
| 7440-66-6 | Zinc, Total | 0.0128 | 0.0050 | 0.0021 | |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE6 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939672-1 | | | | | | | | | |
| Date Analyzed : | 03/12/25 07:19 | | | | | | | | | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | 0.500 | 0.4940 | 99 | | | | | | | |
| Antimony | 0.500 | 0.4720 | 94 | | | | | | | |
| Arsenic | 0.500 | 0.4750 | 95 | | | | | | | |
| Barium | 0.500 | 0.4720 | 94 | | | | | | | |
| Beryllium | 0.500 | 0.4970 | 99 | | | | | | | |
| Cadmium | 0.500 | 0.4630 | 93 | | | | | | | |
| Calcium | 0.500 | 0.5050 | 101 | | | | | | | |
| Chromium | 0.500 | 0.4840 | 97 | | | | | | | |
| Cobalt | 0.500 | 0.4680 | 94 | | | | | | | |
| Copper | 0.500 | 0.4710 | 94 | | | | | | | |
| Iron | 0.500 | 0.5090 | 102 | | | | | | | |
| Lead | 0.500 | 0.4690 | 94 | | | | | | | |
| Magnesium | 0.500 | 0.4920 | 98 | | | | | | | |
| Manganese | 0.500 | 0.4840 | 97 | | | | | | | |
| Nickel | 0.500 | 0.4700 | 94 | | | | | | | |
| Potassium | 5.00 | 5.0600 | 101 | | | | | | | |
| Selenium | 0.500 | 0.4820 | 96 | | | | | | | |
| Silver | 0.500 | 0.4750 | 95 | | | | | | | |
| Sodium | 10.0 | 9.6400 | 96 | | | | | | | |
| Thallium | 0.500 | 0.4700 | 94 | | | | | | | |
| Vanadium | 0.500 | 0.4720 | 94 | | | | | | | |
| Zinc | 0.500 | 0.4700 | 94 | | | | | | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE6 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939672-3 | | | R1939672-6 | | | R1939672-8 | | R1939672-10 | |
| Date Analyzed : | 03/12/25 07:32 | | | 03/12/25 09:29 | | | 03/12/25 09:42 | | 03/12/25 11:17 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | 0.500 | 0.4990 | 100 | 0.5000 | 0.474 | 95 | 0.482 | 96 | 0.485 | 97 |
| Antimony | 0.500 | 0.4800 | 96 | 0.5000 | 0.460 | 92 | 0.460 | 92 | 0.457 | 91 |
| Arsenic | 0.500 | 0.4820 | 96 | 0.5000 | 0.482 | 96 | 0.480 | 96 | 0.474 | 95 |
| Barium | 0.500 | 0.4760 | 95 | 0.5000 | 0.447 | 89 | 0.456 | 91 | 0.460 | 92 |
| Beryllium | 0.500 | 0.5020 | 100 | 0.5000 | 0.470 | 94 | 0.480 | 96 | 0.483 | 97 |
| Cadmium | 0.500 | 0.4770 | 95 | 0.5000 | 0.463 | 93 | 0.464 | 93 | 0.459 | 92 |
| Calcium | 0.500 | 0.5100 | 102 | 0.5000 | 0.496 | 99 | 0.506 | 101 | 0.511 | 102 |
| Chromium | 0.500 | 0.4850 | 97 | 0.5000 | 0.472 | 94 | 0.470 | 94 | 0.477 | 95 |
| Cobalt | 0.500 | 0.4790 | 96 | 0.5000 | 0.458 | 92 | 0.458 | 92 | 0.456 | 91 |
| Copper | 0.500 | 0.4790 | 96 | 0.5000 | 0.501 | 100 | 0.498 | 100 | 0.495 | 99 |
| Iron | 0.500 | 0.5100 | 102 | 0.5000 | 0.481 | 96 | 0.488 | 98 | 0.490 | 98 |
| Lead | 0.500 | 0.4830 | 97 | 0.5000 | 0.484 | 97 | 0.482 | 96 | 0.475 | 95 |
| Magnesium | 0.500 | 0.4970 | 99 | 0.5000 | 0.499 | 100 | 0.497 | 99 | 0.500 | 100 |
| Manganese | 0.500 | 0.4900 | 98 | 0.5000 | 0.470 | 94 | 0.478 | 96 | 0.480 | 96 |
| Nickel | 0.500 | 0.4850 | 97 | 0.5000 | 0.475 | 95 | 0.474 | 95 | 0.468 | 94 |
| Potassium | 5.00 | 5.0300 | 101 | 5.0000 | 4.73 | 95 | 4.85 | 97 | 4.91 | 98 |
| Selenium | 0.500 | 0.4850 | 97 | 0.5000 | 0.483 | 97 | 0.483 | 97 | 0.477 | 95 |
| Silver | 0.500 | 0.4780 | 96 | 0.5000 | 0.486 | 97 | 0.481 | 96 | 0.484 | 97 |
| Sodium | 10.0 | 9.7100 | 97 | 10.0000 | 9.48 | 95 | 9.61 | 96 | 9.56 | 96 |
| Thallium | 0.500 | 0.4820 | 96 | 0.5000 | 0.478 | 96 | 0.477 | 95 | 0.471 | 94 |
| Vanadium | 0.500 | 0.4840 | 97 | 0.5000 | 0.487 | 97 | 0.486 | 97 | 0.481 | 96 |
| Zinc | 0.500 | 0.4810 | 96 | 0.5000 | 0.456 | 91 | 0.456 | 91 | 0.456 | 91 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE6 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1939672-12 | | | R1939672-14 | | R1939672-16 | |
| Date Analyzed : | | | | 03/12/25 11:44 | | | 03/12/25 13:14 | | 03/12/25 14:40 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | | | | 0.5000 | 0.483 | 97 | 0.486 | 97 | 0.481 | 96 |
| Antimony | | | | 0.5000 | 0.465 | 93 | 0.472 | 94 | 0.464 | 93 |
| Arsenic | | | | 0.5000 | 0.479 | 96 | 0.476 | 95 | 0.474 | 95 |
| Barium | | | | 0.5000 | 0.456 | 91 | 0.464 | 93 | 0.462 | 92 |
| Beryllium | | | | 0.5000 | 0.479 | 96 | 0.484 | 97 | 0.480 | 96 |
| Cadmium | | | | 0.5000 | 0.465 | 93 | 0.460 | 92 | 0.457 | 91 |
| Calcium | | | | 0.5000 | 0.504 | 101 | 0.503 | 101 | 0.499 | 100 |
| Chromium | | | | 0.5000 | 0.470 | 94 | 0.480 | 96 | 0.472 | 94 |
| Cobalt | | | | 0.5000 | 0.463 | 93 | 0.464 | 93 | 0.458 | 92 |
| Copper | | | | 0.5000 | 0.491 | 98 | 0.479 | 96 | 0.480 | 96 |
| Iron | | | | 0.5000 | 0.489 | 98 | 0.494 | 99 | 0.489 | 98 |
| Lead | | | | 0.5000 | 0.483 | 97 | 0.472 | 94 | 0.473 | 95 |
| Magnesium | | | | 0.5000 | 0.495 | 99 | 0.496 | 99 | 0.492 | 98 |
| Manganese | | | | 0.5000 | 0.476 | 95 | 0.477 | 95 | 0.475 | 95 |
| Nickel | | | | 0.5000 | 0.475 | 95 | 0.469 | 94 | 0.467 | 93 |
| Potassium | | | | 5.0000 | 4.89 | 98 | 5.05 | 101 | 4.97 | 99 |
| Selenium | | | | 0.5000 | 0.482 | 96 | 0.482 | 96 | 0.479 | 96 |
| Silver | | | | 0.5000 | 0.478 | 96 | 0.478 | 96 | 0.476 | 95 |
| Sodium | | | | 10.0000 | 9.54 | 95 | 9.55 | 96 | 9.62 | 96 |
| Thallium | | | | 0.5000 | 0.479 | 96 | 0.474 | 95 | 0.473 | 95 |
| Vanadium | | | | 0.5000 | 0.484 | 97 | 0.476 | 95 | 0.478 | 96 |
| Zinc | | | | 0.5000 | 0.460 | 92 | 0.462 | 92 | 0.455 | 91 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE6 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1939672-18 | | | R1939672-20 | | R1939672-22 | |
| Date Analyzed : | | | | 03/12/25 16:14 | | | 03/12/25 17:35 | | 03/12/25 18:30 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | | | | 0.5000 | 0.479 | 96 | 0.484 | 97 | 0.479 | 96 |
| Antimony | | | | 0.5000 | 0.467 | 93 | 0.461 | 92 | 0.455 | 91 |
| Arsenic | | | | 0.5000 | 0.462 | 92 | 0.459 | 92 | 0.453 | 91 |
| Barium | | | | 0.5000 | 0.459 | 92 | 0.458 | 92 | 0.453 | 91 |
| Beryllium | | | | 0.5000 | 0.481 | 96 | 0.483 | 97 | 0.476 | 95 |
| Cadmium | | | | 0.5000 | 0.452 | 90 | 0.452 | 90 | 0.448 | 90 |
| Calcium | | | | 0.5000 | 0.498 | 100 | 0.506 | 101 | 0.500 | 100 |
| Chromium | | | | 0.5000 | 0.475 | 95 | 0.476 | 95 | 0.474 | 95 |
| Cobalt | | | | 0.5000 | 0.461 | 92 | 0.458 | 92 | 0.453 | 91 |
| Copper | | | | 0.5000 | 0.453 | 91 | 0.449 | 90 | 0.448 | 90 |
| Iron | | | | 0.5000 | 0.487 | 97 | 0.493 | 99 | 0.486 | 97 |
| Lead | | | | 0.5000 | 0.458 | 92 | 0.456 | 91 | 0.452 | 90 |
| Magnesium | | | | 0.5000 | 0.483 | 97 | 0.485 | 97 | 0.485 | 97 |
| Manganese | | | | 0.5000 | 0.471 | 94 | 0.476 | 95 | 0.470 | 94 |
| Nickel | | | | 0.5000 | 0.459 | 92 | 0.458 | 92 | 0.454 | 91 |
| Potassium | | | | 5.0000 | 5.06 | 101 | 5.14 | 103 | 5.02 | 100 |
| Selenium | | | | 0.5000 | 0.472 | 94 | 0.469 | 94 | 0.462 | 92 |
| Silver | | | | 0.5000 | 0.469 | 94 | 0.470 | 94 | 0.470 | 94 |
| Sodium | | | | 10.0000 | 9.26 | 93 | 9.23 | 92 | 9.14 | 91 |
| Thallium | | | | 0.5000 | 0.461 | 92 | 0.458 | 92 | 0.454 | 91 |
| Vanadium | | | | 0.5000 | 0.462 | 92 | 0.460 | 92 | 0.455 | 91 |
| Zinc | | | | 0.5000 | 0.462 | 92 | 0.463 | 93 | 0.458 | 92 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE6 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1939672-24 | | | R1939672-26 | | | |
| Date Analyzed : | | | | 03/12/25 19:45 | | | 03/12/25 21:41 | | | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | | | | 0.5000 | 0.472 | 94 | 0.465 | 93 | | |
| Antimony | | | | 0.5000 | 0.456 | 91 | 0.449 | 90 | | |
| Arsenic | | | | 0.5000 | 0.455 | 91 | 0.456 | 91 | | |
| Barium | | | | 0.5000 | 0.455 | 91 | 0.454 | 91 | | |
| Beryllium | | | | 0.5000 | 0.469 | 94 | 0.463 | 93 | | |
| Cadmium | | | | 0.5000 | 0.455 | 91 | 0.450 | 90 | | |
| Calcium | | | | 0.5000 | 0.495 | 99 | 0.493 | 99 | | |
| Chromium | | | | 0.5000 | 0.473 | 95 | 0.466 | 93 | | |
| Cobalt | | | | 0.5000 | 0.456 | 91 | 0.449 | 90 | | |
| Copper | | | | 0.5000 | 0.452 | 90 | 0.457 | 91 | | |
| Iron | | | | 0.5000 | 0.485 | 97 | 0.473 | 95 | | |
| Lead | | | | 0.5000 | 0.461 | 92 | 0.459 | 92 | | |
| Magnesium | | | | 0.5000 | 0.482 | 96 | 0.481 | 96 | | |
| Manganese | | | | 0.5000 | 0.465 | 93 | 0.460 | 92 | | |
| Nickel | | | | 0.5000 | 0.460 | 92 | 0.455 | 91 | | |
| Potassium | | | | 5.0000 | 4.94 | 99 | 4.88 | 98 | | |
| Selenium | | | | 0.5000 | 0.462 | 92 | 0.460 | 92 | | |
| Silver | | | | 0.5000 | 0.470 | 94 | 0.467 | 93 | | |
| Sodium | | | | 10.0000 | 9.05 | 90 | 9.01 | 90 | | |
| Thallium | | | | 0.5000 | 0.460 | 92 | 0.456 | 91 | | |
| Vanadium | | | | 0.5000 | 0.456 | 91 | 0.459 | 92 | | |
| Zinc | | | | 0.5000 | 0.463 | 93 | 0.455 | 91 | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE5 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939701-1 | | | | | | | | | |
| Date Analyzed : | 03/12/25 05:52 | | | | | | | | | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | 0.500 | 0.5040 | 101 | | | | | | | |
| Antimony | 0.500 | 0.4970 | 99 | | | | | | | |
| Arsenic | 0.500 | 0.4850 | 97 | | | | | | | |
| Barium | 0.500 | 0.4880 | 98 | | | | | | | |
| Beryllium | 0.500 | 0.5080 | 102 | | | | | | | |
| Cadmium | 0.500 | 0.4920 | 98 | | | | | | | |
| Calcium | 0.500 | 0.5150 | 103 | | | | | | | |
| Chromium | 0.500 | 0.4990 | 100 | | | | | | | |
| Cobalt | 0.500 | 0.5020 | 100 | | | | | | | |
| Copper | 0.500 | 0.4900 | 98 | | | | | | | |
| Iron | 0.500 | 0.5280 | 106 | | | | | | | |
| Lead | 0.500 | 0.5040 | 101 | | | | | | | |
| Magnesium | 0.500 | 0.5060 | 101 | | | | | | | |
| Manganese | 0.500 | 0.5030 | 101 | | | | | | | |
| Nickel | 0.500 | 0.5020 | 100 | | | | | | | |
| Potassium | 5.00 | 5.2000 | 104 | | | | | | | |
| Selenium | 0.500 | 0.4880 | 98 | | | | | | | |
| Silver | 0.500 | 0.4930 | 99 | | | | | | | |
| Sodium | 10.0 | 10.0000 | 100 | | | | | | | |
| Thallium | 0.500 | 0.5070 | 101 | | | | | | | |
| Vanadium | 0.500 | 0.4920 | 98 | | | | | | | |
| Zinc | 0.500 | 0.4980 | 100 | | | | | | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE5 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939701-3 | | | R1939701-6 | | | R1939701-8 | | R1939701-10 | |
| Date Analyzed : | 03/12/25 06:09 | | | 03/12/25 08:33 | | | 03/12/25 09:59 | | 03/12/25 11:25 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | 0.500 | 0.4830 | 97 | 0.5000 | 0.498 | 100 | 0.485 | 97 | 0.508 | 102 |
| Antimony | 0.500 | 0.5000 | 100 | 0.5000 | 0.500 | 100 | 0.501 | 100 | 0.499 | 100 |
| Arsenic | 0.500 | 0.4880 | 98 | 0.5000 | 0.492 | 98 | 0.485 | 97 | 0.491 | 98 |
| Barium | 0.500 | 0.4690 | 94 | 0.5000 | 0.480 | 96 | 0.470 | 94 | 0.495 | 99 |
| Beryllium | 0.500 | 0.4910 | 98 | 0.5000 | 0.524 | 105 | 0.503 | 101 | 0.533 | 107 |
| Cadmium | 0.500 | 0.4910 | 98 | 0.5000 | 0.485 | 97 | 0.483 | 97 | 0.482 | 96 |
| Calcium | 0.500 | 0.4960 | 99 | 0.5000 | 0.508 | 102 | 0.496 | 99 | 0.526 | 105 |
| Chromium | 0.500 | 0.5010 | 100 | 0.5000 | 0.490 | 98 | 0.487 | 97 | 0.485 | 97 |
| Cobalt | 0.500 | 0.5020 | 100 | 0.5000 | 0.495 | 99 | 0.494 | 99 | 0.492 | 98 |
| Copper | 0.500 | 0.4930 | 99 | 0.5000 | 0.484 | 97 | 0.481 | 96 | 0.478 | 96 |
| Iron | 0.500 | 0.5060 | 101 | 0.5000 | 0.512 | 102 | 0.502 | 100 | 0.528 | 106 |
| Lead | 0.500 | 0.5060 | 101 | 0.5000 | 0.517 | 103 | 0.506 | 101 | 0.512 | 102 |
| Magnesium | 0.500 | 0.5120 | 102 | 0.5000 | 0.527 | 105 | 0.514 | 103 | 0.520 | 104 |
| Manganese | 0.500 | 0.4820 | 96 | 0.5000 | 0.504 | 101 | 0.488 | 98 | 0.516 | 103 |
| Nickel | 0.500 | 0.5050 | 101 | 0.5000 | 0.512 | 102 | 0.503 | 101 | 0.506 | 101 |
| Potassium | 5.00 | 5.0000 | 100 | 5.0000 | 5.27 | 105 | 5.11 | 102 | 5.43 | 109 |
| Selenium | 0.500 | 0.4850 | 97 | 0.5000 | 0.471 | 94 | 0.472 | 94 | 0.471 | 94 |
| Silver | 0.500 | 0.4860 | 97 | 0.5000 | 0.503 | 101 | 0.495 | 99 | 0.498 | 100 |
| Sodium | 10.0 | 9.6000 | 96 | 10.0000 | 9.78 | 98 | 9.60 | 96 | 9.84 | 98 |
| Thallium | 0.500 | 0.5060 | 101 | 0.5000 | 0.499 | 100 | 0.499 | 100 | 0.497 | 99 |
| Vanadium | 0.500 | 0.4960 | 99 | 0.5000 | 0.496 | 99 | 0.487 | 97 | 0.489 | 98 |
| Zinc | 0.500 | 0.4980 | 100 | 0.5000 | 0.500 | 100 | 0.494 | 99 | 0.496 | 99 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE5 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1939701-12 | | | R1939701-14 | | R1939701-16 | |
| Date Analyzed : | | | | 03/12/25 11:44 | | | 03/12/25 14:10 | | 03/12/25 15:25 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | | | | 0.5000 | 0.500 | 100 | 0.510 | 102 | 0.501 | 100 |
| Antimony | | | | 0.5000 | 0.501 | 100 | 0.502 | 100 | 0.497 | 99 |
| Arsenic | | | | 0.5000 | 0.491 | 98 | 0.498 | 100 | 0.478 | 96 |
| Barium | | | | 0.5000 | 0.487 | 97 | 0.492 | 98 | 0.480 | 96 |
| Beryllium | | | | 0.5000 | 0.528 | 106 | 0.535 | 107 | 0.496 | 99 |
| Cadmium | | | | 0.5000 | 0.481 | 96 | 0.488 | 98 | 0.494 | 99 |
| Calcium | | | | 0.5000 | 0.513 | 103 | 0.519 | 104 | 0.511 | 102 |
| Chromium | | | | 0.5000 | 0.485 | 97 | 0.494 | 99 | 0.505 | 101 |
| Cobalt | | | | 0.5000 | 0.492 | 98 | 0.497 | 99 | 0.503 | 101 |
| Copper | | | | 0.5000 | 0.483 | 97 | 0.486 | 97 | 0.492 | 98 |
| Iron | | | | 0.5000 | 0.519 | 104 | 0.528 | 106 | 0.519 | 104 |
| Lead | | | | 0.5000 | 0.512 | 102 | 0.519 | 104 | 0.497 | 99 |
| Magnesium | | | | 0.5000 | 0.519 | 104 | 0.534 | 107 | 0.503 | 101 |
| Manganese | | | | 0.5000 | 0.508 | 102 | 0.516 | 103 | 0.495 | 99 |
| Nickel | | | | 0.5000 | 0.507 | 101 | 0.514 | 103 | 0.496 | 99 |
| Potassium | | | | 5.0000 | 5.33 | 107 | 5.39 | 108 | 5.09 | 102 |
| Selenium | | | | 0.5000 | 0.468 | 94 | 0.471 | 94 | 0.489 | 98 |
| Silver | | | | 0.5000 | 0.501 | 100 | 0.495 | 99 | 0.482 | 96 |
| Sodium | | | | 10.0000 | 9.77 | 98 | 9.84 | 98 | 9.95 | 100 |
| Thallium | | | | 0.5000 | 0.499 | 100 | 0.502 | 100 | 0.506 | 101 |
| Vanadium | | | | 0.5000 | 0.490 | 98 | 0.500 | 100 | 0.491 | 98 |
| Zinc | | | | 0.5000 | 0.495 | 99 | 0.503 | 101 | 0.498 | 100 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE5 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1939701-18 | | | R1939701-20 | | R1939701-22 | |
| Date Analyzed : | | | | 03/12/25 16:36 | | | 03/12/25 17:31 | | 03/12/25 19:17 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | | | | 0.5000 | 0.495 | 99 | 0.477 | 95 | 0.495 | 99 |
| Antimony | | | | 0.5000 | 0.489 | 98 | 0.482 | 96 | 0.480 | 96 |
| Arsenic | | | | 0.5000 | 0.474 | 95 | 0.467 | 93 | 0.468 | 94 |
| Barium | | | | 0.5000 | 0.476 | 95 | 0.460 | 92 | 0.476 | 95 |
| Beryllium | | | | 0.5000 | 0.483 | 97 | 0.464 | 93 | 0.485 | 97 |
| Cadmium | | | | 0.5000 | 0.495 | 99 | 0.490 | 98 | 0.487 | 97 |
| Calcium | | | | 0.5000 | 0.513 | 103 | 0.491 | 98 | 0.509 | 102 |
| Chromium | | | | 0.5000 | 0.518 | 104 | 0.510 | 102 | 0.511 | 102 |
| Cobalt | | | | 0.5000 | 0.503 | 101 | 0.497 | 99 | 0.493 | 99 |
| Copper | | | | 0.5000 | 0.502 | 100 | 0.495 | 99 | 0.494 | 99 |
| Iron | | | | 0.5000 | 0.539 | 108 | 0.507 | 101 | 0.523 | 105 |
| Lead | | | | 0.5000 | 0.492 | 98 | 0.488 | 98 | 0.488 | 98 |
| Magnesium | | | | 0.5000 | 0.510 | 102 | 0.501 | 100 | 0.507 | 101 |
| Manganese | | | | 0.5000 | 0.490 | 98 | 0.469 | 94 | 0.488 | 98 |
| Nickel | | | | 0.5000 | 0.491 | 98 | 0.486 | 97 | 0.484 | 97 |
| Potassium | | | | 5.0000 | 5.01 | 100 | 4.79 | 96 | 4.97 | 99 |
| Selenium | | | | 0.5000 | 0.492 | 98 | 0.488 | 98 | 0.480 | 96 |
| Silver | | | | 0.5000 | 0.484 | 97 | 0.473 | 95 | 0.475 | 95 |
| Sodium | | | | 10.0000 | 9.78 | 98 | 9.41 | 94 | 9.70 | 97 |
| Thallium | | | | 0.5000 | 0.504 | 101 | 0.497 | 99 | 0.492 | 98 |
| Vanadium | | | | 0.5000 | 0.499 | 100 | 0.491 | 98 | 0.492 | 98 |
| Zinc | | | | 0.5000 | 0.497 | 99 | 0.491 | 98 | 0.491 | 98 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE5 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1939701-24 | | | R1939701-26 | | R1939701-28 | |
| Date Analyzed : | | | | 03/12/25 20:39 | | | 03/12/25 21:56 | | 03/12/25 23:05 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | | | | 0.5000 | 0.492 | 98 | 0.468 | 94 | 0.460 | 92 |
| Antimony | | | | 0.5000 | 0.484 | 97 | 0.479 | 96 | 0.475 | 95 |
| Arsenic | | | | 0.5000 | 0.470 | 94 | 0.473 | 95 | 0.467 | 93 |
| Barium | | | | 0.5000 | 0.481 | 96 | 0.453 | 91 | 0.448 | 90 |
| Beryllium | | | | 0.5000 | 0.492 | 98 | 0.465 | 93 | 0.462 | 92 |
| Cadmium | | | | 0.5000 | 0.486 | 97 | 0.485 | 97 | 0.480 | 96 |
| Calcium | | | | 0.5000 | 0.517 | 103 | 0.497 | 99 | 0.480 | 96 |
| Chromium | | | | 0.5000 | 0.508 | 102 | 0.509 | 102 | 0.502 | 100 |
| Cobalt | | | | 0.5000 | 0.492 | 98 | 0.490 | 98 | 0.485 | 97 |
| Copper | | | | 0.5000 | 0.492 | 98 | 0.492 | 98 | 0.487 | 97 |
| Iron | | | | 0.5000 | 0.522 | 104 | 0.491 | 98 | 0.484 | 97 |
| Lead | | | | 0.5000 | 0.490 | 98 | 0.491 | 98 | 0.488 | 98 |
| Magnesium | | | | 0.5000 | 0.509 | 102 | 0.510 | 102 | 0.508 | 102 |
| Manganese | | | | 0.5000 | 0.493 | 99 | 0.464 | 93 | 0.461 | 92 |
| Nickel | | | | 0.5000 | 0.487 | 97 | 0.487 | 97 | 0.484 | 97 |
| Potassium | | | | 5.0000 | 5.03 | 101 | 4.72 | 94 | 4.70 | 94 |
| Selenium | | | | 0.5000 | 0.480 | 96 | 0.475 | 95 | 0.470 | 94 |
| Silver | | | | 0.5000 | 0.477 | 95 | 0.475 | 95 | 0.471 | 94 |
| Sodium | | | | 10.0000 | 9.78 | 98 | 9.19 | 92 | 9.12 | 91 |
| Thallium | | | | 0.5000 | 0.492 | 98 | 0.490 | 98 | 0.485 | 97 |
| Vanadium | | | | 0.5000 | 0.492 | 98 | 0.494 | 99 | 0.489 | 98 |
| Zinc | | | | 0.5000 | 0.491 | 98 | 0.491 | 98 | 0.487 | 97 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1940136-1 | | | | | | | | | |
| Date Analyzed : | 03/13/25 08:22 | | | | | | | | | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | 0.500 | 0.4850 | 97 | | | | | | | |
| Antimony | 0.500 | 0.4940 | 99 | | | | | | | |
| Arsenic | 0.500 | 0.4920 | 98 | | | | | | | |
| Barium | 0.500 | 0.4810 | 96 | | | | | | | |
| Beryllium | 0.500 | 0.5090 | 102 | | | | | | | |
| Cadmium | 0.500 | 0.5000 | 100 | | | | | | | |
| Calcium | 0.500 | 0.5000 | 100 | | | | | | | |
| Chromium | 0.500 | 0.4940 | 99 | | | | | | | |
| Cobalt | 0.500 | 0.5100 | 102 | | | | | | | |
| Copper | 0.500 | 0.4720 | 94 | | | | | | | |
| Iron | 0.500 | 0.5130 | 103 | | | | | | | |
| Lead | 0.500 | 0.5020 | 100 | | | | | | | |
| Magnesium | 0.500 | 0.4910 | 98 | | | | | | | |
| Manganese | 0.500 | 0.4940 | 99 | | | | | | | |
| Nickel | 0.500 | 0.5040 | 101 | | | | | | | |
| Potassium | 5.00 | 5.0900 | 102 | | | | | | | |
| Selenium | 0.500 | 0.4930 | 99 | | | | | | | |
| Silver | 0.500 | 0.4660 | 93 | | | | | | | |
| Sodium | 10.0 | 10.0000 | 100 | | | | | | | |
| Thallium | 0.500 | 0.4900 | 98 | | | | | | | |
| Vanadium | 0.500 | 0.4890 | 98 | | | | | | | |
| Zinc | 0.500 | 0.5060 | 101 | | | | | | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1940136-3 | | | R1940136-6 | | | R1940136-8 | | R1940136-10 | |
| Date Analyzed : | 03/13/25 08:29 | | | 03/13/25 09:49 | | | 03/13/25 10:46 | | 03/13/25 11:53 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | 0.500 | 0.4950 | 99 | 0.5000 | 0.482 | 96 | 0.476 | 95 | 0.473 | 95 |
| Antimony | 0.500 | 0.4990 | 100 | 0.5000 | 0.495 | 99 | 0.498 | 100 | 0.481 | 96 |
| Arsenic | 0.500 | 0.4970 | 99 | 0.5000 | 0.487 | 97 | 0.483 | 97 | 0.465 | 93 |
| Barium | 0.500 | 0.4920 | 98 | 0.5000 | 0.485 | 97 | 0.487 | 97 | 0.478 | 96 |
| Beryllium | 0.500 | 0.5180 | 104 | 0.5000 | 0.510 | 102 | 0.501 | 100 | 0.496 | 99 |
| Cadmium | 0.500 | 0.5070 | 101 | 0.5000 | 0.501 | 100 | 0.497 | 99 | 0.488 | 98 |
| Calcium | 0.500 | 0.5100 | 102 | 0.5000 | 0.506 | 101 | 0.504 | 101 | 0.496 | 99 |
| Chromium | 0.500 | 0.5040 | 101 | 0.5000 | 0.498 | 100 | 0.496 | 99 | 0.486 | 97 |
| Cobalt | 0.500 | 0.5160 | 103 | 0.5000 | 0.512 | 102 | 0.509 | 102 | 0.498 | 100 |
| Copper | 0.500 | 0.4790 | 96 | 0.5000 | 0.471 | 94 | 0.470 | 94 | 0.461 | 92 |
| Iron | 0.500 | 0.5260 | 105 | 0.5000 | 0.517 | 103 | 0.516 | 103 | 0.504 | 101 |
| Lead | 0.500 | 0.5090 | 102 | 0.5000 | 0.505 | 101 | 0.503 | 101 | 0.490 | 98 |
| Magnesium | 0.500 | 0.5040 | 101 | 0.5000 | 0.494 | 99 | 0.490 | 98 | 0.483 | 97 |
| Manganese | 0.500 | 0.5000 | 100 | 0.5000 | 0.497 | 99 | 0.497 | 99 | 0.488 | 98 |
| Nickel | 0.500 | 0.5150 | 103 | 0.5000 | 0.510 | 102 | 0.503 | 101 | 0.493 | 99 |
| Potassium | 5.00 | 5.2000 | 104 | 5.0000 | 5.12 | 102 | 5.06 | 101 | 4.97 | 99 |
| Selenium | 0.500 | 0.4980 | 100 | 0.5000 | 0.492 | 98 | 0.488 | 98 | 0.469 | 94 |
| Silver | 0.500 | 0.4850 | 97 | 0.5000 | 0.468 | 94 | 0.469 | 94 | 0.459 | 92 |
| Sodium | 10.0 | 10.2000 | 102 | 10.0000 | 9.94 | 99 | 9.92 | 99 | 9.70 | 97 |
| Thallium | 0.500 | 0.4950 | 99 | 0.5000 | 0.492 | 98 | 0.491 | 98 | 0.475 | 95 |
| Vanadium | 0.500 | 0.4980 | 100 | 0.5000 | 0.493 | 99 | 0.489 | 98 | 0.481 | 96 |
| Zinc | 0.500 | 0.5140 | 103 | 0.5000 | 0.508 | 102 | 0.501 | 100 | 0.489 | 98 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Units | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1940136-12 | | | R1940136-14 | | | |
| Date Analyzed : | | | | 03/13/25 12:38 | | | 03/13/25 13:32 | | | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Aluminum | | | | 0.5000 | 0.459 | 92 | 0.462 | 92 | | |
| Antimony | | | | 0.5000 | 0.478 | 96 | 0.483 | 97 | | |
| Arsenic | | | | 0.5000 | 0.466 | 93 | 0.474 | 95 | | |
| Barium | | | | 0.5000 | 0.474 | 95 | 0.475 | 95 | | |
| Beryllium | | | | 0.5000 | 0.491 | 98 | 0.493 | 99 | | |
| Cadmium | | | | 0.5000 | 0.480 | 96 | 0.480 | 96 | | |
| Calcium | | | | 0.5000 | 0.490 | 98 | 0.493 | 99 | | |
| Chromium | | | | 0.5000 | 0.480 | 96 | 0.481 | 96 | | |
| Cobalt | | | | 0.5000 | 0.491 | 98 | 0.494 | 99 | | |
| Copper | | | | 0.5000 | 0.456 | 91 | 0.467 | 93 | | |
| Iron | | | | 0.5000 | 0.499 | 100 | 0.505 | 101 | | |
| Lead | | | | 0.5000 | 0.491 | 98 | 0.494 | 99 | | |
| Magnesium | | | | 0.5000 | 0.477 | 95 | 0.474 | 95 | | |
| Manganese | | | | 0.5000 | 0.480 | 96 | 0.485 | 97 | | |
| Nickel | | | | 0.5000 | 0.489 | 98 | 0.486 | 97 | | |
| Potassium | | | | 5.0000 | 4.92 | 98 | 4.96 | 99 | | |
| Selenium | | | | 0.5000 | 0.467 | 93 | 0.476 | 95 | | |
| Silver | | | | 0.5000 | 0.454 | 91 | 0.460 | 92 | | |
| Sodium | | | | 10.0000 | 9.59 | 96 | 9.66 | 97 | | |
| Thallium | | | | 0.5000 | 0.478 | 96 | 0.480 | 96 | | |
| Vanadium | | | | 0.5000 | 0.476 | 95 | 0.479 | 96 | | |
| Zinc | | | | 0.5000 | 0.483 | 97 | 0.482 | 96 | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE6 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939672-2 | | R1939672-7 | | R1939672-9 | | R1939672-11 | | WG2039059-1 | |
| Date Analyzed : | 03/12/25 07:26 | | 03/12/25 09:36 | | 03/12/25 09:48 | | 03/12/25 11:23 | | 03/12/25 13:42 | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q |
| Aluminum | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U |
| Antimony | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.0071 | U |
| Arsenic | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.0019 | U |
| Barium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.0021 | U |
| Beryllium | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.0009 | U |
| Cadmium | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.0010 | U |
| Calcium | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0502 | J |
| Chromium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.0021 | U |
| Cobalt | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.0017 | U |
| Copper | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.0022 | U |
| Iron | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.0090 | U |
| Lead | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.0027 | U |
| Magnesium | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U |
| Manganese | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.0016 | U |
| Nickel | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.0024 | U |
| Potassium | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U |
| Selenium | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.0035 | U |
| Silver | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.0028 | U |
| Sodium | 0.120 | U | 0.120 | U | 0.120 | U | 0.120 | U | 0.120 | U |
| Thallium | 0.00250 | U | 0.00250 | U | 0.00250 | U | 0.00250 | U | 0.0025 | U |
| Vanadium | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.0020 | U |
| Zinc | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.0021 | U |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE6 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939672-4 | | R1939672-13 | | R1939672-15 | | R1939672-17 | | | |
| Date Analyzed : | 03/12/25 07:39 | | 03/12/25 11:50 | | 03/12/25 13:20 | | 03/12/25 14:46 | | | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U | | |
| Antimony | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.00190 | U | | |
| Barium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | 0.120 | U | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | 0.00250 | U | 0.00250 | U | 0.00250 | U | 0.00250 | U | | |
| Vanadium | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE6 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939672-19 | | R1939672-21 | | R1939672-23 | | | |
| Date Analyzed : | | | 03/12/25 16:20 | | 03/12/25 17:41 | | 03/12/25 18:36 | | | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | | | 0.0318 | U | 0.0318 | U | 0.0318 | U | | |
| Antimony | | | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | | | 0.00190 | U | 0.00190 | U | 0.00190 | U | | |
| Barium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | | | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | | | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | | | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | | | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | | | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | | | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | | | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | | | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | | | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | | | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | | | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | | | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | | | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | | | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | | | 0.00250 | U | 0.00250 | U | 0.00250 | U | | |
| Vanadium | | | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE6 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939672-25 | | R1939672-27 | | | | | |
| Date Analyzed : | | | 03/12/25 19:52 | | 03/12/25 21:48 | | | | | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | | | 0.0318 | U | 0.0318 | U | | | | |
| Antimony | | | 0.00710 | U | 0.00710 | U | | | | |
| Arsenic | | | 0.00190 | U | 0.00190 | U | | | | |
| Barium | | | 0.00210 | U | 0.00210 | U | | | | |
| Beryllium | | | 0.000900 | U | 0.000900 | U | | | | |
| Cadmium | | | 0.00100 | U | 0.00100 | U | | | | |
| Calcium | | | 0.0350 | U | 0.0350 | U | | | | |
| Chromium | | | 0.00210 | U | 0.00210 | U | | | | |
| Cobalt | | | 0.00170 | U | 0.00170 | U | | | | |
| Copper | | | 0.00220 | U | 0.00220 | U | | | | |
| Iron | | | 0.00900 | U | 0.00900 | U | | | | |
| Lead | | | 0.00270 | U | 0.00270 | U | | | | |
| Magnesium | | | 0.0153 | U | 0.0153 | U | | | | |
| Manganese | | | 0.00160 | U | 0.00160 | U | | | | |
| Nickel | | | 0.00240 | U | 0.00240 | U | | | | |
| Potassium | | | 0.237 | U | 0.237 | U | | | | |
| Selenium | | | 0.00350 | U | 0.00350 | U | | | | |
| Silver | | | 0.00280 | U | 0.00280 | U | | | | |
| Sodium | | | 0.120 | U | 0.120 | U | | | | |
| Thallium | | | 0.00250 | U | 0.00250 | U | | | | |
| Vanadium | | | 0.00200 | U | 0.00200 | U | | | | |
| Zinc | | | 0.00210 | U | 0.00210 | U | | | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE5 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939701-2 | | R1939701-7 | | R1939701-9 | | R1939701-11 | | WG2039054-1 | |
| Date Analyzed : | 03/12/25 05:58 | | 03/12/25 08:39 | | 03/12/25 10:05 | | 03/12/25 11:31 | | 03/12/25 19:37 | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q |
| Aluminum | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U |
| Antimony | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.0071 | U |
| Arsenic | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.0019 | U |
| Barium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.0021 | U |
| Beryllium | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.0009 | U |
| Cadmium | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.0010 | U |
| Calcium | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U |
| Chromium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.0021 | U |
| Cobalt | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.0017 | U |
| Copper | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.0022 | U |
| Iron | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.0090 | U |
| Lead | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.0027 | U |
| Magnesium | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U |
| Manganese | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.0033 | J |
| Nickel | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.0024 | U |
| Potassium | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U |
| Selenium | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.0035 | U |
| Silver | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.0028 | U |
| Sodium | 0.120 | U | 0.120 | U | 0.120 | U | 0.136 | J | 0.120 | U |
| Thallium | 0.00250 | U | 0.00250 | U | 0.00250 | U | 0.00250 | U | 0.0025 | U |
| Vanadium | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.0020 | U |
| Zinc | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.0021 | U |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE5 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939701-4 | | R1939701-13 | | R1939701-15 | | R1939701-17 | | | |
| Date Analyzed : | 03/12/25 06:15 | | 03/12/25 11:50 | | 03/12/25 14:16 | | 03/12/25 15:31 | | | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U | | |
| Antimony | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.00190 | U | | |
| Barium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | 0.120 | U | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | 0.00250 | U | 0.00250 | U | 0.00250 | U | 0.00250 | U | | |
| Vanadium | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE5 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939701-19 | | R1939701-21 | | R1939701-23 | | | |
| Date Analyzed : | | | 03/12/25 16:53 | | 03/12/25 17:37 | | 03/12/25 19:23 | | | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | | | 0.0318 | U | 0.0318 | U | 0.0318 | U | | |
| Antimony | | | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | | | 0.00190 | U | 0.00190 | U | 0.00190 | U | | |
| Barium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | | | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | | | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | | | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | | | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | | | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | | | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | | | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | | | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | | | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | | | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | | | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | | | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | | | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | | | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | | | 0.00250 | U | 0.00250 | U | 0.00250 | U | | |
| Vanadium | | | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE5 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939701-25 | | R1939701-27 | | R1939701-29 | | | |
| Date Analyzed : | | | 03/12/25 20:45 | | 03/12/25 22:02 | | 03/12/25 23:12 | | | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | | | 0.0318 | U | 0.0318 | U | 0.0318 | U | | |
| Antimony | | | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | | | 0.00190 | U | 0.00190 | U | 0.00190 | U | | |
| Barium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | | | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | | | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | | | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | | | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | | | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | | | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | | | 0.00270 | U | 0.00270 | U | 0.00270 | U | | |
| Magnesium | | | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | | | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | | | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | | | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | | | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | | | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | | | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | | | 0.00250 | U | 0.00250 | U | 0.00250 | U | | |
| Vanadium | | | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | | | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1940136-2 | | R1940136-7 | | R1940136-9 | | R1940136-11 | | | |
| Date Analyzed : | 03/13/25 08:26 | | 03/13/25 09:52 | | 03/13/25 10:50 | | 03/13/25 11:57 | | | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | 0.0318 | U | 0.0318 | U | 0.0318 | U | 0.0318 | U | | |
| Antimony | 0.00710 | U | 0.00710 | U | 0.00710 | U | 0.00710 | U | | |
| Arsenic | 0.00190 | U | 0.00190 | U | 0.00190 | U | 0.00190 | U | | |
| Barium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Beryllium | 0.000900 | U | 0.000900 | U | 0.000900 | U | 0.000900 | U | | |
| Cadmium | 0.00100 | U | 0.00100 | U | 0.00100 | U | 0.00100 | U | | |
| Calcium | 0.0350 | U | 0.0350 | U | 0.0350 | U | 0.0350 | U | | |
| Chromium | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |
| Cobalt | 0.00170 | U | 0.00170 | U | 0.00170 | U | 0.00170 | U | | |
| Copper | 0.00220 | U | 0.00220 | U | 0.00220 | U | 0.00220 | U | | |
| Iron | 0.00900 | U | 0.00900 | U | 0.00900 | U | 0.00900 | U | | |
| Lead | 0.00270 | U | 0.00270 | U | 0.00270 | U | 0.00276 | J | | |
| Magnesium | 0.0153 | U | 0.0153 | U | 0.0153 | U | 0.0153 | U | | |
| Manganese | 0.00160 | U | 0.00160 | U | 0.00160 | U | 0.00160 | U | | |
| Nickel | 0.00240 | U | 0.00240 | U | 0.00240 | U | 0.00240 | U | | |
| Potassium | 0.237 | U | 0.237 | U | 0.237 | U | 0.237 | U | | |
| Selenium | 0.00350 | U | 0.00350 | U | 0.00350 | U | 0.00350 | U | | |
| Silver | 0.00280 | U | 0.00280 | U | 0.00280 | U | 0.00280 | U | | |
| Sodium | 0.120 | U | 0.120 | U | 0.120 | U | 0.120 | U | | |
| Thallium | 0.00250 | U | 0.00250 | U | 0.00250 | U | 0.00250 | U | | |
| Vanadium | 0.00200 | U | 0.00200 | U | 0.00200 | U | 0.00200 | U | | |
| Zinc | 0.00210 | U | 0.00210 | U | 0.00210 | U | 0.00210 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1940136-4 | | R1940136-13 | | R1940136-15 | | | | | |
| Date Analyzed : | 03/13/25 08:33 | | 03/13/25 12:42 | | 03/13/25 13:35 | | | | | |
| Parameter | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | | Q |
| Aluminum | 0.0318 | U | 0.0318 | U | 0.0318 | U | | | | |
| Antimony | 0.00710 | U | 0.00710 | U | 0.00710 | U | | | | |
| Arsenic | 0.00190 | U | 0.00190 | U | 0.00190 | U | | | | |
| Barium | 0.00210 | U | 0.00210 | U | 0.00210 | U | | | | |
| Beryllium | 0.000900 | U | 0.000900 | U | 0.000900 | U | | | | |
| Cadmium | 0.00100 | U | 0.00100 | U | 0.00100 | U | | | | |
| Calcium | 0.0350 | U | 0.0350 | U | 0.0350 | U | | | | |
| Chromium | 0.00210 | U | 0.00210 | U | 0.00210 | U | | | | |
| Cobalt | 0.00170 | U | 0.00170 | U | 0.00170 | U | | | | |
| Copper | 0.00220 | U | 0.00220 | U | 0.00220 | U | | | | |
| Iron | 0.00900 | U | 0.00900 | U | 0.00900 | U | | | | |
| Lead | 0.00270 | U | 0.00270 | U | 0.00270 | U | | | | |
| Magnesium | 0.0153 | U | 0.0153 | U | 0.0153 | U | | | | |
| Manganese | 0.00160 | U | 0.00160 | U | 0.00160 | U | | | | |
| Nickel | 0.00240 | U | 0.00240 | U | 0.00240 | U | | | | |
| Potassium | 0.237 | U | 0.237 | U | 0.237 | U | | | | |
| Selenium | 0.00350 | U | 0.00350 | U | 0.00350 | U | | | | |
| Silver | 0.00280 | U | 0.00280 | U | 0.00280 | U | | | | |
| Sodium | 0.120 | U | 0.120 | U | 0.120 | U | | | | |
| Thallium | 0.00250 | U | 0.00250 | U | 0.00250 | U | | | | |
| Vanadium | 0.00200 | U | 0.00200 | U | 0.00200 | U | | | | |
| Zinc | 0.00210 | U | 0.00210 | U | 0.00210 | U | | | | |

# Form 4a
# Interference Check Sample

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE6 | Concentration Units | : mg/l |

| | True | | Initial Found | | | | Final Found | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939672-5 | | | | | | | |
| Analysis Date : | | | 03/12/25 07:52 | | | | | | | |
| Analyte | Sol. A | Sol. AB | Sol. A | %R | Sol. AB | %R | Sol. A | %R | Sol. AB | %R |
| Aluminum | 500 | | 521. | 104 | | | | | | |
| Antimony | | | -0.0126 | | | | | | | |
| Arsenic | | | -0.00698 | | | | | | | |
| Barium | | | 0.00138 | | | | | | | |
| Beryllium | | | -0.0000443 | | | | | | | |
| Cadmium | | | -0.00429 | | | | | | | |
| Calcium | 500 | | 482. | 96 | | | | | | |
| Chromium | | | -0.000586 | | | | | | | |
| Cobalt | | | 0.000736 | | | | | | | |
| Copper | | | 0.00237 | | | | | | | |
| Iron | 200 | | 186. | 93 | | | | | | |
| Lead | | | 0.0000181 | | | | | | | |
| Magnesium | 500 | | 481. | 96 | | | | | | |
| Manganese | | | 0.00202 | | | | | | | |
| Nickel | | | -0.0107 | | | | | | | |
| Potassium | | | 0.00590 | | | | | | | |
| Selenium | | | 0.00269 | | | | | | | |
| Silver | | | 0.000521 | | | | | | | |
| Sodium | | | 0.0220 | | | | | | | |
| Thallium | | | -0.0101 | | | | | | | |
| Vanadium | | | -0.000197 | | | | | | | |
| Zinc | | | 0.000783 | | | | | | | |

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

# Form 4a
# Interference Check Sample

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE5 | Concentration Units | : mg/l |

| | True | | Initial Found | | | | Final Found | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939701-5 | | | | | | | |
| Analysis Date : | | | 03/12/25 06:28 | | | | | | | |
| Analyte | Sol. A | Sol. AB | Sol. A | %R | Sol. AB | %R | Sol. A | %R | Sol. AB | %R |
| Aluminum | 500 | | 485. | 97 | | | | | | |
| Antimony | | | 0.00218 | | | | | | | |
| Arsenic | | | -0.00764 | | | | | | | |
| Barium | | | 0.00126 | | | | | | | |
| Beryllium | | | -0.000138 | | | | | | | |
| Cadmium | | | -0.00752 | | | | | | | |
| Calcium | 500 | | 451. | 90 | | | | | | |
| Chromium | | | 0.00192 | | | | | | | |
| Cobalt | | | 0.000726 | | | | | | | |
| Copper | | | 0.00155 | | | | | | | |
| Iron | 200 | | 175. | 88 | | | | | | |
| Lead | | | -0.00182 | | | | | | | |
| Magnesium | 500 | | 494. | 99 | | | | | | |
| Manganese | | | -0.0000298 | | | | | | | |
| Nickel | | | -0.00322 | | | | | | | |
| Potassium | | | 0.00601 | | | | | | | |
| Selenium | | | 0.00208 | | | | | | | |
| Silver | | | 0.00317 | | | | | | | |
| Sodium | | | 0.0617 | | | | | | | |
| Thallium | | | 0.00256 | | | | | | | |
| Vanadium | | | -0.000139 | | | | | | | |
| Zinc | | | 0.00105 | | | | | | | |

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

# Form 4a
# Interference Check Sample

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE9 | Concentration Units | : mg/l |

| | True | | Initial Found | | | | Final Found | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1940136-5 | | | | | | | |
| Analysis Date : | | | 03/13/25 08:45 | | | | | | | |
| Analyte | Sol. A | Sol. AB | Sol. A | %R | Sol. AB | %R | Sol. A | %R | Sol. AB | %R |
| Aluminum | 500 | | 522. | 104 | | | | | | |
| Antimony | | | -0.0138 | | | | | | | |
| Arsenic | | | -0.00544 | | | | | | | |
| Barium | | | 0.00147 | | | | | | | |
| Beryllium | | | 0.0000437 | | | | | | | |
| Cadmium | | | -0.00122 | | | | | | | |
| Calcium | 500 | | 491. | 98 | | | | | | |
| Chromium | | | -0.00103 | | | | | | | |
| Cobalt | | | -0.000903 | | | | | | | |
| Copper | | | -0.00538 | | | | | | | |
| Iron | 200 | | 192. | 96 | | | | | | |
| Lead | | | 0.000210 | | | | | | | |
| Magnesium | 500 | | 489. | 98 | | | | | | |
| Manganese | | | -0.000371 | | | | | | | |
| Nickel | | | 0.000802 | | | | | | | |
| Potassium | | | -0.0122 | | | | | | | |
| Selenium | | | -0.00148 | | | | | | | |
| Silver | | | -0.00155 | | | | | | | |
| Sodium | | | 0.00219 | | | | | | | |
| Thallium | | | 0.00469 | | | | | | | |
| Vanadium | | | -0.00162 | | | | | | | |
| Zinc | | | -0.00261 | | | | | | | |

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Client Sample ID | : 8A | Matrix | : WATER |
| Lab Sample ID | : L2512368-10 | | |
| Matrix Spike | : WG2039059-3 | MS Analysis Date | : 03/12/25 14:14 |
| Matrix Spike Dup | : WG2039059-4 | MSD Analysis Date | : 03/12/25 14:20 |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Aluminum, Total | ND | 2 | 2.07 | 104 | 2 | 2.06 | 103 | 0 | 75-125 | 20 |
| Antimony, Total | ND | 0.5 | 0.465 | 93 | 0.5 | 0.465 | 93 | 0 | 75-125 | 20 |
| Arsenic, Total | ND | 0.12 | 0.113 | 94 | 0.12 | 0.113 | 94 | 0 | 75-125 | 20 |
| Barium, Total | 0.0308 | 2 | 1.98 | 97 | 2 | 1.96 | 96 | 1 | 75-125 | 20 |
| Beryllium, Total | ND | 0.05 | 0.0503 | 101 | 0.05 | 0.0499 | 100 | 1 | 75-125 | 20 |
| Cadmium, Total | ND | 0.053 | 0.0497 | 94 | 0.053 | 0.0497 | 94 | 0 | 75-125 | 20 |
| Calcium, Total | 13.8 | 10 | 23.4 | 96 | 10 | 23.6 | 98 | 1 | 75-125 | 20 |
| Chromium, Total | ND | 0.2 | 0.194 | 97 | 0.2 | 0.193 | 96 | 1 | 75-125 | 20 |
| Cobalt, Total | ND | 0.5 | 0.458 | 92 | 0.5 | 0.457 | 91 | 0 | 75-125 | 20 |
| Copper, Total | ND | 0.25 | 0.263 | 105 | 0.25 | 0.261 | 104 | 1 | 75-125 | 20 |
| Iron, Total | 0.0168J | 1 | 1.03 | 103 | 1 | 1.03 | 103 | 0 | 75-125 | 20 |
| Lead, Total | ND | 0.53 | 0.506 | 95 | 0.53 | 0.511 | 96 | 1 | 75-125 | 20 |
| Magnesium, Total | 2.72 | 10 | 12.6 | 99 | 10 | 12.7 | 100 | 1 | 75-125 | 20 |
| Manganese, Total | 0.0016J | 0.5 | 0.509 | 102 | 0.5 | 0.506 | 101 | 1 | 75-125 | 20 |
| Nickel, Total | ND | 0.5 | 0.474 | 95 | 0.5 | 0.473 | 95 | 0 | 75-125 | 20 |
| Potassium, Total | 2.19J | 10 | 12.5 | 125 | 10 | 12.5 | 125 | 0 | 75-125 | 20 |
| Selenium, Total | ND | 0.12 | 0.113 | 94 | 0.12 | 0.113 | 94 | 0 | 75-125 | 20 |
| Silver, Total | ND | 0.05 | 0.0510 | 102 | 0.05 | 0.0512 | 102 | 0 | 75-125 | 20 |
| Sodium, Total | 12.2 | 10 | 22.5 | 103 | 10 | 22.5 | 103 | 0 | 75-125 | 20 |
| Thallium, Total | ND | 0.12 | 0.108 | 90 | 0.12 | 0.109 | 91 | 1 | 75-125 | 20 |
| Vanadium, Total | ND | 0.5 | 0.500 | 100 | 0.5 | 0.495 | 99 | 1 | 75-125 | 20 |
| Zinc, Total | 0.0125 | 0.5 | 0.470 | 92 | 0.5 | 0.471 | 92 | 0 | 75-125 | 20 |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Client Sample ID | : 5A | Matrix | : WATER |
| Lab Sample ID | : L2512368-01 | | |
| Matrix Spike | : WG2039059-7 | MS Analysis Date | : 03/12/25 15:48 |
| Matrix Spike Dup | : | MSD Analysis Date | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Aluminum, Total | ND | 2 | 2.02 | 101 | | | | | 75-125 | 20 |
| Antimony, Total | ND | 0.5 | 0.465 | 93 | | | | | 75-125 | 20 |
| Arsenic, Total | ND | 0.12 | 0.109 | 91 | | | | | 75-125 | 20 |
| Barium, Total | 0.0152 | 2 | 1.93 | 96 | | | | | 75-125 | 20 |
| Beryllium, Total | ND | 0.05 | 0.0492 | 98 | | | | | 75-125 | 20 |
| Cadmium, Total | ND | 0.053 | 0.0486 | 92 | | | | | 75-125 | 20 |
| Calcium, Total | 24.1 | 10 | 33.0 | 89 | | | | | 75-125 | 20 |
| Chromium, Total | ND | 0.2 | 0.192 | 96 | | | | | 75-125 | 20 |
| Cobalt, Total | ND | 0.5 | 0.457 | 91 | | | | | 75-125 | 20 |
| Copper, Total | ND | 0.25 | 0.241 | 96 | | | | | 75-125 | 20 |
| Iron, Total | 0.0097J | 1 | 0.994 | 99 | | | | | 75-125 | 20 |
| Lead, Total | ND | 0.53 | 0.490 | 92 | | | | | 75-125 | 20 |
| Magnesium, Total | 4.70 | 10 | 14.4 | 97 | | | | | 75-125 | 20 |
| Manganese, Total | 0.0180 | 0.5 | 0.494 | 95 | | | | | 75-125 | 20 |
| Nickel, Total | ND | 0.5 | 0.461 | 92 | | | | | 75-125 | 20 |
| Potassium, Total | 1.89J | 10 | 12.5 | 125 | | | | | 75-125 | 20 |
| Selenium, Total | ND | 0.12 | 0.111 | 92 | | | | | 75-125 | 20 |
| Silver, Total | ND | 0.05 | 0.0500 | 100 | | | | | 75-125 | 20 |
| Sodium, Total | 9.18 | 10 | 19.2 | 100 | | | | | 75-125 | 20 |
| Thallium, Total | ND | 0.12 | 0.105 | 88 | | | | | 75-125 | 20 |
| Vanadium, Total | ND | 0.5 | 0.477 | 95 | | | | | 75-125 | 20 |
| Zinc, Total | 0.0134 | 0.5 | 0.475 | 92 | | | | | 75-125 | 20 |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Client Sample ID | : 8A | Matrix | : WATER |
| Lab Sample ID | : L2512368-10 | | |
| Matrix Spike | : WG2039054-3 | MS Analysis Date | : 03/12/25 19:56 |
| Matrix Spike Dup | : WG2039054-4 | MSD Analysis Date | : 03/12/25 20:02 |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Aluminum, Dissolved | ND | 2 | 1.87 | 94 | 2 | 1.96 | 98 | 5 | 75-125 | 20 |
| Antimony, Dissolved | ND | 0.5 | 0.466 | 93 | 0.5 | 0.473 | 95 | 1 | 75-125 | 20 |
| Arsenic, Dissolved | ND | 0.12 | 0.111 | 92 | 0.12 | 0.112 | 93 | 1 | 75-125 | 20 |
| Barium, Dissolved | 0.0304 | 2 | 1.84 | 90 | 2 | 1.92 | 94 | 4 | 75-125 | 20 |
| Beryllium, Dissolved | ND | 0.05 | 0.0466 | 93 | 0.05 | 0.0487 | 97 | 4 | 75-125 | 20 |
| Cadmium, Dissolved | ND | 0.053 | 0.0523 | 99 | 0.053 | 0.0528 | 100 | 1 | 75-125 | 20 |
| Calcium, Dissolved | 13.1 | 10 | 21.8 | 87 | 10 | 23.0 | 99 | 5 | 75-125 | 20 |
| Chromium, Dissolved | ND | 0.2 | 0.207 | 104 | 0.2 | 0.209 | 104 | 1 | 75-125 | 20 |
| Cobalt, Dissolved | ND | 0.5 | 0.484 | 97 | 0.5 | 0.488 | 98 | 1 | 75-125 | 20 |
| Copper, Dissolved | ND | 0.25 | 0.255 | 102 | 0.25 | 0.256 | 102 | 0 | 75-125 | 20 |
| Iron, Dissolved | ND | 1 | 0.968 | 97 | 1 | 1.01 | 101 | 4 | 75-125 | 20 |
| Lead, Dissolved | ND | 0.53 | 0.512 | 97 | 0.53 | 0.517 | 98 | 1 | 75-125 | 20 |
| Magnesium, Dissolved | 2.67 | 10 | 12.6 | 99 | 10 | 12.8 | 101 | 2 | 75-125 | 20 |
| Manganese, Dissolved | ND | 0.5 | 0.467 | 93 | 0.5 | 0.486 | 97 | 4 | 75-125 | 20 |
| Nickel, Dissolved | ND | 0.5 | 0.482 | 96 | 0.5 | 0.486 | 97 | 1 | 75-125 | 20 |
| Potassium, Dissolved | 2.02J | 10 | 11.4 | 114 | 10 | 11.9 | 119 | 4 | 75-125 | 20 |
| Selenium, Dissolved | ND | 0.12 | 0.111 | 92 | 0.12 | 0.111 | 92 | 0 | 75-125 | 20 |
| Silver, Dissolved | ND | 0.05 | 0.0490 | 98 | 0.05 | 0.0499 | 100 | 2 | 75-125 | 20 |
| Sodium, Dissolved | 11.1 | 10 | 20.1 | 90 | 10 | 21.1 | 100 | 5 | 75-125 | 20 |
| Thallium, Dissolved | ND | 0.12 | 0.110 | 92 | 0.12 | 0.111 | 92 | 1 | 75-125 | 20 |
| Vanadium, Dissolved | ND | 0.5 | 0.505 | 101 | 0.5 | 0.510 | 102 | 1 | 75-125 | 20 |
| Zinc, Dissolved | 0.0173 | 0.5 | 0.512 | 99 | 0.5 | 0.518 | 100 | 1 | 75-125 | 20 |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Client Sample ID | : 5A | Matrix | : WATER |
| Lab Sample ID | : L2512368-01 | | |
| Matrix Spike | : WG2039054-7 | MS Analysis Date | : 03/12/25 20:27 |
| Matrix Spike Dup | : | MSD Analysis Date | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Aluminum, Dissolved | ND | 2 | 1.99 | 100 | | | | | 75-125 | 20 |
| Antimony, Dissolved | ND | 0.5 | 0.471 | 94 | | | | | 75-125 | 20 |
| Arsenic, Dissolved | ND | 0.12 | 0.112 | 93 | | | | | 75-125 | 20 |
| Barium, Dissolved | 0.0145 | 2 | 1.94 | 96 | | | | | 75-125 | 20 |
| Beryllium, Dissolved | ND | 0.05 | 0.0500 | 100 | | | | | 75-125 | 20 |
| Cadmium, Dissolved | ND | 0.053 | 0.0530 | 100 | | | | | 75-125 | 20 |
| Calcium, Dissolved | 22.8 | 10 | 33.3 | 105 | | | | | 75-125 | 20 |
| Chromium, Dissolved | ND | 0.2 | 0.207 | 104 | | | | | 75-125 | 20 |
| Cobalt, Dissolved | ND | 0.5 | 0.490 | 98 | | | | | 75-125 | 20 |
| Copper, Dissolved | 0.0061J | 0.25 | 0.262 | 105 | | | | | 75-125 | 20 |
| Iron, Dissolved | ND | 1 | 1.03 | 103 | | | | | 75-125 | 20 |
| Lead, Dissolved | ND | 0.53 | 0.518 | 98 | | | | | 75-125 | 20 |
| Magnesium, Dissolved | 4.71 | 10 | 14.9 | 102 | | | | | 75-125 | 20 |
| Manganese, Dissolved | ND | 0.5 | 0.499 | 100 | | | | | 75-125 | 20 |
| Nickel, Dissolved | ND | 0.5 | 0.488 | 98 | | | | | 75-125 | 20 |
| Potassium, Dissolved | 1.66J | 10 | 11.9 | 119 | | | | | 75-125 | 20 |
| Selenium, Dissolved | ND | 0.12 | 0.112 | 93 | | | | | 75-125 | 20 |
| Silver, Dissolved | ND | 0.05 | 0.0501 | 100 | | | | | 75-125 | 20 |
| Sodium, Dissolved | 8.71 | 10 | 19.0 | 103 | | | | | 75-125 | 20 |
| Thallium, Dissolved | ND | 0.12 | 0.110 | 92 | | | | | 75-125 | 20 |
| Vanadium, Dissolved | ND | 0.5 | 0.510 | 102 | | | | | 75-125 | 20 |
| Zinc, Dissolved | 0.0272 | 0.5 | 0.530 | 100 | | | | | 75-125 | 20 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Client Sample ID | : 5A | Matrix | : WATER |
| Lab Sample ID | : L2512368-01 | Analysis Date | : 03/12/25 15:42 |
| Dup Sample ID | : WG2039059-8 | DUP Analysis Date | : 03/12/25 15:55 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Aluminum, Total | ND | ND | NC | 20 |
| Antimony, Total | ND | ND | NC | 20 |
| Arsenic, Total | ND | ND | NC | 20 |
| Barium, Total | 0.0152 | 0.0151 | 1 | 20 |
| Beryllium, Total | ND | ND | NC | 20 |
| Cadmium, Total | ND | ND | NC | 20 |
| Calcium, Total | 24.1 | 23.8 | 1 | 20 |
| Chromium, Total | ND | ND | NC | 20 |
| Cobalt, Total | ND | ND | NC | 20 |
| Copper, Total | ND | ND | NC | 20 |
| Iron, Total | 0.0097J | ND | NC | 20 |
| Lead, Total | ND | ND | NC | 20 |
| Magnesium, Total | 4.70 | 4.66 | 1 | 20 |
| Manganese, Total | 0.0180 | ND | NC | 20 |
| Nickel, Total | ND | ND | NC | 20 |
| Potassium, Total | 1.89J | 1.88J | NC | 20 |
| Selenium, Total | ND | ND | NC | 20 |
| Silver, Total | ND | ND | NC | 20 |
| Sodium, Total | 9.18 | 9.12 | 1 | 20 |
| Thallium, Total | ND | ND | NC | 20 |
| Vanadium, Total | ND | ND | NC | 20 |
| Zinc, Total | 0.0134 | 0.0132 | 2 | 20 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Client Sample ID | : 5A | Matrix | : WATER |
| Lab Sample ID | : L2512368-01 | Analysis Date | : 03/12/25 20:21 |
| Dup Sample ID | : WG2039054-8 | DUP Analysis Date | : 03/12/25 20:33 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Aluminum, Dissolved | ND | ND | NC | 20 |
| Antimony, Dissolved | ND | ND | NC | 20 |
| Arsenic, Dissolved | ND | ND | NC | 20 |
| Barium, Dissolved | 0.0145 | 0.0156 | 7 | 20 |
| Beryllium, Dissolved | ND | ND | NC | 20 |
| Cadmium, Dissolved | ND | ND | NC | 20 |
| Calcium, Dissolved | 22.8 | 23.8 | 4 | 20 |
| Chromium, Dissolved | ND | ND | NC | 20 |
| Cobalt, Dissolved | ND | ND | NC | 20 |
| Copper, Dissolved | 0.0061J | 0.0061J | NC | 20 |
| Iron, Dissolved | ND | ND | NC | 20 |
| Lead, Dissolved | ND | ND | NC | 20 |
| Magnesium, Dissolved | 4.71 | 4.85 | 3 | 20 |
| Manganese, Dissolved | ND | ND | NC | 20 |
| Nickel, Dissolved | ND | ND | NC | 20 |
| Potassium, Dissolved | 1.66J | 1.76J | NC | 20 |
| Selenium, Dissolved | ND | ND | NC | 20 |
| Silver, Dissolved | ND | ND | NC | 20 |
| Sodium, Dissolved | 8.71 | 9.09 | 4 | 20 |
| Thallium, Dissolved | ND | ND | NC | 20 |
| Vanadium, Dissolved | ND | ND | NC | 20 |
| Zinc, Dissolved | 0.0272 | 0.0278 | 2 | 20 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Client Sample ID | : NA | Matrix | : WATER |
| Lab Sample ID | : WG2039059-2 | LCS Analysis Date | : 03/12/25 13:48 |
| Dup Sample ID | : | LCSD Analysis Date | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Aluminum, Total | 2.00 | 2.07 | 104. | | | | | 85-115 | 20 |
| Antimony, Total | 0.500 | 0.457 | 91. | | | | | 85-115 | 20 |
| Arsenic, Total | 0.120 | 0.111 | 92. | | | | | 85-115 | 20 |
| Barium, Total | 2.00 | 1.97 | 98. | | | | | 85-115 | 20 |
| Beryllium, Total | 0.0500 | 0.0502 | 100. | | | | | 85-115 | 20 |
| Cadmium, Total | 0.0530 | 0.0496 | 94. | | | | | 85-115 | 20 |
| Calcium, Total | 10.0 | 10.3 | 103. | | | | | 85-115 | 20 |
| Chromium, Total | 0.200 | 0.193 | 96. | | | | | 85-115 | 20 |
| Cobalt, Total | 0.500 | 0.459 | 92. | | | | | 85-115 | 20 |
| Copper, Total | 0.250 | 0.260 | 104. | | | | | 85-115 | 20 |
| Iron, Total | 1.00 | 1.04 | 104. | | | | | 85-115 | 20 |
| Lead, Total | 0.530 | 0.508 | 96. | | | | | 85-115 | 20 |
| Magnesium, Total | 10.0 | 10.0 | 100. | | | | | 85-115 | 20 |
| Manganese, Total | 0.500 | 0.513 | 103. | | | | | 85-115 | 20 |
| Nickel, Total | 0.500 | 0.475 | 95. | | | | | 85-115 | 20 |
| Potassium, Total | 10.0 | 10.4 | 104. | | | | | 85-115 | 20 |
| Selenium, Total | 0.120 | 0.109 | 91. | | | | | 85-115 | 20 |
| Silver, Total | 0.0500 | 0.0506 | 101. | | | | | 85-115 | 20 |
| Sodium, Total | 10.0 | 10.4 | 104. | | | | | 85-115 | 20 |
| Thallium, Total | 0.120 | 0.107 | 89. | | | | | 85-115 | 20 |
| Vanadium, Total | 0.500 | 0.500 | 100. | | | | | 85-115 | 20 |
| Zinc, Total | 0.500 | 0.457 | 91. | | | | | 85-115 | 20 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Client Sample ID | : NA | Matrix | : WATER |
| Lab Sample ID | : WG2039054-2 | LCS Analysis Date | : 03/12/25 19:43 |
| Dup Sample ID | : | LCSD Analysis Date | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Aluminum, Dissolved | 2.00 | 1.93 | 96. | | | | | 85-115 | 20 |
| Antimony, Dissolved | 0.500 | 0.458 | 92. | | | | | 85-115 | 20 |
| Arsenic, Dissolved | 0.120 | 0.109 | 91. | | | | | 85-115 | 20 |
| Barium, Dissolved | 2.00 | 1.86 | 93. | | | | | 85-115 | 20 |
| Beryllium, Dissolved | 0.0500 | 0.0477 | 95. | | | | | 85-115 | 20 |
| Cadmium, Dissolved | 0.0530 | 0.0525 | 99. | | | | | 85-115 | 20 |
| Calcium, Dissolved | 10.0 | 9.65 | 96. | | | | | 85-115 | 20 |
| Chromium, Dissolved | 0.200 | 0.207 | 104. | | | | | 85-115 | 20 |
| Cobalt, Dissolved | 0.500 | 0.488 | 98. | | | | | 85-115 | 20 |
| Copper, Dissolved | 0.250 | 0.255 | 102. | | | | | 85-115 | 20 |
| Iron, Dissolved | 1.00 | 0.998 | 100. | | | | | 85-115 | 20 |
| Lead, Dissolved | 0.530 | 0.515 | 97. | | | | | 85-115 | 20 |
| Magnesium, Dissolved | 10.0 | 10.1 | 101. | | | | | 85-115 | 20 |
| Manganese, Dissolved | 0.500 | 0.481 | 96. | | | | | 85-115 | 20 |
| Nickel, Dissolved | 0.500 | 0.486 | 97. | | | | | 85-115 | 20 |
| Potassium, Dissolved | 10.0 | 9.60 | 96. | | | | | 85-115 | 20 |
| Selenium, Dissolved | 0.120 | 0.108 | 90. | | | | | 85-115 | 20 |
| Silver, Dissolved | 0.0500 | 0.0496 | 99. | | | | | 85-115 | 20 |
| Sodium, Dissolved | 10.0 | 9.55 | 96. | | | | | 85-115 | 20 |
| Thallium, Dissolved | 0.120 | 0.110 | 92. | | | | | 85-115 | 20 |
| Vanadium, Dissolved | 0.500 | 0.506 | 101. | | | | | 85-115 | 20 |
| Zinc, Dissolved | 0.500 | 0.498 | 100. | | | | | 85-115 | 20 |

# Form 8
# Serial Dilutions

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 8A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-10 | **Analysis Date** | : 03/12/25 14:08 |
| **Serial Dilution ID** | : WG2039059-6 | **Analysis Date** | : 03/12/25 14:33 |

| Parameter | Initial Sample Result (mg/l) | Serial Dilution Result (mg/l) | % Difference | %D Limit |
|---|---|---|---|---|
| Calcium, Total | 13.8 | 13.8 | 0 | 20 |
| Magnesium, Total | 2.72 | 2.70 | 1 | 20 |

# Form 8
# Serial Dilutions

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 5A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-01 | **Analysis Date** | : 03/12/25 15:42 |
| **Serial Dilution ID** | : WG2039059-10 | **Analysis Date** | : 03/12/25 16:08 |

| Parameter | Initial Sample Result (mg/l) | Serial Dilution Result (mg/l) | % Difference | %D Limit |
|---|---|---|---|---|
| Calcium, Total | 24.1 | 23.8 | 1 | 20 |
| Magnesium, Total | 4.70 | 4.75 | 1 | 20 |

# Form 8
# Serial Dilutions

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 8A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-10 | **Analysis Date** | : 03/12/25 19:50 |
| **Serial Dilution ID** | : WG2039054-6 | **Analysis Date** | : 03/12/25 20:14 |

| Parameter | Initial Sample Result (mg/l) | Serial Dilution Result (mg/l) | % Difference | %D Limit |
|---|---|---|---|---|
| Calcium, Dissolved | 13.1 | 14.1 | 8 | 20 |
| Magnesium, Dissolved | 2.67 | 2.74 | 3 | 20 |

# Form 8
# Serial Dilutions

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 5A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-01 | **Analysis Date** | : 03/12/25 20:21 |
| **Serial Dilution ID** | : WG2039054-10 | **Analysis Date** | : 03/12/25 20:59 |

| Parameter | Initial Sample Result (mg/l) | Serial Dilution Result (mg/l) | % Difference | %D Limit |
|---|---|---|---|---|
| Calcium, Dissolved | 22.8 | 24.2 | 6 | 20 |
| Magnesium, Dissolved | 4.71 | 4.81 | 2 | 20 |

U.S. EPA - CLP
10A-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument: TRACE4 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Al | Ca | Fe | Mg | __ |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000020 | -0.0000310 | -0.0000090 | |
| Antimony | 206.83 | -0.0000020 | 0.0000040 | -0.0000110 | -0.0000050 | |
| Arsenic | 189.04 | 0.0000090 | -0.0000010 | -0.0000700 | 0.0000000 | |
| Barium | 455.40 | -0.0000040 | -0.0000020 | -0.0000110 | -0.0000010 | |
| Beryllium | 313.40 | -0.0000020 | -0.0000020 | -0.0000050 | 0.0000000 | |
| Cadmium | 214.44 | 0.0000000 | -0.0000030 | 0.0000000 | -0.0000010 | |
| Calcium | 315.89 | 0.0000780 | 0.0000000 | -0.0000170 | 0.0000710 | |
| Chromium | 267.72 | 0.0000050 | -0.0000020 | 0.0000120 | 0.0000000 | |
| Cobalt | 228.62 | -0.0000120 | -0.0000060 | -0.0000250 | -0.0000020 | |
| Copper | 324.75 | -0.0000030 | -0.0000020 | -0.0000040 | 0.0000110 | |
| Iron | 259.94 | 0.0000180 | -0.0000120 | 0.0000000 | -0.0000030 | |
| Lead | 220.35 | 0.0001100 | -0.0000010 | 0.0000180 | -0.0000010 | |
| Magnesium | 279.08 | -0.0000540 | -0.0000280 | 0.0000190 | 0.0000000 | |
| Manganese | 257.61 | -0.0000030 | -0.0000020 | -0.0000080 | 0.0000020 | |
| Mercury | | | | | | |
| Nickel | 231.60 | -0.0000130 | -0.0000050 | -0.0000240 | -0.0000020 | |
| Potassium | 766.49 | -0.0012590 | -0.0007040 | -0.0028490 | -0.0002350 | |
| Selenium | 196.09 | -0.0000200 | 0.0000000 | -0.0000290 | -0.0000010 | |
| Silver | 328.07 | -0.0000040 | -0.0000020 | -0.0000090 | -0.0000010 | |
| Sodium | 589.59 | -0.0006160 | -0.0005220 | -0.0020960 | -0.0001600 | |
| Thallium | 190.86 | -0.0000060 | -0.0000040 | -0.0000050 | -0.0000010 | |
| Vanadium | 292.40 | -0.0000050 | -0.0000030 | 0.0000100 | -0.0000020 | |
| Zinc | 206.20 | 0.0002750 | 0.0000030 | -0.0007990 | -0.0000040 | |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE4 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Sb | As | Ba | Be | Cd |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0022950 | -0.0018570 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0003900 | -0.0000120 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000210 | -0.0001780 | -0.0001730 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0002050 | -0.0002030 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0000860 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0002090 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0020880 | -0.0018790 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0002010 | -0.0003100 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0004810 | -0.0004970 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0002330 | -0.0002260 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0012310 | -0.0009570 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0001700 | -0.0001850 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0022440 | -0.0017830 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0001950 | -0.0002020 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0005490 | -0.0005200 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0522980 | -0.0517110 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000060 | 0.0000030 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0001740 | -0.0001560 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0417330 | -0.0407400 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0002650 | -0.0002240 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0002090 | -0.0002040 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0000320 | -0.0009250 |
| | | | | | | |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE4 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Cr | Co | Cu | Pb | Mn |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | -0.0020320 | -0.0005350 | -0.0005960 | 0.0000000 | -0.0003930 |
| Antimony | 206.83 | 0.0049920 | -0.0001600 | -0.0001410 | 0.0000000 | -0.0001780 |
| Arsenic | 189.04 | 0.0002670 | -0.0001290 | -0.0000570 | 0.0000000 | -0.0000030 |
| Barium | 455.40 | -0.0002000 | -0.0000500 | -0.0000660 | 0.0000000 | -0.0000350 |
| Beryllium | 313.40 | -0.0000900 | -0.0000220 | -0.0000300 | 0.0000000 | -0.0000110 |
| Cadmium | 214.44 | -0.0000290 | -0.0000520 | -0.0000680 | 0.0000000 | -0.0000270 |
| Calcium | 315.89 | -0.0020720 | 0.0009940 | -0.0005720 | 0.0000000 | -0.0000920 |
| Chromium | 267.72 | 0.0000000 | -0.0000480 | -0.0000690 | 0.0000000 | 0.0001140 |
| Cobalt | 228.62 | -0.0005870 | 0.0000000 | -0.0001660 | 0.0000000 | -0.0000740 |
| Copper | 324.75 | -0.0002130 | -0.0000490 | 0.0000000 | 0.0000000 | 0.0000300 |
| Iron | 259.94 | -0.0010370 | -0.0002940 | -0.0003760 | 0.0000000 | -0.0001890 |
| Lead | 220.35 | -0.0001960 | -0.0003260 | 0.0002710 | 0.0000000 | 0.0000640 |
| Magnesium | 279.08 | -0.0024620 | -0.0005640 | -0.0008730 | 0.0000000 | -0.0069760 |
| Manganese | 257.61 | -0.0002060 | -0.0000480 | -0.0000750 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | -0.0005230 | -0.0002210 | -0.0001810 | 0.0000000 | -0.0000730 |
| Potassium | 766.49 | -0.0512430 | -0.0126240 | -0.0178480 | 0.0000000 | -0.0089880 |
| Selenium | 196.09 | -0.0000520 | 0.0000530 | -0.0000240 | 0.0000000 | 0.0003780 |
| Silver | 328.07 | -0.0001430 | -0.0000370 | -0.0000450 | 0.0000000 | 0.0001940 |
| Sodium | 589.59 | -0.0407180 | -0.0097580 | -0.0137660 | 0.0000000 | -0.0070470 |
| Thallium | 190.86 | -0.0000390 | 0.0020440 | -0.0000840 | -0.0000200 | 0.0003990 |
| Vanadium | 292.40 | -0.0002210 | -0.0000500 | -0.0000650 | 0.0000000 | 0.0001060 |
| Zinc | 206.20 | -0.0012900 | 0.0000070 | 0.0003430 | 0.0001200 | -0.0001520 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE4 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Ni | K | Se | Ag | Na |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10A-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument: TRACE5 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Al | Ca | Fe | Mg | Mo |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000960 | 0.0000000 | 0.0000000 | 0.0573510 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0016160 |
| Arsenic | 189.04 | -0.0000310 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0009550 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000010 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0009910 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000120 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0004030 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0003010 | 0.0000000 | 0.0000210 | 0.0000000 | -0.0026290 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0001760 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000340 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000180 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000310 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE5 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Sb | As | Ba | Be | Cd |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE5 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Cr | Co | Cu | Pb | Mn |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0114090 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0003850 | -0.0000480 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0007800 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0092850 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | -0.0001620 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000620 | 0.0000000 | 0.0000000 | 0.0006770 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | -0.0019910 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0004360 |
| Zinc | 206.20 | | | | | |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE5 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Ni | K | Se | Ag | Na |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000930 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0002270 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | -0.0003390 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE5 Date: 12/01/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Tl | V | Zn | | |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Beryllium | 313.40 | 0.0000000 | 0.0018940 | 0.0000000 | | |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Cobalt | 228.62 | 0.0017990 | 0.0000000 | 0.0000000 | | |
| Copper | 324.75 | 0.0000000 | -0.0003720 | 0.0000000 | | |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Lead | 220.35 | 0.0000000 | -0.0001170 | 0.0000000 | | |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0005790 | 0.0000000 | 0.0000000 | | |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Silver | 328.07 | 0.0000000 | -0.0017200 | 0.0000000 | | |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Thallium | 190.86 | 0.0000000 | 0.0002820 | 0.0000000 | | |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | | |
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Comments:

U.S. EPA - CLP
10A-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument: TRACE6 Date: 11/10/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Al | Ca | Fe | Mg | Mo |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000960 | 0.0000000 | 0.0000000 | 0.0573510 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0016160 |
| Arsenic | 189.04 | -0.0000310 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0009550 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000010 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0009910 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000120 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0004030 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0003010 | 0.0000000 | 0.0000210 | 0.0000000 | -0.0026290 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0001760 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000340 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000180 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000310 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE6 Date: 11/10/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Sb | As | Ba | Be | Cd |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE6 Date: 11/10/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Cr | Co | Cu | Pb | Mn |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0114090 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0003850 | -0.0000480 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0007800 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0092850 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | -0.0001620 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000620 | 0.0000000 | 0.0000000 | 0.0006770 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | -0.0019910 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0004360 |
| Zinc | 206.20 | | | | | |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE6 Date: 11/10/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Ni | K | Se | Ag | Na |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000930 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0002270 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | -0.0003390 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract: _____

Lab Code: AAL Case No.: _____ NRAS No.: _____ SDG No.: _____

ICP-AES Instrument ID: TRACE6 Date: 11/10/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Tl | V | Zn | | |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Beryllium | 313.40 | 0.0000000 | 0.0018940 | 0.0000000 | | |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Cobalt | 228.62 | 0.0017990 | 0.0000000 | 0.0000000 | | |
| Copper | 324.75 | 0.0000000 | -0.0003720 | 0.0000000 | | |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Lead | 220.35 | 0.0000000 | -0.0001170 | 0.0000000 | | |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0005790 | 0.0000000 | 0.0000000 | | |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Silver | 328.07 | 0.0000000 | -0.0017200 | 0.0000000 | | |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Thallium | 190.86 | 0.0000000 | 0.0002820 | 0.0000000 | | |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | | |
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Comments:

U.S. EPA - CLP
10A-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument: TRACE7 Date: 05/17/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Al | Ca | Fe | Mg | Mo |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000960 | 0.0000000 | 0.0000000 | 0.0573510 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0016160 |
| Arsenic | 189.04 | 0.0001500 | 0.0000000 | -0.0004550 | 0.0000000 | 0.0038670 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000380 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0009910 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000120 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0004030 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000340 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0001750 | 0.0000000 | 0.0002100 | 0.0000000 | -0.0026290 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0001760 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | -0.0000350 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000180 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000100 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument: TRACE7 Date: 05/17/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Sb | As | Ba | Be | Cd |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument: TRACE7 Date: 05/17/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Cr | Co | Cu | Pb | Mn |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0114090 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0017890 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0000000 | 0.0000000 | 0.0007800 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0092850 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | -0.0001620 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000620 | 0.0000000 | 0.0000000 | 0.0006770 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | -0.0019910 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0004360 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument: TRACE7 Date: 05/17/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Ni | K | Se | Ag | Na |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 313.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.62 | 0.0000930 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.35 | 0.0002270 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.08 | -0.0003390 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.40 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
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Comments:

U.S. EPA - CLP
10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Alpha Analytical Contract:

Lab Code: AAL Case No.: NRAS No.: SDG No.:

ICP-AES Instrument: TRACE7 Date: 05/17/16

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Tl | V | Zn | | |
|---|---|---|---|---|---|---|
| Aluminum | 396.15 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Antimony | 206.83 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Arsenic | 189.04 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Barium | 455.40 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Beryllium | 313.40 | 0.0000000 | 0.0018940 | 0.0000000 | | |
| Cadmium | 214.44 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Calcium | 315.89 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Chromium | 267.72 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Cobalt | 228.62 | 0.0017990 | 0.0000000 | 0.0000000 | | |
| Copper | 324.75 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Iron | 259.94 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Lead | 220.35 | 0.0000000 | -0.0001170 | 0.0000000 | | |
| Magnesium | 279.08 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Manganese | 257.61 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Mercury | | | | | | |
| Nickel | 231.60 | 0.0005790 | 0.0000000 | 0.0000000 | | |
| Potassium | 766.49 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Selenium | 196.09 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Silver | 328.07 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Sodium | 589.59 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Thallium | 190.86 | 0.0000000 | 0.0000000 | 0.0000000 | | |
| Vanadium | 292.40 | 0.0011610 | 0.0000000 | 0.0000000 | | |
| Zinc | 206.20 | 0.0000000 | 0.0000000 | 0.0000000 | | |
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Comments:

| EPA 200.7, EPA 6010D | | Linear Dynamic Range | | | | | |
|---|---|---|---|---|---|---|---|
| | | All values are in mg/L and are 90% of the established LDR concentration. | | | | | |
| | Instrument ID: | Trace 4 | Trace 5 | Trace 6 | Trace 7 | Trace 8 | Trace 9 |
| 2023 Complete | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Ag | Silver | 36 | 27 | 9 | 13 | 90 | 45 |
| Al | Aluminum | 900 | 540 | 450 | 900 | 900 | 900 |
| As | Arsenic | 90 | 54 | 90 | 72 | 180 | 90 |
| B | Boron | 90 | 90 | 9 | 45 | 90 | 54 |
| Ba | Barium | 90 | 27 | 18 | 13 | 135 | 27 |
| Be | Beryllium | 27 | 36 | 9 | 9 | 11 | 31 |
| Ca | Calcium | 450 | 900 | 675 | 900 | 900 | 900 |
| Cd | Cadmium | 11 | 9 | 9 | 11 | 27 | 18 |
| Co | Cobalt | 90 | 63 | 45 | 22 | 135 | 90 |
| Cr | Chromium | 45 | 63 | 9 | 45 | 157 | 90 |
| Cu | Copper | 90 | 54 | 45 | 45 | 90 | 67 |
| Fe | Iron | 630 | 900 | 450 | 450 | 540 | 540 |
| K | Potassium | 900 | 900 | 675 | 720 | 900 | 900 |
| Mg | Magnesium | 450 | 900 | 360 | 900 | 900 | 900 |
| Mn | Manganese | 90 | 31 | 90 | 67 | 90 | 90 |
| Mo | Molybdenum | 45 | 36 | 9 | 22 | 67 | 45 |
| Na | Sodium | 675 | 900 | 450 | 405 | 630 | 900 |
| Ni | Nickel | 90 | 45 | 45 | 22 | 135 | 90 |
| Pb | Lead | 180 | 180 | 90 | 90 | 225 | 90 |
| S | Sulfur | - | 90 | - | - | - | - |
| Sb | Antimony | 22 | 45 | 45 | 4.5 | 90 | 45 |
| Se | Selenium | 27 | 27 | 45 | 22 | 15 | 45 |
| Si | Silica | 45 | 90 | 22 | 22 | 90 | 45 |
| Sn | Tin | 45 | 45 | 13 | 22 | 72 | 45 |
| Sr | Strontium | 45 | 45 | 9 | 9 | 67 | 45 |
| Ti | Titanium | 45 | 90 | 9 | 90 | 72 | 45 |
| Tl | Thallium | 45 | 90 | 45 | 22 | 135 | 45 |
| V | Vanadium | 90 | 90 | 90 | 90 | 112 | 45 |
| Zn | Zinc | 45 | 27 | 45 | 22 | 63 | 22 |

# Form 12
# Preparation Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Matrix** | : WATER | **Prep Method** | : EPA 3005A |

| Sample Number | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| L2512368-01 | 03/11/25 17:26 | - | 50 |
| L2512368-04 | 03/11/25 17:26 | - | 50 |
| L2512368-05 | 03/11/25 17:26 | - | 50 |
| L2512368-07 | 03/11/25 17:26 | - | 50 |
| L2512368-08 | 03/11/25 17:26 | - | 50 |
| L2512368-10 | 03/11/25 17:26 | - | 50 |
| L2512368-11 | 03/11/25 17:26 | - | 50 |
| L2512368-13 | 03/11/25 17:26 | - | 50 |
| L2512368-14 | 03/11/25 17:26 | - | 50 |
| L2512368-16 | 03/11/25 17:26 | - | 50 |
| L2512368-17 | 03/11/25 17:26 | - | 50 |
| L2512368-19 | 03/11/25 17:26 | - | 50 |
| WG2039059-1 | 03/11/25 17:26 | - | 50 |
| WG2039059-2 | 03/11/25 17:26 | - | 50 |
| WG2039059-3 | 03/11/25 17:26 | - | 50 |
| WG2039059-4 | 03/11/25 17:26 | - | 50 |
| WG2039059-5 | 03/11/25 17:26 | - | 50 |
| WG2039059-6 | 03/11/25 17:26 | - | 50 |
| WG2039059-7 | 03/11/25 17:26 | - | 50 |
| WG2039059-8 | 03/11/25 17:26 | - | 50 |
| WG2039059-9 | 03/11/25 17:26 | - | 50 |
| WG2039059-10 | 03/11/25 17:26 | - | 50 |

# Form 12
# Preparation Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Matrix** | : WATER | **Prep Method** | : EPA 3005A |

| Sample Number | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| L2512368-01 | 03/11/25 12:59 | - | 50 |
| L2512368-02 | 03/11/25 12:59 | - | 50 |
| L2512368-04 | 03/11/25 12:59 | - | 50 |
| L2512368-05 | 03/11/25 12:59 | - | 50 |
| L2512368-07 | 03/11/25 12:59 | - | 50 |
| L2512368-08 | 03/11/25 12:59 | - | 50 |
| L2512368-10 | 03/11/25 12:59 | - | 50 |
| L2512368-11 | 03/11/25 12:59 | - | 50 |
| L2512368-13 | 03/11/25 12:59 | - | 50 |
| L2512368-14 | 03/11/25 12:59 | - | 50 |
| L2512368-16 | 03/11/25 12:59 | - | 50 |
| L2512368-17 | 03/11/25 12:59 | - | 50 |
| L2512368-19 | 03/11/25 12:59 | - | 50 |
| WG2039054-1 | 03/11/25 12:59 | - | 50 |
| WG2039054-2 | 03/11/25 12:59 | - | 50 |
| WG2039054-3 | 03/11/25 12:59 | - | 50 |
| WG2039054-4 | 03/11/25 12:59 | - | 50 |
| WG2039054-6 | 03/11/25 12:59 | - | 50 |
| WG2039054-7 | 03/11/25 12:59 | - | 50 |
| WG2039054-8 | 03/11/25 12:59 | - | 50 |
| WG2039054-10 | 03/11/25 12:59 | - | 50 |

# Form 12
# Preparation Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Matrix** | : WATER | **Prep Method** | : EPA 3005A |

| Sample Number | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| L2512368-02 | 03/11/25 17:26 | - | 50 |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : TRACE6 | **Analysis Method** | : 19,200.7 |
| **Start Date** | : 03/12/25 07:19 | **End Date** | : 03/12/25 21:48 |

| Sample Number | Dilution Factor | Analysis Time | Aluminum, Total | Antimony, Total | Arsenic, Total | Barium, Total | Beryllium, Total | Cadmium, Total | Calcium, Total | Chromium, Total | Cobalt, Total | Copper, Total | Iron, Total | Lead, Total | Magnesium, Total | Manganese, Total | Nickel, Total | Potassium, Total | Selenium, Total | Silver, Total | Sodium, Total | Thallium, Total | Vanadium, Total | Zinc, Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R1939672-1 ICV | 1 | 07:19:54 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-2 ICB | 1 | 07:26:14 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-3 ICV | 1 | 07:32:54 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-4 ICB | 1 | 07:39:16 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-5 ICSA | 1 | 07:52:35 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-6 CCV | 1 | 09:29:40 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-7 CCB | 1 | 09:36:00 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-8 CCV | 1 | 09:42:40 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-9 CCB | 1 | 09:48:59 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-10 CCV | 1 | 11:17:22 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-11 CCB | 1 | 11:23:42 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-12 CCV | 1 | 11:44:29 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-13 CCB | 1 | 11:50:49 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-14 CCV | 1 | 13:14:07 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-15 CCB | 1 | 13:20:26 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2039059-1 BLANK | 1 | 13:42:13 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2039059-2 LCS | 1 | 13:48:46 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-10 | 1 | 14:08:12 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2039059-3 MS | 1 | 14:14:45 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2039059-4 MSD | 1 | 14:20:59 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2039059-5 PS | 1 | 14:27:14 | | | | | | | | | | | | | | | | | | | | | | |
| WG2039059-6 SERDIL | 5 | 14:33:30 | | | | | | | X | | | | | | X | | | | | | | | | |
| R1939672-16 CCV | 1 | 14:40:06 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-17 CCB | 1 | 14:46:25 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-04 | 1 | 15:09:34 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-05 | 1 | 15:16:07 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-07 | 1 | 15:22:40 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE6 | Analysis Method | : 19,200.7 |
| Start Date | : 03/12/25 07:19 | End Date | : 03/12/25 21:48 |

| Sample Number | Dilution Factor | Analysis Time | Aluminum, Total | Antimony, Total | Arsenic, Total | Barium, Total | Beryllium, Total | Cadmium, Total | Calcium, Total | Chromium, Total | Cobalt, Total | Copper, Total | Iron, Total | Lead, Total | Magnesium, Total | Manganese, Total | Nickel, Total | Potassium, Total | Selenium, Total | Silver, Total | Sodium, Total | Thallium, Total | Vanadium, Total | Zinc, Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L2512368-08 | 1 | 15:29:13 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-11 | 1 | 15:35:46 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-01 | 1 | 15:42:20 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2039059-7 MS | 1 | 15:48:53 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2039059-8 DUP | 1 | 15:55:10 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2039059-9 PS | 1 | 16:01:45 | | | | | | | | | | | | | | | | | | | | | | |
| WG2039059-10 SERDIL | 5 | 16:08:02 | | | | | | | X | | | | | | X | | | | | | | | | |
| R1939672-18 CCV | 1 | 16:14:37 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-19 CCB | 1 | 16:20:56 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-20 CCV | 1 | 17:35:35 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-21 CCB | 1 | 17:41:55 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-22 CCV | 1 | 18:30:06 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-23 CCB | 1 | 18:36:26 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-24 CCV | 1 | 19:45:47 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-25 CCB | 1 | 19:52:06 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-13 | 1 | 20:35:53 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-14 | 1 | 20:42:26 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-16 | 1 | 20:49:01 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-17 | 1 | 20:55:35 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-19 | 1 | 21:02:10 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-26 CCV | 1 | 21:41:40 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939672-27 CCB | 1 | 21:48:00 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE5 | Analysis Method | : 19,200.7 |
| Start Date | : 03/12/25 05:52 | End Date | : 03/12/25 23:12 |

| Sample Number | Dilution Factor | Analysis Time | Aluminum, Dissolved | Antimony, Dissolved | Arsenic, Dissolved | Barium, Dissolved | Beryllium, Dissolved | Cadmium, Dissolved | Calcium, Dissolved | Chromium, Dissolved | Cobalt, Dissolved | Copper, Dissolved | Iron, Dissolved | Lead, Dissolved | Magnesium, Dissolved | Manganese, Dissolved | Nickel, Dissolved | Potassium, Dissolved | Selenium, Dissolved | Silver, Dissolved | Sodium, Dissolved | Thallium, Dissolved | Vanadium, Dissolved | Zinc, Dissolved |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R1939701-1 ICV | 1 | 05:52:43 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-2 ICB | 1 | 05:58:50 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-3 ICV | 1 | 06:09:22 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-4 ICB | 1 | 06:15:31 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-5 ICSA | 1 | 06:28:19 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-6 CCV | 1 | 08:33:31 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-7 CCB | 1 | 08:39:37 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-8 CCV | 1 | 09:59:22 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-9 CCB | 1 | 10:05:28 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-10 CCV | 1 | 11:25:16 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-11 CCB | 1 | 11:31:22 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-12 CCV | 1 | 11:44:00 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-13 CCB | 1 | 11:50:05 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-14 CCV | 1 | 14:10:42 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-15 CCB | 1 | 14:16:47 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-16 CCV | 1 | 15:25:35 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-17 CCB | 1 | 15:31:42 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-18 CCV | 1 | 16:36:41 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-19 CCB | 1 | 16:53:42 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-20 CCV | 1 | 17:31:26 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-21 CCB | 1 | 17:37:34 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-22 CCV | 1 | 19:17:41 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-23 CCB | 1 | 19:23:49 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2039054-1 BLANK | 1 | 19:37:31 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2039054-2 LCS | 1 | 19:43:57 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-10 | 1 | 19:50:04 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2039054-3 MS | 1 | 19:56:25 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : TRACE5 | Analysis Method | : 19,200.7 |
| Start Date | : 03/12/25 05:52 | End Date | : 03/12/25 23:12 |

| Sample Number | Dilution Factor | Analysis Time | Aluminum, Dissolved | Antimony, Dissolved | Arsenic, Dissolved | Barium, Dissolved | Beryllium, Dissolved | Cadmium, Dissolved | Calcium, Dissolved | Chromium, Dissolved | Cobalt, Dissolved | Copper, Dissolved | Iron, Dissolved | Lead, Dissolved | Magnesium, Dissolved | Manganese, Dissolved | Nickel, Dissolved | Potassium, Dissolved | Selenium, Dissolved | Silver, Dissolved | Sodium, Dissolved | Thallium, Dissolved | Vanadium, Dissolved | Zinc, Dissolved |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WG2039054-4 MSD | 1 | 20:02:31 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2039054-6 SERDIL | 5 | 20:14:42 | | | | | | | X | | | | | | X | | | | | | | | | |
| L2512368-01 | 1 | 20:21:03 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2039054-7 MS | 1 | 20:27:23 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2039054-8 DUP | 1 | 20:33:28 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-24 CCV | 1 | 20:39:48 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-25 CCB | 1 | 20:45:55 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| WG2039054-10 SERDIL | 5 | 20:59:10 | | | | | | | X | | | | | | X | | | | | | | | | |
| L2512368-02 | 1 | 21:05:31 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-04 | 1 | 21:11:52 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-05 | 1 | 21:18:10 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-07 | 1 | 21:24:29 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-08 | 1 | 21:30:50 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-11 | 1 | 21:37:12 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-13 | 1 | 21:43:30 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-14 | 1 | 21:49:51 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-26 CCV | 1 | 21:56:12 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-27 CCB | 1 | 22:02:20 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-16 | 1 | 22:08:46 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-17 | 1 | 22:15:05 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-19 | 1 | 22:21:25 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-28 CCV | 1 | 23:05:56 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1939701-29 CCB | 1 | 23:12:03 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : TRACE9 | **Analysis Method** | : 19,200.7 |
| **Start Date** | : 03/13/25 08:22 | **End Date** | : 03/13/25 13:35 |

| Sample Number | Dilution Factor | Analysis Time | Aluminum, Total | Antimony, Total | Arsenic, Total | Barium, Total | Beryllium, Total | Cadmium, Total | Calcium, Total | Chromium, Total | Cobalt, Total | Copper, Total | Iron, Total | Lead, Total | Magnesium, Total | Manganese, Total | Nickel, Total | Potassium, Total | Selenium, Total | Silver, Total | Sodium, Total | Thallium, Total | Vanadium, Total | Zinc, Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R1940136-1 ICV | 1 | 08:22:51 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940136-2 ICB | 1 | 08:26:18 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940136-3 ICV | 1 | 08:29:46 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940136-4 ICB | 1 | 08:33:17 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940136-5 ICSA | 1 | 08:45:20 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940136-6 CCV | 1 | 09:49:03 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940136-7 CCB | 1 | 09:52:43 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940136-8 CCV | 1 | 10:46:51 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940136-9 CCB | 1 | 10:50:18 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940136-10 CCV | 1 | 11:53:49 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940136-11 CCB | 1 | 11:57:17 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940136-12 CCV | 1 | 12:38:49 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940136-13 CCB | 1 | 12:42:17 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L2512368-02 | 1 | 13:04:21 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940136-14 CCV | 1 | 13:32:02 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| R1940136-15 CCB | 1 | 13:35:30 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

**Date Created:** 11/04/16
**Created By:** Jason Hebert
**File:** PM2960-2
**Page:** 1

**METALS by 200.7, 6010C (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | 7429-90-5 | 0.1 | 0.0318 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Antimony | 7440-36-0 | 0.05 | 0.0071 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Arsenic | 7440-38-2 | 0.005 | 0.0019 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Barium | 7440-39-3 | 0.01 | 0.0021 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Beryllium | 7440-41-7 | 0.005 | 0.0009 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Cadmium | 7440-43-9 | 0.005 | 0.001 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Calcium | 7440-70-2 | 0.1 | 0.035 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Chromium | 7440-47-3 | 0.01 | 0.0021 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Cobalt | 7440-48-4 | 0.02 | 0.0017 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Copper | 7440-50-8 | 0.01 | 0.0022 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Iron | 7439-89-6 | 0.05 | 0.009 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Lead | 7439-92-1 | 0.01 | 0.0027 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Magnesium | 7439-95-4 | 0.1 | 0.0153 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Manganese | 7439-96-5 | 0.01 | 0.0016 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Nickel | 7440-02-0 | 0.025 | 0.0024 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Potassium | 7440-09-7 | 2.5 | 0.237 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Selenium | 7782-49-2 | 0.01 | 0.0035 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Silver | 7440-22-4 | 0.007 | 0.0028 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Sodium | 7440-23-5 | 2 | 0.12 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Thallium | 7440-28-0 | 0.02 | 0.0025 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Vanadium | 7440-62-2 | 0.01 | 0.002 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |
| Zinc | 7440-66-6 | 0.05 | 0.0021 | mg/l | 85-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Plastic 500ml HNO3 preserved |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.***

**Date Created:** 11/04/16
**Created By:** Jason Hebert
**File:** PM2962-1
**Page:** 1

**METALS by 6010C (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum, Total | 7429-90-5 | 4 | 1.08 | mg/kg | 48-151 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Antimony, Total | 7440-36-0 | 2 | 0.152 | mg/kg | 1-208 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Arsenic, Total | 7440-38-2 | 0.4 | 0.0832 | mg/kg | 79-121 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Barium, Total | 7440-39-3 | 0.4 | 0.0696 | mg/kg | 83-117 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Beryllium, Total | 7440-41-7 | 0.2 | 0.0132 | mg/kg | 83-117 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Cadmium, Total | 7440-43-9 | 0.4 | 0.0392 | mg/kg | 83-117 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Calcium, Total | 7440-70-2 | 4 | 1.4 | mg/kg | 81-119 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Chromium, Total | 7440-47-3 | 0.4 | 0.0384 | mg/kg | 80-120 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Cobalt, Total | 7440-48-4 | 0.8 | 0.0664 | mg/kg | 84-115 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Copper, Total | 7440-50-8 | 0.4 | 0.1032 | mg/kg | 81-118 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Iron, Total | 7439-89-6 | 2 | 0.3612 | mg/kg | 45-155 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Lead, Total | 7439-92-1 | 2 | 0.1072 | mg/kg | 81-117 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Magnesium, Total | 7439-95-4 | 4 | 0.616 | mg/kg | 76-124 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Manganese, Total | 7439-96-5 | 0.4 | 0.0636 | mg/kg | 81-117 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Nickel, Total | 7440-02-0 | 1 | 0.0968 | mg/kg | 83-117 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Potassium, Total | 7440-09-7 | 100 | 5.76 | mg/kg | 71-129 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Selenium, Total | 7782-49-2 | 0.8 | 0.1032 | mg/kg | 78-122 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Silver, Total | 7440-22-4 | 0.4 | 0.1132 | mg/kg | 75-124 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Sodium, Total | 7440-23-5 | 80 | 1.26 | mg/kg | 72-127 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Thallium, Total | 7440-28-0 | 0.8 | 0.126 | mg/kg | 80-120 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Vanadium, Total | 7440-62-2 | 0.4 | 0.0812 | mg/kg | 78-122 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |
| Zinc, Total | 7440-66-6 | 2 | 0.1172 | mg/kg | 82-118 | | 75-125 | 20 | 20 | | 180 days | 1 - Metals Only - Glass 60mL/2oz unpreserved |

***Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)***
***Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.***

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: Blank DHL Trace6
Analysis started at: 3/12/2025 7:07:05 AM
Rack: 0
Vial: 1

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -0.3 % | -0.9 % | -0.6 % | 0.0 % | 0.2 % | 38.1 % | 0.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | 0.2 % | 0.3 % | -0.1 % | 0.0 % | 0.9 % | 0.4 % | -1.8 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 0.2 % | -0.1 % | -4.4 % | 0.0 % | -0.2 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | 0.0 % | 1.9 % | 2.9 % | -0.6 % | -0.2 % | 0.0 % | 0.3 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 0.0000 ppm |
| Concentration per Run | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 0.0000 ppm |
| Concentration RSD | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | -0.7 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: ICAL
Analysis started at: 3/12/2025 7:13:41 AM
Rack: 0
Vial: 2

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 10.0000 ppm |
| Concentration per Run 1 | 1.0228 ppm | 24.6125 ppm | 1.0143 ppm | 1.0141 ppm | 0.9849 ppm | 0.9853 ppm | 9.8609 ppm |
| Concentration per Run 2 | 1.0163 ppm | 25.0580 ppm | 0.9941 ppm | 0.9939 ppm | 1.0033 ppm | 1.0022 ppm | 9.9932 ppm |
| Concentration per Run 3 | 0.9609 ppm | 25.3295 ppm | 0.9915 ppm | 0.9920 ppm | 1.0118 ppm | 1.0125 ppm | 10.1459 ppm |
| Concentration RSD | 3.4 % | 1.4 % | 1.2 % | 1.2 % | 1.4 % | 1.4 % | 1.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 35.0000 ppm | 10.0000 ppm |
| Concentration per Run 1 | 1.0208 ppm | 1.0205 ppm | 1.0201 ppm | 1.0234 ppm | 24.6230 ppm | 34.5092 ppm | 10.2190 ppm |
| Concentration per Run 2 | 0.9959 ppm | 0.9948 ppm | 1.0211 ppm | 1.0156 ppm | 25.0589 ppm | 35.0544 ppm | 10.1684 ppm |
| Concentration per Run 3 | 0.9833 ppm | 0.9847 ppm | 0.9588 ppm | 0.9610 ppm | 25.3182 ppm | 35.4365 ppm | 9.6125 ppm |
| Concentration RSD | 1.9 % | 1.8 % | 3.6 % | 3.4 % | 1.4 % | 1.3 % | 3.4 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 0.9838 ppm | 1.0197 ppm | 24.5848 ppm | 1.0204 ppm | 1.0215 ppm | 1.0219 ppm | 1.0156 ppm |
| Concentration per Run 2 | 1.0040 ppm | 0.9941 ppm | 25.0676 ppm | 0.9951 ppm | 0.9948 ppm | 0.9918 ppm | 0.9933 ppm |
| Concentration per Run 3 | 1.0122 ppm | 0.9862 ppm | 25.3475 ppm | 0.9845 ppm | 0.9837 ppm | 0.9863 ppm | 0.9912 ppm |
| Concentration RSD | 1.5 % | 1.8 % | 1.5 % | 1.8 % | 1.9 % | 1.9 % | 1.4 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 10.2097 ppm | 1.0211 ppm | 0.9848 ppm | 1.0213 ppm | 1.0232 ppm | 1.0162 ppm | 1.0210 ppm |
| Concentration per Run 2 | 9.9367 ppm | 0.9942 ppm | 1.0038 ppm | 1.0191 ppm | 0.9945 ppm | 0.9964 ppm | 0.9961 ppm |
| Concentration per Run 3 | 9.8536 ppm | 0.9848 ppm | 1.0114 ppm | 0.9596 ppm | 0.9823 ppm | 0.9873 ppm | 0.9829 ppm |
| Concentration RSD | 1.9 % | 1.9 % | 1.4 % | 3.5 % | 2.1 % | 1.5 % | 1.9 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.4900 % | 98.7890 % | 95.7865 % | 104.5097 % | 90.1305 % | 99.5999 % | 1.0000 ppm |
| Concentration per Run 1 | 101.3525 % | 97.0191 % | 94.4947 % | 106.0592 % | 88.4644 % | 97.7547 % | 0.9847 ppm |
| Concentration per Run 2 | 100.5485 % | 97.0753 % | 96.4131 % | 104.2033 % | 90.6628 % | 97.8350 % | 1.0049 ppm |
| Concentration per Run 3 | 99.5690 % | 102.2726 % | 96.4516 % | 103.2667 % | 91.2642 % | 103.2101 % | 1.0104 ppm |
| Concentration RSD | 0.9 % | 3.1 % | 1.2 % | 1.4 % | 1.6 % | 3.1 % | 1.4 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: ICV
Analysis started at: 3/12/2025 7:19:54 AM
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4754 ppm | 0.4936 ppm | 0.4747 ppm | 0.4693 ppm | 0.4720 ppm | 0.4970 ppm | 0.5053 ppm |
| Concentration per Run 1 | 0.4738 ppm | 0.4889 ppm | 0.4753 ppm | 0.4681 ppm | 0.4681 ppm | 0.4936 ppm | 0.5084 ppm |
| Concentration per Run 2 | 0.4759 ppm | 0.4976 ppm | 0.4736 ppm | 0.4699 ppm | 0.4744 ppm | 0.4985 ppm | 0.5031 ppm |
| Concentration per Run 3 | 0.4763 ppm | 0.4944 ppm | 0.4752 ppm | 0.4698 ppm | 0.4735 ppm | 0.4989 ppm | 0.5044 ppm |
| Recovery Percentage 1 | 95.070 % | 98.729 % | 94.939 % | 93.853 % | 94.405 % | 99.406 % | 101.058 % |
| Concentration RSD | 0.3 % | 0.9 % | 0.2 % | 0.2 % | 0.7 % | 0.6 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4633 ppm | 0.4686 ppm | 0.4835 ppm | 0.4709 ppm | 0.5093 ppm | 5.0653 ppm | 0.4924 ppm |
| Concentration per Run 1 | 0.4636 ppm | 0.4676 ppm | 0.4832 ppm | 0.4689 ppm | 0.5041 ppm | 5.0150 ppm | 0.4884 ppm |
| Concentration per Run 2 | 0.4625 ppm | 0.4682 ppm | 0.4833 ppm | 0.4723 ppm | 0.5122 ppm | 5.1160 ppm | 0.4950 ppm |
| Concentration per Run 3 | 0.4639 ppm | 0.4699 ppm | 0.4842 ppm | 0.4715 ppm | 0.5117 ppm | 5.0649 ppm | 0.4939 ppm |
| Recovery Percentage 1 | 92.666 % | 93.713 % | 96.708 % | 94.180 % | 101.867 % | 101.306 % | 98.488 % |
| Concentration RSD | 0.2 % | 0.3 % | 0.1 % | 0.4 % | 0.9 % | 1.0 % | 0.7 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4844 ppm | 0.4571 ppm | 9.6356 ppm | 0.4704 ppm | 0.4694 ppm | 0.4722 ppm | 0.4823 ppm |
| Concentration per Run 1 | 0.4816 ppm | 0.4548 ppm | 9.5394 ppm | 0.4694 ppm | 0.4679 ppm | 0.4695 ppm | 0.4831 ppm |
| Concentration per Run 2 | 0.4845 ppm | 0.4565 ppm | 9.7099 ppm | 0.4698 ppm | 0.4689 ppm | 0.4730 ppm | 0.4827 ppm |
| Concentration per Run 3 | 0.4872 ppm | 0.4600 ppm | 9.6576 ppm | 0.4720 ppm | 0.4714 ppm | 0.4741 ppm | 0.4812 ppm |
| Recovery Percentage 1 | 96.884 % | 91.421 % | 96.356 % | 94.082 % | 93.879 % | 94.440 % | 96.469 % |
| Concentration RSD | 0.6 % | 0.6 % | 0.9 % | 0.3 % | 0.4 % | 0.5 % | 0.2 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.1006 ppm | 0.4487 ppm | 0.4724 ppm | 0.4855 ppm | 0.4704 ppm | 0.4719 ppm | 0.4698 ppm |
| Concentration per Run 1 | 5.0801 ppm | 0.4479 ppm | 0.4681 ppm | 0.4846 ppm | 0.4689 ppm | 0.4691 ppm | 0.4709 ppm |
| Concentration per Run 2 | 5.0961 ppm | 0.4489 ppm | 0.4749 ppm | 0.4864 ppm | 0.4709 ppm | 0.4726 ppm | 0.4684 ppm |
| Concentration per Run 3 | 5.1254 ppm | 0.4493 ppm | 0.4742 ppm | 0.4856 ppm | 0.4714 ppm | 0.4739 ppm | 0.4700 ppm |
| Recovery Percentage 1 | 97.154 % | 89.743 % | 94.478 % | 97.105 % | 94.082 % | 94.372 % | 93.952 % |
| Concentration RSD | 0.5 % | 0.2 % | 0.8 % | 0.2 % | 0.3 % | 0.5 % | 0.3 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.7869 % | 99.3433 % | 98.7732 % | 103.4814 % | 96.3430 % | 100.6071 % | 0.4677 ppm |
| Concentration per Run 1 | 100.6468 % | 99.0861 % | 99.1721 % | 104.4907 % | 96.8710 % | 100.4070 % | 0.4615 ppm |
| Concentration per Run 2 | 99.3175 % | 99.4651 % | 98.7092 % | 102.8524 % | 96.3980 % | 100.7852 % | 0.4731 ppm |
| Concentration per Run 3 | 99.3964 % | 99.4788 % | 98.4384 % | 103.1011 % | 95.7600 % | 100.6291 % | 0.4685 ppm |
| Recovery Percentage 1 | | | | | | | 93.541 % |
| Concentration RSD | 0.7 % | 0.2 % | 0.4 % | 0.9 % | 0.6 % | 0.2 % | 1.3 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: ICB
Analysis started at: 3/12/2025 7:26:14 AM
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0019 ppm | -0.0001 ppm | 0.0006 ppm | 0.0001 ppm | 0.0000 ppm | 0.0013 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0004 ppm | -0.0002 ppm | 0.0006 ppm | 0.0001 ppm | 0.0000 ppm | 0.0016 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0060 ppm | 0.0002 ppm | 0.0007 ppm | 0.0000 ppm | 0.0000 ppm | 0.0024 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0001 ppm | -0.0003 ppm | 0.0006 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm |
| Recovery Percentage 1 | -0.919 % | -1.900 % | -2.168 % | 2.116 % | 0.529 % | 0.523 % | 1.345 % |
| Concentration RSD | 156.2 % | 186.1 % | 230.5 % | 11.3 % | 22.3 % | 61.0 % | 90.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0004 ppm | 0.0034 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0213 ppm | -0.0035 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0004 ppm | 0.0000 ppm | -0.0002 ppm | -0.0118 ppm | 0.0015 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | 0.0001 ppm | 0.0012 ppm | 0.0007 ppm | 0.0011 ppm |
| Recovery Percentage 1 | -0.194 % | 0.507 % | 1.380 % | 0.038 % | 0.713 % | 0.137 % | -0.281 % |
| Concentration RSD | 188.3 % | 30.0 % | 164.4 % | 1,607.8 % | 219.2 % | 488.2 % | 985.9 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0006 ppm | -0.0043 ppm | -0.0002 ppm | -0.0004 ppm | -0.0003 ppm | -0.0014 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0007 ppm | -0.0051 ppm | -0.0003 ppm | 0.0000 ppm | -0.0004 ppm | -0.0017 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0005 ppm | -0.0027 ppm | -0.0002 ppm | -0.0006 ppm | -0.0006 ppm | -0.0013 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0005 ppm | -0.0051 ppm | 0.0000 ppm | -0.0007 ppm | 0.0001 ppm | -0.0014 ppm |
| Recovery Percentage 1 | -1.603 % | 1.147 % | -0.216 % | -0.625 % | -3.990 % | -0.605 % | -14.472 % |
| Concentration RSD | 122.7 % | 19.3 % | 31.5 % | 87.5 % | 96.4 % | 132.1 % | 13.0 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0002 ppm | 0.0000 ppm | -0.0002 ppm | -0.0001 ppm | 0.0001 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.0004 ppm | 0.0000 ppm | -0.0002 ppm | -0.0001 ppm | 0.0000 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0005 ppm | -0.0001 ppm | 0.0001 ppm | -0.0001 ppm | -0.0003 ppm | 0.0001 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0014 ppm | 0.0003 ppm | 0.0000 ppm | -0.0002 ppm | 0.0001 ppm | 0.0003 ppm | -0.0001 ppm |
| Recovery Percentage 1 | 0.178 % | 0.346 % | 0.344 % | -1.612 % | -0.457 % | 1.493 % | -1.351 % |
| Concentration RSD | 51.2 % | 132.6 % | 91.1 % | 58.6 % | 177.8 % | 115.9 % | 29.6 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 101.2500 % | 100.0708 % | 98.7892 % | 101.8185 % | 98.7130 % | 100.6514 % | 0.0004 ppm |
| Concentration per Run 1 | 101.1835 % | 99.9348 % | 99.0801 % | 100.7643 % | 99.0560 % | 100.5221 % | 0.0009 ppm |
| Concentration per Run 2 | 99.4611 % | 100.4471 % | 98.7770 % | 100.4988 % | 98.9136 % | 101.0976 % | 0.0012 ppm |
| Concentration per Run 3 | 103.1054 % | 99.8304 % | 98.5105 % | 104.1924 % | 98.1695 % | 100.3345 % | -0.0007 ppm |
| Recovery Percentage 1 | | | | | | | 4.375 % |
| Concentration RSD | 1.8 % | 0.3 % | 0.3 % | 2.0 % | 0.5 % | 0.4 % | 235.3 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: ICV
Analysis started at: 3/12/2025 7:32:54 AM
Rack: 0
Vial: 10

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4780 ppm | 0.4993 ppm | 0.4815 ppm | 0.4764 ppm | 0.4760 ppm | 0.5019 ppm | 0.5101 ppm |
| Concentration per Run 1 | 0.4833 ppm | 0.4921 ppm | 0.4856 ppm | 0.4778 ppm | 0.4718 ppm | 0.4971 ppm | 0.5036 ppm |
| Concentration per Run 2 | 0.4828 ppm | 0.5032 ppm | 0.4806 ppm | 0.4759 ppm | 0.4782 ppm | 0.5037 ppm | 0.5134 ppm |
| Concentration per Run 3 | 0.4680 ppm | 0.5027 ppm | 0.4784 ppm | 0.4755 ppm | 0.4778 ppm | 0.5050 ppm | 0.5134 ppm |
| Recovery Percentage 1 | 95.605 % | 99.865 % | 96.304 % | 95.278 % | 95.190 % | 100.382 % | 102.028 % |
| Concentration RSD | 1.8 % | 1.3 % | 0.8 % | 0.3 % | 0.8 % | 0.8 % | 1.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4774 ppm | 0.4794 ppm | 0.4847 ppm | 0.4793 ppm | 0.5103 ppm | 5.0345 ppm | 0.4968 ppm |
| Concentration per Run 1 | 0.4819 ppm | 0.4824 ppm | 0.4900 ppm | 0.4810 ppm | 0.5030 ppm | 4.9846 ppm | 0.5034 ppm |
| Concentration per Run 2 | 0.4774 ppm | 0.4806 ppm | 0.4891 ppm | 0.4800 ppm | 0.5128 ppm | 5.0441 ppm | 0.5037 ppm |
| Concentration per Run 3 | 0.4727 ppm | 0.4753 ppm | 0.4750 ppm | 0.4769 ppm | 0.5152 ppm | 5.0748 ppm | 0.4833 ppm |
| Recovery Percentage 1 | 95.473 % | 95.889 % | 96.936 % | 95.866 % | 102.062 % | 100.690 % | 99.362 % |
| Concentration RSD | 1.0 % | 0.8 % | 1.7 % | 0.4 % | 1.3 % | 0.9 % | 2.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4906 ppm | 0.4737 ppm | 9.7065 ppm | 0.4851 ppm | 0.4830 ppm | 0.4803 ppm | 0.4847 ppm |
| Concentration per Run 1 | 0.4857 ppm | 0.4756 ppm | 9.6043 ppm | 0.4886 ppm | 0.4853 ppm | 0.4826 ppm | 0.4867 ppm |
| Concentration per Run 2 | 0.4919 ppm | 0.4756 ppm | 9.7457 ppm | 0.4855 ppm | 0.4847 ppm | 0.4800 ppm | 0.4841 ppm |
| Concentration per Run 3 | 0.4941 ppm | 0.4699 ppm | 9.7697 ppm | 0.4813 ppm | 0.4792 ppm | 0.4782 ppm | 0.4831 ppm |
| Recovery Percentage 1 | 98.115 % | 94.742 % | 97.065 % | 97.025 % | 96.608 % | 96.053 % | 96.931 % |
| Concentration RSD | 0.9 % | 0.7 % | 0.9 % | 0.8 % | 0.7 % | 0.5 % | 0.4 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.3129 ppm | 0.4785 ppm | 0.4802 ppm | 0.4842 ppm | 0.4823 ppm | 0.4839 ppm | 0.4807 ppm |
| Concentration per Run 1 | 5.3291 ppm | 0.4802 ppm | 0.4763 ppm | 0.4903 ppm | 0.4837 ppm | 0.4857 ppm | 0.4860 ppm |
| Concentration per Run 2 | 5.3308 ppm | 0.4802 ppm | 0.4823 ppm | 0.4883 ppm | 0.4847 ppm | 0.4826 ppm | 0.4807 ppm |
| Concentration per Run 3 | 5.2787 ppm | 0.4752 ppm | 0.4820 ppm | 0.4741 ppm | 0.4784 ppm | 0.4834 ppm | 0.4753 ppm |
| Recovery Percentage 1 | 101.198 % | 95.707 % | 96.038 % | 96.849 % | 96.452 % | 96.779 % | 96.131 % |
| Concentration RSD | 0.6 % | 0.6 % | 0.7 % | 1.8 % | 0.7 % | 0.3 % | 1.1 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.9996 % | 97.1460 % | 95.9086 % | 102.5696 % | 93.0411 % | 99.8857 % | 0.4750 ppm |
| Concentration per Run 1 | 100.0920 % | 96.8960 % | 95.4535 % | 103.8487 % | 92.6418 % | 98.8057 % | 0.4708 ppm |
| Concentration per Run 2 | 99.2257 % | 96.9388 % | 96.0586 % | 102.5624 % | 92.6863 % | 98.8763 % | 0.4772 ppm |
| Concentration per Run 3 | 97.6811 % | 97.6030 % | 96.2137 % | 101.2977 % | 93.7953 % | 101.9750 % | 0.4770 ppm |
| Recovery Percentage 1 | | | | | | | 95.006 % |
| Concentration RSD | 1.2 % | 0.4 % | 0.4 % | 1.2 % | 0.7 % | 1.8 % | 0.8 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: ICB
Analysis started at: 3/12/2025 7:39:16 AM
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0015 ppm | -0.0004 ppm | 0.0005 ppm | 0.0000 ppm | 0.0001 ppm | 0.0026 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0043 ppm | -0.0003 ppm | 0.0006 ppm | 0.0000 ppm | 0.0000 ppm | 0.0081 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0011 ppm | -0.0011 ppm | 0.0005 ppm | -0.0001 ppm | 0.0001 ppm | -0.0047 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0008 ppm | 0.0003 ppm | 0.0005 ppm | 0.0000 ppm | 0.0001 ppm | 0.0042 ppm |
| Recovery Percentage 1 | 1.168 % | 1.515 % | -7.581 % | 1.729 % | 0.018 % | 1.142 % | 2.557 % |
| Concentration RSD | 140.5 % | 168.0 % | 180.1 % | 11.7 % | 2,701.4 % | 31.3 % | 256.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | -0.0005 ppm | 0.0053 ppm | 0.0016 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | -0.0001 ppm | 0.0001 ppm | -0.0012 ppm | 0.0027 ppm | 0.0025 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | -0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0074 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | -0.0002 ppm | 0.0058 ppm | 0.0014 ppm |
| Recovery Percentage 1 | 0.277 % | 0.159 % | -0.243 % | 0.698 % | -0.914 % | 0.211 % | 1.607 % |
| Concentration RSD | 80.4 % | 194.6 % | 429.2 % | 68.4 % | 150.2 % | 45.5 % | 52.5 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0005 ppm | 0.0008 ppm | -0.0003 ppm | 0.0002 ppm | -0.0005 ppm | -0.0014 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0006 ppm | -0.0067 ppm | -0.0001 ppm | 0.0004 ppm | 0.0001 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0005 ppm | 0.0011 ppm | -0.0003 ppm | 0.0002 ppm | -0.0009 ppm | -0.0025 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0003 ppm | 0.0078 ppm | -0.0004 ppm | 0.0000 ppm | -0.0007 ppm | -0.0013 ppm |
| Recovery Percentage 1 | -1.610 % | 0.981 % | 0.038 % | -1.044 % | 2.103 % | -0.948 % | -13.503 % |
| Concentration RSD | 69.6 % | 29.7 % | 951.0 % | 54.0 % | 103.9 % | 113.8 % | 83.1 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm | 0.0004 ppm | 0.0001 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0004 ppm | 0.0001 ppm | -0.0001 ppm | -0.0005 ppm | 0.0000 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0002 ppm | -0.0001 ppm | -0.0001 ppm | 0.0008 ppm | 0.0001 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0005 ppm | 0.0000 ppm | 0.0001 ppm | 0.0008 ppm | 0.0001 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 0.176 % | 0.693 % | 0.214 % | -0.329 % | 1.812 % | 0.736 % | -3.226 % |
| Concentration RSD | 14.8 % | 55.0 % | 337.1 % | 256.7 % | 215.7 % | 78.9 % | 32.4 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.4344 % | 99.1581 % | 97.5191 % | 100.6055 % | 95.9803 % | 100.4210 % | -0.0002 ppm |
| Concentration per Run 1 | 99.6021 % | 98.3754 % | 97.7142 % | 100.8897 % | 96.6143 % | 99.9572 % | -0.0003 ppm |
| Concentration per Run 2 | 98.2053 % | 99.8011 % | 97.6655 % | 100.7446 % | 95.7494 % | 100.6871 % | -0.0003 ppm |
| Concentration per Run 3 | 97.4957 % | 99.2976 % | 97.1775 % | 100.1823 % | 95.5772 % | 100.6188 % | 0.0001 ppm |
| Recovery Percentage 1 | | | | | | | -1.717 % |
| Concentration RSD | 1.1 % | 0.7 % | 0.3 % | 0.4 % | 0.6 % | 0.4 % | 122.7 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: LLOQ RL Check
Analysis started at: 3/12/2025 7:45:56 AM
Rack: 0
Vial: 5

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0050 ppm | 0.1057 ppm | **0.0036 ppm** | 0.0290 ppm | 0.0099 ppm | 0.0052 ppm | 0.1109 ppm |
| Concentration per Run 1 | 0.0050 ppm | 0.1044 ppm | 0.0048 ppm | 0.0288 ppm | 0.0099 ppm | 0.0053 ppm | 0.1064 ppm |
| Concentration per Run 2 | 0.0050 ppm | 0.1035 ppm | 0.0030 ppm | 0.0291 ppm | 0.0099 ppm | 0.0052 ppm | 0.1093 ppm |
| Concentration per Run 3 | 0.0051 ppm | 0.1092 ppm | 0.0031 ppm | 0.0291 ppm | 0.0100 ppm | 0.0052 ppm | 0.1171 ppm |
| Recovery Percentage 1 | 100.956 % | 105.702 % | 72.806 % | 96.610 % | 99.230 % | 104.908 % | 110.932 % |
| Concentration RSD | 0.7 % | 2.9 % | **28.5 %** | 0.6 % | 0.3 % | 0.7 % | 5.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0040 ppm | 0.0096 ppm | 0.0102 ppm | 0.0099 ppm | 0.0534 ppm | 2.5708 ppm | 0.1061 ppm |
| Concentration per Run 1 | 0.0040 ppm | 0.0096 ppm | 0.0104 ppm | 0.0097 ppm | 0.0543 ppm | 2.5717 ppm | 0.1072 ppm |
| Concentration per Run 2 | 0.0040 ppm | 0.0097 ppm | 0.0104 ppm | 0.0100 ppm | 0.0531 ppm | 2.5639 ppm | 0.1065 ppm |
| Concentration per Run 3 | 0.0040 ppm | 0.0096 ppm | 0.0099 ppm | 0.0099 ppm | 0.0528 ppm | 2.5769 ppm | 0.1046 ppm |
| Recovery Percentage 1 | 99.562 % | 96.113 % | 102.220 % | 98.905 % | 106.782 % | 102.833 % | 106.116 % |
| Concentration RSD | 0.3 % | 0.5 % | 2.8 % | 1.4 % | 1.4 % | 0.3 % | 1.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0104 ppm | 0.0479 ppm | 2.0102 ppm | 0.0191 ppm | 0.0088 ppm | 0.0476 ppm | 0.0088 ppm |
| Concentration per Run 1 | 0.0105 ppm | 0.0476 ppm | 2.0289 ppm | 0.0190 ppm | 0.0091 ppm | 0.0472 ppm | 0.0093 ppm |
| Concentration per Run 2 | 0.0100 ppm | 0.0482 ppm | 2.0034 ppm | 0.0193 ppm | 0.0084 ppm | 0.0486 ppm | 0.0083 ppm |
| Concentration per Run 3 | 0.0106 ppm | 0.0479 ppm | 1.9983 ppm | 0.0190 ppm | 0.0088 ppm | 0.0470 ppm | 0.0088 ppm |
| Recovery Percentage 1 | 103.651 % | 95.786 % | 100.508 % | 95.380 % | 87.771 % | 95.230 % | 88.073 % |
| Concentration RSD | 2.7 % | 0.6 % | 0.8 % | 1.0 % | 4.1 % | 1.8 % | 5.9 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5158 ppm | 0.0486 ppm | 0.0100 ppm | 0.0100 ppm | 0.0183 ppm | 0.0100 ppm | 0.0055 ppm |
| Concentration per Run 1 | 0.5136 ppm | 0.0483 ppm | 0.0100 ppm | 0.0102 ppm | 0.0177 ppm | 0.0100 ppm | 0.0054 ppm |
| Concentration per Run 2 | 0.5180 ppm | 0.0491 ppm | 0.0099 ppm | 0.0098 ppm | 0.0186 ppm | 0.0101 ppm | 0.0057 ppm |
| Concentration per Run 3 | 0.5157 ppm | 0.0484 ppm | 0.0100 ppm | 0.0100 ppm | 0.0184 ppm | 0.0099 ppm | 0.0055 ppm |
| Recovery Percentage 1 | 103.154 % | 97.159 % | 99.904 % | 100.061 % | 91.294 % | 100.009 % | 110.231 % |
| Concentration RSD | 0.4 % | 0.9 % | 0.6 % | 1.9 % | 2.7 % | 1.0 % | 2.5 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 97.9008 % | 97.8979 % | 97.2782 % | 99.9985 % | 94.5259 % | 99.6238 % | 0.0099 ppm |
| Concentration per Run 1 | 98.5743 % | 97.7529 % | 97.4494 % | 99.3277 % | 94.8770 % | 99.4624 % | 0.0097 ppm |
| Concentration per Run 2 | 97.6716 % | 97.8729 % | 97.1973 % | 100.1654 % | 93.8672 % | 99.6827 % | 0.0100 ppm |
| Concentration per Run 3 | 97.4566 % | 98.0678 % | 97.1879 % | 100.5023 % | 94.8334 % | 99.7265 % | 0.0101 ppm |
| Recovery Percentage 1 | | | | | | | 99.396 % |
| Concentration RSD | 0.6 % | 0.2 % | 0.2 % | 0.6 % | 0.6 % | 0.1 % | 2.3 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: ICSA
Analysis started at: 3/12/2025 7:52:35 AM
Rack: 0
Vial: 6

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 520.9857 [SIC 500] | -0.0070 ppm | 0.0044 ppm | 0.0014 ppm | 0.0000 ppm | 481.9722 ppm |
| Concentration per Run 1 | 0.0003 ppm | 529.4581 ppm | -0.0072 ppm | 0.0045 ppm | 0.0014 ppm | -0.0001 ppm | 480.6437 ppm |
| Concentration per Run 2 | 0.0007 ppm | 514.0783 ppm | -0.0034 ppm | 0.0029 ppm | 0.0014 ppm | 0.0000 ppm | 483.2228 ppm |
| Concentration per Run 3 | 0.0005 ppm | 519.4207 ppm | -0.0103 ppm | 0.0056 ppm | 0.0013 ppm | 0.0000 ppm | 482.0501 ppm |
| Recovery Percentage 1 | 7.447 % | 520,985.702 % | -139.716 % | 14.550 % | 13.771 % | -0.886 % | 481,972.214 % |
| Concentration RSD | 42.4 % | 1.5 % | 49.9 % | 30.6 % | 2.4 % | 48.6 % | 0.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0043 ppm | 0.0007 ppm | -0.0006 ppm | 0.0024 ppm | 186.5503 ppm | 0.0059 ppm | 481.3066 ppm |
| Concentration per Run 1 | -0.0042 ppm | 0.0006 ppm | -0.0006 ppm | 0.0023 ppm | 188.2617 ppm | 0.0079 ppm | 477.9291 ppm |
| Concentration per Run 2 | -0.0042 ppm | 0.0010 ppm | -0.0007 ppm | 0.0021 ppm | 184.5856 ppm | 0.0042 ppm | 482.4273 ppm |
| Concentration per Run 3 | -0.0045 ppm | 0.0006 ppm | -0.0004 ppm | 0.0026 ppm | 186.8035 ppm | 0.0056 ppm | 483.5633 ppm |
| Recovery Percentage 1 | -107.168 % | 3.678 % | -5.863 % | 23.664 % | 373,100.585 % | 0.236 % | 481,306.580 % |
| Concentration RSD | 3.7 % | 32.4 % | 29.3 % | 10.9 % | 1.0 % | 31.5 % | 0.6 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0020 ppm | -0.0021 ppm | 0.0220 ppm | -0.0107 ppm | 0.0000 ppm | -0.0126 ppm | 0.0027 ppm |
| Concentration per Run 1 | 0.0019 ppm | -0.0021 ppm | 0.0209 ppm | -0.0108 ppm | -0.0008 ppm | -0.0171 ppm | 0.0038 ppm |
| Concentration per Run 2 | 0.0022 ppm | -0.0021 ppm | 0.0260 ppm | -0.0107 ppm | 0.0006 ppm | -0.0093 ppm | 0.0024 ppm |
| Concentration per Run 3 | 0.0020 ppm | -0.0022 ppm | 0.0190 ppm | -0.0108 ppm | 0.0002 ppm | -0.0114 ppm | 0.0018 ppm |
| Recovery Percentage 1 | 20.180 % | -4.208 % | 1.099 % | -42.944 % | 0.181 % | -25.245 % | 26.937 % |
| Concentration RSD | 7.1 % | 2.4 % | 16.5 % | 0.4 % | 4,031.8 % | 32.2 % | 37.1 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0084 ppm | 0.0026 ppm | 0.0030 ppm | 0.0012 ppm | -0.0101 ppm | -0.0002 ppm | 0.0008 ppm |
| Concentration per Run 1 | -0.0083 ppm | 0.0022 ppm | 0.0030 ppm | 0.0014 ppm | -0.0101 ppm | -0.0001 ppm | 0.0008 ppm |
| Concentration per Run 2 | -0.0092 ppm | 0.0030 ppm | 0.0030 ppm | 0.0007 ppm | -0.0087 ppm | -0.0003 ppm | 0.0006 ppm |
| Concentration per Run 3 | -0.0078 ppm | 0.0027 ppm | 0.0029 ppm | 0.0014 ppm | -0.0117 ppm | -0.0002 ppm | 0.0010 ppm |
| Recovery Percentage 1 | -1.687 % | 5.253 % | 29.633 % | 11.740 % | -50.729 % | -1.974 % | 15.657 % |
| Concentration RSD | 8.6 % | 15.8 % | 2.8 % | 32.6 % | 14.4 % | 30.8 % | 28.3 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 93.0604 % | 84.2793 % | 83.5502 % | 95.8846 % | 67.0913 % | 85.7336 % | -0.0033 ppm |
| Concentration per Run 1 | 93.0209 % | 84.5163 % | 82.8644 % | 95.5212 % | 66.5124 % | 85.8748 % | -0.0038 ppm |
| Concentration per Run 2 | 93.1939 % | 83.9904 % | 84.5487 % | 96.1252 % | 67.7521 % | 85.5512 % | -0.0028 ppm |
| Concentration per Run 3 | 92.9664 % | 84.3311 % | 83.2374 % | 96.0076 % | 67.0095 % | 85.7748 % | -0.0032 ppm |
| Recovery Percentage 1 | | | | | | | -32.806 % |
| Concentration RSD | 0.1 % | 0.3 % | 1.1 % | 0.3 % | 0.9 % | 0.2 % | 14.4 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: SIC Cr Mn V Ti
Analysis started at: 3/12/2025 8:01:35 AM
Rack: 0
Vial: 7

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0060 ppm | -0.0043 ppm | 0.0002 ppm | 0.0001 ppm | -0.0024 ppm | 0.0153 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0075 ppm | -0.0040 ppm | 0.0001 ppm | 0.0003 ppm | -0.0023 ppm | 0.0154 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0055 ppm | -0.0040 ppm | 0.0002 ppm | 0.0002 ppm | -0.0025 ppm | 0.0143 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0051 ppm | -0.0051 ppm | 0.0002 ppm | 0.0000 ppm | -0.0023 ppm | 0.0163 ppm |
| Recovery Percentage 1 | 1.784 % | 6.006 % | -86.989 % | 0.533 % | 1.463 % | -47.592 % | 15.300 % |
| Concentration RSD | 231.4 % | 21.1 % | 14.4 % | 56.0 % | 94.6 % | 4.2 % | 6.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0037 ppm | 19.6027 ppm | -0.0067 ppm | 0.0103 ppm | -0.0018 ppm | -0.0194 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0039 ppm | 19.8536 ppm | -0.0068 ppm | 0.0114 ppm | 0.0062 ppm | -0.0193 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0033 ppm | 19.4102 ppm | -0.0065 ppm | 0.0101 ppm | -0.0152 ppm | -0.0208 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0040 ppm | 19.5442 ppm | -0.0067 ppm | 0.0093 ppm | 0.0037 ppm | -0.0180 ppm |
| Recovery Percentage 1 | -1.900 % | -18.657 % | 196,026.519 % | -66.901 % | 20.533 % | -0.070 % | -19.353 % |
| Concentration RSD | 52.8 % | 9.9 % | 1.2 % | 2.6 % | 10.1 % | 661.8 % | 7.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 19.5446 ppm | -0.0033 ppm | 0.0022 ppm | -0.0004 ppm | -0.0012 ppm | 0.0263 ppm | -0.0042 ppm |
| Concentration per Run 1 | 19.2238 ppm | -0.0031 ppm | 0.0031 ppm | -0.0003 ppm | -0.0013 ppm | 0.0234 ppm | -0.0021 ppm |
| Concentration per Run 2 | 19.6168 ppm | -0.0035 ppm | 0.0026 ppm | -0.0003 ppm | -0.0009 ppm | 0.0300 ppm | -0.0059 ppm |
| Concentration per Run 3 | 19.7933 ppm | -0.0033 ppm | 0.0009 ppm | -0.0005 ppm | -0.0014 ppm | 0.0256 ppm | -0.0046 ppm |
| Recovery Percentage 1 | 195,446.460 % | -6.643 % | 0.110 % | -1.410 % | -12.239 % | 52.699 % | -42.059 % |
| Concentration RSD | 1.5 % | 5.2 % | 53.6 % | 26.2 % | 21.1 % | 12.6 % | 45.2 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0668 ppm | -0.0013 ppm | 0.0001 ppm | 19.4181 ppm | -0.0146 ppm | 9.8125 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0662 ppm | -0.0012 ppm | 0.0001 ppm | 19.3707 ppm | -0.0135 ppm | 9.7645 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0678 ppm | -0.0016 ppm | 0.0001 ppm | 19.3623 ppm | -0.0150 ppm | 9.8263 ppm | -0.0007 ppm |
| Concentration per Run 3 | 0.0663 ppm | -0.0010 ppm | 0.0002 ppm | 19.5213 ppm | -0.0153 ppm | 9.8467 ppm | -0.0003 ppm |
| Recovery Percentage 1 | 13.353 % | -2.526 % | 1.295 % | 194,180.831 % | -72.949 % | 98,124.962 % | -3.866 % |
| Concentration RSD | 1.4 % | 22.0 % | 26.0 % | 0.5 % | 6.3 % | 0.4 % | 285.9 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.3327 % | 95.8308 % | 96.4776 % | 104.1053 % | 90.3708 % | 97.7524 % | -0.0031 ppm |
| Concentration per Run 1 | 98.7997 % | 96.2593 % | 97.1639 % | 105.6939 % | 91.3389 % | 97.9720 % | -0.0036 ppm |
| Concentration per Run 2 | 98.4557 % | 95.7978 % | 96.3354 % | 104.0332 % | 89.5530 % | 97.7461 % | -0.0027 ppm |
| Concentration per Run 3 | 97.7428 % | 95.4353 % | 95.9335 % | 102.5890 % | 90.2206 % | 97.5392 % | -0.0032 ppm |
| Recovery Percentage 1 | | | | | | | -31.330 % |
| Concentration RSD | 0.5 % | 0.4 % | 0.7 % | 1.5 % | 1.0 % | 0.2 % | 14.2 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: LDR Check
Analysis started at: 3/12/2025 8:09:29 AM
Rack: 0
Vial: 8

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0025 ppm | 0.1056 ppm | 20.1697 ppm | 18.8826 ppm | 18.5425 ppm | 4.9096 ppm | 0.0299 ppm |
| Concentration per Run 1 | 0.0025 ppm | 0.0980 ppm | 20.2085 ppm | 18.8899 ppm | 18.4112 ppm | 4.8672 ppm | 0.0296 ppm |
| Concentration per Run 2 | 0.0023 ppm | 0.1064 ppm | 20.0916 ppm | 18.7675 ppm | 18.2841 ppm | 4.8501 ppm | 0.0306 ppm |
| Concentration per Run 3 | 0.0027 ppm | 0.1125 ppm | 20.2090 ppm | 18.9904 ppm | 18.9321 ppm | 5.0115 ppm | 0.0296 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 100.848 % | 94.413 % | 92.712 % | 98.192 % | 0.000 % |
| Concentration RSD | 7.6 % | 6.9 % | 0.3 % | 0.6 % | 1.9 % | 1.8 % | 2.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.9276 ppm | 4.6909 ppm | -0.0004 ppm | 19.0541 ppm | 0.0036 ppm | 504.0638 ppm | -0.0144 ppm |
| Concentration per Run 1 | 4.9438 ppm | 4.6980 ppm | -0.0003 ppm | 19.1062 ppm | 0.0035 ppm | 498.4757 ppm | -0.0151 ppm |
| Concentration per Run 2 | 4.9824 ppm | 4.7266 ppm | -0.0003 ppm | 19.0754 ppm | 0.0029 ppm | 507.9232 ppm | -0.0146 ppm |
| Concentration per Run 3 | 4.8566 ppm | 4.6481 ppm | -0.0007 ppm | 18.9808 ppm | 0.0045 ppm | 505.7924 ppm | -0.0135 ppm |
| Recovery Percentage 1 | 98.551 % | 93.818 % | 0.000 % | 95.271 % | 0.000 % | 100.813 % | 0.000 % |
| Concentration RSD | 1.3 % | 0.8 % | 49.5 % | 0.3 % | 22.1 % | 1.0 % | 5.7 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 4.9537 ppm | 465.4975 ppm | 9.2197 ppm | 46.8363 ppm | 4.8901 ppm | 4.7630 ppm |
| Concentration per Run 1 | 0.0006 ppm | 4.9569 ppm | 457.8235 ppm | 9.2364 ppm | 46.8209 ppm | 4.8799 ppm | 4.7579 ppm |
| Concentration per Run 2 | 0.0004 ppm | 4.9969 ppm | 464.6326 ppm | 9.2948 ppm | 46.9849 ppm | 4.8800 ppm | 4.7317 ppm |
| Concentration per Run 3 | 0.0003 ppm | 4.9075 ppm | 474.0363 ppm | 9.1280 ppm | 46.7031 ppm | 4.9103 ppm | 4.7995 ppm |
| Recovery Percentage 1 | 0.000 % | 99.075 % | 93.099 % | 92.197 % | 93.673 % | 97.801 % | 95.261 % |
| Concentration RSD | 35.1 % | 0.9 % | 1.7 % | 0.9 % | 0.3 % | 0.4 % | 0.7 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 21.0689 [SIC 200] | 9.0714 ppm | 4.8109 ppm | -0.0037 ppm | 4.1651 ppm | 0.0182 ppm | 20.0869 [SIC 20] |
| Concentration per Run 1 | 21.0593 ppm | 9.0709 ppm | 4.7135 ppm | -0.0035 ppm | 4.1549 ppm | 0.0182 ppm | 20.1648 ppm |
| Concentration per Run 2 | 21.1347 ppm | 9.1161 ppm | 4.8248 ppm | -0.0039 ppm | 4.1738 ppm | 0.0182 ppm | 20.3410 ppm |
| Concentration per Run 3 | 21.0128 ppm | 9.0272 ppm | 4.8945 ppm | -0.0035 ppm | 4.1666 ppm | 0.0182 ppm | 19.7550 ppm |
| Recovery Percentage 1 | 105.345 % | 90.714 % | 96.219 % | 0.000 % | 83.302 % | 0.000 % | 100.435 % |
| Concentration RSD | 0.3 % | 0.5 % | 1.9 % | 5.0 % | 0.2 % | 0.2 % | 1.5 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 94.0452 % | 88.1937 % | 85.8080 % | 97.7897 % | 81.0537 % | 88.9968 % | 19.2098 ppm |
| Concentration per Run 1 | 94.6263 % | 88.1740 % | 85.4187 % | 98.6587 % | 80.7885 % | 89.0458 % | 19.0926 ppm |
| Concentration per Run 2 | 93.7173 % | 88.1326 % | 85.5975 % | 97.5828 % | 80.1864 % | 88.8600 % | 19.2779 ppm |
| Concentration per Run 3 | 93.7921 % | 88.2744 % | 86.4076 % | 97.1276 % | 82.1863 % | 89.0847 % | 19.2590 ppm |
| Recovery Percentage 1 | | | | | | | 96.049 % |
| Concentration RSD | 0.5 % | 0.1 % | 0.6 % | 0.8 % | 1.3 % | 0.1 % | 0.5 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: LLOQ RL 0.005
Analysis started at: 3/12/2025 9:07:36 AM
Rack: 1
Vial: 1

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0049 ppm | 0.0050 ppm | 0.0050 ppm | 0.0053 ppm | 0.0047 ppm | 0.0049 ppm | 0.0119 ppm |
| Concentration per Run 1 | 0.0048 ppm | 0.0026 ppm | 0.0060 ppm | 0.0054 ppm | 0.0046 ppm | 0.0049 ppm | 0.0157 ppm |
| Concentration per Run 2 | 0.0050 ppm | 0.0053 ppm | 0.0043 ppm | 0.0053 ppm | 0.0047 ppm | 0.0049 ppm | 0.0142 ppm |
| Concentration per Run 3 | 0.0049 ppm | 0.0071 ppm | 0.0046 ppm | 0.0052 ppm | 0.0046 ppm | 0.0050 ppm | 0.0060 ppm |
| Recovery Percentage 1 | 97.167 % | 99.840 % | 99.283 % | 105.868 % | 93.553 % | 98.762 % | 0.000 % |
| Concentration RSD | 2.2 % | 44.5 % | 18.2 % | 2.2 % | 1.2 % | 0.9 % | 43.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0047 ppm | 0.0045 ppm | 0.0048 ppm | 0.0060 ppm | **0.0063 ppm** | 0.1117 ppm | 0.0068 ppm |
| Concentration per Run 1 | 0.0047 ppm | 0.0045 ppm | 0.0051 ppm | 0.0059 ppm | 0.0056 ppm | 0.1076 ppm | 0.0058 ppm |
| Concentration per Run 2 | 0.0047 ppm | 0.0046 ppm | 0.0046 ppm | 0.0060 ppm | 0.0074 ppm | 0.1235 ppm | 0.0074 ppm |
| Concentration per Run 3 | 0.0047 ppm | 0.0045 ppm | 0.0047 ppm | 0.0060 ppm | 0.0058 ppm | 0.1041 ppm | 0.0072 ppm |
| Recovery Percentage 1 | 93.622 % | 90.744 % | 96.293 % | 119.341 % | 125.142 % | 0.000 % | 0.000 % |
| Concentration RSD | 0.6 % | 1.9 % | 4.9 % | 0.7 % | **15.9 %** | 9.3 % | 12.8 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0051 ppm | 0.0041 ppm | 0.1228 ppm | 0.0046 ppm | 0.0044 ppm | **0.0035 ppm** | **0.0032 ppm** |
| Concentration per Run 1 | 0.0049 ppm | 0.0041 ppm | 0.1202 ppm | 0.0049 ppm | 0.0045 ppm | 0.0046 ppm | 0.0022 ppm |
| Concentration per Run 2 | 0.0051 ppm | 0.0042 ppm | 0.1242 ppm | 0.0047 ppm | 0.0039 ppm | 0.0026 ppm | 0.0041 ppm |
| Concentration per Run 3 | 0.0053 ppm | 0.0041 ppm | 0.1239 ppm | 0.0044 ppm | 0.0047 ppm | 0.0034 ppm | 0.0032 ppm |
| Recovery Percentage 1 | 101.599 % | 82.182 % | 0.000 % | 92.929 % | 87.176 % | 70.256 % | 63.135 % |
| Concentration RSD | 3.7 % | 1.6 % | 1.8 % | 5.6 % | 9.3 % | **29.3 %** | **30.2 %** |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | **0.0547 ppm** | 0.0048 ppm | 0.0048 ppm | 0.0045 ppm | 0.0046 ppm | 0.0048 ppm | 0.0048 ppm |
| Concentration per Run 1 | 0.0564 ppm | 0.0049 ppm | 0.0047 ppm | 0.0044 ppm | 0.0042 ppm | 0.0050 ppm | 0.0048 ppm |
| Concentration per Run 2 | 0.0541 ppm | 0.0051 ppm | 0.0048 ppm | 0.0045 ppm | 0.0050 ppm | 0.0049 ppm | 0.0047 ppm |
| Concentration per Run 3 | 0.0535 ppm | 0.0044 ppm | 0.0048 ppm | 0.0047 ppm | 0.0046 ppm | 0.0046 ppm | 0.0047 ppm |
| Recovery Percentage 1 | 1,093.079 % | 95.849 % | 95.653 % | 90.458 % | 92.043 % | 95.943 % | 95.176 % |
| Concentration RSD | **2.8 %** | 8.2 % | 1.7 % | 2.7 % | 7.7 % | 4.6 % | 1.5 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 97.9541 % | 98.2072 % | 97.9524 % | 103.3899 % | 100.3099 % | 104.1521 % | 0.0055 ppm |
| Concentration per Run 1 | 99.4622 % | 98.8728 % | 98.1536 % | 104.1981 % | 100.5671 % | 105.3102 % | 0.0056 ppm |
| Concentration per Run 2 | 97.6472 % | 97.6674 % | 97.9133 % | 103.4054 % | 100.0770 % | 103.3064 % | 0.0052 ppm |
| Concentration per Run 3 | 96.7528 % | 98.0813 % | 97.7903 % | 102.5663 % | 100.2856 % | 103.8395 % | 0.0058 ppm |
| Recovery Percentage 1 | | | | | | | 110.294 % |
| Concentration RSD | 1.4 % | 0.6 % | 0.2 % | 0.8 % | 0.2 % | 1.0 % | 5.5 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: ZLLOQ RL 0.01
Analysis started at: 3/12/2025 9:14:13 AM
Rack: 1
Vial: 2

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0101 ppm | 0.0113 ppm | 0.0091 ppm | 0.0098 ppm | 0.0095 ppm | 0.0099 ppm | 0.0201 ppm |
| Concentration per Run 1 | 0.0098 ppm | 0.0104 ppm | 0.0090 ppm | 0.0098 ppm | 0.0095 ppm | 0.0098 ppm | 0.0186 ppm |
| Concentration per Run 2 | 0.0106 ppm | 0.0164 ppm | 0.0097 ppm | 0.0097 ppm | 0.0095 ppm | 0.0100 ppm | 0.0225 ppm |
| Concentration per Run 3 | 0.0100 ppm | 0.0070 ppm | 0.0085 ppm | 0.0098 ppm | 0.0095 ppm | 0.0098 ppm | 0.0191 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 90.779 % | 97.704 % | 95.062 % | 0.000 % | 0.000 % |
| Concentration RSD | 4.4 % | 42.0 % | 6.9 % | 0.7 % | 0.2 % | 1.1 % | 10.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0092 ppm | 0.0089 ppm | 0.0096 ppm | 0.0110 ppm | 0.0111 ppm | 0.1303 ppm | 0.0129 ppm |
| Concentration per Run 1 | 0.0093 ppm | 0.0089 ppm | 0.0096 ppm | 0.0108 ppm | 0.0110 ppm | 0.1402 ppm | 0.0133 ppm |
| Concentration per Run 2 | 0.0091 ppm | 0.0089 ppm | 0.0098 ppm | 0.0117 ppm | 0.0117 ppm | 0.1323 ppm | 0.0135 ppm |
| Concentration per Run 3 | 0.0091 ppm | 0.0089 ppm | 0.0094 ppm | 0.0106 ppm | 0.0105 ppm | 0.1183 ppm | 0.0118 ppm |
| Recovery Percentage 1 | 0.000 % | 89.307 % | 95.978 % | 110.370 % | 0.000 % | 0.000 % | 0.000 % |
| Concentration RSD | 1.1 % | 0.3 % | 2.1 % | 5.6 % | 5.3 % | 8.5 % | 7.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0100 ppm | 0.0086 ppm | 0.2139 ppm | 0.0092 ppm | 0.0094 ppm | 0.0088 ppm | 0.0103 ppm |
| Concentration per Run 1 | 0.0101 ppm | 0.0085 ppm | 0.2162 ppm | 0.0092 ppm | 0.0099 ppm | 0.0081 ppm | 0.0082 ppm |
| Concentration per Run 2 | 0.0098 ppm | 0.0087 ppm | 0.2135 ppm | 0.0091 ppm | 0.0092 ppm | 0.0091 ppm | 0.0109 ppm |
| Concentration per Run 3 | 0.0100 ppm | 0.0087 ppm | 0.2119 ppm | 0.0093 ppm | 0.0091 ppm | 0.0094 ppm | 0.0116 ppm |
| Recovery Percentage 1 | 99.605 % | 86.162 % | 0.000 % | 92.026 % | 94.284 % | 0.000 % | 102.690 % |
| Concentration RSD | 1.3 % | 1.2 % | 1.0 % | 1.1 % | 4.3 % | 7.8 % | 17.4 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1061 ppm | 0.0093 ppm | 0.0097 ppm | 0.0092 ppm | 0.0098 ppm | 0.0095 ppm | 0.0094 ppm |
| Concentration per Run 1 | 0.1064 ppm | 0.0095 ppm | 0.0097 ppm | 0.0090 ppm | 0.0101 ppm | 0.0094 ppm | 0.0094 ppm |
| Concentration per Run 2 | 0.1064 ppm | 0.0091 ppm | 0.0096 ppm | 0.0098 ppm | 0.0092 ppm | 0.0096 ppm | 0.0093 ppm |
| Concentration per Run 3 | 0.1054 ppm | 0.0092 ppm | 0.0098 ppm | 0.0087 ppm | 0.0101 ppm | 0.0094 ppm | 0.0094 ppm |
| Recovery Percentage 1 | 0.000 % | 92.667 % | 96.807 % | 91.617 % | 98.160 % | 94.678 % | 93.677 % |
| Concentration RSD | 0.6 % | 2.4 % | 0.9 % | 6.2 % | 5.0 % | 1.3 % | 0.5 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 97.9425 % | 96.7535 % | 98.0341 % | 103.3096 % | 100.8599 % | 102.1972 % | 0.0098 ppm |
| Concentration per Run 1 | 99.0914 % | 97.6646 % | 98.0239 % | 103.6180 % | 100.4312 % | 103.1731 % | 0.0092 ppm |
| Concentration per Run 2 | 97.1957 % | 92.3919 % | 97.5623 % | 102.7392 % | 100.7875 % | 98.5066 % | 0.0100 ppm |
| Concentration per Run 3 | 97.5406 % | 100.2040 % | 98.5163 % | 103.5716 % | 101.3612 % | 104.9120 % | 0.0103 ppm |
| Recovery Percentage 1 | | | | | | | 98.269 % |
| Concentration RSD | 1.0 % | 4.1 % | 0.5 % | 0.5 % | 0.5 % | 3.2 % | 5.8 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCV
Analysis started at: 3/12/2025 9:29:40 AM
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4860 ppm | 0.4743 ppm | 0.4817 ppm | 0.4758 ppm | 0.4471 ppm | 0.4704 ppm | 0.4956 ppm |
| Concentration per Run 1 | 0.4862 ppm | 0.4808 ppm | 0.4781 ppm | 0.4730 ppm | 0.4492 ppm | 0.4723 ppm | 0.4943 ppm |
| Concentration per Run 2 | 0.4853 ppm | 0.4827 ppm | 0.4855 ppm | 0.4786 ppm | 0.4565 ppm | 0.4812 ppm | 0.5107 ppm |
| Concentration per Run 3 | 0.4865 ppm | 0.4594 ppm | 0.4815 ppm | 0.4758 ppm | 0.4357 ppm | 0.4578 ppm | 0.4818 ppm |
| Recovery Percentage 1 | 97.205 % | 94.863 % | 96.343 % | 95.155 % | 89.423 % | 94.083 % | 99.120 % |
| Concentration RSD | 0.1 % | 2.7 % | 0.8 % | 0.6 % | 2.4 % | 2.5 % | 2.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4633 ppm | 0.4578 ppm | 0.4719 ppm | 0.5011 ppm | 0.4814 ppm | 4.7313 ppm | 0.4991 ppm |
| Concentration per Run 1 | 0.4580 ppm | 0.4531 ppm | 0.4727 ppm | 0.5014 ppm | 0.4810 ppm | 4.7686 ppm | 0.5004 ppm |
| Concentration per Run 2 | 0.4674 ppm | 0.4617 ppm | 0.4719 ppm | 0.4998 ppm | 0.4952 ppm | 4.8174 ppm | 0.4990 ppm |
| Concentration per Run 3 | 0.4643 ppm | 0.4586 ppm | 0.4712 ppm | 0.5021 ppm | 0.4681 ppm | 4.6080 ppm | 0.4979 ppm |
| Recovery Percentage 1 | 92.653 % | 91.560 % | 94.390 % | 100.222 % | 96.286 % | 94.627 % | 99.817 % |
| Concentration RSD | 1.0 % | 0.9 % | 0.2 % | 0.2 % | 2.8 % | 2.3 % | 0.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4701 ppm | 0.4663 ppm | 9.4783 ppm | 0.4747 ppm | 0.4843 ppm | 0.4596 ppm | 0.4833 ppm |
| Concentration per Run 1 | 0.4710 ppm | 0.4613 ppm | 9.5433 ppm | 0.4701 ppm | 0.4807 ppm | 0.4552 ppm | 0.4798 ppm |
| Concentration per Run 2 | 0.4816 ppm | 0.4707 ppm | 9.6502 ppm | 0.4788 ppm | 0.4892 ppm | 0.4638 ppm | 0.4869 ppm |
| Concentration per Run 3 | 0.4576 ppm | 0.4669 ppm | 9.2415 ppm | 0.4752 ppm | 0.4830 ppm | 0.4599 ppm | 0.4831 ppm |
| Recovery Percentage 1 | 94.016 % | 93.264 % | 94.783 % | 94.941 % | 96.862 % | 91.921 % | 96.650 % |
| Concentration RSD | 2.6 % | 1.0 % | 2.2 % | 0.9 % | 0.9 % | 0.9 % | 0.7 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.2932 ppm | 0.4511 ppm | 0.4465 ppm | 0.4639 ppm | 0.4781 ppm | 0.4873 ppm | 0.4556 ppm |
| Concentration per Run 1 | 5.2570 ppm | 0.4458 ppm | 0.4486 ppm | 0.4654 ppm | 0.4759 ppm | 0.4856 ppm | 0.4499 ppm |
| Concentration per Run 2 | 5.3412 ppm | 0.4554 ppm | 0.4561 ppm | 0.4635 ppm | 0.4820 ppm | 0.4902 ppm | 0.4590 ppm |
| Concentration per Run 3 | 5.2815 ppm | 0.4520 ppm | 0.4349 ppm | 0.4630 ppm | 0.4765 ppm | 0.4862 ppm | 0.4578 ppm |
| Recovery Percentage 1 | 100.823 % | 90.215 % | 89.301 % | 92.789 % | 95.630 % | 97.470 % | 91.111 % |
| Concentration RSD | 0.8 % | 1.1 % | 2.4 % | 0.3 % | 0.7 % | 0.5 % | 1.1 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.8546 % | 96.5410 % | 96.4156 % | 107.8476 % | 97.3601 % | 103.1346 % | 0.4522 ppm |
| Concentration per Run 1 | 98.8850 % | 96.6146 % | 96.9914 % | 107.8151 % | 98.1892 % | 103.2889 % | 0.4553 ppm |
| Concentration per Run 2 | 96.3269 % | 96.4558 % | 95.8832 % | 105.2702 % | 96.5703 % | 103.0063 % | 0.4592 ppm |
| Concentration per Run 3 | 101.3518 % | 96.5528 % | 96.3723 % | 110.4576 % | 97.3209 % | 103.1085 % | 0.4421 ppm |
| Recovery Percentage 1 | | | | | | | 90.443 % |
| Concentration RSD | 2.5 % | 0.1 % | 0.6 % | 2.4 % | 0.8 % | 0.1 % | 2.0 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCB
Analysis started at: 3/12/2025 9:36:00 AM
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0002 ppm | -0.0002 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0003 ppm | -0.0002 ppm | 0.0007 ppm | 0.0006 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0006 ppm | -0.0002 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm | 0.0013 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0001 ppm | -0.0010 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Recovery Percentage 1 | -2.284 % | -0.217 % | -3.018 % | 0.909 % | 0.405 % | -0.079 % | 0.432 % |
| Concentration RSD | 84.3 % | 151.7 % | 552.4 % | 92.4 % | 10.7 % | 622.8 % | 181.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0009 ppm | 0.0002 ppm | 0.0157 ppm | -0.0005 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | -0.0001 ppm | 0.0009 ppm | 0.0008 ppm | 0.0266 ppm | -0.0016 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | 0.0001 ppm | 0.0009 ppm | 0.0014 ppm | 0.0234 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0009 ppm | -0.0017 ppm | -0.0031 ppm | -0.0006 ppm |
| Recovery Percentage 1 | -0.020 % | 0.130 % | 0.200 % | 9.213 % | 0.343 % | 0.626 % | -0.498 % |
| Concentration RSD | 1,705.5 % | 358.5 % | 561.4 % | 1.4 % | 937.6 % | 104.1 % | 232.7 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0002 ppm | 0.0061 ppm | -0.0001 ppm | -0.0002 ppm | -0.0003 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0004 ppm | 0.0049 ppm | -0.0003 ppm | 0.0001 ppm | -0.0006 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0002 ppm | 0.0100 ppm | -0.0002 ppm | -0.0005 ppm | 0.0001 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0001 ppm | 0.0035 ppm | 0.0003 ppm | -0.0003 ppm | -0.0005 ppm | -0.0016 ppm |
| Recovery Percentage 1 | 0.997 % | 0.451 % | 0.307 % | -0.234 % | -2.102 % | -0.628 % | -1.165 % |
| Concentration RSD | 178.4 % | 60.9 % | 55.5 % | 504.5 % | 140.2 % | 108.0 % | 1,077.4 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0002 ppm | 0.0001 ppm | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0002 ppm | 0.0000 ppm | -0.0004 ppm | -0.0003 ppm | 0.0001 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0003 ppm | 0.0001 ppm | 0.0002 ppm | 0.0001 ppm | 0.0001 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0002 ppm | 0.0001 ppm | 0.0002 ppm | 0.0004 ppm | -0.0001 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 0.106 % | 0.466 % | 0.611 % | 0.039 % | 0.383 % | 0.368 % | -1.849 % |
| Concentration RSD | 57.6 % | 35.4 % | 35.3 % | 7,945.9 % | 473.9 % | 381.5 % | 117.0 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.0799 % | 97.7479 % | 97.7884 % | 103.7849 % | 100.9431 % | 103.7724 % | 0.0000 ppm |
| Concentration per Run 1 | 99.2503 % | 97.9044 % | 97.6238 % | 104.1652 % | 101.5548 % | 103.8316 % | 0.0011 ppm |
| Concentration per Run 2 | 97.7921 % | 97.7635 % | 97.6166 % | 103.8133 % | 100.6933 % | 103.8181 % | -0.0008 ppm |
| Concentration per Run 3 | 97.1972 % | 97.5757 % | 98.1248 % | 103.3762 % | 100.5813 % | 103.6675 % | -0.0002 ppm |
| Recovery Percentage 1 | | | | | | | 0.118 % |
| Concentration RSD | 1.1 % | 0.2 % | 0.3 % | 0.4 % | 0.5 % | 0.1 % | 8,320.6 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCV
Analysis started at: 3/12/2025 9:42:40 AM
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4813 ppm | 0.4819 ppm | 0.4798 ppm | 0.4731 ppm | 0.4563 ppm | 0.4800 ppm | 0.5061 ppm |
| Concentration per Run 1 | 0.4816 ppm | 0.4718 ppm | 0.4750 ppm | 0.4671 ppm | 0.4489 ppm | 0.4746 ppm | 0.4975 ppm |
| Concentration per Run 2 | 0.4732 ppm | 0.4915 ppm | 0.4860 ppm | 0.4804 ppm | 0.4588 ppm | 0.4828 ppm | 0.5110 ppm |
| Concentration per Run 3 | 0.4892 ppm | 0.4824 ppm | 0.4783 ppm | 0.4717 ppm | 0.4611 ppm | 0.4825 ppm | 0.5098 ppm |
| Recovery Percentage 1 | 96.269 % | 96.377 % | 95.957 % | 94.612 % | 91.253 % | 95.995 % | 101.221 % |
| Concentration RSD | 1.7 % | 2.1 % | 1.2 % | 1.4 % | 1.4 % | 1.0 % | 1.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4638 ppm | 0.4583 ppm | 0.4702 ppm | 0.4984 ppm | 0.4879 ppm | 4.8505 ppm | 0.4974 ppm |
| Concentration per Run 1 | 0.4568 ppm | 0.4512 ppm | 0.4714 ppm | 0.4957 ppm | 0.4809 ppm | 4.8011 ppm | 0.4988 ppm |
| Concentration per Run 2 | 0.4705 ppm | 0.4649 ppm | 0.4628 ppm | 0.4993 ppm | 0.4889 ppm | 4.8898 ppm | 0.4877 ppm |
| Concentration per Run 3 | 0.4640 ppm | 0.4589 ppm | 0.4765 ppm | 0.5001 ppm | 0.4939 ppm | 4.8607 ppm | 0.5059 ppm |
| Recovery Percentage 1 | 92.751 % | 91.664 % | 94.042 % | 99.675 % | 97.576 % | 97.011 % | 99.489 % |
| Concentration RSD | 1.5 % | 1.5 % | 1.5 % | 0.5 % | 1.3 % | 0.9 % | 1.8 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4778 ppm | 0.4669 ppm | 9.6122 ppm | 0.4745 ppm | 0.4823 ppm | 0.4597 ppm | 0.4828 ppm |
| Concentration per Run 1 | 0.4729 ppm | 0.4596 ppm | 9.4516 ppm | 0.4677 ppm | 0.4758 ppm | 0.4535 ppm | 0.4790 ppm |
| Concentration per Run 2 | 0.4802 ppm | 0.4730 ppm | 9.6628 ppm | 0.4810 ppm | 0.4891 ppm | 0.4661 ppm | 0.4895 ppm |
| Concentration per Run 3 | 0.4803 ppm | 0.4681 ppm | 9.7222 ppm | 0.4748 ppm | 0.4820 ppm | 0.4595 ppm | 0.4799 ppm |
| Recovery Percentage 1 | 95.561 % | 93.383 % | 96.122 % | 94.905 % | 96.463 % | 91.942 % | 96.560 % |
| Concentration RSD | 0.9 % | 1.4 % | 1.5 % | 1.4 % | 1.4 % | 1.4 % | 1.2 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.3115 ppm | 0.4676 ppm | 0.4606 ppm | 0.4627 ppm | 0.4770 ppm | 0.4862 ppm | 0.4565 ppm |
| Concentration per Run 1 | 5.2411 ppm | 0.4605 ppm | 0.4535 ppm | 0.4632 ppm | 0.4715 ppm | 0.4814 ppm | 0.4495 ppm |
| Concentration per Run 2 | 5.3854 ppm | 0.4746 ppm | 0.4630 ppm | 0.4561 ppm | 0.4839 ppm | 0.4932 ppm | 0.4632 ppm |
| Concentration per Run 3 | 5.3081 ppm | 0.4678 ppm | 0.4653 ppm | 0.4688 ppm | 0.4758 ppm | 0.4839 ppm | 0.4568 ppm |
| Recovery Percentage 1 | 101.172 % | 93.530 % | 92.117 % | 92.539 % | 95.410 % | 97.233 % | 91.297 % |
| Concentration RSD | 1.4 % | 1.5 % | 1.4 % | 1.4 % | 1.3 % | 1.3 % | 1.5 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 97.7303 % | 96.2088 % | 96.0367 % | 105.6433 % | 96.6541 % | 102.7537 % | 0.4674 ppm |
| Concentration per Run 1 | 98.4544 % | 96.4323 % | 97.0406 % | 106.8184 % | 97.9643 % | 102.6187 % | 0.4592 ppm |
| Concentration per Run 2 | 97.0353 % | 96.0623 % | 94.7053 % | 104.7513 % | 95.3823 % | 104.4187 % | 0.4697 ppm |
| Concentration per Run 3 | 97.7012 % | 96.1318 % | 96.3641 % | 105.3603 % | 96.6159 % | 101.2238 % | 0.4732 ppm |
| Recovery Percentage 1 | | | | | | | 93.475 % |
| Concentration RSD | 0.7 % | 0.2 % | 1.3 % | 1.0 % | 1.3 % | 1.6 % | 1.6 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCB
Analysis started at: 3/12/2025 9:48:59 AM
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0046 ppm | -0.0007 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm | 0.0036 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0021 ppm | -0.0007 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm | 0.0036 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0061 ppm | -0.0002 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm | 0.0059 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0055 ppm | -0.0012 ppm | 0.0004 ppm | -0.0001 ppm | 0.0000 ppm | 0.0013 ppm |
| Recovery Percentage 1 | 0.544 % | -4.575 % | -14.373 % | 1.081 % | -0.343 % | -0.014 % | 3.588 % |
| Concentration RSD | 336.0 % | 47.5 % | 73.5 % | 25.7 % | 184.3 % | 883.2 % | 63.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | -0.0002 ppm | 0.0009 ppm | 0.0006 ppm | 0.0164 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0010 ppm | 0.0015 ppm | 0.0168 ppm | 0.0023 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | -0.0002 ppm | 0.0007 ppm | 0.0000 ppm | -0.0009 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | -0.0004 ppm | 0.0010 ppm | 0.0002 ppm | 0.0334 ppm | 0.0009 ppm |
| Recovery Percentage 1 | -0.367 % | -0.022 % | -1.644 % | 9.117 % | 1.132 % | 0.657 % | 1.006 % |
| Concentration RSD | 98.7 % | 472.1 % | 158.4 % | 22.9 % | 140.3 % | 104.6 % | 120.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0004 ppm | -0.0023 ppm | -0.0001 ppm | -0.0001 ppm | -0.0003 ppm | -0.0010 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0005 ppm | 0.0034 ppm | 0.0001 ppm | 0.0001 ppm | -0.0008 ppm | -0.0030 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0004 ppm | -0.0047 ppm | -0.0002 ppm | 0.0000 ppm | -0.0004 ppm | 0.0002 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0002 ppm | -0.0056 ppm | -0.0001 ppm | -0.0006 ppm | 0.0002 ppm | -0.0001 ppm |
| Recovery Percentage 1 | -2.014 % | 0.718 % | -0.115 % | -0.260 % | -1.441 % | -0.680 % | -9.538 % |
| Concentration RSD | 35.8 % | 47.9 % | 217.1 % | 211.8 % | 273.8 % | 154.4 % | 187.0 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0004 ppm | 0.0001 ppm | -0.0001 ppm | 0.0002 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0004 ppm | 0.0001 ppm | -0.0003 ppm | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0018 ppm | 0.0004 ppm | 0.0000 ppm | -0.0001 ppm | 0.0005 ppm | 0.0000 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 0.177 % | 0.704 % | 0.529 % | -1.472 % | 0.925 % | 0.190 % | -0.325 % |
| Concentration RSD | 87.5 % | 34.2 % | 49.7 % | 103.2 % | 166.1 % | 581.9 % | 566.0 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 97.8899 % | 98.8006 % | 98.3680 % | 103.0371 % | 101.5661 % | 103.5929 % | -0.0001 ppm |
| Concentration per Run 1 | 99.5359 % | 98.1340 % | 98.2657 % | 103.9098 % | 101.3554 % | 103.0457 % | -0.0004 ppm |
| Concentration per Run 2 | 97.7253 % | 99.1738 % | 98.3467 % | 103.0247 % | 101.3808 % | 104.0636 % | 0.0003 ppm |
| Concentration per Run 3 | 96.4086 % | 99.0941 % | 98.4916 % | 102.1766 % | 101.9621 % | 103.6695 % | -0.0003 ppm |
| Recovery Percentage 1 | | | | | | | -1.132 % |
| Concentration RSD | 1.6 % | 0.6 % | 0.1 % | 0.8 % | 0.3 % | 0.5 % | 336.9 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2511531-06 WG2038644
Analysis started at: 3/12/2025 10:09:07 AM
Rack: 1
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0099 ppm | -0.0005 ppm | 0.0168 ppm | 0.1261 ppm | 0.0000 ppm | 80.0689 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0125 ppm | 0.0000 ppm | 0.0167 ppm | 0.1270 ppm | 0.0000 ppm | 80.2332 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0093 ppm | -0.0004 ppm | 0.0167 ppm | 0.1253 ppm | 0.0000 ppm | 79.9096 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0079 ppm | -0.0010 ppm | 0.0170 ppm | 0.1261 ppm | 0.0000 ppm | 80.0638 ppm |
| Concentration RSD | 101.1 % | 23.9 % | 117.8 % | 1.1 % | 0.7 % | 140.3 % | 0.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 0.0031 ppm | 0.0002 ppm | 0.0152 ppm | 0.0022 ppm | 0.5943 ppm | 1.4170 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.0031 ppm | 0.0003 ppm | 0.0151 ppm | 0.0022 ppm | 0.5798 ppm | 1.4135 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0031 ppm | -0.0001 ppm | 0.0152 ppm | 0.0022 ppm | 0.5774 ppm | 1.4229 ppm |
| Concentration per Run 3 | 0.0012 ppm | 0.0031 ppm | 0.0004 ppm | 0.0151 ppm | 0.0021 ppm | 0.6258 ppm | 1.4145 ppm |
| Concentration RSD | 1.4 % | 1.3 % | 112.2 % | 0.5 % | 3.6 % | 4.6 % | 0.4 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4806 ppm | 0.0003 ppm | 141.0052 ppm | 0.0127 ppm | 0.0309 ppm | 0.0010 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.4817 ppm | 0.0004 ppm | 140.3665 ppm | 0.0129 ppm | 0.0309 ppm | 0.0005 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.4799 ppm | 0.0002 ppm | 140.5334 ppm | 0.0127 ppm | 0.0305 ppm | 0.0005 ppm | -0.0012 ppm |
| Concentration per Run 3 | 0.4801 ppm | 0.0002 ppm | 142.1156 ppm | 0.0125 ppm | 0.0312 ppm | 0.0019 ppm | -0.0002 ppm |
| Concentration RSD | 0.2 % | 47.8 % | 0.7 % | 1.4 % | 1.1 % | 76.9 % | 286.9 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5471 ppm | 0.0012 ppm | 0.3608 ppm | 0.0003 ppm | -0.0045 ppm | 0.0010 ppm | 0.5277 ppm |
| Concentration per Run 1 | 0.5464 ppm | 0.0010 ppm | 0.3629 ppm | 0.0001 ppm | -0.0053 ppm | 0.0010 ppm | 0.5264 ppm |
| Concentration per Run 2 | 0.5500 ppm | 0.0010 ppm | 0.3584 ppm | 0.0004 ppm | -0.0036 ppm | 0.0010 ppm | 0.5291 ppm |
| Concentration per Run 3 | 0.5449 ppm | 0.0017 ppm | 0.3610 ppm | 0.0003 ppm | -0.0045 ppm | 0.0010 ppm | 0.5276 ppm |
| Concentration RSD | 0.5 % | 34.9 % | 0.6 % | 65.6 % | 18.9 % | 1.1 % | 0.3 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 95.1982 % | 93.2130 % | 91.8052 % | 102.1314 % | 84.8248 % | 97.3560 % | 0.0047 ppm |
| Concentration per Run 1 | 96.0215 % | 93.3121 % | 91.7500 % | 101.8561 % | 84.9871 % | 97.2210 % | 0.0053 ppm |
| Concentration per Run 2 | 94.9966 % | 93.1605 % | 91.7664 % | 102.3663 % | 84.3308 % | 97.2770 % | 0.0039 ppm |
| Concentration per Run 3 | 94.5765 % | 93.1662 % | 91.8992 % | 102.1720 % | 85.1563 % | 97.5701 % | 0.0049 ppm |
| Concentration RSD | 0.8 % | 0.1 % | 0.1 % | 0.3 % | 0.5 % | 0.2 % | 14.9 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2511768-01 WG2038644
Analysis started at: 3/12/2025 10:15:47 AM
Rack: 1
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0239 ppm | 0.0001 ppm | 0.0027 ppm | 0.0993 ppm | 0.0000 ppm | 4.0639 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0246 ppm | -0.0002 ppm | 0.0030 ppm | 0.1012 ppm | 0.0001 ppm | 4.1199 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0214 ppm | -0.0005 ppm | 0.0023 ppm | 0.0950 ppm | 0.0000 ppm | 3.9144 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0258 ppm | 0.0008 ppm | 0.0028 ppm | 0.1018 ppm | 0.0001 ppm | 4.1575 ppm |
| Concentration RSD | 201.8 % | 9.5 % | 1,296.6 % | 12.4 % | 3.8 % | 24.4 % | 3.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0009 ppm | 0.0003 ppm | 0.0034 ppm | 0.0058 ppm | 0.4957 ppm | 0.1046 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.0012 ppm | 0.0002 ppm | 0.0033 ppm | 0.0064 ppm | 0.5132 ppm | 0.1046 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0009 ppm | 0.0003 ppm | 0.0032 ppm | 0.0051 ppm | 0.4781 ppm | 0.1060 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0008 ppm | 0.0003 ppm | 0.0036 ppm | 0.0059 ppm | 0.4959 ppm | 0.1032 ppm |
| Concentration RSD | 4.7 % | 23.5 % | 35.0 % | 6.8 % | 10.7 % | 3.5 % | 1.4 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1014 ppm | -0.0001 ppm | 135.5428 ppm | 0.0019 ppm | 0.1312 ppm | -0.0015 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.1032 ppm | 0.0000 ppm | 135.3362 ppm | 0.0022 ppm | 0.1350 ppm | -0.0014 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0969 ppm | -0.0001 ppm | 131.4191 ppm | 0.0018 ppm | 0.1297 ppm | -0.0021 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.1041 ppm | 0.0000 ppm | 139.8733 ppm | 0.0019 ppm | 0.1289 ppm | -0.0010 ppm | 0.0001 ppm |
| Concentration RSD | 3.9 % | 97.1 % | 3.1 % | 9.7 % | 2.5 % | 35.4 % | 290.3 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1699 ppm | 0.0008 ppm | 0.0164 ppm | 0.0000 ppm | -0.0042 ppm | 0.0002 ppm | 0.2308 ppm |
| Concentration per Run 1 | 0.1742 ppm | 0.0009 ppm | 0.0167 ppm | -0.0001 ppm | -0.0039 ppm | 0.0000 ppm | 0.2374 ppm |
| Concentration per Run 2 | 0.1683 ppm | 0.0007 ppm | 0.0157 ppm | 0.0000 ppm | -0.0049 ppm | 0.0002 ppm | 0.2273 ppm |
| Concentration per Run 3 | 0.1673 ppm | 0.0009 ppm | 0.0168 ppm | 0.0000 ppm | -0.0038 ppm | 0.0003 ppm | 0.2277 ppm |
| Concentration RSD | 2.2 % | 14.6 % | 3.6 % | 184.0 % | 15.5 % | 102.4 % | 2.5 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 97.1076 % | 95.2925 % | 93.2448 % | 102.6291 % | 87.6032 % | 99.0525 % | 0.0020 ppm |
| Concentration per Run 1 | 97.0867 % | 95.3726 % | 91.0657 % | 101.3539 % | 85.5791 % | 99.1448 % | 0.0015 ppm |
| Concentration per Run 2 | 99.0019 % | 95.5633 % | 94.1234 % | 106.1436 % | 88.1249 % | 99.2859 % | 0.0021 ppm |
| Concentration per Run 3 | 95.2341 % | 94.9417 % | 94.5452 % | 100.3896 % | 89.1057 % | 98.7267 % | 0.0025 ppm |
| Concentration RSD | 1.9 % | 0.3 % | 2.0 % | 3.0 % | 2.1 % | 0.3 % | 23.3 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2511769-01 WG2038644
Analysis started at: 3/12/2025 10:22:30 AM
Rack: 1
Vial: 5

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0207 ppm | -0.0004 ppm | 0.0022 ppm | 0.0107 ppm | 0.0000 ppm | 1.4162 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0209 ppm | -0.0002 ppm | 0.0021 ppm | 0.0107 ppm | 0.0000 ppm | 1.4299 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0219 ppm | 0.0011 ppm | 0.0022 ppm | 0.0106 ppm | 0.0000 ppm | 1.4118 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0194 ppm | -0.0019 ppm | 0.0021 ppm | 0.0108 ppm | 0.0000 ppm | 1.4069 ppm |
| Concentration RSD | 175.4 % | 6.1 % | 414.4 % | 2.6 % | 0.6 % | 769.0 % | 0.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | -0.0003 ppm | 0.0002 ppm | 0.0011 ppm | 0.0070 ppm | 0.2400 ppm | 0.1093 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0003 ppm | 0.0001 ppm | 0.0010 ppm | 0.0075 ppm | 0.2381 ppm | 0.1082 ppm |
| Concentration per Run 2 | 0.0002 ppm | -0.0004 ppm | 0.0002 ppm | 0.0011 ppm | 0.0082 ppm | 0.2554 ppm | 0.1100 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0003 ppm | 0.0002 ppm | 0.0011 ppm | 0.0053 ppm | 0.2264 ppm | 0.1096 ppm |
| Concentration RSD | 14.2 % | 26.7 % | 57.1 % | 7.2 % | 21.5 % | 6.1 % | 0.8 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0068 ppm | -0.0002 ppm | 131.8312 ppm | 0.0003 ppm | 0.0021 ppm | -0.0015 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0067 ppm | -0.0003 ppm | 130.9710 ppm | 0.0004 ppm | 0.0022 ppm | -0.0016 ppm | -0.0009 ppm |
| Concentration per Run 2 | 0.0068 ppm | -0.0002 ppm | 132.6502 ppm | 0.0001 ppm | 0.0024 ppm | -0.0011 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0069 ppm | -0.0001 ppm | 131.8723 ppm | 0.0004 ppm | 0.0017 ppm | -0.0017 ppm | -0.0003 ppm |
| Concentration RSD | 1.4 % | 67.1 % | 0.6 % | 59.3 % | 16.8 % | 19.3 % | 95.7 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0847 ppm | 0.0009 ppm | 0.0117 ppm | 0.0000 ppm | -0.0044 ppm | 0.0001 ppm | 0.0529 ppm |
| Concentration per Run 1 | 0.0854 ppm | 0.0009 ppm | 0.0118 ppm | -0.0002 ppm | -0.0042 ppm | 0.0000 ppm | 0.0532 ppm |
| Concentration per Run 2 | 0.0844 ppm | 0.0011 ppm | 0.0118 ppm | 0.0000 ppm | -0.0041 ppm | 0.0002 ppm | 0.0529 ppm |
| Concentration per Run 3 | 0.0844 ppm | 0.0007 ppm | 0.0116 ppm | 0.0001 ppm | -0.0047 ppm | 0.0002 ppm | 0.0526 ppm |
| Concentration RSD | 0.7 % | 23.7 % | 0.8 % | 584.8 % | 7.5 % | 76.8 % | 0.5 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 96.5525 % | 95.5459 % | 94.5158 % | 102.6616 % | 88.7208 % | 99.2553 % | 0.0021 ppm |
| Concentration per Run 1 | 96.7141 % | 95.5385 % | 94.4998 % | 101.7867 % | 88.4647 % | 99.2152 % | 0.0024 ppm |
| Concentration per Run 2 | 96.8711 % | 95.3717 % | 94.4482 % | 103.4370 % | 88.8855 % | 99.1858 % | 0.0018 ppm |
| Concentration per Run 3 | 96.0724 % | 95.7275 % | 94.5994 % | 102.7611 % | 88.8122 % | 99.3649 % | 0.0021 ppm |
| Concentration RSD | 0.4 % | 0.2 % | 0.1 % | 0.8 % | 0.3 % | 0.1 % | 14.9 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512062-01 WG2038644
Analysis started at: 3/12/2025 10:30:16 AM
Rack: 1
Vial: 6

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0360 ppm | -0.0008 ppm | 0.0015 ppm | 0.0130 ppm | 0.0000 ppm | 0.3527 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0361 ppm | -0.0014 ppm | 0.0016 ppm | 0.0131 ppm | 0.0000 ppm | 0.3555 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0353 ppm | -0.0021 ppm | 0.0017 ppm | 0.0130 ppm | 0.0000 ppm | 0.3450 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0365 ppm | 0.0011 ppm | 0.0012 ppm | 0.0130 ppm | 0.0000 ppm | 0.3576 ppm |
| Concentration RSD | 354.4 % | 1.6 % | 216.6 % | 16.6 % | 0.8 % | 258.6 % | 1.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0003 ppm | 0.0003 ppm | 0.0023 ppm | 0.0021 ppm | 0.2092 ppm | 0.0347 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0003 ppm | 0.0003 ppm | 0.0024 ppm | 0.0013 ppm | 0.1850 ppm | 0.0353 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0004 ppm | 0.0005 ppm | 0.0020 ppm | 0.0019 ppm | 0.2206 ppm | 0.0353 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0003 ppm | 0.0001 ppm | 0.0024 ppm | 0.0029 ppm | 0.2221 ppm | 0.0334 ppm |
| Concentration RSD | 16.3 % | 26.9 % | 72.7 % | 9.7 % | 38.2 % | 10.1 % | 3.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | -0.0004 ppm | 138.4370 ppm | 0.0004 ppm | 0.0263 ppm | -0.0010 ppm | -0.0009 ppm |
| Concentration per Run 1 | 0.0013 ppm | -0.0004 ppm | 139.8417 ppm | 0.0005 ppm | 0.0266 ppm | -0.0011 ppm | -0.0022 ppm |
| Concentration per Run 2 | 0.0012 ppm | -0.0003 ppm | 137.1893 ppm | 0.0005 ppm | 0.0261 ppm | -0.0006 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0013 ppm | -0.0003 ppm | 138.2800 ppm | 0.0003 ppm | 0.0263 ppm | -0.0012 ppm | 0.0000 ppm |
| Concentration RSD | 6.9 % | 9.3 % | 1.0 % | 19.4 % | 0.8 % | 37.3 % | 133.4 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0704 ppm | 0.0032 ppm | 0.0027 ppm | -0.0002 ppm | -0.0038 ppm | 0.0001 ppm | 0.0063 ppm |
| Concentration per Run 1 | 0.0711 ppm | 0.0033 ppm | 0.0027 ppm | -0.0002 ppm | -0.0032 ppm | 0.0000 ppm | 0.0063 ppm |
| Concentration per Run 2 | 0.0701 ppm | 0.0032 ppm | 0.0027 ppm | 0.0000 ppm | -0.0037 ppm | 0.0001 ppm | 0.0063 ppm |
| Concentration per Run 3 | 0.0700 ppm | 0.0032 ppm | 0.0028 ppm | -0.0003 ppm | -0.0044 ppm | 0.0000 ppm | 0.0061 ppm |
| Concentration RSD | 0.8 % | 2.4 % | 1.2 % | 84.1 % | 15.2 % | 91.6 % | 1.6 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 96.3990 % | 94.9438 % | 93.9795 % | 101.7411 % | 88.4398 % | 99.2461 % | 0.0013 ppm |
| Concentration per Run 1 | 97.6361 % | 95.1676 % | 93.7271 % | 101.4999 % | 88.1610 % | 99.3102 % | 0.0014 ppm |
| Concentration per Run 2 | 96.0156 % | 94.8971 % | 93.9968 % | 101.8996 % | 88.3868 % | 99.1568 % | 0.0010 ppm |
| Concentration per Run 3 | 95.5454 % | 94.7668 % | 94.2147 % | 101.8239 % | 88.7717 % | 99.2713 % | 0.0015 ppm |
| Concentration RSD | 1.1 % | 0.2 % | 0.3 % | 0.2 % | 0.3 % | 0.1 % | 21.3 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512201-01 WG2038644
Analysis started at: 3/12/2025 10:37:04 AM
Rack: 1
Vial: 7

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0266 ppm | 0.0013 ppm | 0.1104 ppm | 0.0870 ppm | 0.0000 ppm | 42.8983 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0303 ppm | 0.0012 ppm | 0.1104 ppm | 0.0866 ppm | 0.0000 ppm | 42.7679 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0241 ppm | 0.0002 ppm | 0.1106 ppm | 0.0855 ppm | 0.0001 ppm | 42.0506 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0254 ppm | 0.0025 ppm | 0.1104 ppm | 0.0888 ppm | 0.0000 ppm | 43.8765 ppm |
| Concentration RSD | 71.4 % | 12.3 % | 89.4 % | 0.1 % | 1.9 % | 92.6 % | 2.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0027 ppm | 0.0003 ppm | 0.0012 ppm | 0.0033 ppm | 0.5870 ppm | 0.8580 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0026 ppm | 0.0006 ppm | 0.0012 ppm | 0.0044 ppm | 0.5616 ppm | 0.8562 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0028 ppm | 0.0001 ppm | 0.0013 ppm | 0.0013 ppm | 0.5937 ppm | 0.8557 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0027 ppm | 0.0001 ppm | 0.0012 ppm | 0.0044 ppm | 0.6057 ppm | 0.8622 ppm |
| Concentration RSD | 4.1 % | 3.4 % | 99.5 % | 3.5 % | 53.7 % | 3.9 % | 0.4 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1727 ppm | -0.0002 ppm | 127.9392 ppm | 0.0058 ppm | 0.0045 ppm | -0.0015 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.1719 ppm | -0.0002 ppm | 126.4659 ppm | 0.0058 ppm | 0.0043 ppm | -0.0012 ppm | -0.0015 ppm |
| Concentration per Run 2 | 0.1694 ppm | -0.0003 ppm | 125.3604 ppm | 0.0060 ppm | 0.0045 ppm | -0.0016 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.1768 ppm | -0.0002 ppm | 131.9914 ppm | 0.0058 ppm | 0.0047 ppm | -0.0017 ppm | 0.0000 ppm |
| Concentration RSD | 2.2 % | 34.3 % | 2.8 % | 1.7 % | 3.7 % | 19.5 % | 238.9 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0287 ppm | 0.0010 ppm | 0.2137 ppm | 0.0000 ppm | -0.0035 ppm | 0.0004 ppm | 0.0425 ppm |
| Concentration per Run 1 | 1.0286 ppm | 0.0014 ppm | 0.2123 ppm | -0.0001 ppm | -0.0045 ppm | 0.0004 ppm | 0.0427 ppm |
| Concentration per Run 2 | 1.0272 ppm | 0.0005 ppm | 0.2106 ppm | 0.0000 ppm | -0.0031 ppm | 0.0005 ppm | 0.0424 ppm |
| Concentration per Run 3 | 1.0303 ppm | 0.0012 ppm | 0.2183 ppm | 0.0001 ppm | -0.0030 ppm | 0.0004 ppm | 0.0425 ppm |
| Concentration RSD | 0.2 % | 47.9 % | 1.9 % | 1,607.6 % | 24.3 % | 15.5 % | 0.3 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 96.0568 % | 94.8428 % | 93.7278 % | 100.9029 % | 87.2535 % | 98.9912 % | 0.0088 ppm |
| Concentration per Run 1 | 96.7231 % | 94.7891 % | 93.6356 % | 101.0787 % | 87.3372 % | 98.8726 % | 0.0078 ppm |
| Concentration per Run 2 | 96.9760 % | 94.9001 % | 93.5918 % | 102.9134 % | 87.2618 % | 99.1301 % | 0.0088 ppm |
| Concentration per Run 3 | 94.4713 % | 94.8391 % | 93.9560 % | 98.7168 % | 87.1614 % | 98.9708 % | 0.0098 ppm |
| Concentration RSD | 1.4 % | 0.1 % | 0.2 % | 2.1 % | 0.1 % | 0.1 % | 11.5 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512259-02 WG2038644
Analysis started at: 3/12/2025 10:43:43 AM
Rack: 1
Vial: 8

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0183 ppm | -0.0014 ppm | 0.0059 ppm | 0.0319 ppm | 0.0000 ppm | 38.8059 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0176 ppm | -0.0004 ppm | 0.0059 ppm | 0.0318 ppm | 0.0000 ppm | 39.0524 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0225 ppm | -0.0013 ppm | 0.0057 ppm | 0.0312 ppm | 0.0001 ppm | 37.6936 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0148 ppm | -0.0026 ppm | 0.0060 ppm | 0.0328 ppm | -0.0001 ppm | 39.6716 ppm |
| Concentration RSD | 73.2 % | 21.2 % | 76.3 % | 2.9 % | 2.6 % | 647.3 % | 2.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0001 ppm | 0.0003 ppm | 0.0038 ppm | 0.0046 ppm | 0.5971 ppm | 0.6861 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0000 ppm | 0.0002 ppm | 0.0038 ppm | 0.0058 ppm | 0.5954 ppm | 0.6872 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0000 ppm | 0.0001 ppm | 0.0037 ppm | 0.0028 ppm | 0.5784 ppm | 0.6848 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0001 ppm | 0.0007 ppm | 0.0039 ppm | 0.0053 ppm | 0.6174 ppm | 0.6862 ppm |
| Concentration RSD | 14.4 % | 91.4 % | 105.7 % | 2.4 % | 33.9 % | 3.3 % | 0.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0767 ppm | -0.0002 ppm | 130.6008 ppm | 0.0013 ppm | 0.0224 ppm | -0.0003 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0771 ppm | -0.0003 ppm | 129.1375 ppm | 0.0015 ppm | 0.0230 ppm | -0.0006 ppm | -0.0009 ppm |
| Concentration per Run 2 | 0.0744 ppm | -0.0002 ppm | 126.7141 ppm | 0.0011 ppm | 0.0221 ppm | 0.0001 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0785 ppm | -0.0001 ppm | 135.9509 ppm | 0.0013 ppm | 0.0222 ppm | -0.0005 ppm | 0.0003 ppm |
| Concentration RSD | 2.7 % | 32.2 % | 3.7 % | 13.4 % | 2.1 % | 102.7 % | 854.8 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4925 ppm | 0.0010 ppm | 0.1853 ppm | 0.0001 ppm | -0.0041 ppm | 0.0002 ppm | 0.0165 ppm |
| Concentration per Run 1 | 0.4927 ppm | 0.0010 ppm | 0.1858 ppm | 0.0002 ppm | -0.0032 ppm | 0.0000 ppm | 0.0165 ppm |
| Concentration per Run 2 | 0.4921 ppm | 0.0009 ppm | 0.1805 ppm | 0.0000 ppm | -0.0043 ppm | 0.0003 ppm | 0.0165 ppm |
| Concentration per Run 3 | 0.4926 ppm | 0.0011 ppm | 0.1894 ppm | 0.0003 ppm | -0.0049 ppm | 0.0003 ppm | 0.0164 ppm |
| Concentration RSD | 0.1 % | 7.3 % | 2.4 % | 97.8 % | 20.3 % | 76.8 % | 0.4 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 95.8335 % | 94.3142 % | 93.3769 % | 101.6021 % | 87.1059 % | 98.7984 % | 0.0020 ppm |
| Concentration per Run 1 | 95.5818 % | 94.0976 % | 93.2684 % | 100.6862 % | 87.0057 % | 98.6585 % | 0.0017 ppm |
| Concentration per Run 2 | 97.3560 % | 94.1168 % | 93.4862 % | 104.5520 % | 87.3528 % | 98.6052 % | 0.0014 ppm |
| Concentration per Run 3 | 94.5626 % | 94.7282 % | 93.3761 % | 99.5681 % | 86.9591 % | 99.1315 % | 0.0028 ppm |
| Concentration RSD | 1.5 % | 0.4 % | 0.1 % | 2.6 % | 0.2 % | 0.3 % | 37.6 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512259-04 WG2038644
Analysis started at: 3/12/2025 10:50:28 AM
Rack: 1
Vial: 9

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0170 ppm | -0.0002 ppm | 0.0084 ppm | 0.0297 ppm | 0.0000 ppm | 25.8022 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0200 ppm | 0.0000 ppm | 0.0083 ppm | 0.0299 ppm | 0.0000 ppm | 25.9441 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0171 ppm | -0.0003 ppm | 0.0086 ppm | 0.0295 ppm | 0.0000 ppm | 25.7407 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0138 ppm | -0.0003 ppm | 0.0084 ppm | 0.0296 ppm | 0.0001 ppm | 25.7217 ppm |
| Concentration RSD | 173.3 % | 18.3 % | 92.8 % | 2.4 % | 0.5 % | 63.5 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0006 ppm | 0.0003 ppm | 0.0081 ppm | 0.0171 ppm | 0.9360 ppm | 1.5451 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0006 ppm | 0.0002 ppm | 0.0077 ppm | 0.0177 ppm | 0.9274 ppm | 1.4600 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0006 ppm | 0.0001 ppm | 0.0087 ppm | 0.0168 ppm | 0.9270 ppm | 1.6337 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0005 ppm | 0.0006 ppm | 0.0078 ppm | 0.0168 ppm | 0.9537 ppm | 1.5417 ppm |
| Concentration RSD | 26.3 % | 9.8 % | 81.9 % | 6.3 % | 3.0 % | 1.6 % | 5.6 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1375 ppm | -0.0002 ppm | 132.3228 ppm | 0.0015 ppm | 0.0041 ppm | -0.0017 ppm | -0.0012 ppm |
| Concentration per Run 1 | 0.1380 ppm | -0.0001 ppm | 135.7055 ppm | 0.0014 ppm | 0.0044 ppm | -0.0023 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.1372 ppm | -0.0002 ppm | 128.9608 ppm | 0.0014 ppm | 0.0039 ppm | -0.0015 ppm | -0.0018 ppm |
| Concentration per Run 3 | 0.1373 ppm | -0.0002 ppm | 132.3023 ppm | 0.0015 ppm | 0.0040 ppm | -0.0013 ppm | -0.0023 ppm |
| Concentration RSD | 0.3 % | 36.1 % | 2.5 % | 4.3 % | 6.3 % | 31.0 % | 123.9 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4119 ppm | 0.0009 ppm | 0.1364 ppm | 0.0002 ppm | -0.0031 ppm | 0.0003 ppm | 0.0244 ppm |
| Concentration per Run 1 | 0.4034 ppm | 0.0010 ppm | 0.1373 ppm | 0.0003 ppm | -0.0022 ppm | 0.0005 ppm | 0.0239 ppm |
| Concentration per Run 2 | 0.4193 ppm | 0.0009 ppm | 0.1362 ppm | 0.0001 ppm | -0.0041 ppm | 0.0002 ppm | 0.0246 ppm |
| Concentration per Run 3 | 0.4130 ppm | 0.0008 ppm | 0.1358 ppm | 0.0003 ppm | -0.0030 ppm | 0.0003 ppm | 0.0246 ppm |
| Concentration RSD | 2.0 % | 14.4 % | 0.6 % | 50.8 % | 31.1 % | 46.6 % | 1.6 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 96.2575 % | 96.2753 % | 93.8164 % | 102.1800 % | 87.7229 % | 100.2381 % | 0.0026 ppm |
| Concentration per Run 1 | 96.4811 % | 100.6496 % | 95.2763 % | 101.1676 % | 89.5300 % | 105.3727 % | 0.0024 ppm |
| Concentration per Run 2 | 96.1078 % | 91.7935 % | 92.5634 % | 102.4834 % | 86.4442 % | 94.9537 % | 0.0024 ppm |
| Concentration per Run 3 | 96.1835 % | 96.3828 % | 93.6095 % | 102.8890 % | 87.1945 % | 100.3878 % | 0.0030 ppm |
| Concentration RSD | 0.2 % | 4.6 % | 1.5 % | 0.9 % | 1.8 % | 5.2 % | 12.9 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512485-01 WG2038644
Analysis started at: 3/12/2025 10:57:13 AM
Rack: 1
Vial: 10

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0116 ppm | 0.0002 ppm | 0.0152 ppm | 0.0260 ppm | 0.0000 ppm | 74.1076 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0083 ppm | 0.0009 ppm | 0.0152 ppm | 0.0261 ppm | 0.0000 ppm | 74.1053 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0129 ppm | -0.0002 ppm | 0.0151 ppm | 0.0260 ppm | 0.0000 ppm | 74.4286 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0137 ppm | -0.0001 ppm | 0.0154 ppm | 0.0259 ppm | 0.0000 ppm | 73.7888 ppm |
| Concentration RSD | 196.2 % | 25.2 % | 285.6 % | 0.9 % | 0.4 % | 84.7 % | 0.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0032 ppm | 0.0012 ppm | 0.0007 ppm | 0.0263 ppm | 0.0023 ppm | 1.6789 ppm | 2.2618 ppm |
| Concentration per Run 1 | 0.0032 ppm | 0.0014 ppm | 0.0009 ppm | 0.0265 ppm | 0.0026 ppm | 1.6909 ppm | 2.2634 ppm |
| Concentration per Run 2 | 0.0033 ppm | 0.0012 ppm | 0.0003 ppm | 0.0263 ppm | 0.0018 ppm | 1.6815 ppm | 2.2668 ppm |
| Concentration per Run 3 | 0.0033 ppm | 0.0011 ppm | 0.0007 ppm | 0.0262 ppm | 0.0025 ppm | 1.6644 ppm | 2.2550 ppm |
| Concentration RSD | 1.0 % | 11.7 % | 45.8 % | 0.6 % | 19.3 % | 0.8 % | 0.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0787 ppm | 0.0011 ppm | 135.0952 ppm | 0.0179 ppm | 0.0146 ppm | -0.0010 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0789 ppm | 0.0011 ppm | 137.6905 ppm | 0.0179 ppm | 0.0142 ppm | -0.0002 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0796 ppm | 0.0011 ppm | 132.8414 ppm | 0.0179 ppm | 0.0143 ppm | -0.0013 ppm | -0.0008 ppm |
| Concentration per Run 3 | 0.0778 ppm | 0.0010 ppm | 134.7536 ppm | 0.0181 ppm | 0.0152 ppm | -0.0016 ppm | 0.0000 ppm |
| Concentration RSD | 1.1 % | 5.6 % | 1.8 % | 0.7 % | 3.6 % | 69.5 % | 492.7 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.1412 ppm | 0.0012 ppm | 0.2946 ppm | 0.0001 ppm | -0.0038 ppm | 0.0780 ppm | 0.2439 ppm |
| Concentration per Run 1 | 1.1346 ppm | 0.0014 ppm | 0.2961 ppm | 0.0001 ppm | -0.0035 ppm | 0.0775 ppm | 0.2415 ppm |
| Concentration per Run 2 | 1.1323 ppm | 0.0012 ppm | 0.2935 ppm | 0.0003 ppm | -0.0037 ppm | 0.0776 ppm | 0.2421 ppm |
| Concentration per Run 3 | 1.1566 ppm | 0.0011 ppm | 0.2942 ppm | 0.0000 ppm | -0.0043 ppm | 0.0788 ppm | 0.2482 ppm |
| Concentration RSD | 1.2 % | 14.8 % | 0.5 % | 109.9 % | 10.9 % | 0.9 % | 1.5 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 95.5524 % | 93.5531 % | 90.7426 % | 101.6768 % | 84.2269 % | 97.7876 % | 0.0305 ppm |
| Concentration per Run 1 | 96.8371 % | 93.7362 % | 91.3054 % | 101.6851 % | 84.7003 % | 97.9657 % | 0.0307 ppm |
| Concentration per Run 2 | 94.3828 % | 93.4333 % | 91.3564 % | 101.0802 % | 84.6833 % | 97.6579 % | 0.0306 ppm |
| Concentration per Run 3 | 95.4373 % | 93.4898 % | 89.5661 % | 102.2650 % | 83.2970 % | 97.7392 % | 0.0301 ppm |
| Concentration RSD | 1.3 % | 0.2 % | 1.1 % | 0.6 % | 1.0 % | 0.2 % | 1.0 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512485-02 WG2038644
Analysis started at: 3/12/2025 11:03:55 AM
Rack: 1
Vial: 11

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0328 ppm | -0.0012 ppm | 0.0074 ppm | 0.0325 ppm | 0.0000 ppm | 57.8897 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0291 ppm | -0.0004 ppm | 0.0078 ppm | 0.0328 ppm | 0.0000 ppm | 58.0639 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0323 ppm | -0.0023 ppm | 0.0070 ppm | 0.0324 ppm | 0.0000 ppm | 58.0359 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0370 ppm | -0.0010 ppm | 0.0073 ppm | 0.0324 ppm | 0.0000 ppm | 57.5692 ppm |
| Concentration RSD | 92.3 % | 12.1 % | 77.9 % | 5.5 % | 0.7 % | 82.1 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0010 ppm | 0.0011 ppm | 0.0111 ppm | 0.0165 ppm | 0.8995 ppm | 1.5961 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0010 ppm | 0.0010 ppm | 0.0108 ppm | 0.0172 ppm | 0.9270 ppm | 1.5339 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0009 ppm | 0.0012 ppm | 0.0111 ppm | 0.0158 ppm | 0.8866 ppm | 1.6415 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0010 ppm | 0.0012 ppm | 0.0114 ppm | 0.0167 ppm | 0.8848 ppm | 1.6129 ppm |
| Concentration RSD | 32.2 % | 4.8 % | 10.5 % | 2.8 % | 4.4 % | 2.7 % | 3.5 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1406 ppm | -0.0001 ppm | 135.2426 ppm | 0.0047 ppm | 0.0137 ppm | -0.0006 ppm | -0.0009 ppm |
| Concentration per Run 1 | 0.1411 ppm | -0.0001 ppm | 137.9747 ppm | 0.0046 ppm | 0.0142 ppm | -0.0008 ppm | -0.0021 ppm |
| Concentration per Run 2 | 0.1409 ppm | 0.0000 ppm | 136.8460 ppm | 0.0046 ppm | 0.0135 ppm | -0.0004 ppm | -0.0012 ppm |
| Concentration per Run 3 | 0.1399 ppm | -0.0001 ppm | 130.9071 ppm | 0.0049 ppm | 0.0133 ppm | -0.0005 ppm | 0.0007 ppm |
| Concentration RSD | 0.5 % | 146.8 % | 2.8 % | 2.9 % | 3.4 % | 36.1 % | 165.4 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.9223 ppm | 0.0009 ppm | 0.2192 ppm | 0.0006 ppm | -0.0040 ppm | 0.0004 ppm | 0.0292 ppm |
| Concentration per Run 1 | 0.9216 ppm | 0.0006 ppm | 0.2207 ppm | 0.0004 ppm | -0.0041 ppm | 0.0003 ppm | 0.0292 ppm |
| Concentration per Run 2 | 0.9179 ppm | 0.0011 ppm | 0.2184 ppm | 0.0008 ppm | -0.0037 ppm | 0.0003 ppm | 0.0291 ppm |
| Concentration per Run 3 | 0.9273 ppm | 0.0009 ppm | 0.2186 ppm | 0.0007 ppm | -0.0043 ppm | 0.0005 ppm | 0.0293 ppm |
| Concentration RSD | 0.5 % | 33.5 % | 0.6 % | 29.2 % | 7.8 % | 25.7 % | 0.4 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 95.4399 % | 93.6947 % | 92.7762 % | 101.1287 % | 86.3273 % | 98.9220 % | 0.0035 ppm |
| Concentration per Run 1 | 96.1578 % | 93.7464 % | 92.9987 % | 100.5799 % | 86.6580 % | 102.3417 % | 0.0031 ppm |
| Concentration per Run 2 | 94.5502 % | 93.4634 % | 92.8580 % | 100.9075 % | 86.6944 % | 96.3643 % | 0.0038 ppm |
| Concentration per Run 3 | 95.6116 % | 93.8742 % | 92.4718 % | 101.8986 % | 85.6293 % | 98.0602 % | 0.0035 ppm |
| Concentration RSD | 0.9 % | 0.2 % | 0.3 % | 0.7 % | 0.7 % | 3.1 % | 9.8 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512485-03 WG2038644
Analysis started at: 3/12/2025 11:10:39 AM
Rack: 1
Vial: 12

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0203 ppm | -0.0005 ppm | 0.0125 ppm | 0.0293 ppm | 0.0000 ppm | 63.1758 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0198 ppm | -0.0005 ppm | 0.0125 ppm | 0.0294 ppm | 0.0000 ppm | 63.2636 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0193 ppm | -0.0001 ppm | 0.0127 ppm | 0.0292 ppm | 0.0000 ppm | 63.3184 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0219 ppm | -0.0008 ppm | 0.0123 ppm | 0.0293 ppm | 0.0000 ppm | 62.9455 ppm |
| Concentration RSD | 293.4 % | 6.8 % | 76.4 % | 1.8 % | 0.3 % | 229.3 % | 0.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0000 ppm | 0.0010 ppm | 0.0621 ppm | 0.0113 ppm | 1.2220 ppm | 1.6836 ppm |
| Concentration per Run 1 | 0.0008 ppm | -0.0001 ppm | 0.0011 ppm | 0.0622 ppm | 0.0107 ppm | 1.2241 ppm | 1.6890 ppm |
| Concentration per Run 2 | 0.0008 ppm | -0.0001 ppm | 0.0009 ppm | 0.0622 ppm | 0.0111 ppm | 1.2029 ppm | 1.6787 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0001 ppm | 0.0011 ppm | 0.0618 ppm | 0.0121 ppm | 1.2389 ppm | 1.6832 ppm |
| Concentration RSD | 5.2 % | 191.1 % | 7.7 % | 0.4 % | 6.6 % | 1.5 % | 0.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4709 ppm | 0.0002 ppm | 136.4498 ppm | 0.0077 ppm | 0.0029 ppm | -0.0007 ppm | -0.0005 ppm |
| Concentration per Run 1 | 0.4724 ppm | 0.0001 ppm | 137.8483 ppm | 0.0079 ppm | 0.0032 ppm | -0.0018 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.4711 ppm | 0.0003 ppm | 135.9672 ppm | 0.0076 ppm | 0.0026 ppm | 0.0003 ppm | -0.0018 ppm |
| Concentration per Run 3 | 0.4691 ppm | 0.0003 ppm | 135.5339 ppm | 0.0076 ppm | 0.0027 ppm | -0.0006 ppm | -0.0001 ppm |
| Concentration RSD | 0.4 % | 51.1 % | 0.9 % | 2.3 % | 11.8 % | 148.6 % | 240.4 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.1669 ppm | 0.0009 ppm | 0.3294 ppm | 0.0005 ppm | -0.0043 ppm | 0.0091 ppm | 0.1264 ppm |
| Concentration per Run 1 | 2.1476 ppm | 0.0007 ppm | 0.3306 ppm | 0.0003 ppm | -0.0042 ppm | 0.0088 ppm | 0.1248 ppm |
| Concentration per Run 2 | 2.1880 ppm | 0.0011 ppm | 0.3288 ppm | 0.0006 ppm | -0.0040 ppm | 0.0092 ppm | 0.1279 ppm |
| Concentration per Run 3 | 2.1652 ppm | 0.0009 ppm | 0.3290 ppm | 0.0005 ppm | -0.0048 ppm | 0.0092 ppm | 0.1267 ppm |
| Concentration RSD | 0.9 % | 22.2 % | 0.3 % | 26.8 % | 9.2 % | 2.7 % | 1.2 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 95.7492 % | 93.5856 % | 92.4085 % | 102.1193 % | 86.0286 % | 97.9367 % | 0.0100 ppm |
| Concentration per Run 1 | 96.3385 % | 93.9912 % | 92.9768 % | 101.6660 % | 86.7899 % | 98.3222 % | 0.0102 ppm |
| Concentration per Run 2 | 94.9528 % | 93.2913 % | 91.8014 % | 101.8846 % | 85.3762 % | 97.6464 % | 0.0106 ppm |
| Concentration per Run 3 | 95.9564 % | 93.4744 % | 92.4473 % | 102.8074 % | 85.9197 % | 97.8415 % | 0.0091 ppm |
| Concentration RSD | 0.7 % | 0.4 % | 0.6 % | 0.6 % | 0.8 % | 0.4 % | 8.1 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCV
Analysis started at: 3/12/2025 11:17:22 AM
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4841 ppm | 0.4850 ppm | 0.4736 ppm | 0.4678 ppm | 0.4596 ppm | 0.4833 ppm | 0.5108 ppm |
| Concentration per Run 1 | 0.4836 ppm | 0.4802 ppm | 0.4781 ppm | 0.4698 ppm | 0.4557 ppm | 0.4792 ppm | 0.5053 ppm |
| Concentration per Run 2 | 0.4846 ppm | 0.4836 ppm | 0.4705 ppm | 0.4641 ppm | 0.4616 ppm | 0.4845 ppm | 0.5136 ppm |
| Concentration per Run 3 | 0.4841 ppm | 0.4911 ppm | 0.4723 ppm | 0.4694 ppm | 0.4615 ppm | 0.4864 ppm | 0.5135 ppm |
| Recovery Percentage 1 | 96.820 % | 96.992 % | 94.725 % | 93.551 % | 91.923 % | 96.668 % | 102.163 % |
| Concentration RSD | 0.1 % | 1.1 % | 0.8 % | 0.7 % | 0.7 % | 0.8 % | 0.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4593 ppm | 0.4564 ppm | 0.4768 ppm | 0.4951 ppm | 0.4906 ppm | 4.9083 ppm | 0.5005 ppm |
| Concentration per Run 1 | 0.4606 ppm | 0.4587 ppm | 0.4760 ppm | 0.4940 ppm | 0.4868 ppm | 4.8497 ppm | 0.5005 ppm |
| Concentration per Run 2 | 0.4534 ppm | 0.4512 ppm | 0.4765 ppm | 0.4946 ppm | 0.4924 ppm | 4.9413 ppm | 0.4997 ppm |
| Concentration per Run 3 | 0.4640 ppm | 0.4595 ppm | 0.4780 ppm | 0.4968 ppm | 0.4926 ppm | 4.9339 ppm | 0.5012 ppm |
| Recovery Percentage 1 | 91.863 % | 91.285 % | 95.366 % | 99.020 % | 98.117 % | 98.167 % | 100.100 % |
| Concentration RSD | 1.2 % | 1.0 % | 0.2 % | 0.3 % | 0.7 % | 1.0 % | 0.1 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4800 ppm | 0.4584 ppm | 9.5623 ppm | 0.4681 ppm | 0.4746 ppm | 0.4574 ppm | 0.4768 ppm |
| Concentration per Run 1 | 0.4748 ppm | 0.4598 ppm | 9.4802 ppm | 0.4699 ppm | 0.4760 ppm | 0.4607 ppm | 0.4803 ppm |
| Concentration per Run 2 | 0.4818 ppm | 0.4530 ppm | 9.6055 ppm | 0.4626 ppm | 0.4702 ppm | 0.4525 ppm | 0.4737 ppm |
| Concentration per Run 3 | 0.4834 ppm | 0.4623 ppm | 9.6013 ppm | 0.4718 ppm | 0.4777 ppm | 0.4590 ppm | 0.4762 ppm |
| Recovery Percentage 1 | 96.007 % | 91.674 % | 95.623 % | 93.624 % | 94.928 % | 91.483 % | 95.354 % |
| Concentration RSD | 1.0 % | 1.0 % | 0.7 % | 1.0 % | 0.8 % | 0.9 % | 0.7 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.1987 ppm | 0.4620 ppm | 0.4657 ppm | 0.4728 ppm | 0.4712 ppm | 0.4807 ppm | 0.4557 ppm |
| Concentration per Run 1 | 5.2358 ppm | 0.4644 ppm | 0.4617 ppm | 0.4722 ppm | 0.4733 ppm | 0.4829 ppm | 0.4571 ppm |
| Concentration per Run 2 | 5.1418 ppm | 0.4562 ppm | 0.4679 ppm | 0.4711 ppm | 0.4675 ppm | 0.4771 ppm | 0.4495 ppm |
| Concentration per Run 3 | 5.2183 ppm | 0.4653 ppm | 0.4676 ppm | 0.4751 ppm | 0.4728 ppm | 0.4821 ppm | 0.4605 ppm |
| Recovery Percentage 1 | 99.022 % | 92.390 % | 93.142 % | 94.552 % | 94.233 % | 96.142 % | 91.138 % |
| Concentration RSD | 1.0 % | 1.1 % | 0.8 % | 0.4 % | 0.7 % | 0.7 % | 1.2 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.2725 % | 98.0536 % | 98.2574 % | 105.0141 % | 98.5362 % | 102.7619 % | 0.4681 ppm |
| Concentration per Run 1 | 99.4391 % | 98.0840 % | 97.8167 % | 106.3268 % | 98.1832 % | 102.8319 % | 0.4636 ppm |
| Concentration per Run 2 | 98.6632 % | 98.3142 % | 99.0513 % | 105.1496 % | 99.4129 % | 102.9369 % | 0.4725 ppm |
| Concentration per Run 3 | 96.7151 % | 97.7627 % | 97.9043 % | 103.5660 % | 98.0126 % | 102.5167 % | 0.4682 ppm |
| Recovery Percentage 1 | | | | | | | 93.623 % |
| Concentration RSD | 1.4 % | 0.3 % | 0.7 % | 1.3 % | 0.8 % | 0.2 % | 1.0 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCB
Analysis started at: 3/12/2025 11:23:42 AM
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0012 ppm | -0.0004 ppm | -0.0002 ppm | 0.0000 ppm | 0.0000 ppm | -0.0014 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0001 ppm | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0000 ppm | -0.0004 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0012 ppm | -0.0007 ppm | -0.0004 ppm | 0.0000 ppm | 0.0000 ppm | -0.0069 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0023 ppm | -0.0006 ppm | -0.0003 ppm | -0.0001 ppm | 0.0000 ppm | 0.0031 ppm |
| Recovery Percentage 1 | -0.704 % | -1.163 % | -8.593 % | -0.826 % | -0.123 % | 0.332 % | -1.421 % |
| Concentration RSD | 332.6 % | 95.6 % | 87.3 % | 71.5 % | 446.0 % | 122.6 % | 356.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | 0.0002 ppm | 0.0006 ppm | -0.0002 ppm | 0.0156 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0003 ppm | 0.0007 ppm | -0.0005 ppm | 0.0051 ppm | 0.0016 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | 0.0003 ppm | 0.0008 ppm | -0.0003 ppm | 0.0254 ppm | -0.0007 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0004 ppm | 0.0001 ppm | 0.0164 ppm | -0.0010 ppm |
| Recovery Percentage 1 | -0.119 % | -0.271 % | 2.289 % | 6.402 % | -0.445 % | 0.625 % | -0.028 % |
| Concentration RSD | 366.5 % | 137.9 % | 64.4 % | 28.2 % | 126.0 % | 65.3 % | 4,906.0 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0001 ppm | 0.0243 ppm | -0.0001 ppm | -0.0004 ppm | 0.0002 ppm | -0.0013 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0002 ppm | 0.0261 ppm | 0.0000 ppm | -0.0004 ppm | -0.0001 ppm | -0.0008 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0002 ppm | 0.0236 ppm | -0.0001 ppm | -0.0004 ppm | 0.0002 ppm | -0.0012 ppm |
| Concentration per Run 3 | -0.0004 ppm | -0.0001 ppm | 0.0231 ppm | -0.0001 ppm | -0.0004 ppm | 0.0005 ppm | -0.0018 ppm |
| Recovery Percentage 1 | -2.051 % | 0.222 % | 1.213 % | -0.283 % | -4.027 % | 0.386 % | -12.887 % |
| Concentration RSD | 74.8 % | 131.8 % | 6.8 % | 107.8 % | 11.1 % | 142.9 % | 39.7 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0004 ppm | 0.0001 ppm | -0.0001 ppm | -0.0003 ppm | 0.0001 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0005 ppm | 0.0001 ppm | -0.0001 ppm | -0.0005 ppm | 0.0000 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0003 ppm | 0.0001 ppm | 0.0002 ppm | 0.0002 ppm | 0.0003 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0004 ppm | 0.0001 ppm | -0.0003 ppm | -0.0006 ppm | 0.0000 ppm | 0.0001 ppm |
| Recovery Percentage 1 | 0.129 % | 0.851 % | 1.176 % | -0.803 % | -1.571 % | 0.975 % | 1.231 % |
| Concentration RSD | 37.7 % | 25.3 % | 17.4 % | 322.4 % | 128.6 % | 188.8 % | 44.8 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.5998 % | 98.5387 % | 99.0224 % | 103.4036 % | 101.7226 % | 102.6830 % | -0.0007 ppm |
| Concentration per Run 1 | 99.7727 % | 99.5129 % | 99.3809 % | 103.6861 % | 102.4351 % | 103.3552 % | -0.0009 ppm |
| Concentration per Run 2 | 98.3980 % | 96.5397 % | 98.9302 % | 103.3432 % | 101.2590 % | 101.2850 % | -0.0007 ppm |
| Concentration per Run 3 | 97.6286 % | 99.5636 % | 98.7560 % | 103.1816 % | 101.4735 % | 103.4087 % | -0.0007 ppm |
| Recovery Percentage 1 | | | | | | | -7.399 % |
| Concentration RSD | 1.1 % | 1.8 % | 0.3 % | 0.2 % | 0.6 % | 1.2 % | 16.5 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512486-01 WG2038644
Analysis started at: 3/12/2025 11:31:10 AM
Rack: 1
Vial: 13

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0037 ppm | -0.0005 ppm | 0.0513 ppm | 0.0643 ppm | 0.0000 ppm | 71.5075 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0019 ppm | -0.0002 ppm | 0.0525 ppm | 0.0646 ppm | 0.0000 ppm | 71.9566 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0049 ppm | -0.0008 ppm | 0.0506 ppm | 0.0641 ppm | 0.0000 ppm | 71.0086 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0044 ppm | -0.0003 ppm | 0.0507 ppm | 0.0642 ppm | 0.0001 ppm | 71.5573 ppm |
| Concentration RSD | 81.9 % | 42.3 % | 73.3 % | 2.1 % | 0.4 % | 501.6 % | 0.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0006 ppm | 0.0004 ppm | 0.0013 ppm | 0.0043 ppm | 1.2628 ppm | 2.6640 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0005 ppm | 0.0004 ppm | 0.0011 ppm | 0.0044 ppm | 1.2729 ppm | 2.6646 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0007 ppm | 0.0003 ppm | 0.0014 ppm | 0.0044 ppm | 1.2637 ppm | 2.6604 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0004 ppm | 0.0004 ppm | 0.0014 ppm | 0.0040 ppm | 1.2518 ppm | 2.6670 ppm |
| Concentration RSD | 20.5 % | 23.6 % | 14.5 % | 11.9 % | 5.3 % | 0.8 % | 0.1 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2888 ppm | 0.0018 ppm | 134.6218 ppm | 0.0053 ppm | -0.0019 ppm | 0.0000 ppm | -0.0006 ppm |
| Concentration per Run 1 | 0.2908 ppm | 0.0021 ppm | 134.5459 ppm | 0.0051 ppm | -0.0018 ppm | -0.0002 ppm | -0.0020 ppm |
| Concentration per Run 2 | 0.2873 ppm | 0.0016 ppm | 133.2265 ppm | 0.0054 ppm | -0.0024 ppm | -0.0001 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.2885 ppm | 0.0017 ppm | 136.0929 ppm | 0.0053 ppm | -0.0016 ppm | 0.0003 ppm | 0.0007 ppm |
| Concentration RSD | 0.6 % | 15.1 % | 1.1 % | 2.6 % | 20.8 % | 1,363.4 % | 239.2 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.7907 ppm | 0.0011 ppm | 0.1599 ppm | 0.0002 ppm | -0.0045 ppm | 0.0017 ppm | 0.0731 ppm |
| Concentration per Run 1 | 2.8714 ppm | 0.0012 ppm | 0.1607 ppm | 0.0006 ppm | -0.0040 ppm | 0.0018 ppm | 0.0757 ppm |
| Concentration per Run 2 | 2.7590 ppm | 0.0012 ppm | 0.1595 ppm | 0.0002 ppm | -0.0039 ppm | 0.0017 ppm | 0.0721 ppm |
| Concentration per Run 3 | 2.7418 ppm | 0.0008 ppm | 0.1594 ppm | -0.0001 ppm | -0.0057 ppm | 0.0015 ppm | 0.0715 ppm |
| Concentration RSD | 2.5 % | 19.7 % | 0.5 % | 152.5 % | 22.0 % | 8.5 % | 3.0 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 95.3940 % | 93.2936 % | 90.5916 % | 101.4878 % | 84.2279 % | 97.5527 % | 0.0041 ppm |
| Concentration per Run 1 | 94.4204 % | 93.6142 % | 88.9577 % | 100.7137 % | 82.1992 % | 97.8053 % | 0.0040 ppm |
| Concentration per Run 2 | 95.8937 % | 93.1129 % | 91.5204 % | 102.4537 % | 84.9786 % | 97.4305 % | 0.0045 ppm |
| Concentration per Run 3 | 95.8679 % | 93.1537 % | 91.2968 % | 101.2959 % | 85.5060 % | 97.4222 % | 0.0039 ppm |
| Concentration RSD | 0.9 % | 0.3 % | 1.6 % | 0.9 % | 2.1 % | 0.2 % | 7.5 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512752-02 WG2038644
Analysis started at: 3/12/2025 11:37:48 AM
Rack: 1
Vial: 14

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0574 ppm | -0.0002 ppm | 0.0051 ppm | 0.0325 ppm | 0.0000 ppm | 14.0379 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0566 ppm | -0.0008 ppm | 0.0053 ppm | 0.0328 ppm | 0.0000 ppm | 14.1877 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0625 ppm | 0.0009 ppm | 0.0051 ppm | 0.0325 ppm | 0.0000 ppm | 14.0946 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0529 ppm | -0.0006 ppm | 0.0050 ppm | 0.0321 ppm | 0.0000 ppm | 13.8312 ppm |
| Concentration RSD | 935.9 % | 8.4 % | 526.0 % | 2.9 % | 1.0 % | 58.7 % | 1.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0003 ppm | 0.0622 ppm | 0.0041 ppm | 0.3600 ppm | 0.5531 ppm | 0.7771 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0002 ppm | 0.0624 ppm | 0.0040 ppm | 0.3611 ppm | 0.5595 ppm | 0.7774 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0002 ppm | 0.0620 ppm | 0.0040 ppm | 0.3636 ppm | 0.5506 ppm | 0.7782 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0004 ppm | 0.0621 ppm | 0.0042 ppm | 0.3552 ppm | 0.5491 ppm | 0.7758 ppm |
| Concentration RSD | 13.1 % | 38.6 % | 0.3 % | 2.6 % | 1.2 % | 1.0 % | 0.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1460 ppm | 0.0004 ppm | 132.5679 ppm | 0.0021 ppm | 0.0070 ppm | -0.0018 ppm | -0.0008 ppm |
| Concentration per Run 1 | 0.1472 ppm | 0.0004 ppm | 131.7969 ppm | 0.0021 ppm | 0.0072 ppm | -0.0019 ppm | -0.0022 ppm |
| Concentration per Run 2 | 0.1467 ppm | 0.0003 ppm | 132.2863 ppm | 0.0020 ppm | 0.0068 ppm | -0.0020 ppm | -0.0006 ppm |
| Concentration per Run 3 | 0.1440 ppm | 0.0004 ppm | 133.6205 ppm | 0.0021 ppm | 0.0069 ppm | -0.0017 ppm | 0.0004 ppm |
| Concentration RSD | 1.2 % | 13.7 % | 0.7 % | 3.3 % | 3.0 % | 8.7 % | 164.2 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.1765 ppm | 0.0009 ppm | 0.0641 ppm | 0.0002 ppm | -0.0036 ppm | 0.0005 ppm | 0.0111 ppm |
| Concentration per Run 1 | 1.1644 ppm | 0.0005 ppm | 0.0646 ppm | 0.0003 ppm | -0.0031 ppm | 0.0005 ppm | 0.0109 ppm |
| Concentration per Run 2 | 1.1686 ppm | 0.0010 ppm | 0.0644 ppm | 0.0000 ppm | -0.0033 ppm | 0.0006 ppm | 0.0111 ppm |
| Concentration per Run 3 | 1.1964 ppm | 0.0011 ppm | 0.0632 ppm | 0.0004 ppm | -0.0043 ppm | 0.0004 ppm | 0.0112 ppm |
| Concentration RSD | 1.5 % | 34.5 % | 1.2 % | 87.0 % | 17.6 % | 24.3 % | 1.2 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 96.1610 % | 94.3396 % | 93.2309 % | 102.3526 % | 87.2292 % | 98.7487 % | 0.0013 ppm |
| Concentration per Run 1 | 96.3367 % | 94.1695 % | 93.6282 % | 101.3667 % | 88.1012 % | 98.6939 % | 0.0015 ppm |
| Concentration per Run 2 | 95.6630 % | 94.3939 % | 93.7366 % | 102.1453 % | 87.8625 % | 98.7191 % | 0.0013 ppm |
| Concentration per Run 3 | 96.4833 % | 94.4552 % | 92.3279 % | 103.5458 % | 85.7239 % | 98.8332 % | 0.0012 ppm |
| Concentration RSD | 0.5 % | 0.2 % | 0.8 % | 1.1 % | 1.5 % | 0.1 % | 10.7 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCV
Analysis started at: 3/12/2025 11:44:29 AM
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4783 ppm | 0.4830 ppm | 0.4795 ppm | 0.4730 ppm | 0.4566 ppm | 0.4793 ppm | 0.5039 ppm |
| Concentration per Run 1 | 0.4812 ppm | 0.4745 ppm | 0.4746 ppm | 0.4676 ppm | 0.4513 ppm | 0.4721 ppm | 0.4938 ppm |
| Concentration per Run 2 | 0.4664 ppm | 0.4836 ppm | 0.4850 ppm | 0.4801 ppm | 0.4585 ppm | 0.4831 ppm | 0.5137 ppm |
| Concentration per Run 3 | 0.4872 ppm | 0.4909 ppm | 0.4788 ppm | 0.4714 ppm | 0.4600 ppm | 0.4826 ppm | 0.5043 ppm |
| Recovery Percentage 1 | 95.658 % | 96.601 % | 95.899 % | 94.601 % | 91.317 % | 95.857 % | 100.789 % |
| Concentration RSD | 2.2 % | 1.7 % | 1.1 % | 1.4 % | 1.0 % | 1.3 % | 2.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4648 ppm | 0.4629 ppm | 0.4700 ppm | 0.4915 ppm | 0.4891 ppm | 4.8862 ppm | 0.4950 ppm |
| Concentration per Run 1 | 0.4641 ppm | 0.4611 ppm | 0.4747 ppm | 0.4921 ppm | 0.4770 ppm | 4.8149 ppm | 0.4996 ppm |
| Concentration per Run 2 | 0.4716 ppm | 0.4697 ppm | 0.4579 ppm | 0.4848 ppm | 0.4944 ppm | 4.9096 ppm | 0.4827 ppm |
| Concentration per Run 3 | 0.4586 ppm | 0.4579 ppm | 0.4775 ppm | 0.4975 ppm | 0.4958 ppm | 4.9342 ppm | 0.5028 ppm |
| Recovery Percentage 1 | 92.956 % | 92.579 % | 94.009 % | 98.291 % | 97.814 % | 97.725 % | 99.002 % |
| Concentration RSD | 1.4 % | 1.3 % | 2.3 % | 1.3 % | 2.1 % | 1.3 % | 2.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4760 ppm | 0.4671 ppm | 9.5451 ppm | 0.4749 ppm | 0.4831 ppm | 0.4651 ppm | 0.4824 ppm |
| Concentration per Run 1 | 0.4684 ppm | 0.4650 ppm | 9.4415 ppm | 0.4738 ppm | 0.4810 ppm | 0.4624 ppm | 0.4771 ppm |
| Concentration per Run 2 | 0.4804 ppm | 0.4728 ppm | 9.5772 ppm | 0.4815 ppm | 0.4897 ppm | 0.4720 ppm | 0.4888 ppm |
| Concentration per Run 3 | 0.4793 ppm | 0.4634 ppm | 9.6165 ppm | 0.4694 ppm | 0.4785 ppm | 0.4608 ppm | 0.4814 ppm |
| Recovery Percentage 1 | 95.204 % | 93.414 % | 95.451 % | 94.983 % | 96.611 % | 93.014 % | 96.482 % |
| Concentration RSD | 1.4 % | 1.1 % | 1.0 % | 1.3 % | 1.2 % | 1.3 % | 1.2 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.2980 ppm | 0.4705 ppm | 0.4616 ppm | 0.4650 ppm | 0.4794 ppm | 0.4844 ppm | 0.4601 ppm |
| Concentration per Run 1 | 5.2675 ppm | 0.4682 ppm | 0.4563 ppm | 0.4678 ppm | 0.4761 ppm | 0.4808 ppm | 0.4595 ppm |
| Concentration per Run 2 | 5.3659 ppm | 0.4768 ppm | 0.4634 ppm | 0.4520 ppm | 0.4858 ppm | 0.4901 ppm | 0.4670 ppm |
| Concentration per Run 3 | 5.2607 ppm | 0.4663 ppm | 0.4649 ppm | 0.4751 ppm | 0.4763 ppm | 0.4824 ppm | 0.4536 ppm |
| Recovery Percentage 1 | 100.915 % | 94.090 % | 92.311 % | 92.996 % | 95.884 % | 96.885 % | 92.011 % |
| Concentration RSD | 1.1 % | 1.2 % | 1.0 % | 2.5 % | 1.2 % | 1.0 % | 1.5 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 97.6049 % | 98.2231 % | 97.1156 % | 105.5697 % | 96.9290 % | 103.8211 % | 0.4638 ppm |
| Concentration per Run 1 | 98.8495 % | 97.5177 % | 97.9361 % | 107.5499 % | 97.1295 % | 102.9864 % | 0.4578 ppm |
| Concentration per Run 2 | 96.5243 % | 99.6348 % | 95.8288 % | 104.2366 % | 95.8186 % | 106.5848 % | 0.4636 ppm |
| Concentration per Run 3 | 97.4411 % | 97.5169 % | 97.5818 % | 104.9224 % | 97.8388 % | 101.8920 % | 0.4699 ppm |
| Recovery Percentage 1 | | | | | | | 92.751 % |
| Concentration RSD | 1.2 % | 1.2 % | 1.2 % | 1.7 % | 1.1 % | 2.4 % | 1.3 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCB
Analysis started at: 3/12/2025 11:50:49 AM
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0006 ppm | -0.0005 ppm | -0.0001 ppm | 0.0000 ppm | 0.0000 ppm | 0.0012 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0057 ppm | -0.0025 ppm | -0.0001 ppm | 0.0001 ppm | 0.0001 ppm | 0.0040 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0054 ppm | 0.0009 ppm | -0.0001 ppm | -0.0001 ppm | 0.0001 ppm | -0.0056 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0022 ppm | 0.0003 ppm | -0.0002 ppm | 0.0001 ppm | 0.0000 ppm | 0.0051 ppm |
| Recovery Percentage 1 | 0.252 % | -0.619 % | -9.096 % | -0.369 % | 0.441 % | 0.856 % | 1.168 % |
| Concentration RSD | 605.3 % | 916.9 % | 396.5 % | 50.2 % | 270.1 % | 44.2 % | 504.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | 0.0006 ppm | -0.0001 ppm | -0.0004 ppm | 0.0012 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0004 ppm | 0.0006 ppm | 0.0005 ppm | 0.0076 ppm | 0.0017 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0006 ppm | 0.0011 ppm | 0.0312 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | 0.0005 ppm | -0.0019 ppm | -0.0399 ppm | 0.0014 ppm |
| Recovery Percentage 1 | -0.194 % | 0.195 % | 2.117 % | 5.960 % | -0.160 % | -0.015 % | 1.162 % |
| Concentration RSD | 214.7 % | 187.2 % | 86.2 % | 7.1 % | 2,010.4 % | 9,807.5 % | 59.7 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0002 ppm | 0.0208 ppm | -0.0001 ppm | -0.0002 ppm | 0.0000 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0004 ppm | 0.0202 ppm | 0.0000 ppm | 0.0000 ppm | 0.0004 ppm | -0.0006 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0002 ppm | 0.0200 ppm | -0.0003 ppm | -0.0003 ppm | -0.0001 ppm | 0.0010 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0000 ppm | 0.0222 ppm | 0.0000 ppm | -0.0003 ppm | -0.0003 ppm | 0.0006 ppm |
| Recovery Percentage 1 | -1.601 % | 0.428 % | 1.041 % | -0.329 % | -1.789 % | -0.008 % | 3.159 % |
| Concentration RSD | 33.1 % | 80.3 % | 5.7 % | 236.1 % | 100.7 % | 9,457.2 % | 256.8 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 0.0001 ppm | 0.0000 ppm | -0.0001 ppm | 0.0003 ppm | 0.0001 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | 0.0009 ppm | 0.0001 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0020 ppm | 0.0001 ppm | 0.0001 ppm | -0.0002 ppm | -0.0007 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0013 ppm | 0.0002 ppm | 0.0000 ppm | -0.0001 ppm | 0.0006 ppm | 0.0001 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 0.311 % | 0.170 % | 0.141 % | -1.180 % | 1.294 % | 0.657 % | -0.021 % |
| Concentration RSD | 24.9 % | 137.4 % | 485.3 % | 38.1 % | 325.6 % | 101.2 % | 1,455.7 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.7677 % | 99.2354 % | 98.2033 % | 103.5888 % | 101.3616 % | 103.3406 % | 0.0001 ppm |
| Concentration per Run 1 | 100.1112 % | 100.8078 % | 99.0370 % | 104.1563 % | 102.4052 % | 105.3208 % | 0.0000 ppm |
| Concentration per Run 2 | 98.1281 % | 98.3414 % | 97.1323 % | 103.1364 % | 99.9758 % | 101.9183 % | 0.0005 ppm |
| Concentration per Run 3 | 98.0638 % | 98.5570 % | 98.4407 % | 103.4738 % | 101.7038 % | 102.7827 % | -0.0002 ppm |
| Recovery Percentage 1 | | | | | | | 0.924 % |
| Concentration RSD | 1.2 % | 1.4 % | 1.0 % | 0.5 % | 1.2 % | 1.7 % | 405.5 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2038726-1 WG2038726
Analysis started at: 3/12/2025 12:11:26 PM
Rack: 1
Vial: 15

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0027 ppm | -0.0009 ppm | -0.0008 ppm | 0.0000 ppm | 0.0000 ppm | 0.0102 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0024 ppm | -0.0012 ppm | -0.0006 ppm | -0.0001 ppm | 0.0000 ppm | 0.0105 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0060 ppm | -0.0011 ppm | -0.0009 ppm | -0.0001 ppm | 0.0000 ppm | 0.0117 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0044 ppm | -0.0005 ppm | -0.0010 ppm | 0.0002 ppm | 0.0000 ppm | 0.0084 ppm |
| Concentration RSD | 7,047.2 % | 166.8 % | 40.6 % | 28.0 % | 1,045.8 % | 89.5 % | 16.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | 0.0001 ppm | 0.0012 ppm | 0.0069 ppm | -0.0090 ppm | 0.0032 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0012 ppm | 0.0075 ppm | 0.0055 ppm | 0.0017 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | 0.0003 ppm | 0.0013 ppm | 0.0053 ppm | -0.0101 ppm | 0.0027 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0012 ppm | 0.0079 ppm | -0.0224 ppm | 0.0053 ppm |
| Concentration RSD | 93.9 % | 36.8 % | 161.5 % | 5.7 % | 20.0 % | 156.0 % | 58.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0004 ppm | 0.0134 ppm | 0.0000 ppm | 0.0001 ppm | -0.0016 ppm | -0.0019 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0005 ppm | 0.0145 ppm | 0.0000 ppm | 0.0001 ppm | -0.0024 ppm | -0.0021 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0003 ppm | 0.0126 ppm | 0.0001 ppm | 0.0001 ppm | -0.0011 ppm | -0.0011 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0003 ppm | 0.0132 ppm | -0.0002 ppm | 0.0000 ppm | -0.0014 ppm | -0.0026 ppm |
| Concentration RSD | 756.2 % | 26.2 % | 7.2 % | 588.4 % | 77.7 % | 42.4 % | 39.1 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0076 ppm | 0.0003 ppm | 0.0001 ppm | -0.0001 ppm | -0.0002 ppm | 0.0000 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0078 ppm | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | -0.0006 ppm | 0.0000 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0079 ppm | 0.0004 ppm | 0.0001 ppm | -0.0002 ppm | 0.0004 ppm | 0.0000 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0071 ppm | 0.0004 ppm | 0.0001 ppm | 0.0001 ppm | -0.0003 ppm | -0.0001 ppm | 0.0004 ppm |
| Concentration RSD | 5.7 % | 97.1 % | 13.1 % | 213.6 % | 260.8 % | 67.0 % | 33.4 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.7479 % | 98.3016 % | 97.4183 % | 113.0562 % | 102.2412 % | 104.6955 % | -0.0005 ppm |
| Concentration per Run 1 | 101.5790 % | 97.6739 % | 96.6886 % | 115.4499 % | 102.3722 % | 105.0105 % | 0.0002 ppm |
| Concentration per Run 2 | 98.9236 % | 99.1861 % | 97.6159 % | 112.7023 % | 102.2231 % | 104.9307 % | -0.0013 ppm |
| Concentration per Run 3 | 98.7410 % | 98.0447 % | 97.9505 % | 111.0165 % | 102.1284 % | 104.1452 % | -0.0005 ppm |
| Concentration RSD | 1.6 % | 0.8 % | 0.7 % | 2.0 % | 0.1 % | 0.5 % | 146.3 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2038726-2 WG2038726
Analysis started at: 3/12/2025 12:28:57 PM
Rack: 1
Vial: 16

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0506 ppm | 1.8217 ppm | 0.1107 ppm | 0.9247 ppm | 1.7083 ppm | 0.0439 ppm | 8.8628 ppm |
| Concentration per Run 1 | 0.0504 ppm | 1.7315 ppm | 0.1108 ppm | 0.9236 ppm | 1.6313 ppm | 0.0419 ppm | 8.4655 ppm |
| Concentration per Run 2 | 0.0510 ppm | 1.8446 ppm | 0.1113 ppm | 0.9246 ppm | 1.7221 ppm | 0.0443 ppm | 8.9706 ppm |
| Concentration per Run 3 | 0.0505 ppm | 1.8889 ppm | 0.1099 ppm | 0.9259 ppm | 1.7716 ppm | 0.0455 ppm | 9.1524 ppm |
| Concentration RSD | 0.6 % | 4.5 % | 0.7 % | 0.1 % | 4.2 % | 4.2 % | 4.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0495 ppm | 0.4566 ppm | 0.1907 ppm | 0.2662 ppm | 0.9015 ppm | 8.8718 ppm | 9.7885 ppm |
| Concentration per Run 1 | 0.0493 ppm | 0.4552 ppm | 0.1912 ppm | 0.2652 ppm | 0.8593 ppm | 8.4531 ppm | 9.7726 ppm |
| Concentration per Run 2 | 0.0496 ppm | 0.4575 ppm | 0.1898 ppm | 0.2663 ppm | 0.9092 ppm | 8.9612 ppm | 9.7725 ppm |
| Concentration per Run 3 | 0.0495 ppm | 0.4571 ppm | 0.1913 ppm | 0.2672 ppm | 0.9360 ppm | 9.2011 ppm | 9.8203 ppm |
| Concentration RSD | 0.3 % | 0.3 % | 0.5 % | 0.4 % | 4.3 % | 4.3 % | 0.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4490 ppm | 0.8895 ppm | 9.0392 ppm | 0.4749 ppm | 0.5028 ppm | 0.4522 ppm | 0.1087 ppm |
| Concentration per Run 1 | 0.4288 ppm | 0.8829 ppm | 8.6203 ppm | 0.4737 ppm | 0.5017 ppm | 0.4492 ppm | 0.1082 ppm |
| Concentration per Run 2 | 0.4536 ppm | 0.8908 ppm | 9.1214 ppm | 0.4758 ppm | 0.5035 ppm | 0.4532 ppm | 0.1080 ppm |
| Concentration per Run 3 | 0.4647 ppm | 0.8947 ppm | 9.3761 ppm | 0.4751 ppm | 0.5033 ppm | 0.4542 ppm | 0.1099 ppm |
| Concentration RSD | 4.1 % | 0.7 % | 4.3 % | 0.2 % | 0.2 % | 0.6 % | 0.9 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0405 ppm | 0.8887 ppm | 0.8184 ppm | 0.9063 ppm | 0.1059 ppm | 0.5051 ppm | 0.4537 ppm |
| Concentration per Run 1 | 1.0356 ppm | 0.8864 ppm | 0.7813 ppm | 0.9044 ppm | 0.1062 ppm | 0.5056 ppm | 0.4528 ppm |
| Concentration per Run 2 | 1.0418 ppm | 0.8907 ppm | 0.8248 ppm | 0.9051 ppm | 0.1062 ppm | 0.5059 ppm | 0.4554 ppm |
| Concentration per Run 3 | 1.0441 ppm | 0.8891 ppm | 0.8492 ppm | 0.9093 ppm | 0.1053 ppm | 0.5039 ppm | 0.4530 ppm |
| Concentration RSD | 0.4 % | 0.2 % | 4.2 % | 0.3 % | 0.5 % | 0.2 % | 0.3 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.1726 % | 96.4732 % | 95.8685 % | 118.4563 % | 97.9543 % | 104.4769 % | -0.0001 ppm |
| Concentration per Run 1 | 100.3985 % | 96.4182 % | 96.0431 % | 124.1911 % | 98.3847 % | 104.7582 % | 0.0000 ppm |
| Concentration per Run 2 | 96.9377 % | 96.7899 % | 95.7733 % | 116.8936 % | 97.8322 % | 104.8061 % | -0.0004 ppm |
| Concentration per Run 3 | 97.1818 % | 96.2115 % | 95.7891 % | 114.2841 % | 97.6460 % | 103.8662 % | 0.0000 ppm |
| Concentration RSD | 2.0 % | 0.3 % | 0.2 % | 4.3 % | 0.4 % | 0.5 % | 171.7 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2038726-2 WG2038726
Analysis started at: 3/12/2025 12:35:12 PM
Rack: 1
Vial: 17

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0022 ppm | -0.0012 ppm | 0.0007 ppm | 0.0001 ppm | 0.0000 ppm | 0.0460 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0005 ppm | -0.0005 ppm | 0.0011 ppm | 0.0002 ppm | 0.0000 ppm | 0.0469 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0072 ppm | -0.0023 ppm | 0.0005 ppm | 0.0000 ppm | 0.0000 ppm | 0.0476 ppm |
| Concentration per Run 3 | 0.0003 ppm | -0.0001 ppm | -0.0008 ppm | 0.0006 ppm | 0.0001 ppm | 0.0000 ppm | 0.0435 ppm |
| Concentration RSD | 870.1 % | 198.9 % | 76.7 % | 44.7 % | 87.8 % | 441.1 % | 4.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0002 ppm | 0.0004 ppm | 0.0007 ppm | 0.0027 ppm | 0.0062 ppm | 0.0031 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0002 ppm | 0.0005 ppm | 0.0008 ppm | 0.0018 ppm | -0.0015 ppm | 0.0028 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | 0.0003 ppm | 0.0007 ppm | 0.0035 ppm | -0.0107 ppm | 0.0031 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0002 ppm | 0.0004 ppm | 0.0007 ppm | 0.0029 ppm | 0.0306 ppm | 0.0036 ppm |
| Concentration RSD | 259.1 % | 27.8 % | 24.3 % | 5.9 % | 31.9 % | 351.9 % | 12.6 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0020 ppm | 0.0122 ppm | 0.0000 ppm | -0.0005 ppm | 0.0007 ppm | -0.0011 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0023 ppm | 0.0164 ppm | 0.0000 ppm | -0.0005 ppm | 0.0006 ppm | -0.0033 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0019 ppm | 0.0119 ppm | 0.0001 ppm | -0.0012 ppm | 0.0003 ppm | -0.0009 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0017 ppm | 0.0082 ppm | -0.0001 ppm | 0.0000 ppm | 0.0011 ppm | 0.0009 ppm |
| Concentration RSD | 112.8 % | 14.7 % | 33.4 % | 2,712.1 % | 115.8 % | 58.5 % | 195.7 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0099 ppm | 0.0007 ppm | 0.0001 ppm | 0.0001 ppm | -0.0014 ppm | 0.0000 ppm | 0.0029 ppm |
| Concentration per Run 1 | 0.0103 ppm | 0.0010 ppm | 0.0001 ppm | 0.0000 ppm | -0.0018 ppm | -0.0001 ppm | 0.0029 ppm |
| Concentration per Run 2 | 0.0098 ppm | 0.0007 ppm | 0.0001 ppm | 0.0000 ppm | -0.0008 ppm | 0.0000 ppm | 0.0029 ppm |
| Concentration per Run 3 | 0.0097 ppm | 0.0004 ppm | 0.0002 ppm | 0.0002 ppm | -0.0015 ppm | 0.0002 ppm | 0.0029 ppm |
| Concentration RSD | 2.9 % | 41.9 % | 33.3 % | 246.3 % | 37.8 % | 1,090.1 % | 0.8 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.9847 % | 99.9105 % | 99.5628 % | 100.8541 % | 100.2387 % | 103.5999 % | 0.9871 ppm |
| Concentration per Run 1 | 99.9558 % | 99.6946 % | 98.7200 % | 99.9658 % | 99.4435 % | 103.1790 % | 0.9840 ppm |
| Concentration per Run 2 | 98.6095 % | 100.1930 % | 100.1169 % | 100.7871 % | 100.4544 % | 103.9877 % | 0.9939 ppm |
| Concentration per Run 3 | 98.3887 % | 99.8440 % | 99.8515 % | 101.8094 % | 100.8181 % | 103.6329 % | 0.9835 ppm |
| Concentration RSD | 0.9 % | 0.3 % | 0.7 % | 0.9 % | 0.7 % | 0.4 % | 0.6 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2038726-2 WG2038726
Analysis started at: 3/12/2025 12:41:50 PM
Rack: 1
Vial: 18

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0053 ppm | -0.0017 ppm | 0.0001 ppm | 0.0020 ppm | 0.0000 ppm | 0.0115 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0104 ppm | -0.0013 ppm | 0.0000 ppm | 0.0020 ppm | 0.0000 ppm | 0.0084 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0012 ppm | -0.0018 ppm | 0.0001 ppm | 0.0019 ppm | 0.0000 ppm | 0.0154 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0044 ppm | -0.0020 ppm | 0.0001 ppm | 0.0020 ppm | 0.0001 ppm | 0.0108 ppm |
| Concentration RSD | 2,494.6 % | 88.2 % | 21.1 % | 94.9 % | 2.9 % | 34.2 % | 30.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0002 ppm | 0.0003 ppm | 0.0007 ppm | 0.0018 ppm | -0.0019 ppm | 0.0025 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0001 ppm | 0.0003 ppm | 0.0009 ppm | 0.0031 ppm | -0.0165 ppm | 0.0024 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0004 ppm | 0.0004 ppm | 0.0007 ppm | 0.0015 ppm | -0.0059 ppm | 0.0023 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0002 ppm | 0.0003 ppm | 0.0006 ppm | 0.0009 ppm | 0.0168 ppm | 0.0027 ppm |
| Concentration RSD | 48.7 % | 65.6 % | 22.0 % | 20.5 % | 62.6 % | 904.5 % | 9.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0002 ppm | 0.0053 ppm | 0.0004 ppm | -0.0010 ppm | 0.0001 ppm | -0.0010 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0003 ppm | 0.0013 ppm | 0.0006 ppm | -0.0008 ppm | 0.0002 ppm | -0.0005 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0002 ppm | 0.0093 ppm | 0.0001 ppm | -0.0012 ppm | 0.0001 ppm | -0.0011 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0002 ppm | 0.0052 ppm | 0.0005 ppm | -0.0011 ppm | -0.0002 ppm | -0.0014 ppm |
| Concentration RSD | 35.7 % | 20.7 % | 75.5 % | 56.9 % | 22.1 % | 368.4 % | 44.9 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.9990 ppm | 0.0003 ppm | 0.0000 ppm | -0.0002 ppm | -0.0014 ppm | 0.0004 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.9983 ppm | 0.0004 ppm | 0.0001 ppm | -0.0002 ppm | -0.0011 ppm | 0.0004 ppm | 0.0004 ppm |
| Concentration per Run 2 | 1.0021 ppm | 0.0001 ppm | 0.0000 ppm | -0.0001 ppm | -0.0016 ppm | 0.0004 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.9967 ppm | 0.0004 ppm | 0.0001 ppm | -0.0001 ppm | -0.0016 ppm | 0.0006 ppm | 0.0004 ppm |
| Concentration RSD | 0.3 % | 51.1 % | 188.4 % | 26.0 % | 19.2 % | 22.6 % | 10.1 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.6254 % | 100.4956 % | 100.3533 % | 103.0557 % | 101.7475 % | 103.7733 % | -0.0005 ppm |
| Concentration per Run 1 | 101.7704 % | 98.3981 % | 100.6780 % | 103.7203 % | 102.0055 % | 102.1336 % | -0.0017 ppm |
| Concentration per Run 2 | 98.2065 % | 101.8475 % | 100.1672 % | 102.0783 % | 101.5089 % | 104.8870 % | 0.0005 ppm |
| Concentration per Run 3 | 98.8994 % | 101.2412 % | 100.2147 % | 103.3686 % | 101.7282 % | 104.2991 % | -0.0003 ppm |
| Concentration RSD | 1.9 % | 1.8 % | 0.3 % | 0.8 % | 0.2 % | 1.4 % | 231.3 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2500778-40 WG2038726
Analysis started at: 3/12/2025 12:48:26 PM
Rack: 1
Vial: 19

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0112 ppm | -0.0013 ppm | 0.0059 ppm | 0.0124 ppm | 0.0000 ppm | 59.7228 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0154 ppm | -0.0013 ppm | 0.0064 ppm | 0.0125 ppm | 0.0000 ppm | 60.0067 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0078 ppm | -0.0017 ppm | 0.0056 ppm | 0.0123 ppm | 0.0000 ppm | 59.8822 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0105 ppm | -0.0009 ppm | 0.0056 ppm | 0.0123 ppm | 0.0000 ppm | 59.2796 ppm |
| Concentration RSD | 10,209.8 % | 34.7 % | 32.7 % | 7.7 % | 0.9 % | 1,543.0 % | 0.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0002 ppm | 0.0014 ppm | 0.0007 ppm | 0.0126 ppm | 9.2250 ppm | 8.2705 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0004 ppm | 0.0013 ppm | 0.0007 ppm | 0.0134 ppm | 9.2922 ppm | 8.2832 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0002 ppm | 0.0015 ppm | 0.0008 ppm | 0.0123 ppm | 9.2196 ppm | 8.2834 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0002 ppm | 0.0013 ppm | 0.0007 ppm | 0.0120 ppm | 9.1632 ppm | 8.2450 ppm |
| Concentration RSD | 34.2 % | 52.9 % | 8.1 % | 7.3 % | 5.7 % | 0.7 % | 0.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0089 ppm | 0.0043 ppm | 34.4581 ppm | -0.0001 ppm | -0.0028 ppm | -0.0005 ppm | -0.0011 ppm |
| Concentration per Run 1 | 0.0088 ppm | 0.0043 ppm | 34.6452 ppm | -0.0003 ppm | -0.0031 ppm | -0.0012 ppm | -0.0007 ppm |
| Concentration per Run 2 | 0.0091 ppm | 0.0045 ppm | 34.4395 ppm | 0.0000 ppm | -0.0026 ppm | -0.0005 ppm | -0.0023 ppm |
| Concentration per Run 3 | 0.0088 ppm | 0.0040 ppm | 34.2897 ppm | -0.0002 ppm | -0.0027 ppm | 0.0003 ppm | -0.0004 ppm |
| Concentration RSD | 1.8 % | 4.9 % | 0.5 % | 110.2 % | 7.8 % | 153.6 % | 91.7 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.5283 ppm | 0.0000 ppm | 0.2584 ppm | 0.0008 ppm | -0.0005 ppm | 0.0003 ppm | 0.0006 ppm |
| Concentration per Run 1 | 5.5710 ppm | 0.0001 ppm | 0.2592 ppm | 0.0007 ppm | -0.0009 ppm | 0.0003 ppm | 0.0006 ppm |
| Concentration per Run 2 | 5.5126 ppm | 0.0000 ppm | 0.2590 ppm | 0.0011 ppm | -0.0005 ppm | 0.0003 ppm | 0.0006 ppm |
| Concentration per Run 3 | 5.5012 ppm | -0.0001 ppm | 0.2570 ppm | 0.0006 ppm | -0.0002 ppm | 0.0002 ppm | 0.0005 ppm |
| Concentration RSD | 0.7 % | 464.6 % | 0.5 % | 37.9 % | 67.3 % | 19.6 % | 15.0 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.1403 % | 97.7007 % | 96.1119 % | 98.6609 % | 94.8696 % | 99.0930 % | 0.0044 ppm |
| Concentration per Run 1 | 100.9551 % | 97.8398 % | 95.8263 % | 98.1072 % | 94.4964 % | 99.1741 % | 0.0042 ppm |
| Concentration per Run 2 | 98.0174 % | 97.3412 % | 96.2117 % | 98.2711 % | 94.9990 % | 98.7104 % | 0.0050 ppm |
| Concentration per Run 3 | 98.4485 % | 97.9211 % | 96.2978 % | 99.6043 % | 95.1133 % | 99.3944 % | 0.0041 ppm |
| Concentration RSD | 1.6 % | 0.3 % | 0.3 % | 0.8 % | 0.3 % | 0.4 % | 11.0 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2038726-3 WG2038726
Analysis started at: 3/12/2025 12:55:00 PM
Rack: 1
Vial: 20

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0519 ppm | 2.1049 ppm | 0.1143 ppm | 0.9683 ppm | 1.9972 ppm | 0.0510 ppm | 68.7983 ppm |
| Concentration per Run 1 | 0.0521 ppm | 2.0943 ppm | 0.1148 ppm | 0.9691 ppm | 1.9927 ppm | 0.0509 ppm | 68.6164 ppm |
| Concentration per Run 2 | 0.0520 ppm | 2.1231 ppm | 0.1129 ppm | 0.9608 ppm | 2.0068 ppm | 0.0512 ppm | 69.3165 ppm |
| Concentration per Run 3 | 0.0518 ppm | 2.0974 ppm | 0.1151 ppm | 0.9752 ppm | 1.9922 ppm | 0.0508 ppm | 68.4620 ppm |
| Concentration RSD | 0.3 % | 0.8 % | 1.1 % | 0.7 % | 0.4 % | 0.4 % | 0.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0505 ppm | 0.4695 ppm | 0.1968 ppm | 0.2582 ppm | 1.0346 ppm | 19.9600 ppm | 18.3533 ppm |
| Concentration per Run 1 | 0.0510 ppm | 0.4722 ppm | 0.1973 ppm | 0.2582 ppm | 1.0302 ppm | 20.0121 ppm | 18.3628 ppm |
| Concentration per Run 2 | 0.0499 ppm | 0.4657 ppm | 0.1972 ppm | 0.2577 ppm | 1.0404 ppm | 20.0358 ppm | 18.3504 ppm |
| Concentration per Run 3 | 0.0506 ppm | 0.4708 ppm | 0.1961 ppm | 0.2586 ppm | 1.0333 ppm | 19.8322 ppm | 18.3467 ppm |
| Concentration RSD | 1.0 % | 0.7 % | 0.3 % | 0.2 % | 0.5 % | 0.6 % | 0.0 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5196 ppm | 0.9044 ppm | 44.5059 ppm | 0.4776 ppm | 0.5044 ppm | 0.4761 ppm | 0.1157 ppm |
| Concentration per Run 1 | 0.5169 ppm | 0.9030 ppm | 44.5835 ppm | 0.4800 ppm | 0.5068 ppm | 0.4746 ppm | 0.1154 ppm |
| Concentration per Run 2 | 0.5235 ppm | 0.8969 ppm | 44.6382 ppm | 0.4739 ppm | 0.5003 ppm | 0.4734 ppm | 0.1160 ppm |
| Concentration per Run 3 | 0.5184 ppm | 0.9134 ppm | 44.2961 ppm | 0.4788 ppm | 0.5062 ppm | 0.4804 ppm | 0.1157 ppm |
| Concentration RSD | 0.7 % | 0.9 % | 0.4 % | 0.7 % | 0.7 % | 0.8 % | 0.3 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.6875 ppm | 0.9174 ppm | 1.2220 ppm | 0.9730 ppm | 0.1077 ppm | 0.4986 ppm | 0.4745 ppm |
| Concentration per Run 1 | 6.7009 ppm | 0.9219 ppm | 1.2192 ppm | 0.9750 ppm | 0.1071 ppm | 0.4992 ppm | 0.4797 ppm |
| Concentration per Run 2 | 6.6466 ppm | 0.9095 ppm | 1.2277 ppm | 0.9727 ppm | 0.1065 ppm | 0.4951 ppm | 0.4693 ppm |
| Concentration per Run 3 | 6.7151 ppm | 0.9209 ppm | 1.2192 ppm | 0.9712 ppm | 0.1095 ppm | 0.5014 ppm | 0.4745 ppm |
| Concentration RSD | 0.5 % | 0.7 % | 0.4 % | 0.2 % | 1.5 % | 0.6 % | 1.1 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.8550 % | 97.2325 % | 95.8657 % | 101.4137 % | 93.7083 % | 99.2164 % | 0.0037 ppm |
| Concentration per Run 1 | 101.3675 % | 97.0844 % | 95.7244 % | 101.9448 % | 93.5226 % | 99.0459 % | 0.0044 ppm |
| Concentration per Run 2 | 97.2190 % | 97.2796 % | 96.5042 % | 100.4018 % | 94.0739 % | 99.2108 % | 0.0038 ppm |
| Concentration per Run 3 | 97.9784 % | 97.3335 % | 95.3686 % | 101.8945 % | 93.5285 % | 99.3927 % | 0.0030 ppm |
| Concentration RSD | 2.2 % | 0.1 % | 0.6 % | 0.9 % | 0.3 % | 0.2 % | 19.2 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2038726-4 WG2038726
Analysis started at: 3/12/2025 1:01:16 PM
Rack: 1
Vial: 21

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0094 ppm | -0.0005 ppm | 0.0072 ppm | 0.0122 ppm | 0.0000 ppm | 58.5417 ppm |
| Concentration per Run 1 | -0.0005 ppm | 0.0078 ppm | 0.0000 ppm | 0.0075 ppm | 0.0122 ppm | 0.0000 ppm | 58.9022 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0117 ppm | 0.0000 ppm | 0.0070 ppm | 0.0123 ppm | 0.0000 ppm | 58.4976 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0089 ppm | -0.0016 ppm | 0.0071 ppm | 0.0122 ppm | 0.0000 ppm | 58.2255 ppm |
| Concentration RSD | 154.0 % | 21.1 % | 173.7 % | 3.6 % | 0.2 % | 145.5 % | 0.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0003 ppm | -0.0001 ppm | 0.0007 ppm | 0.0051 ppm | 9.1590 ppm | 8.2690 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0002 ppm | -0.0001 ppm | 0.0007 ppm | 0.0049 ppm | 9.1311 ppm | 8.2085 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0004 ppm | 0.0000 ppm | 0.0005 ppm | 0.0054 ppm | 9.1792 ppm | 8.2828 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0003 ppm | -0.0002 ppm | 0.0009 ppm | 0.0049 ppm | 9.1667 ppm | 8.3158 ppm |
| Concentration RSD | 28.0 % | 28.3 % | 115.6 % | 23.6 % | 6.2 % | 0.3 % | 0.7 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0087 ppm | 0.0070 ppm | 33.9231 ppm | -0.0002 ppm | -0.0027 ppm | 0.0015 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0088 ppm | 0.0074 ppm | 33.7828 ppm | -0.0003 ppm | -0.0027 ppm | 0.0017 ppm | -0.0013 ppm |
| Concentration per Run 2 | 0.0087 ppm | 0.0070 ppm | 34.0328 ppm | -0.0002 ppm | -0.0026 ppm | 0.0018 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0087 ppm | 0.0065 ppm | 33.9537 ppm | -0.0002 ppm | -0.0028 ppm | 0.0010 ppm | 0.0004 ppm |
| Concentration RSD | 0.4 % | 6.1 % | 0.4 % | 21.4 % | 3.2 % | 26.7 % | 229.5 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.5341 ppm | 0.0015 ppm | 0.2560 ppm | 0.0007 ppm | 0.0000 ppm | 0.0003 ppm | 0.0001 ppm |
| Concentration per Run 1 | 5.5394 ppm | 0.0015 ppm | 0.2564 ppm | 0.0004 ppm | 0.0004 ppm | 0.0002 ppm | 0.0001 ppm |
| Concentration per Run 2 | 5.5185 ppm | 0.0016 ppm | 0.2566 ppm | 0.0006 ppm | -0.0006 ppm | 0.0004 ppm | 0.0001 ppm |
| Concentration per Run 3 | 5.5442 ppm | 0.0014 ppm | 0.2549 ppm | 0.0009 ppm | 0.0003 ppm | 0.0003 ppm | 0.0002 ppm |
| Concentration RSD | 0.2 % | 7.0 % | 0.4 % | 40.0 % | 1,234.9 % | 35.8 % | 28.8 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.7433 % | 99.3371 % | 96.5152 % | 100.2795 % | 94.6493 % | 99.0724 % | 0.0034 ppm |
| Concentration per Run 1 | 101.5532 % | 100.1562 % | 96.7596 % | 99.4196 % | 94.6810 % | 99.7314 % | 0.0032 ppm |
| Concentration per Run 2 | 98.9578 % | 99.2375 % | 96.9311 % | 100.5431 % | 94.8660 % | 98.8426 % | 0.0043 ppm |
| Concentration per Run 3 | 98.7189 % | 98.6178 % | 95.8549 % | 100.8759 % | 94.4010 % | 98.6433 % | 0.0028 ppm |
| Concentration RSD | 1.6 % | 0.8 % | 0.6 % | 0.8 % | 0.2 % | 0.6 % | 21.9 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2038726-5 WG2038726
Analysis started at: 3/12/2025 1:07:50 PM
Rack: 1
Vial: 22

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0373 ppm | 2.0535 ppm | 0.1230 ppm | 0.9711 ppm | 1.9455 ppm | 0.0500 ppm | 66.4467 ppm |
| Concentration per Run 1 | 0.0377 ppm | 2.0396 ppm | 0.1243 ppm | 0.9796 ppm | 1.9325 ppm | 0.0496 ppm | 66.2059 ppm |
| Concentration per Run 2 | 0.0378 ppm | 2.0663 ppm | 0.1223 ppm | 0.9668 ppm | 1.9538 ppm | 0.0500 ppm | 66.4810 ppm |
| Concentration per Run 3 | 0.0364 ppm | 2.0546 ppm | 0.1222 ppm | 0.9669 ppm | 1.9503 ppm | 0.0503 ppm | 66.6532 ppm |
| Concentration RSD | 2.1 % | 0.7 % | 1.0 % | 0.8 % | 0.6 % | 0.7 % | 0.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0500 ppm | 0.4620 ppm | 0.1903 ppm | 0.2483 ppm | 1.0121 ppm | 19.7649 ppm | 17.8665 ppm |
| Concentration per Run 1 | 0.0504 ppm | 0.4669 ppm | 0.1922 ppm | 0.2511 ppm | 0.9990 ppm | 19.7614 ppm | 18.0946 ppm |
| Concentration per Run 2 | 0.0497 ppm | 0.4593 ppm | 0.1931 ppm | 0.2515 ppm | 1.0166 ppm | 19.8500 ppm | 18.1100 ppm |
| Concentration per Run 3 | 0.0498 ppm | 0.4599 ppm | 0.1856 ppm | 0.2424 ppm | 1.0208 ppm | 19.6832 ppm | 17.3948 ppm |
| Concentration RSD | 0.8 % | 0.9 % | 2.2 % | 2.1 % | 1.1 % | 0.4 % | 2.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5080 ppm | 0.9106 ppm | 43.4470 ppm | 0.4693 ppm | 0.5175 ppm | 0.4660 ppm | 0.1248 ppm |
| Concentration per Run 1 | 0.5059 ppm | 0.9132 ppm | 43.3018 ppm | 0.4740 ppm | 0.5231 ppm | 0.4678 ppm | 0.1279 ppm |
| Concentration per Run 2 | 0.5080 ppm | 0.9058 ppm | 43.6724 ppm | 0.4671 ppm | 0.5139 ppm | 0.4632 ppm | 0.1231 ppm |
| Concentration per Run 3 | 0.5099 ppm | 0.9129 ppm | 43.3669 ppm | 0.4669 ppm | 0.5154 ppm | 0.4669 ppm | 0.1236 ppm |
| Concentration RSD | 0.4 % | 0.5 % | 0.5 % | 0.9 % | 1.0 % | 0.5 % | 2.1 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.2181 ppm | 0.9292 ppm | 1.2154 ppm | 0.9601 ppm | 0.1171 ppm | 0.4891 ppm | 0.4680 ppm |
| Concentration per Run 1 | 6.2834 ppm | 0.9390 ppm | 1.2084 ppm | 0.9724 ppm | 0.1189 ppm | 0.4930 ppm | 0.4724 ppm |
| Concentration per Run 2 | 6.1802 ppm | 0.9251 ppm | 1.2193 ppm | 0.9721 ppm | 0.1173 ppm | 0.4892 ppm | 0.4661 ppm |
| Concentration per Run 3 | 6.1908 ppm | 0.9237 ppm | 1.2186 ppm | 0.9358 ppm | 0.1152 ppm | 0.4851 ppm | 0.4656 ppm |
| Concentration RSD | 0.9 % | 0.9 % | 0.5 % | 2.2 % | 1.6 % | 0.8 % | 0.8 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.3696 % | 98.4937 % | 94.9752 % | 101.1181 % | 92.9955 % | 100.0060 % | 0.0029 ppm |
| Concentration per Run 1 | 101.6948 % | 97.4872 % | 94.3874 % | 101.5226 % | 92.1991 % | 98.9634 % | 0.0033 ppm |
| Concentration per Run 2 | 98.8437 % | 97.3836 % | 95.2702 % | 101.4096 % | 93.4523 % | 98.9295 % | 0.0029 ppm |
| Concentration per Run 3 | 97.5705 % | 100.6104 % | 95.2681 % | 100.4220 % | 93.3352 % | 102.1249 % | 0.0026 ppm |
| Concentration RSD | 2.1 % | 1.9 % | 0.5 % | 0.6 % | 0.7 % | 1.8 % | 12.0 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCV
Analysis started at: 3/12/2025 1:14:07 PM
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4786 ppm | 0.4856 ppm | 0.4765 ppm | 0.4723 ppm | 0.4645 ppm | 0.4841 ppm | 0.5029 ppm |
| Concentration per Run 1 | 0.4778 ppm | 0.4821 ppm | 0.4754 ppm | 0.4685 ppm | 0.4569 ppm | 0.4768 ppm | 0.4985 ppm |
| Concentration per Run 2 | 0.4791 ppm | 0.4927 ppm | 0.4709 ppm | 0.4694 ppm | 0.4669 ppm | 0.4866 ppm | 0.5014 ppm |
| Concentration per Run 3 | 0.4788 ppm | 0.4821 ppm | 0.4831 ppm | 0.4789 ppm | 0.4696 ppm | 0.4891 ppm | 0.5089 ppm |
| Recovery Percentage 1 | 95.712 % | 97.130 % | 95.292 % | 94.454 % | 92.892 % | 96.829 % | 100.589 % |
| Concentration RSD | 0.1 % | 1.3 % | 1.3 % | 1.2 % | 1.4 % | 1.3 % | 1.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4600 ppm | 0.4646 ppm | 0.4796 ppm | 0.4792 ppm | 0.4936 ppm | 5.0461 ppm | 0.4960 ppm |
| Concentration per Run 1 | 0.4584 ppm | 0.4613 ppm | 0.4793 ppm | 0.4773 ppm | 0.4838 ppm | 4.9543 ppm | 0.4949 ppm |
| Concentration per Run 2 | 0.4501 ppm | 0.4562 ppm | 0.4795 ppm | 0.4808 ppm | 0.4948 ppm | 5.0895 ppm | 0.4963 ppm |
| Concentration per Run 3 | 0.4715 ppm | 0.4762 ppm | 0.4799 ppm | 0.4795 ppm | 0.5021 ppm | 5.0944 ppm | 0.4966 ppm |
| Recovery Percentage 1 | 91.994 % | 92.916 % | 95.915 % | 95.844 % | 98.715 % | 100.921 % | 99.193 % |
| Concentration RSD | 2.3 % | 2.2 % | 0.1 % | 0.4 % | 1.9 % | 1.6 % | 0.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4768 ppm | 0.4602 ppm | 9.5492 ppm | 0.4691 ppm | 0.4726 ppm | 0.4719 ppm | 0.4822 ppm |
| Concentration per Run 1 | 0.4712 ppm | 0.4559 ppm | 9.3894 ppm | 0.4657 ppm | 0.4669 ppm | 0.4662 ppm | 0.4780 ppm |
| Concentration per Run 2 | 0.4790 ppm | 0.4519 ppm | 9.6076 ppm | 0.4606 ppm | 0.4665 ppm | 0.4658 ppm | 0.4794 ppm |
| Concentration per Run 3 | 0.4803 ppm | 0.4727 ppm | 9.6505 ppm | 0.4811 ppm | 0.4842 ppm | 0.4839 ppm | 0.4890 ppm |
| Recovery Percentage 1 | 95.367 % | 92.031 % | 95.492 % | 93.824 % | 94.511 % | 94.389 % | 96.432 % |
| Concentration RSD | 1.0 % | 2.4 % | 1.5 % | 2.3 % | 2.1 % | 2.2 % | 1.2 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.1726 ppm | 0.4674 ppm | 0.4717 ppm | 0.4805 ppm | 0.4746 ppm | 0.4758 ppm | 0.4619 ppm |
| Concentration per Run 1 | 5.1106 ppm | 0.4638 ppm | 0.4647 ppm | 0.4809 ppm | 0.4689 ppm | 0.4724 ppm | 0.4611 ppm |
| Concentration per Run 2 | 5.1077 ppm | 0.4590 ppm | 0.4741 ppm | 0.4811 ppm | 0.4693 ppm | 0.4737 ppm | 0.4509 ppm |
| Concentration per Run 3 | 5.2995 ppm | 0.4793 ppm | 0.4763 ppm | 0.4796 ppm | 0.4856 ppm | 0.4814 ppm | 0.4735 ppm |
| Recovery Percentage 1 | 98.526 % | 93.476 % | 94.340 % | 96.110 % | 94.917 % | 95.167 % | 92.370 % |
| Concentration RSD | 2.1 % | 2.3 % | 1.3 % | 0.2 % | 2.0 % | 1.0 % | 2.5 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.6520 % | 99.5792 % | 98.9339 % | 104.0144 % | 97.6786 % | 102.0900 % | 0.4741 ppm |
| Concentration per Run 1 | 99.5696 % | 99.5486 % | 99.6224 % | 105.2499 % | 98.6348 % | 102.0762 % | 0.4658 ppm |
| Concentration per Run 2 | 98.3093 % | 99.6961 % | 99.5402 % | 103.6417 % | 98.9600 % | 102.2225 % | 0.4789 ppm |
| Concentration per Run 3 | 98.0771 % | 99.4931 % | 97.6389 % | 103.1515 % | 95.4410 % | 101.9714 % | 0.4777 ppm |
| Recovery Percentage 1 | | | | | | | 94.829 % |
| Concentration RSD | 0.8 % | 0.1 % | 1.1 % | 1.1 % | 2.0 % | 0.1 % | 1.5 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCB
Analysis started at: 3/12/2025 1:20:26 PM
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0001 ppm | -0.0001 ppm | 0.0009 ppm | 0.0000 ppm | 0.0000 ppm | 0.0005 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0020 ppm | 0.0000 ppm | 0.0011 ppm | 0.0001 ppm | 0.0000 ppm | -0.0035 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0042 ppm | -0.0006 ppm | 0.0010 ppm | -0.0001 ppm | 0.0000 ppm | 0.0076 ppm |
| Concentration per Run 3 | -0.0003 ppm | -0.0066 ppm | 0.0003 ppm | 0.0007 ppm | 0.0000 ppm | 0.0000 ppm | -0.0028 ppm |
| Recovery Percentage 1 | -1.458 % | -0.145 % | -2.231 % | 3.079 % | -0.023 % | 0.328 % | 0.461 % |
| Concentration RSD | 198.2 % | 3,956.3 % | 394.5 % | 17.8 % | 3,548.6 % | 133.4 % | 1,342.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0004 ppm | -0.0004 ppm | 0.0251 ppm | 0.0015 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0003 ppm | 0.0004 ppm | -0.0001 ppm | 0.0221 ppm | 0.0029 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | -0.0020 ppm | 0.0319 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | 0.0005 ppm | 0.0009 ppm | 0.0213 ppm | 0.0020 ppm |
| Recovery Percentage 1 | 0.002 % | 0.122 % | 0.642 % | 3.770 % | -0.816 % | 1.004 % | 1.538 % |
| Concentration RSD | 15,724.2 % | 35.6 % | 322.1 % | 42.6 % | 358.2 % | 23.6 % | 109.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0011 ppm | 0.0092 ppm | -0.0001 ppm | -0.0004 ppm | 0.0005 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0013 ppm | 0.0101 ppm | -0.0001 ppm | -0.0006 ppm | 0.0018 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0005 ppm | 0.0011 ppm | 0.0080 ppm | 0.0000 ppm | -0.0007 ppm | 0.0001 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0009 ppm | 0.0095 ppm | -0.0003 ppm | 0.0001 ppm | -0.0004 ppm | 0.0004 ppm |
| Recovery Percentage 1 | -0.965 % | 2.268 % | 0.460 % | -0.522 % | -4.206 % | 0.990 % | 1.537 % |
| Concentration RSD | 370.8 % | 16.7 % | 11.7 % | 97.0 % | 108.7 % | 230.9 % | 164.4 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 0.0007 ppm | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | -0.0001 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.0005 ppm | 0.0000 ppm | 0.0003 ppm | 0.0002 ppm | 0.0000 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0013 ppm | 0.0008 ppm | 0.0001 ppm | -0.0003 ppm | -0.0005 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0013 ppm | 0.0008 ppm | -0.0001 ppm | 0.0001 ppm | -0.0002 ppm | -0.0001 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 0.245 % | 1.404 % | 0.103 % | 0.291 % | -0.628 % | -0.660 % | -1.136 % |
| Concentration RSD | 9.1 % | 21.6 % | 905.4 % | 1,179.2 % | 283.6 % | 99.5 % | 151.0 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.7671 % | 100.6217 % | 99.0840 % | 101.9572 % | 101.1595 % | 102.7879 % | 0.0001 ppm |
| Concentration per Run 1 | 99.2045 % | 101.8230 % | 99.1277 % | 101.5700 % | 100.8270 % | 103.8843 % | -0.0003 ppm |
| Concentration per Run 2 | 98.1948 % | 99.4644 % | 99.0544 % | 101.8077 % | 101.3618 % | 101.7082 % | 0.0008 ppm |
| Concentration per Run 3 | 98.9021 % | 100.5777 % | 99.0697 % | 102.4940 % | 101.2897 % | 102.7713 % | -0.0001 ppm |
| Recovery Percentage 1 | | | | | | | 0.969 % |
| Concentration RSD | 0.5 % | 1.2 % | 0.0 % | 0.5 % | 0.3 % | 1.1 % | 595.7 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2039059-1 WG2039059
Analysis started at: 3/12/2025 1:42:13 PM
Rack: 1
Vial: 25

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0039 ppm | -0.0003 ppm | -0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0502 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0067 ppm | -0.0004 ppm | -0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0527 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0019 ppm | -0.0009 ppm | -0.0003 ppm | 0.0001 ppm | 0.0000 ppm | 0.0541 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0029 ppm | 0.0005 ppm | -0.0005 ppm | 0.0000 ppm | 0.0000 ppm | 0.0436 ppm |
| Concentration RSD | 916.5 % | 65.9 % | 236.5 % | 19.2 % | 579.8 % | 47.7 % | 11.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | 0.0009 ppm | 0.0027 ppm | -0.0020 ppm | 0.0049 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0001 ppm | 0.0002 ppm | 0.0009 ppm | 0.0026 ppm | 0.0036 ppm | 0.0029 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0009 ppm | 0.0036 ppm | -0.0151 ppm | 0.0061 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | 0.0004 ppm | 0.0008 ppm | 0.0018 ppm | 0.0056 ppm | 0.0058 ppm |
| Concentration RSD | 110.2 % | 1,076.6 % | 72.8 % | 8.7 % | 34.4 % | 575.4 % | 35.9 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | -0.0002 ppm | 0.0101 ppm | 0.0000 ppm | -0.0004 ppm | -0.0010 ppm | -0.0008 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0002 ppm | 0.0115 ppm | 0.0000 ppm | -0.0002 ppm | -0.0012 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0002 ppm | -0.0002 ppm | 0.0098 ppm | 0.0000 ppm | -0.0005 ppm | -0.0005 ppm | -0.0012 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0002 ppm | 0.0089 ppm | 0.0001 ppm | -0.0004 ppm | -0.0013 ppm | -0.0017 ppm |
| Concentration RSD | 2.6 % | 13.3 % | 13.2 % | 219.7 % | 42.6 % | 46.1 % | 159.8 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0068 ppm | 0.0000 ppm | 0.0001 ppm | -0.0002 ppm | -0.0004 ppm | 0.0000 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0063 ppm | 0.0002 ppm | 0.0001 ppm | -0.0002 ppm | -0.0002 ppm | 0.0001 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0070 ppm | 0.0001 ppm | 0.0001 ppm | -0.0002 ppm | 0.0001 ppm | 0.0001 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0069 ppm | -0.0004 ppm | 0.0001 ppm | -0.0002 ppm | -0.0012 ppm | -0.0001 ppm | 0.0004 ppm |
| Concentration RSD | 6.2 % | 1,300.9 % | 13.8 % | 14.8 % | 174.9 % | 806.4 % | 29.8 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.7825 % | 99.5586 % | 98.7487 % | 112.9441 % | 102.1976 % | 106.3215 % | -0.0007 ppm |
| Concentration per Run 1 | 101.3298 % | 99.5374 % | 99.0361 % | 115.8027 % | 102.7642 % | 106.5528 % | -0.0011 ppm |
| Concentration per Run 2 | 98.8982 % | 99.5340 % | 98.6142 % | 112.1438 % | 102.0822 % | 106.2734 % | -0.0002 ppm |
| Concentration per Run 3 | 99.1194 % | 99.6043 % | 98.5957 % | 110.8859 % | 101.7463 % | 106.1383 % | -0.0007 ppm |
| Concentration RSD | 1.3 % | 0.0 % | 0.3 % | 2.3 % | 0.5 % | 0.2 % | 73.3 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2039059-2 WG2039059
Analysis started at: 3/12/2025 1:48:46 PM
Rack: 1
Vial: 26

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0506 ppm | 2.0742 ppm | 0.1110 ppm | 0.9276 ppm | 1.9664 ppm | 0.0502 ppm | 10.3192 ppm |
| Concentration per Run 1 | 0.0506 ppm | 2.0893 ppm | 0.1107 ppm | 0.9296 ppm | 1.9785 ppm | 0.0506 ppm | 10.4461 ppm |
| Concentration per Run 2 | 0.0504 ppm | 2.0820 ppm | 0.1111 ppm | 0.9295 ppm | 1.9707 ppm | 0.0500 ppm | 10.2706 ppm |
| Concentration per Run 3 | 0.0507 ppm | 2.0514 ppm | 0.1113 ppm | 0.9238 ppm | 1.9499 ppm | 0.0499 ppm | 10.2408 ppm |
| Concentration RSD | 0.3 % | 1.0 % | 0.3 % | 0.4 % | 0.8 % | 0.8 % | 1.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0496 ppm | 0.4590 ppm | 0.1931 ppm | 0.2604 ppm | 1.0354 ppm | 10.3733 ppm | 9.9972 ppm |
| Concentration per Run 1 | 0.0495 ppm | 0.4583 ppm | 0.1940 ppm | 0.2598 ppm | 1.0421 ppm | 10.4447 ppm | 10.0123 ppm |
| Concentration per Run 2 | 0.0498 ppm | 0.4603 ppm | 0.1928 ppm | 0.2610 ppm | 1.0305 ppm | 10.4166 ppm | 9.9954 ppm |
| Concentration per Run 3 | 0.0495 ppm | 0.4583 ppm | 0.1924 ppm | 0.2604 ppm | 1.0336 ppm | 10.2584 ppm | 9.9838 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 0.4 % | 0.2 % | 0.6 % | 1.0 % | 0.1 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5133 ppm | 0.9045 ppm | 10.4495 ppm | 0.4749 ppm | 0.5083 ppm | 0.4567 ppm | 0.1088 ppm |
| Concentration per Run 1 | 0.5188 ppm | 0.9005 ppm | 10.4985 ppm | 0.4740 ppm | 0.5087 ppm | 0.4556 ppm | 0.1085 ppm |
| Concentration per Run 2 | 0.5114 ppm | 0.9070 ppm | 10.5093 ppm | 0.4761 ppm | 0.5076 ppm | 0.4571 ppm | 0.1103 ppm |
| Concentration per Run 3 | 0.5095 ppm | 0.9060 ppm | 10.3407 ppm | 0.4748 ppm | 0.5086 ppm | 0.4575 ppm | 0.1075 ppm |
| Concentration RSD | 1.0 % | 0.4 % | 0.9 % | 0.2 % | 0.1 % | 0.2 % | 1.3 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0645 ppm | 0.9025 ppm | 0.9584 ppm | 0.9369 ppm | 0.1068 ppm | 0.5005 ppm | 0.4574 ppm |
| Concentration per Run 1 | 1.0665 ppm | 0.9007 ppm | 0.9654 ppm | 0.9375 ppm | 0.1058 ppm | 0.5009 ppm | 0.4560 ppm |
| Concentration per Run 2 | 1.0649 ppm | 0.9040 ppm | 0.9600 ppm | 0.9370 ppm | 0.1063 ppm | 0.5013 ppm | 0.4586 ppm |
| Concentration per Run 3 | 1.0619 ppm | 0.9029 ppm | 0.9498 ppm | 0.9363 ppm | 0.1084 ppm | 0.4992 ppm | 0.4576 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 0.8 % | 0.1 % | 1.3 % | 0.2 % | 0.3 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.3309 % | 97.9467 % | 96.2453 % | 102.0214 % | 96.8163 % | 102.7274 % | -0.0004 ppm |
| Concentration per Run 1 | 99.0139 % | 97.9386 % | 96.3131 % | 100.9548 % | 96.9943 % | 102.6893 % | -0.0005 ppm |
| Concentration per Run 2 | 98.7797 % | 97.9508 % | 95.8416 % | 102.8381 % | 96.4144 % | 102.7638 % | -0.0001 ppm |
| Concentration per Run 3 | 97.1990 % | 97.9507 % | 96.5812 % | 102.2714 % | 97.0403 % | 102.7290 % | -0.0005 ppm |
| Concentration RSD | 1.0 % | 0.0 % | 0.4 % | 0.9 % | 0.4 % | 0.0 % | 72.2 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2038726-6D5 WG2038726
Analysis started at: 3/12/2025 1:55:02 PM
Rack: 1
Vial: 23

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0025 ppm | -0.0005 ppm | 0.0022 ppm | 0.0024 ppm | 0.0000 ppm | 11.3835 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0032 ppm | -0.0006 ppm | 0.0021 ppm | 0.0025 ppm | 0.0000 ppm | 11.3073 ppm |
| Concentration per Run 2 | -0.0005 ppm | 0.0043 ppm | -0.0014 ppm | 0.0021 ppm | 0.0024 ppm | 0.0000 ppm | 11.3945 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0002 ppm | 0.0005 ppm | 0.0023 ppm | 0.0024 ppm | 0.0000 ppm | 11.4488 ppm |
| Concentration RSD | 222.1 % | 95.1 % | 180.4 % | 5.2 % | 3.6 % | 40.6 % | 0.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0009 ppm | 0.0027 ppm | 1.6454 ppm | 1.6748 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0001 ppm | 0.0001 ppm | 0.0007 ppm | 0.0035 ppm | 1.6200 ppm | 1.6830 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0008 ppm | 0.0011 ppm | 1.6651 ppm | 1.6727 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | -0.0003 ppm | 0.0010 ppm | 0.0035 ppm | 1.6513 ppm | 1.6685 ppm |
| Concentration RSD | 62.0 % | 50.6 % | 559.2 % | 18.0 % | 50.8 % | 1.4 % | 0.4 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 0.0030 ppm | 6.3523 ppm | -0.0001 ppm | -0.0004 ppm | 0.0014 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0015 ppm | 0.0033 ppm | 6.2533 ppm | -0.0001 ppm | -0.0001 ppm | 0.0015 ppm | 0.0019 ppm |
| Concentration per Run 2 | 0.0017 ppm | 0.0030 ppm | 6.3649 ppm | 0.0000 ppm | -0.0008 ppm | 0.0014 ppm | -0.0006 ppm |
| Concentration per Run 3 | 0.0019 ppm | 0.0026 ppm | 6.4387 ppm | -0.0002 ppm | -0.0003 ppm | 0.0013 ppm | -0.0025 ppm |
| Concentration RSD | 9.8 % | 11.5 % | 1.5 % | 136.1 % | 86.7 % | 7.8 % | 537.4 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0870 ppm | 0.0009 ppm | 0.0492 ppm | 0.0001 ppm | -0.0005 ppm | 0.0000 ppm | 0.0003 ppm |
| Concentration per Run 1 | 1.0715 ppm | 0.0013 ppm | 0.0485 ppm | 0.0001 ppm | -0.0008 ppm | 0.0000 ppm | 0.0003 ppm |
| Concentration per Run 2 | 1.0954 ppm | 0.0009 ppm | 0.0494 ppm | 0.0001 ppm | -0.0004 ppm | -0.0001 ppm | 0.0004 ppm |
| Concentration per Run 3 | 1.0942 ppm | 0.0007 ppm | 0.0496 ppm | 0.0002 ppm | -0.0004 ppm | 0.0001 ppm | 0.0004 ppm |
| Concentration RSD | 1.2 % | 30.6 % | 1.2 % | 40.1 % | 49.3 % | 755.9 % | 12.9 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 97.1733 % | 97.8497 % | 97.5313 % | 104.3637 % | 99.1326 % | 101.9793 % | 0.0006 ppm |
| Concentration per Run 1 | 97.9591 % | 97.7077 % | 98.9579 % | 105.0053 % | 100.2824 % | 101.8003 % | 0.0002 ppm |
| Concentration per Run 2 | 96.7000 % | 98.0542 % | 96.6289 % | 104.0640 % | 98.4101 % | 102.1884 % | 0.0003 ppm |
| Concentration per Run 3 | 96.8609 % | 97.7872 % | 97.0070 % | 104.0218 % | 98.7055 % | 101.9490 % | 0.0012 ppm |
| Concentration RSD | 0.7 % | 0.2 % | 1.3 % | 0.5 % | 1.0 % | 0.2 % | 97.3 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2511871-01 WG2038726
Analysis started at: 3/12/2025 2:01:37 PM
Rack: 1
Vial: 24

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0562 ppm | -0.0007 ppm | 0.0365 ppm | 0.0522 ppm | 0.0000 ppm | 43.3787 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0549 ppm | -0.0027 ppm | 0.0365 ppm | 0.0526 ppm | 0.0000 ppm | 43.6301 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0552 ppm | 0.0012 ppm | 0.0368 ppm | 0.0521 ppm | 0.0001 ppm | 43.7693 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0583 ppm | -0.0006 ppm | 0.0363 ppm | 0.0518 ppm | 0.0000 ppm | 42.7367 ppm |
| Concentration RSD | 2,621.8 % | 3.4 % | 278.3 % | 0.6 % | 0.8 % | 134.0 % | 1.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0002 ppm | 0.0008 ppm | 0.0040 ppm | 0.1151 ppm | 4.2251 ppm | 14.2566 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0003 ppm | 0.0010 ppm | 0.0042 ppm | 0.1161 ppm | 4.2421 ppm | 14.2417 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0008 ppm | 0.0038 ppm | 0.1161 ppm | 4.1982 ppm | 14.3111 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0002 ppm | 0.0006 ppm | 0.0039 ppm | 0.1131 ppm | 4.2348 ppm | 14.2169 ppm |
| Concentration RSD | 55.8 % | 71.3 % | 25.9 % | 4.3 % | 1.5 % | 0.6 % | 0.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1105 ppm | 0.0022 ppm | 54.3112 ppm | 0.0019 ppm | -0.0005 ppm | -0.0001 ppm | -0.0011 ppm |
| Concentration per Run 1 | 0.1110 ppm | 0.0022 ppm | 54.6066 ppm | 0.0020 ppm | -0.0002 ppm | -0.0007 ppm | -0.0004 ppm |
| Concentration per Run 2 | 0.1116 ppm | 0.0023 ppm | 54.1081 ppm | 0.0019 ppm | -0.0005 ppm | 0.0005 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.1088 ppm | 0.0021 ppm | 54.2188 ppm | 0.0019 ppm | -0.0009 ppm | -0.0001 ppm | -0.0031 ppm |
| Concentration RSD | 1.3 % | 5.9 % | 0.5 % | 4.3 % | 68.6 % | 475.4 % | 145.6 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.3704 ppm | 0.0007 ppm | 0.2124 ppm | 0.0026 ppm | -0.0001 ppm | 0.0005 ppm | 0.0068 ppm |
| Concentration per Run 1 | 1.3697 ppm | 0.0007 ppm | 0.2138 ppm | 0.0022 ppm | -0.0002 ppm | 0.0007 ppm | 0.0067 ppm |
| Concentration per Run 2 | 1.3691 ppm | 0.0005 ppm | 0.2124 ppm | 0.0025 ppm | -0.0006 ppm | 0.0004 ppm | 0.0067 ppm |
| Concentration per Run 3 | 1.3724 ppm | 0.0009 ppm | 0.2111 ppm | 0.0033 ppm | 0.0005 ppm | 0.0005 ppm | 0.0070 ppm |
| Concentration RSD | 0.1 % | 30.2 % | 0.6 % | 20.8 % | 547.0 % | 22.6 % | 2.1 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.7221 % | 95.9106 % | 94.3412 % | 99.3384 % | 93.7924 % | 99.4209 % | 0.0046 ppm |
| Concentration per Run 1 | 100.7714 % | 95.8608 % | 94.6240 % | 98.9399 % | 93.7857 % | 99.3525 % | 0.0044 ppm |
| Concentration per Run 2 | 96.8777 % | 95.7054 % | 94.0592 % | 98.3139 % | 93.9990 % | 99.2031 % | 0.0047 ppm |
| Concentration per Run 3 | 98.5171 % | 96.1657 % | 94.3404 % | 100.7616 % | 93.5926 % | 99.7070 % | 0.0046 ppm |
| Concentration RSD | 2.0 % | 0.2 % | 0.3 % | 1.3 % | 0.2 % | 0.3 % | 3.3 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512368-10 WG2039059
Analysis started at: 3/12/2025 2:08:12 PM
Rack: 1
Vial: 27

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0127 ppm | -0.0006 ppm | 0.0165 ppm | 0.0308 ppm | 0.0000 ppm | 13.8039 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0112 ppm | -0.0013 ppm | 0.0166 ppm | 0.0311 ppm | 0.0000 ppm | 13.8830 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0154 ppm | -0.0003 ppm | 0.0165 ppm | 0.0306 ppm | 0.0000 ppm | 13.8717 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0117 ppm | -0.0002 ppm | 0.0164 ppm | 0.0308 ppm | 0.0001 ppm | 13.6569 ppm |
| Concentration RSD | 146.8 % | 18.1 % | 92.6 % | 0.6 % | 0.8 % | 1,364.3 % | 0.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0003 ppm | 0.0012 ppm | 0.0009 ppm | 0.0168 ppm | 2.1884 ppm | 2.7199 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0002 ppm | 0.0012 ppm | 0.0009 ppm | 0.0152 ppm | 2.2261 ppm | 2.7401 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0003 ppm | 0.0012 ppm | 0.0010 ppm | 0.0182 ppm | 2.1589 ppm | 2.7108 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0003 ppm | 0.0012 ppm | 0.0008 ppm | 0.0170 ppm | 2.1803 ppm | 2.7088 ppm |
| Concentration RSD | 45.9 % | 20.1 % | 0.9 % | 12.3 % | 9.2 % | 1.6 % | 0.6 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 0.0000 ppm | 12.2210 ppm | -0.0002 ppm | -0.0023 ppm | -0.0003 ppm | -0.0011 ppm |
| Concentration per Run 1 | 0.0016 ppm | 0.0000 ppm | 12.3010 ppm | -0.0003 ppm | -0.0025 ppm | -0.0002 ppm | -0.0021 ppm |
| Concentration per Run 2 | 0.0016 ppm | 0.0000 ppm | 12.1936 ppm | -0.0004 ppm | -0.0024 ppm | -0.0004 ppm | -0.0009 ppm |
| Concentration per Run 3 | 0.0017 ppm | -0.0001 ppm | 12.1683 ppm | 0.0000 ppm | -0.0020 ppm | -0.0003 ppm | -0.0004 ppm |
| Concentration RSD | 4.2 % | 230.0 % | 0.6 % | 107.5 % | 10.2 % | 39.8 % | 77.5 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.1940 ppm | 0.0004 ppm | 0.0588 ppm | 0.0004 ppm | 0.0000 ppm | 0.0002 ppm | 0.0125 ppm |
| Concentration per Run 1 | 4.2079 ppm | 0.0007 ppm | 0.0590 ppm | 0.0004 ppm | 0.0007 ppm | 0.0001 ppm | 0.0125 ppm |
| Concentration per Run 2 | 4.1933 ppm | 0.0002 ppm | 0.0588 ppm | 0.0002 ppm | 0.0003 ppm | 0.0001 ppm | 0.0125 ppm |
| Concentration per Run 3 | 4.1807 ppm | 0.0002 ppm | 0.0586 ppm | 0.0007 ppm | -0.0009 ppm | 0.0003 ppm | 0.0125 ppm |
| Concentration RSD | 0.3 % | 69.3 % | 0.3 % | 55.4 % | 3,933.7 % | 83.9 % | 0.4 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.9985 % | 97.8894 % | 96.4674 % | 101.5558 % | 97.0669 % | 100.9612 % | -0.0003 ppm |
| Concentration per Run 1 | 101.0439 % | 97.7919 % | 96.5229 % | 101.4565 % | 97.0323 % | 100.3521 % | -0.0001 ppm |
| Concentration per Run 2 | 97.5808 % | 98.0152 % | 96.5392 % | 100.7390 % | 96.8649 % | 101.1277 % | -0.0016 ppm |
| Concentration per Run 3 | 98.3709 % | 97.8610 % | 96.3400 % | 102.4719 % | 97.3036 % | 101.4039 % | 0.0007 ppm |
| Concentration RSD | 1.8 % | 0.1 % | 0.1 % | 0.9 % | 0.2 % | 0.5 % | 378.9 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2039059-3 WG2039059
Analysis started at: 3/12/2025 2:14:45 PM
Rack: 1
Vial: 28

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0510 ppm | 2.0696 ppm | 0.1128 ppm | 0.9565 ppm | 1.9853 ppm | 0.0503 ppm | 23.4503 ppm |
| Concentration per Run 1 | 0.0506 ppm | 2.0712 ppm | 0.1140 ppm | 0.9575 ppm | 1.9856 ppm | 0.0508 ppm | 23.6332 ppm |
| Concentration per Run 2 | 0.0512 ppm | 2.0764 ppm | 0.1129 ppm | 0.9543 ppm | 1.9926 ppm | 0.0503 ppm | 23.4039 ppm |
| Concentration per Run 3 | 0.0513 ppm | 2.0613 ppm | 0.1116 ppm | 0.9577 ppm | 1.9776 ppm | 0.0500 ppm | 23.3140 ppm |
| Concentration RSD | 0.8 % | 0.4 % | 1.0 % | 0.2 % | 0.4 % | 0.8 % | 0.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0497 ppm | 0.4578 ppm | 0.1936 ppm | 0.2629 ppm | 1.0342 ppm | 12.4873 ppm | 12.5803 ppm |
| Concentration per Run 1 | 0.0497 ppm | 0.4581 ppm | 0.1940 ppm | 0.2627 ppm | 1.0341 ppm | 12.4377 ppm | 12.5783 ppm |
| Concentration per Run 2 | 0.0498 ppm | 0.4592 ppm | 0.1943 ppm | 0.2624 ppm | 1.0346 ppm | 12.6121 ppm | 12.6125 ppm |
| Concentration per Run 3 | 0.0495 ppm | 0.4561 ppm | 0.1924 ppm | 0.2637 ppm | 1.0338 ppm | 12.4120 ppm | 12.5501 ppm |
| Concentration RSD | 0.3 % | 0.3 % | 0.5 % | 0.3 % | 0.0 % | 0.9 % | 0.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5091 ppm | 0.8976 ppm | 22.5238 ppm | 0.4736 ppm | 0.5061 ppm | 0.4650 ppm | 0.1129 ppm |
| Concentration per Run 1 | 0.5125 ppm | 0.8930 ppm | 22.4572 ppm | 0.4748 ppm | 0.5064 ppm | 0.4646 ppm | 0.1145 ppm |
| Concentration per Run 2 | 0.5076 ppm | 0.8993 ppm | 22.7029 ppm | 0.4740 ppm | 0.5074 ppm | 0.4653 ppm | 0.1128 ppm |
| Concentration per Run 3 | 0.5073 ppm | 0.9004 ppm | 22.4114 ppm | 0.4719 ppm | 0.5046 ppm | 0.4649 ppm | 0.1114 ppm |
| Concentration RSD | 0.6 % | 0.4 % | 0.7 % | 0.3 % | 0.3 % | 0.1 % | 1.4 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.2878 ppm | 0.8993 ppm | 1.0004 ppm | 0.9285 ppm | 0.1085 ppm | 0.5000 ppm | 0.4704 ppm |
| Concentration per Run 1 | 5.2928 ppm | 0.9023 ppm | 1.0013 ppm | 0.9284 ppm | 0.1099 ppm | 0.5004 ppm | 0.4713 ppm |
| Concentration per Run 2 | 5.2886 ppm | 0.9003 ppm | 1.0037 ppm | 0.9300 ppm | 0.1079 ppm | 0.4999 ppm | 0.4719 ppm |
| Concentration per Run 3 | 5.2820 ppm | 0.8953 ppm | 0.9963 ppm | 0.9271 ppm | 0.1076 ppm | 0.4996 ppm | 0.4679 ppm |
| Concentration RSD | 0.1 % | 0.4 % | 0.4 % | 0.2 % | 1.2 % | 0.1 % | 0.5 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.9208 % | 96.2757 % | 94.9019 % | 102.2517 % | 94.8761 % | 101.1333 % | -0.0003 ppm |
| Concentration per Run 1 | 100.0062 % | 96.3974 % | 94.8305 % | 101.6428 % | 94.8999 % | 101.2500 % | -0.0007 ppm |
| Concentration per Run 2 | 98.5404 % | 96.0710 % | 95.0047 % | 102.3343 % | 94.7042 % | 100.9377 % | -0.0001 ppm |
| Concentration per Run 3 | 98.2157 % | 96.3587 % | 94.8706 % | 102.7779 % | 95.0241 % | 101.2123 % | -0.0001 ppm |
| Concentration RSD | 1.0 % | 0.2 % | 0.1 % | 0.6 % | 0.2 % | 0.2 % | 102.0 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2039059-4 WG2039059
Analysis started at: 3/12/2025 2:20:59 PM
Rack: 1
Vial: 29

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0512 ppm | 2.0590 ppm | 0.1134 ppm | 0.9631 ppm | 1.9655 ppm | 0.0499 ppm | 23.6335 ppm |
| Concentration per Run 1 | 0.0512 ppm | 2.0626 ppm | 0.1124 ppm | 0.9535 ppm | 1.9662 ppm | 0.0501 ppm | 23.7360 ppm |
| Concentration per Run 2 | 0.0513 ppm | 2.0588 ppm | 0.1150 ppm | 0.9676 ppm | 1.9696 ppm | 0.0499 ppm | 23.6206 ppm |
| Concentration per Run 3 | 0.0510 ppm | 2.0557 ppm | 0.1128 ppm | 0.9681 ppm | 1.9608 ppm | 0.0497 ppm | 23.5439 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 1.2 % | 0.9 % | 0.2 % | 0.5 % | 0.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0497 ppm | 0.4570 ppm | 0.1928 ppm | 0.2611 ppm | 1.0285 ppm | 12.4827 ppm | 12.7028 ppm |
| Concentration per Run 1 | 0.0495 ppm | 0.4529 ppm | 0.1933 ppm | 0.2610 ppm | 1.0235 ppm | 12.4622 ppm | 12.7298 ppm |
| Concentration per Run 2 | 0.0500 ppm | 0.4605 ppm | 0.1926 ppm | 0.2618 ppm | 1.0309 ppm | 12.5435 ppm | 12.7247 ppm |
| Concentration per Run 3 | 0.0497 ppm | 0.4577 ppm | 0.1925 ppm | 0.2605 ppm | 1.0313 ppm | 12.4424 ppm | 12.6538 ppm |
| Concentration RSD | 0.5 % | 0.8 % | 0.2 % | 0.2 % | 0.4 % | 0.4 % | 0.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5062 ppm | 0.9071 ppm | 22.4913 ppm | 0.4729 ppm | 0.5108 ppm | 0.4650 ppm | 0.1129 ppm |
| Concentration per Run 1 | 0.5090 ppm | 0.8917 ppm | 22.4971 ppm | 0.4690 ppm | 0.5068 ppm | 0.4573 ppm | 0.1114 ppm |
| Concentration per Run 2 | 0.5057 ppm | 0.9160 ppm | 22.5483 ppm | 0.4764 ppm | 0.5139 ppm | 0.4684 ppm | 0.1130 ppm |
| Concentration per Run 3 | 0.5038 ppm | 0.9136 ppm | 22.4285 ppm | 0.4731 ppm | 0.5117 ppm | 0.4693 ppm | 0.1143 ppm |
| Concentration RSD | 0.5 % | 1.5 % | 0.3 % | 0.8 % | 0.7 % | 1.4 % | 1.3 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.3093 ppm | 0.9106 ppm | 1.0046 ppm | 0.9389 ppm | 0.1089 ppm | 0.4948 ppm | 0.4714 ppm |
| Concentration per Run 1 | 5.2539 ppm | 0.9026 ppm | 1.0051 ppm | 0.9401 ppm | 0.1074 ppm | 0.4906 ppm | 0.4691 ppm |
| Concentration per Run 2 | 5.3481 ppm | 0.9159 ppm | 1.0059 ppm | 0.9402 ppm | 0.1100 ppm | 0.4963 ppm | 0.4745 ppm |
| Concentration per Run 3 | 5.3259 ppm | 0.9134 ppm | 1.0026 ppm | 0.9362 ppm | 0.1093 ppm | 0.4974 ppm | 0.4706 ppm |
| Concentration RSD | 0.9 % | 0.8 % | 0.2 % | 0.2 % | 1.2 % | 0.7 % | 0.6 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.0110 % | 95.7809 % | 95.4436 % | 102.4309 % | 95.2032 % | 100.7894 % | -0.0014 ppm |
| Concentration per Run 1 | 99.0226 % | 95.7998 % | 96.4809 % | 101.9437 % | 96.4037 % | 100.8685 % | -0.0013 ppm |
| Concentration per Run 2 | 97.7551 % | 95.5590 % | 94.9156 % | 102.5633 % | 94.4148 % | 100.5110 % | -0.0009 ppm |
| Concentration per Run 3 | 97.2553 % | 95.9840 % | 94.9342 % | 102.7856 % | 94.7911 % | 100.9885 % | -0.0019 ppm |
| Concentration RSD | 0.9 % | 0.2 % | 0.9 % | 0.4 % | 1.1 % | 0.2 % | 39.3 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2039059-5 WG2039059
Analysis started at: 3/12/2025 2:27:14 PM
Rack: 1
Vial: 30

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0344 ppm | 2.0411 ppm | 0.1224 ppm | 0.9749 ppm | 1.9551 ppm | 0.0500 ppm | 23.1390 ppm |
| Concentration per Run 1 | 0.0235 ppm | 2.0375 ppm | 0.1225 ppm | 0.9792 ppm | 1.9506 ppm | 0.0499 ppm | 23.2272 ppm |
| Concentration per Run 2 | 0.0275 ppm | 2.0483 ppm | 0.1223 ppm | 0.9695 ppm | 1.9638 ppm | 0.0502 ppm | 23.2139 ppm |
| Concentration per Run 3 | 0.0523 ppm | 2.0376 ppm | 0.1224 ppm | 0.9758 ppm | 1.9508 ppm | 0.0497 ppm | 22.9760 ppm |
| Concentration RSD | 45.3 % | 0.3 % | 0.1 % | 0.5 % | 0.4 % | 0.5 % | 0.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0503 ppm | 0.4613 ppm | 0.1939 ppm | 0.2627 ppm | 1.0288 ppm | 12.6657 ppm | 12.8022 ppm |
| Concentration per Run 1 | 0.0507 ppm | 0.4663 ppm | 0.1935 ppm | 0.2616 ppm | 1.0275 ppm | 12.6319 ppm | 12.7835 ppm |
| Concentration per Run 2 | 0.0498 ppm | 0.4572 ppm | 0.1938 ppm | 0.2632 ppm | 1.0289 ppm | 12.7297 ppm | 12.8302 ppm |
| Concentration per Run 3 | 0.0502 ppm | 0.4605 ppm | 0.1943 ppm | 0.2631 ppm | 1.0301 ppm | 12.6353 ppm | 12.7928 ppm |
| Concentration RSD | 0.9 % | 1.0 % | 0.2 % | 0.3 % | 0.1 % | 0.4 % | 0.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5042 ppm | 0.9253 ppm | 22.4588 ppm | 0.4761 ppm | 0.5290 ppm | 0.4638 ppm | 0.1223 ppm |
| Concentration per Run 1 | 0.5059 ppm | 0.9293 ppm | 22.3842 ppm | 0.4813 ppm | 0.5340 ppm | 0.4652 ppm | 0.1222 ppm |
| Concentration per Run 2 | 0.5061 ppm | 0.9178 ppm | 22.5983 ppm | 0.4716 ppm | 0.5245 ppm | 0.4603 ppm | 0.1208 ppm |
| Concentration per Run 3 | 0.5005 ppm | 0.9289 ppm | 22.3940 ppm | 0.4754 ppm | 0.5286 ppm | 0.4660 ppm | 0.1237 ppm |
| Concentration RSD | 0.6 % | 0.7 % | 0.5 % | 1.0 % | 0.9 % | 0.7 % | 1.2 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.9521 ppm | 0.9369 ppm | 1.0119 ppm | 0.9535 ppm | 0.1190 ppm | 0.4993 ppm | 0.4733 ppm |
| Concentration per Run 1 | 5.0021 ppm | 0.9458 ppm | 1.0095 ppm | 0.9498 ppm | 0.1209 ppm | 0.5019 ppm | 0.4786 ppm |
| Concentration per Run 2 | 4.9142 ppm | 0.9288 ppm | 1.0161 ppm | 0.9562 ppm | 0.1181 ppm | 0.4962 ppm | 0.4685 ppm |
| Concentration per Run 3 | 4.9400 ppm | 0.9361 ppm | 1.0101 ppm | 0.9546 ppm | 0.1179 ppm | 0.4997 ppm | 0.4728 ppm |
| Concentration RSD | 0.9 % | 0.9 % | 0.4 % | 0.4 % | 1.4 % | 0.6 % | 1.1 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.0080 % | 96.3097 % | 95.3854 % | 103.5941 % | 94.5424 % | 101.0500 % | -0.0002 ppm |
| Concentration per Run 1 | 100.1209 % | 96.6056 % | 94.9054 % | 102.8995 % | 93.6291 % | 101.4736 % | 0.0004 ppm |
| Concentration per Run 2 | 98.1437 % | 96.1894 % | 96.1274 % | 103.3403 % | 95.5447 % | 100.9737 % | 0.0003 ppm |
| Concentration per Run 3 | 98.7595 % | 96.1341 % | 95.1234 % | 104.5427 % | 94.4534 % | 100.7027 % | -0.0013 ppm |
| Concentration RSD | 1.0 % | 0.3 % | 0.7 % | 0.8 % | 1.0 % | 0.4 % | 484.5 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2039059-6D5 WG2039059
Analysis started at: 3/12/2025 2:33:30 PM
Rack: 1
Vial: 31

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0002 ppm | 0.0002 ppm | 0.0056 ppm | 0.0061 ppm | 0.0000 ppm | 2.7554 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0007 ppm | 0.0001 ppm | 0.0059 ppm | 0.0061 ppm | 0.0000 ppm | 2.7520 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0036 ppm | 0.0008 ppm | 0.0054 ppm | 0.0061 ppm | 0.0000 ppm | 2.7563 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0050 ppm | -0.0002 ppm | 0.0054 ppm | 0.0061 ppm | 0.0000 ppm | 2.7581 ppm |
| Concentration RSD | 260.0 % | 1,826.1 % | 253.0 % | 5.0 % | 0.6 % | 91.0 % | 0.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0007 ppm | 0.0043 ppm | 0.4413 ppm | 0.5395 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | 0.0008 ppm | 0.0044 ppm | 0.4288 ppm | 0.5393 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0003 ppm | 0.0006 ppm | 0.0059 ppm | 0.4505 ppm | 0.5409 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0001 ppm | 0.0000 ppm | 0.0006 ppm | 0.0027 ppm | 0.4446 ppm | 0.5384 ppm |
| Concentration RSD | 280.5 % | 295.5 % | 376.0 % | 16.2 % | 36.9 % | 2.5 % | 0.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0028 ppm | 2.3575 ppm | -0.0001 ppm | -0.0007 ppm | 0.0029 ppm | -0.0011 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0033 ppm | 2.3562 ppm | 0.0000 ppm | -0.0007 ppm | 0.0040 ppm | -0.0017 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0026 ppm | 2.3612 ppm | -0.0001 ppm | -0.0006 ppm | 0.0032 ppm | -0.0015 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0025 ppm | 2.3550 ppm | -0.0001 ppm | -0.0007 ppm | 0.0015 ppm | 0.0000 ppm |
| Concentration RSD | 8.5 % | 15.5 % | 0.1 % | 76.2 % | 8.6 % | 43.7 % | 84.6 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.8148 ppm | 0.0016 ppm | 0.0117 ppm | 0.0001 ppm | 0.0003 ppm | 0.0001 ppm | 0.0026 ppm |
| Concentration per Run 1 | 0.8149 ppm | 0.0018 ppm | 0.0117 ppm | 0.0002 ppm | 0.0005 ppm | 0.0001 ppm | 0.0026 ppm |
| Concentration per Run 2 | 0.8138 ppm | 0.0016 ppm | 0.0118 ppm | 0.0000 ppm | 0.0002 ppm | 0.0000 ppm | 0.0026 ppm |
| Concentration per Run 3 | 0.8158 ppm | 0.0012 ppm | 0.0117 ppm | 0.0001 ppm | 0.0001 ppm | 0.0002 ppm | 0.0027 ppm |
| Concentration RSD | 0.1 % | 20.3 % | 0.7 % | 80.0 % | 71.4 % | 69.7 % | 1.0 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.4920 % | 98.9092 % | 98.5387 % | 102.4949 % | 100.7345 % | 102.5660 % | -0.0005 ppm |
| Concentration per Run 1 | 99.5441 % | 98.8025 % | 98.9283 % | 102.3597 % | 100.5890 % | 102.3730 % | -0.0002 ppm |
| Concentration per Run 2 | 98.1978 % | 99.0732 % | 98.3923 % | 102.6698 % | 101.2701 % | 102.7547 % | -0.0010 ppm |
| Concentration per Run 3 | 97.7342 % | 98.8520 % | 98.2955 % | 102.4551 % | 100.3446 % | 102.5704 % | -0.0003 ppm |
| Concentration RSD | 1.0 % | 0.1 % | 0.3 % | 0.2 % | 0.5 % | 0.2 % | 82.9 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCV
Analysis started at: 3/12/2025 2:40:06 PM
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4757 ppm | 0.4809 ppm | 0.4743 ppm | 0.4713 ppm | 0.4621 ppm | 0.4805 ppm | 0.4994 ppm |
| Concentration per Run 1 | 0.4484 ppm | 0.4782 ppm | 0.4785 ppm | 0.4746 ppm | 0.4557 ppm | 0.4747 ppm | 0.4923 ppm |
| Concentration per Run 2 | 0.4980 ppm | 0.4784 ppm | 0.4735 ppm | 0.4713 ppm | 0.4646 ppm | 0.4824 ppm | 0.5004 ppm |
| Concentration per Run 3 | 0.4807 ppm | 0.4862 ppm | 0.4708 ppm | 0.4678 ppm | 0.4658 ppm | 0.4846 ppm | 0.5055 ppm |
| Recovery Percentage 1 | 95.139 % | 96.185 % | 94.852 % | 94.252 % | 92.411 % | 96.108 % | 99.876 % |
| Concentration RSD | 5.3 % | 1.0 % | 0.8 % | 0.7 % | 1.2 % | 1.1 % | 1.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4571 ppm | 0.4584 ppm | 0.4724 ppm | 0.4806 ppm | 0.4895 ppm | 4.9681 ppm | 0.4917 ppm |
| Concentration per Run 1 | 0.4598 ppm | 0.4614 ppm | 0.4463 ppm | 0.4502 ppm | 0.4810 ppm | 4.8994 ppm | 0.4618 ppm |
| Concentration per Run 2 | 0.4578 ppm | 0.4589 ppm | 0.4979 ppm | 0.5056 ppm | 0.4911 ppm | 5.0136 ppm | 0.5187 ppm |
| Concentration per Run 3 | 0.4536 ppm | 0.4551 ppm | 0.4731 ppm | 0.4859 ppm | 0.4963 ppm | 4.9913 ppm | 0.4946 ppm |
| Recovery Percentage 1 | 91.414 % | 91.689 % | 94.483 % | 96.117 % | 97.893 % | 99.362 % | 98.343 % |
| Concentration RSD | 0.7 % | 0.7 % | 5.5 % | 5.8 % | 1.6 % | 1.2 % | 5.8 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4752 ppm | 0.4586 ppm | 9.6248 ppm | 0.4671 ppm | 0.4735 ppm | 0.4636 ppm | 0.4794 ppm |
| Concentration per Run 1 | 0.4687 ppm | 0.4608 ppm | 9.5161 ppm | 0.4700 ppm | 0.4758 ppm | 0.4663 ppm | 0.4836 ppm |
| Concentration per Run 2 | 0.4764 ppm | 0.4588 ppm | 9.7077 ppm | 0.4680 ppm | 0.4748 ppm | 0.4648 ppm | 0.4816 ppm |
| Concentration per Run 3 | 0.4806 ppm | 0.4561 ppm | 9.6507 ppm | 0.4632 ppm | 0.4698 ppm | 0.4598 ppm | 0.4729 ppm |
| Recovery Percentage 1 | 95.045 % | 91.717 % | 96.248 % | 93.411 % | 94.692 % | 92.720 % | 95.871 % |
| Concentration RSD | 1.3 % | 0.5 % | 1.0 % | 0.7 % | 0.7 % | 0.7 % | 1.2 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.1850 ppm | 0.4640 ppm | 0.4672 ppm | 0.4723 ppm | 0.4731 ppm | 0.4779 ppm | 0.4550 ppm |
| Concentration per Run 1 | 5.2178 ppm | 0.4672 ppm | 0.4608 ppm | 0.4459 ppm | 0.4773 ppm | 0.4775 ppm | 0.4571 ppm |
| Concentration per Run 2 | 5.1903 ppm | 0.4637 ppm | 0.4698 ppm | 0.4956 ppm | 0.4733 ppm | 0.4817 ppm | 0.4562 ppm |
| Concentration per Run 3 | 5.1468 ppm | 0.4610 ppm | 0.4711 ppm | 0.4755 ppm | 0.4686 ppm | 0.4745 ppm | 0.4516 ppm |
| Recovery Percentage 1 | 98.761 % | 92.799 % | 93.445 % | 94.462 % | 94.610 % | 95.579 % | 90.995 % |
| Concentration RSD | 0.7 % | 0.7 % | 1.2 % | 5.3 % | 0.9 % | 0.8 % | 0.6 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.2282 % | 99.4961 % | 98.3486 % | 104.6658 % | 98.0619 % | 103.2751 % | 0.4743 ppm |
| Concentration per Run 1 | 99.4958 % | 104.7305 % | 97.7962 % | 106.2073 % | 97.4470 % | 108.5057 % | 0.4689 ppm |
| Concentration per Run 2 | 98.1871 % | 94.5332 % | 98.3326 % | 104.7809 % | 98.0757 % | 98.7944 % | 0.4796 ppm |
| Concentration per Run 3 | 97.0016 % | 99.2246 % | 98.9168 % | 103.0092 % | 98.6630 % | 102.5253 % | 0.4745 ppm |
| Recovery Percentage 1 | | | | | | | 94.864 % |
| Concentration RSD | 1.3 % | 5.1 % | 0.6 % | 1.5 % | 0.6 % | 4.7 % | 1.1 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCB
Analysis started at: 3/12/2025 2:46:25 PM
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | -0.0042 ppm | -0.0006 ppm | 0.0009 ppm | 0.0000 ppm | 0.0000 ppm | 0.0031 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0052 ppm | -0.0014 ppm | 0.0010 ppm | 0.0000 ppm | 0.0000 ppm | 0.0027 ppm |
| Concentration per Run 2 | 0.0004 ppm | -0.0033 ppm | -0.0001 ppm | 0.0008 ppm | 0.0000 ppm | 0.0000 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0003 ppm | -0.0039 ppm | -0.0005 ppm | 0.0008 ppm | 0.0000 ppm | 0.0000 ppm | 0.0062 ppm |
| Recovery Percentage 1 | 2.996 % | -4.159 % | -12.887 % | 2.879 % | -0.129 % | -0.426 % | 3.083 % |
| Concentration RSD | 148.6 % | 22.9 % | 104.6 % | 15.0 % | 233.7 % | 17.9 % | 95.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | 0.0002 ppm | 0.0005 ppm | 0.0130 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | 0.0003 ppm | 0.0002 ppm | 0.0283 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | -0.0001 ppm | 0.0012 ppm | 0.0038 ppm | 0.0018 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0003 ppm | 0.0005 ppm | 0.0002 ppm | 0.0069 ppm | 0.0007 ppm |
| Recovery Percentage 1 | 0.136 % | 0.231 % | 1.808 % | 2.195 % | 1.089 % | 0.519 % | 0.836 % |
| Concentration RSD | 258.0 % | 176.2 % | 75.8 % | 144.1 % | 100.1 % | 102.8 % | 101.7 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0008 ppm | 0.0040 ppm | -0.0001 ppm | 0.0000 ppm | 0.0007 ppm | -0.0009 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0009 ppm | 0.0041 ppm | -0.0001 ppm | 0.0000 ppm | 0.0010 ppm | -0.0009 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0008 ppm | 0.0043 ppm | 0.0000 ppm | 0.0004 ppm | 0.0004 ppm | -0.0016 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0006 ppm | 0.0034 ppm | -0.0001 ppm | -0.0005 ppm | 0.0007 ppm | -0.0002 ppm |
| Recovery Percentage 1 | -0.559 % | 1.528 % | 0.198 % | -0.391 % | -0.070 % | 1.373 % | -9.076 % |
| Concentration RSD | 474.7 % | 21.6 % | 12.3 % | 64.6 % | 6,610.0 % | 39.9 % | 78.2 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 0.0005 ppm | 0.0000 ppm | -0.0001 ppm | 0.0004 ppm | 0.0001 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0005 ppm | 0.0000 ppm | 0.0001 ppm | 0.0013 ppm | 0.0002 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0006 ppm | -0.0001 ppm | -0.0002 ppm | 0.0003 ppm | 0.0001 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0022 ppm | 0.0003 ppm | 0.0000 ppm | -0.0003 ppm | -0.0006 ppm | 0.0001 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 0.273 % | 0.971 % | 0.023 % | -1.276 % | 1.806 % | 1.056 % | -1.975 % |
| Concentration RSD | 52.1 % | 26.6 % | 2,618.1 % | 157.1 % | 266.7 % | 42.9 % | 146.2 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 97.7055 % | 101.3674 % | 99.7376 % | 102.0733 % | 101.4756 % | 103.8767 % | 0.0000 ppm |
| Concentration per Run 1 | 98.9100 % | 100.5407 % | 100.1933 % | 102.5425 % | 101.9033 % | 103.0418 % | 0.0003 ppm |
| Concentration per Run 2 | 97.8422 % | 102.7998 % | 99.6101 % | 102.0176 % | 101.5480 % | 105.1540 % | -0.0006 ppm |
| Concentration per Run 3 | 96.3643 % | 100.7615 % | 99.4094 % | 101.6597 % | 100.9755 % | 103.4343 % | 0.0002 ppm |
| Recovery Percentage 1 | | | | | | | -0.393 % |
| Concentration RSD | 1.3 % | 1.2 % | 0.4 % | 0.4 % | 0.5 % | 1.1 % | 1,357.1 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512368-04 WG2039059
Analysis started at: 3/12/2025 3:09:34 PM
Rack: 1
Vial: 37

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0035 ppm | -0.0007 ppm | 0.0163 ppm | 0.0180 ppm | 0.0000 ppm | 26.9443 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0099 ppm | -0.0009 ppm | 0.0165 ppm | 0.0182 ppm | 0.0000 ppm | 27.0936 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0002 ppm | -0.0001 ppm | 0.0162 ppm | 0.0180 ppm | 0.0000 ppm | 27.0539 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0007 ppm | -0.0013 ppm | 0.0161 ppm | 0.0179 ppm | 0.0000 ppm | 26.6853 ppm |
| Concentration RSD | 434.1 % | 160.9 % | 83.4 % | 1.3 % | 0.9 % | 249.1 % | 0.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | 0.0019 ppm | 0.0005 ppm | 0.0176 ppm | 1.1879 ppm | 5.5491 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0019 ppm | 0.0004 ppm | 0.0157 ppm | 1.1850 ppm | 5.5343 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0000 ppm | 0.0015 ppm | 0.0006 ppm | 0.0191 ppm | 1.1739 ppm | 5.5362 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0001 ppm | 0.0022 ppm | 0.0006 ppm | 0.0178 ppm | 1.2047 ppm | 5.5770 ppm |
| Concentration RSD | 119.3 % | 158.7 % | 17.5 % | 20.6 % | 9.8 % | 1.3 % | 0.4 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0028 ppm | 0.0000 ppm | 9.4976 ppm | 0.0157 ppm | -0.0019 ppm | -0.0004 ppm | -0.0018 ppm |
| Concentration per Run 1 | 0.0028 ppm | 0.0000 ppm | 9.5451 ppm | 0.0156 ppm | -0.0020 ppm | -0.0004 ppm | -0.0031 ppm |
| Concentration per Run 2 | 0.0027 ppm | -0.0001 ppm | 9.4801 ppm | 0.0159 ppm | -0.0018 ppm | -0.0009 ppm | -0.0012 ppm |
| Concentration per Run 3 | 0.0028 ppm | 0.0000 ppm | 9.4676 ppm | 0.0157 ppm | -0.0018 ppm | 0.0002 ppm | -0.0012 ppm |
| Concentration RSD | 1.9 % | 65.4 % | 0.4 % | 1.0 % | 5.5 % | 141.1 % | 58.6 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.4933 ppm | 0.0002 ppm | 0.0891 ppm | 0.0001 ppm | -0.0002 ppm | 0.0003 ppm | 0.0131 ppm |
| Concentration per Run 1 | 3.5114 ppm | 0.0000 ppm | 0.0894 ppm | 0.0002 ppm | 0.0002 ppm | 0.0004 ppm | 0.0132 ppm |
| Concentration per Run 2 | 3.4891 ppm | 0.0002 ppm | 0.0891 ppm | -0.0001 ppm | 0.0006 ppm | 0.0002 ppm | 0.0130 ppm |
| Concentration per Run 3 | 3.4793 ppm | 0.0002 ppm | 0.0888 ppm | 0.0003 ppm | -0.0014 ppm | 0.0003 ppm | 0.0130 ppm |
| Concentration RSD | 0.5 % | 75.3 % | 0.4 % | 140.6 % | 474.3 % | 40.7 % | 0.9 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.9036 % | 100.0290 % | 98.8399 % | 101.0954 % | 98.4305 % | 101.7206 % | -0.0004 ppm |
| Concentration per Run 1 | 101.7826 % | 100.4678 % | 98.7971 % | 100.9055 % | 98.0980 % | 101.9923 % | -0.0007 ppm |
| Concentration per Run 2 | 98.7666 % | 100.2031 % | 98.8349 % | 100.5414 % | 98.5610 % | 101.8665 % | 0.0000 ppm |
| Concentration per Run 3 | 99.1615 % | 99.4162 % | 98.8877 % | 101.8392 % | 98.6326 % | 101.3029 % | -0.0003 ppm |
| Concentration RSD | 1.6 % | 0.5 % | 0.0 % | 0.7 % | 0.3 % | 0.4 % | 93.5 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512368-05 WG2039059
Analysis started at: 3/12/2025 3:16:07 PM
Rack: 1
Vial: 38

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0058 ppm | -0.0021 ppm | 0.0126 ppm | 0.0391 ppm | 0.0000 ppm | 22.5156 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0069 ppm | -0.0022 ppm | 0.0129 ppm | 0.0391 ppm | 0.0000 ppm | 22.4881 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0080 ppm | -0.0017 ppm | 0.0126 ppm | 0.0393 ppm | 0.0001 ppm | 22.6611 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0025 ppm | -0.0023 ppm | 0.0125 ppm | 0.0390 ppm | 0.0000 ppm | 22.3977 ppm |
| Concentration RSD | 97.6 % | 50.0 % | 13.9 % | 1.5 % | 0.3 % | 141.1 % | 0.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0003 ppm | 0.0019 ppm | 0.0003 ppm | 0.0236 ppm | 1.2119 ppm | 4.8448 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0003 ppm | 0.0018 ppm | 0.0004 ppm | 0.0234 ppm | 1.2169 ppm | 4.8798 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0003 ppm | 0.0018 ppm | 0.0004 ppm | 0.0239 ppm | 1.2126 ppm | 4.8408 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0002 ppm | 0.0020 ppm | 0.0002 ppm | 0.0237 ppm | 1.2061 ppm | 4.8137 ppm |
| Concentration RSD | 89.8 % | 12.9 % | 3.8 % | 38.0 % | 1.2 % | 0.5 % | 0.7 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | -0.0002 ppm | 10.5302 ppm | 0.0089 ppm | -0.0025 ppm | -0.0004 ppm | -0.0012 ppm |
| Concentration per Run 1 | 0.0014 ppm | -0.0003 ppm | 10.5404 ppm | 0.0090 ppm | -0.0017 ppm | -0.0006 ppm | -0.0005 ppm |
| Concentration per Run 2 | 0.0012 ppm | -0.0003 ppm | 10.5507 ppm | 0.0089 ppm | -0.0026 ppm | -0.0007 ppm | -0.0010 ppm |
| Concentration per Run 3 | 0.0014 ppm | 0.0000 ppm | 10.4996 ppm | 0.0089 ppm | -0.0031 ppm | 0.0003 ppm | -0.0020 ppm |
| Concentration RSD | 6.7 % | 99.4 % | 0.3 % | 0.5 % | 27.7 % | 155.9 % | 69.3 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.6089 ppm | 0.0003 ppm | 0.0944 ppm | 0.0004 ppm | -0.0015 ppm | 0.0001 ppm | 0.0121 ppm |
| Concentration per Run 1 | 5.6342 ppm | 0.0003 ppm | 0.0948 ppm | 0.0004 ppm | -0.0023 ppm | 0.0002 ppm | 0.0120 ppm |
| Concentration per Run 2 | 5.6053 ppm | 0.0004 ppm | 0.0944 ppm | 0.0001 ppm | -0.0011 ppm | 0.0001 ppm | 0.0122 ppm |
| Concentration per Run 3 | 5.5873 ppm | 0.0001 ppm | 0.0941 ppm | 0.0005 ppm | -0.0010 ppm | 0.0001 ppm | 0.0122 ppm |
| Concentration RSD | 0.4 % | 72.6 % | 0.3 % | 59.9 % | 51.0 % | 41.5 % | 0.7 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.9341 % | 101.2146 % | 99.3397 % | 100.1550 % | 98.3201 % | 101.6922 % | 0.0000 ppm |
| Concentration per Run 1 | 102.2078 % | 101.0709 % | 99.1632 % | 100.3245 % | 97.8889 % | 101.3752 % | -0.0004 ppm |
| Concentration per Run 2 | 98.7092 % | 101.1487 % | 99.3332 % | 99.6209 % | 98.3223 % | 101.5680 % | 0.0002 ppm |
| Concentration per Run 3 | 98.8851 % | 101.4241 % | 99.5227 % | 100.5197 % | 98.7490 % | 102.1332 % | 0.0002 ppm |
| Concentration RSD | 2.0 % | 0.2 % | 0.2 % | 0.5 % | 0.4 % | 0.4 % | 4,061.0 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512368-07 WG2039059
Analysis started at: 3/12/2025 3:22:40 PM
Rack: 1
Vial: 39

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0082 ppm | -0.0015 ppm | 0.0513 ppm | 0.1158 ppm | 0.0000 ppm | 78.5492 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0057 ppm | -0.0017 ppm | 0.0516 ppm | 0.1159 ppm | 0.0000 ppm | 78.9769 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0083 ppm | -0.0021 ppm | 0.0515 ppm | 0.1169 ppm | 0.0000 ppm | 79.1756 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0107 ppm | -0.0006 ppm | 0.0508 ppm | 0.1147 ppm | 0.0001 ppm | 77.4952 ppm |
| Concentration RSD | 236.0 % | 30.0 % | 54.0 % | 0.9 % | 0.9 % | 88.4 % | 1.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0001 ppm | 0.0010 ppm | 0.0024 ppm | 0.0139 ppm | 11.9986 ppm | 14.3092 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0002 ppm | 0.0011 ppm | 0.0025 ppm | 0.0139 ppm | 11.9913 ppm | 14.3637 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0001 ppm | 0.0010 ppm | 0.0024 ppm | 0.0141 ppm | 12.1341 ppm | 14.2599 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0001 ppm | 0.0009 ppm | 0.0024 ppm | 0.0138 ppm | 11.8705 ppm | 14.3041 ppm |
| Concentration RSD | 37.5 % | 32.8 % | 8.3 % | 1.5 % | 0.9 % | 1.1 % | 0.4 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.3089 ppm | 0.0000 ppm | 14.0813 ppm | 0.0009 ppm | -0.0025 ppm | -0.0006 ppm | -0.0016 ppm |
| Concentration per Run 1 | 3.3287 ppm | 0.0000 ppm | 14.0673 ppm | 0.0009 ppm | -0.0025 ppm | -0.0011 ppm | -0.0023 ppm |
| Concentration per Run 2 | 3.3329 ppm | 0.0002 ppm | 14.2121 ppm | 0.0009 ppm | -0.0027 ppm | -0.0002 ppm | -0.0017 ppm |
| Concentration per Run 3 | 3.2651 ppm | 0.0000 ppm | 13.9644 ppm | 0.0009 ppm | -0.0024 ppm | -0.0006 ppm | -0.0009 ppm |
| Concentration RSD | 1.1 % | 567.2 % | 0.9 % | 3.2 % | 7.0 % | 69.9 % | 44.5 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.6282 ppm | 0.0002 ppm | 0.3140 ppm | 0.0007 ppm | -0.0022 ppm | 0.0067 ppm | 0.0152 ppm |
| Concentration per Run 1 | 4.6480 ppm | 0.0004 ppm | 0.3147 ppm | 0.0006 ppm | -0.0017 ppm | 0.0067 ppm | 0.0153 ppm |
| Concentration per Run 2 | 4.6397 ppm | -0.0001 ppm | 0.3167 ppm | 0.0010 ppm | -0.0028 ppm | 0.0068 ppm | 0.0151 ppm |
| Concentration per Run 3 | 4.5971 ppm | 0.0003 ppm | 0.3105 ppm | 0.0005 ppm | -0.0020 ppm | 0.0067 ppm | 0.0152 ppm |
| Concentration RSD | 0.6 % | 170.1 % | 1.0 % | 37.6 % | 24.0 % | 0.2 % | 0.7 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.1487 % | 99.8198 % | 97.3046 % | 99.4995 % | 94.6377 % | 99.2154 % | 0.0002 ppm |
| Concentration per Run 1 | 101.7568 % | 99.7588 % | 96.9471 % | 99.0487 % | 94.1955 % | 99.0762 % | 0.0009 ppm |
| Concentration per Run 2 | 98.9511 % | 99.9143 % | 97.1985 % | 98.9722 % | 94.8322 % | 99.2864 % | -0.0011 ppm |
| Concentration per Run 3 | 99.7382 % | 99.7863 % | 97.7683 % | 100.4777 % | 94.8853 % | 99.2837 % | 0.0008 ppm |
| Concentration RSD | 1.4 % | 0.1 % | 0.4 % | 0.9 % | 0.4 % | 0.1 % | 585.5 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512368-08 WG2039059
Analysis started at: 3/12/2025 3:29:13 PM
Rack: 1
Vial: 40

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0086 ppm | -0.0001 ppm | 0.0160 ppm | 0.0319 ppm | 0.0000 ppm | 31.5075 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0022 ppm | 0.0000 ppm | 0.0159 ppm | 0.0320 ppm | 0.0000 ppm | 31.3622 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0095 ppm | 0.0003 ppm | 0.0159 ppm | 0.0319 ppm | 0.0000 ppm | 31.5915 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0139 ppm | -0.0005 ppm | 0.0161 ppm | 0.0318 ppm | 0.0000 ppm | 31.5688 ppm |
| Concentration RSD | 130.7 % | 69.2 % | 411.0 % | 0.8 % | 0.3 % | 4,515.1 % | 0.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | 0.0023 ppm | 0.0004 ppm | 0.0644 ppm | 1.6186 ppm | 5.7812 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0002 ppm | 0.0025 ppm | 0.0003 ppm | 0.0639 ppm | 1.6323 ppm | 5.7588 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0021 ppm | 0.0006 ppm | 0.0649 ppm | 1.6257 ppm | 5.7719 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0002 ppm | 0.0022 ppm | 0.0004 ppm | 0.0645 ppm | 1.5979 ppm | 5.8129 ppm |
| Concentration RSD | 145.5 % | 61.2 % | 8.1 % | 35.2 % | 0.7 % | 1.1 % | 0.5 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0147 ppm | -0.0003 ppm | 12.5014 ppm | 0.0043 ppm | -0.0024 ppm | -0.0005 ppm | -0.0021 ppm |
| Concentration per Run 1 | 0.0146 ppm | -0.0003 ppm | 12.5662 ppm | 0.0043 ppm | -0.0019 ppm | -0.0004 ppm | -0.0035 ppm |
| Concentration per Run 2 | 0.0147 ppm | -0.0002 ppm | 12.4981 ppm | 0.0042 ppm | -0.0026 ppm | -0.0009 ppm | -0.0019 ppm |
| Concentration per Run 3 | 0.0147 ppm | -0.0004 ppm | 12.4400 ppm | 0.0044 ppm | -0.0028 ppm | -0.0002 ppm | -0.0008 ppm |
| Concentration RSD | 0.6 % | 33.4 % | 0.5 % | 2.3 % | 19.4 % | 71.9 % | 66.9 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.0570 ppm | 0.0004 ppm | 0.1095 ppm | 0.0003 ppm | -0.0010 ppm | 0.0003 ppm | 0.0135 ppm |
| Concentration per Run 1 | 5.0642 ppm | 0.0004 ppm | 0.1095 ppm | 0.0006 ppm | -0.0007 ppm | 0.0005 ppm | 0.0136 ppm |
| Concentration per Run 2 | 5.0584 ppm | 0.0005 ppm | 0.1097 ppm | 0.0003 ppm | -0.0015 ppm | 0.0002 ppm | 0.0134 ppm |
| Concentration per Run 3 | 5.0484 ppm | 0.0002 ppm | 0.1093 ppm | 0.0001 ppm | -0.0009 ppm | 0.0003 ppm | 0.0134 ppm |
| Concentration RSD | 0.2 % | 42.5 % | 0.2 % | 69.2 % | 41.4 % | 56.1 % | 1.1 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.3535 % | 101.1558 % | 99.1155 % | 101.8644 % | 96.1775 % | 100.6976 % | -0.0004 ppm |
| Concentration per Run 1 | 102.9922 % | 101.1150 % | 99.2142 % | 102.4684 % | 95.9089 % | 100.7565 % | -0.0012 ppm |
| Concentration per Run 2 | 99.6195 % | 101.1285 % | 98.7789 % | 101.8552 % | 96.3704 % | 100.8421 % | -0.0002 ppm |
| Concentration per Run 3 | 98.4488 % | 101.2238 % | 99.3534 % | 101.2698 % | 96.2532 % | 100.4942 % | 0.0003 ppm |
| Concentration RSD | 2.4 % | 0.1 % | 0.3 % | 0.6 % | 0.2 % | 0.2 % | 197.6 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512368-11 WG2039059
Analysis started at: 3/12/2025 3:35:46 PM
Rack: 1
Vial: 41

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.1192 ppm | -0.0011 ppm | 0.0066 ppm | 0.0027 ppm | 0.0001 ppm | 8.5410 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.1189 ppm | -0.0005 ppm | 0.0067 ppm | 0.0027 ppm | 0.0001 ppm | 8.5381 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.1204 ppm | -0.0014 ppm | 0.0066 ppm | 0.0028 ppm | 0.0001 ppm | 8.5662 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.1183 ppm | -0.0016 ppm | 0.0064 ppm | 0.0025 ppm | 0.0000 ppm | 8.5187 ppm |
| Concentration RSD | 510.9 % | 0.9 % | 52.4 % | 2.5 % | 4.2 % | 98.4 % | 0.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0005 ppm | 0.0013 ppm | 0.0004 ppm | 1.1770 ppm | 1.0511 ppm | 3.2629 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0005 ppm | 0.0014 ppm | 0.0003 ppm | 1.1734 ppm | 1.0450 ppm | 3.2707 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0006 ppm | 0.0012 ppm | 0.0004 ppm | 1.1827 ppm | 1.0666 ppm | 3.2668 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0005 ppm | 0.0013 ppm | 0.0003 ppm | 1.1750 ppm | 1.0416 ppm | 3.2511 ppm |
| Concentration RSD | 47.0 % | 8.7 % | 7.1 % | 15.5 % | 0.4 % | 1.3 % | 0.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0352 ppm | -0.0001 ppm | 5.9580 ppm | -0.0006 ppm | -0.0059 ppm | -0.0004 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0351 ppm | 0.0000 ppm | 5.9572 ppm | -0.0005 ppm | -0.0064 ppm | -0.0008 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0356 ppm | 0.0000 ppm | 6.0153 ppm | -0.0006 ppm | -0.0057 ppm | -0.0002 ppm | -0.0005 ppm |
| Concentration per Run 3 | 0.0349 ppm | -0.0002 ppm | 5.9015 ppm | -0.0005 ppm | -0.0057 ppm | -0.0003 ppm | -0.0003 ppm |
| Concentration RSD | 1.1 % | 162.3 % | 1.0 % | 13.6 % | 6.3 % | 70.5 % | 170.7 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 12.4610 ppm | 0.0003 ppm | 0.0385 ppm | 0.0067 ppm | -0.0007 ppm | 0.0007 ppm | 0.0117 ppm |
| Concentration per Run 1 | 12.5020 ppm | 0.0002 ppm | 0.0385 ppm | 0.0067 ppm | -0.0003 ppm | 0.0006 ppm | 0.0117 ppm |
| Concentration per Run 2 | 12.4503 ppm | 0.0006 ppm | 0.0388 ppm | 0.0065 ppm | -0.0012 ppm | 0.0008 ppm | 0.0117 ppm |
| Concentration per Run 3 | 12.4307 ppm | 0.0002 ppm | 0.0381 ppm | 0.0068 ppm | -0.0006 ppm | 0.0006 ppm | 0.0118 ppm |
| Concentration RSD | 0.3 % | 63.7 % | 0.9 % | 2.5 % | 65.4 % | 15.5 % | 0.7 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.7265 % | 102.7531 % | 101.0950 % | 99.7128 % | 99.6627 % | 102.0995 % | 0.0016 ppm |
| Concentration per Run 1 | 103.6287 % | 102.9259 % | 100.9428 % | 100.3324 % | 99.3218 % | 102.1252 % | 0.0020 ppm |
| Concentration per Run 2 | 99.9530 % | 102.6403 % | 101.1055 % | 99.6620 % | 100.0329 % | 102.0190 % | 0.0015 ppm |
| Concentration per Run 3 | 98.5977 % | 102.6931 % | 101.2368 % | 99.1440 % | 99.6333 % | 102.1543 % | 0.0011 ppm |
| Concentration RSD | 2.6 % | 0.1 % | 0.1 % | 0.6 % | 0.4 % | 0.1 % | 31.1 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512368-01 WG2039059
Analysis started at: 3/12/2025 3:42:20 PM
Rack: 1
Vial: 32

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0051 ppm | -0.0010 ppm | 0.0115 ppm | 0.0152 ppm | 0.0000 ppm | 24.0971 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0063 ppm | -0.0011 ppm | 0.0117 ppm | 0.0152 ppm | 0.0000 ppm | 24.0961 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0037 ppm | -0.0005 ppm | 0.0115 ppm | 0.0152 ppm | 0.0001 ppm | 24.2049 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0125 ppm | -0.0015 ppm | 0.0115 ppm | 0.0152 ppm | 0.0000 ppm | 23.9903 ppm |
| Concentration RSD | 186.3 % | 161.8 % | 47.7 % | 1.1 % | 0.1 % | 97.7 % | 0.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | 0.0012 ppm | 0.0001 ppm | 0.0098 ppm | 1.8893 ppm | 4.6953 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0008 ppm | 0.0000 ppm | 0.0106 ppm | 1.9010 ppm | 4.7139 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | 0.0011 ppm | 0.0001 ppm | 0.0096 ppm | 1.8853 ppm | 4.6829 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0002 ppm | 0.0017 ppm | 0.0002 ppm | 0.0091 ppm | 1.8815 ppm | 4.6891 ppm |
| Concentration RSD | 56.5 % | 70.9 % | 36.9 % | 96.1 % | 7.9 % | 0.5 % | 0.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0180 ppm | 0.0001 ppm | 9.1821 ppm | 0.0000 ppm | -0.0010 ppm | -0.0009 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0182 ppm | 0.0000 ppm | 9.2133 ppm | -0.0001 ppm | -0.0009 ppm | -0.0006 ppm | -0.0011 ppm |
| Concentration per Run 2 | 0.0183 ppm | 0.0002 ppm | 9.1689 ppm | 0.0001 ppm | -0.0013 ppm | -0.0009 ppm | 0.0012 ppm |
| Concentration per Run 3 | 0.0174 ppm | 0.0001 ppm | 9.1642 ppm | 0.0000 ppm | -0.0009 ppm | -0.0011 ppm | -0.0004 ppm |
| Concentration RSD | 2.9 % | 93.4 % | 0.3 % | 1,152.5 % | 22.3 % | 31.9 % | 1,226.5 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.6293 ppm | 0.0005 ppm | 0.0804 ppm | 0.0003 ppm | -0.0009 ppm | 0.0007 ppm | 0.0134 ppm |
| Concentration per Run 1 | 1.6348 ppm | 0.0007 ppm | 0.0806 ppm | 0.0003 ppm | -0.0007 ppm | 0.0008 ppm | 0.0136 ppm |
| Concentration per Run 2 | 1.6247 ppm | 0.0000 ppm | 0.0805 ppm | 0.0005 ppm | -0.0009 ppm | 0.0008 ppm | 0.0133 ppm |
| Concentration per Run 3 | 1.6283 ppm | 0.0007 ppm | 0.0800 ppm | 0.0003 ppm | -0.0010 ppm | 0.0004 ppm | 0.0134 ppm |
| Concentration RSD | 0.3 % | 93.6 % | 0.4 % | 31.0 % | 20.1 % | 34.7 % | 1.3 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.7743 % | 102.6039 % | 100.5306 % | 99.1344 % | 99.3913 % | 100.9597 % | -0.0002 ppm |
| Concentration per Run 1 | 103.0101 % | 102.6237 % | 100.5799 % | 99.0689 % | 98.8995 % | 100.8794 % | -0.0002 ppm |
| Concentration per Run 2 | 99.4028 % | 103.0632 % | 100.6284 % | 98.5564 % | 99.5988 % | 101.3286 % | 0.0007 ppm |
| Concentration per Run 3 | 99.9099 % | 102.1249 % | 100.3836 % | 99.7781 % | 99.6756 % | 100.6712 % | -0.0012 ppm |
| Concentration RSD | 1.9 % | 0.5 % | 0.1 % | 0.6 % | 0.4 % | 0.3 % | 431.7 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2039059-7 WG2039059
Analysis started at: 3/12/2025 3:48:53 PM
Rack: 1
Vial: 33

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0501 ppm | 2.0238 ppm | 0.1091 ppm | 0.9356 ppm | 1.9349 ppm | 0.0492 ppm | 33.0355 ppm |
| Concentration per Run 1 | 0.0500 ppm | 2.0047 ppm | 0.1094 ppm | 0.9362 ppm | 1.9224 ppm | 0.0490 ppm | 32.7875 ppm |
| Concentration per Run 2 | 0.0499 ppm | 2.0395 ppm | 0.1086 ppm | 0.9356 ppm | 1.9438 ppm | 0.0494 ppm | 33.2398 ppm |
| Concentration per Run 3 | 0.0503 ppm | 2.0273 ppm | 0.1094 ppm | 0.9351 ppm | 1.9386 ppm | 0.0493 ppm | 33.0792 ppm |
| Concentration RSD | 0.4 % | 0.9 % | 0.4 % | 0.1 % | 0.6 % | 0.5 % | 0.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0486 ppm | 0.4572 ppm | 0.1918 ppm | 0.2412 ppm | 0.9938 ppm | 12.5258 ppm | 14.4369 ppm |
| Concentration per Run 1 | 0.0487 ppm | 0.4566 ppm | 0.1922 ppm | 0.2424 ppm | 0.9825 ppm | 12.5008 ppm | 14.4798 ppm |
| Concentration per Run 2 | 0.0486 ppm | 0.4574 ppm | 0.1918 ppm | 0.2395 ppm | 1.0016 ppm | 12.5574 ppm | 14.3914 ppm |
| Concentration per Run 3 | 0.0487 ppm | 0.4576 ppm | 0.1913 ppm | 0.2418 ppm | 0.9974 ppm | 12.5193 ppm | 14.4396 ppm |
| Concentration RSD | 0.1 % | 0.1 % | 0.2 % | 0.6 % | 1.0 % | 0.2 % | 0.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4940 ppm | 0.9000 ppm | 19.1975 ppm | 0.4606 ppm | 0.4897 ppm | 0.4647 ppm | 0.1108 ppm |
| Concentration per Run 1 | 0.4911 ppm | 0.8938 ppm | 19.1127 ppm | 0.4596 ppm | 0.4896 ppm | 0.4613 ppm | 0.1093 ppm |
| Concentration per Run 2 | 0.4968 ppm | 0.9005 ppm | 19.3057 ppm | 0.4612 ppm | 0.4896 ppm | 0.4622 ppm | 0.1107 ppm |
| Concentration per Run 3 | 0.4942 ppm | 0.9056 ppm | 19.1741 ppm | 0.4610 ppm | 0.4899 ppm | 0.4707 ppm | 0.1123 ppm |
| Concentration RSD | 0.6 % | 0.7 % | 0.5 % | 0.2 % | 0.0 % | 1.1 % | 1.4 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.6835 ppm | 0.8880 ppm | 1.0288 ppm | 0.9708 ppm | 0.1047 ppm | 0.4770 ppm | 0.4748 ppm |
| Concentration per Run 1 | 2.6767 ppm | 0.8888 ppm | 1.0225 ppm | 0.9730 ppm | 0.1052 ppm | 0.4781 ppm | 0.4758 ppm |
| Concentration per Run 2 | 2.6839 ppm | 0.8867 ppm | 1.0334 ppm | 0.9669 ppm | 0.1055 ppm | 0.4764 ppm | 0.4747 ppm |
| Concentration per Run 3 | 2.6900 ppm | 0.8885 ppm | 1.0307 ppm | 0.9724 ppm | 0.1034 ppm | 0.4766 ppm | 0.4738 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 0.6 % | 0.3 % | 1.1 % | 0.2 % | 0.2 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 101.1235 % | 101.2797 % | 99.3037 % | 102.7622 % | 96.9598 % | 101.0754 % | 0.0000 ppm |
| Concentration per Run 1 | 103.7926 % | 101.3915 % | 99.4078 % | 103.8308 % | 97.2259 % | 101.1668 % | -0.0006 ppm |
| Concentration per Run 2 | 99.7927 % | 101.2257 % | 99.3226 % | 101.9578 % | 96.9694 % | 101.0991 % | -0.0002 ppm |
| Concentration per Run 3 | 99.7851 % | 101.2220 % | 99.1807 % | 102.4980 % | 96.6842 % | 100.9603 % | 0.0009 ppm |
| Concentration RSD | 2.3 % | 0.1 % | 0.1 % | 0.9 % | 0.3 % | 0.1 % | 2,782.2 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2039059-8 WG2039059
Analysis started at: 3/12/2025 3:55:10 PM
Rack: 1
Vial: 34

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0062 ppm | -0.0012 ppm | 0.0132 ppm | 0.0151 ppm | 0.0000 ppm | 23.8416 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0007 ppm | -0.0015 ppm | 0.0135 ppm | 0.0151 ppm | 0.0001 ppm | 23.8328 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0119 ppm | -0.0029 ppm | 0.0129 ppm | 0.0152 ppm | 0.0000 ppm | 23.9302 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0076 ppm | 0.0007 ppm | 0.0132 ppm | 0.0149 ppm | 0.0000 ppm | 23.7616 ppm |
| Concentration RSD | 235.1 % | 102.5 % | 150.9 % | 2.1 % | 0.8 % | 95.1 % | 0.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0002 ppm | 0.0002 ppm | 0.0002 ppm | 0.0025 ppm | 1.8823 ppm | 4.6573 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0002 ppm | 0.0003 ppm | 0.0004 ppm | 0.0020 ppm | 1.8891 ppm | 4.6743 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0002 ppm | 0.0002 ppm | 0.0001 ppm | 0.0029 ppm | 1.8995 ppm | 4.6507 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0002 ppm | 0.0002 ppm | 0.0002 ppm | 0.0025 ppm | 1.8583 ppm | 4.6469 ppm |
| Concentration RSD | 42.0 % | 3.5 % | 33.4 % | 64.1 % | 18.6 % | 1.1 % | 0.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 0.0029 ppm | 9.1185 ppm | 0.0000 ppm | -0.0011 ppm | 0.0016 ppm | -0.0007 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0034 ppm | 9.1634 ppm | -0.0002 ppm | -0.0015 ppm | 0.0014 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0017 ppm | 0.0029 ppm | 9.1385 ppm | 0.0001 ppm | -0.0009 ppm | 0.0017 ppm | -0.0019 ppm |
| Concentration per Run 3 | 0.0013 ppm | 0.0025 ppm | 9.0534 ppm | 0.0002 ppm | -0.0009 ppm | 0.0015 ppm | 0.0000 ppm |
| Concentration RSD | 17.6 % | 14.7 % | 0.6 % | 1,793.4 % | 32.1 % | 7.6 % | 140.1 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.6417 ppm | 0.0010 ppm | 0.0798 ppm | 0.0004 ppm | -0.0006 ppm | 0.0007 ppm | 0.0132 ppm |
| Concentration per Run 1 | 1.6429 ppm | 0.0012 ppm | 0.0799 ppm | 0.0007 ppm | -0.0010 ppm | 0.0007 ppm | 0.0133 ppm |
| Concentration per Run 2 | 1.6379 ppm | 0.0013 ppm | 0.0800 ppm | 0.0002 ppm | -0.0012 ppm | 0.0006 ppm | 0.0132 ppm |
| Concentration per Run 3 | 1.6443 ppm | 0.0006 ppm | 0.0794 ppm | 0.0003 ppm | 0.0005 ppm | 0.0007 ppm | 0.0132 ppm |
| Concentration RSD | 0.2 % | 36.5 % | 0.4 % | 69.4 % | 163.0 % | 8.3 % | 0.3 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.2394 % | 103.3035 % | 100.1651 % | 100.7029 % | 99.6145 % | 102.4167 % | -0.0007 ppm |
| Concentration per Run 1 | 102.2414 % | 103.5024 % | 100.1362 % | 100.7208 % | 99.5443 % | 102.7317 % | -0.0012 ppm |
| Concentration per Run 2 | 99.5588 % | 103.5339 % | 100.4105 % | 100.5021 % | 99.7791 % | 102.0538 % | -0.0003 ppm |
| Concentration per Run 3 | 98.9180 % | 102.8741 % | 99.9487 % | 100.8859 % | 99.5201 % | 102.4646 % | -0.0007 ppm |
| Concentration RSD | 1.8 % | 0.4 % | 0.2 % | 0.2 % | 0.1 % | 0.3 % | 60.6 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2039059-9 WG2039059
Analysis started at: 3/12/2025 4:01:45 PM
Rack: 1
Vial: 35

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0272 ppm | 2.0524 ppm | 0.1201 ppm | 0.9570 ppm | 1.9563 ppm | 0.0504 ppm | 32.7754 ppm |
| Concentration per Run 1 | 0.0271 ppm | 2.0492 ppm | 0.1190 ppm | 0.9528 ppm | 1.9482 ppm | 0.0502 ppm | 32.6788 ppm |
| Concentration per Run 2 | 0.0271 ppm | 2.0579 ppm | 0.1204 ppm | 0.9569 ppm | 1.9608 ppm | 0.0505 ppm | 32.8502 ppm |
| Concentration per Run 3 | 0.0274 ppm | 2.0500 ppm | 0.1208 ppm | 0.9614 ppm | 1.9598 ppm | 0.0505 ppm | 32.7973 ppm |
| Concentration RSD | 0.6 % | 0.2 % | 0.8 % | 0.4 % | 0.4 % | 0.4 % | 0.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0497 ppm | 0.4638 ppm | 0.1964 ppm | 0.2432 ppm | 1.0262 ppm | 12.8390 ppm | 14.6242 ppm |
| Concentration per Run 1 | 0.0494 ppm | 0.4614 ppm | 0.1969 ppm | 0.2439 ppm | 1.0173 ppm | 12.7906 ppm | 14.6077 ppm |
| Concentration per Run 2 | 0.0499 ppm | 0.4653 ppm | 0.1963 ppm | 0.2423 ppm | 1.0277 ppm | 12.8795 ppm | 14.6157 ppm |
| Concentration per Run 3 | 0.0498 ppm | 0.4646 ppm | 0.1960 ppm | 0.2435 ppm | 1.0336 ppm | 12.8470 ppm | 14.6491 ppm |
| Concentration RSD | 0.6 % | 0.5 % | 0.2 % | 0.4 % | 0.8 % | 0.4 % | 0.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5073 ppm | 0.9240 ppm | 19.1950 ppm | 0.4675 ppm | 0.5113 ppm | 0.4624 ppm | 0.1212 ppm |
| Concentration per Run 1 | 0.5050 ppm | 0.9137 ppm | 19.1242 ppm | 0.4653 ppm | 0.5099 ppm | 0.4568 ppm | 0.1216 ppm |
| Concentration per Run 2 | 0.5086 ppm | 0.9248 ppm | 19.2523 ppm | 0.4687 ppm | 0.5117 ppm | 0.4636 ppm | 0.1197 ppm |
| Concentration per Run 3 | 0.5084 ppm | 0.9335 ppm | 19.2086 ppm | 0.4686 ppm | 0.5124 ppm | 0.4667 ppm | 0.1223 ppm |
| Concentration RSD | 0.4 % | 1.1 % | 0.3 % | 0.4 % | 0.2 % | 1.1 % | 1.1 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.3649 ppm | 0.9215 ppm | 1.0538 ppm | 1.0013 ppm | 0.1160 ppm | 0.4841 ppm | 0.4824 ppm |
| Concentration per Run 1 | 2.3574 ppm | 0.9170 ppm | 1.0482 ppm | 1.0036 ppm | 0.1158 ppm | 0.4801 ppm | 0.4791 ppm |
| Concentration per Run 2 | 2.3681 ppm | 0.9240 ppm | 1.0565 ppm | 1.0006 ppm | 0.1152 ppm | 0.4845 ppm | 0.4852 ppm |
| Concentration per Run 3 | 2.3692 ppm | 0.9234 ppm | 1.0567 ppm | 0.9997 ppm | 0.1170 ppm | 0.4875 ppm | 0.4828 ppm |
| Concentration RSD | 0.3 % | 0.4 % | 0.5 % | 0.2 % | 0.8 % | 0.8 % | 0.6 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.6508 % | 101.4912 % | 99.4555 % | 100.9027 % | 97.0833 % | 100.9772 % | 0.0000 ppm |
| Concentration per Run 1 | 102.0841 % | 101.0506 % | 100.1497 % | 100.7982 % | 97.7974 % | 100.6624 % | -0.0008 ppm |
| Concentration per Run 2 | 100.1490 % | 101.6759 % | 99.4163 % | 101.0237 % | 96.8917 % | 101.1045 % | 0.0007 ppm |
| Concentration per Run 3 | 99.7193 % | 101.7470 % | 98.8005 % | 100.8862 % | 96.5608 % | 101.1648 % | 0.0003 ppm |
| Concentration RSD | 1.3 % | 0.4 % | 0.7 % | 0.1 % | 0.7 % | 0.3 % | 1,629.3 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2039059-10d5 WG2039059
Analysis started at: 3/12/2025 4:08:02 PM
Rack: 1
Vial: 36

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0011 ppm | -0.0003 ppm | 0.0038 ppm | 0.0030 ppm | 0.0000 ppm | 4.7578 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0007 ppm | -0.0018 ppm | 0.0037 ppm | 0.0029 ppm | 0.0000 ppm | 4.7039 ppm |
| Concentration per Run 2 | -0.0004 ppm | -0.0047 ppm | -0.0003 ppm | 0.0038 ppm | 0.0032 ppm | 0.0000 ppm | 4.7665 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0009 ppm | 0.0012 ppm | 0.0038 ppm | 0.0031 ppm | 0.0001 ppm | 4.8028 ppm |
| Concentration RSD | 124.7 % | 299.4 % | 511.1 % | 2.3 % | 5.1 % | 137.0 % | 1.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | -0.0002 ppm | 0.0029 ppm | 0.3880 ppm | 0.9495 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | -0.0002 ppm | 0.0019 ppm | 0.4106 ppm | 0.9433 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | 0.0029 ppm | 0.3662 ppm | 0.9522 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | 0.0003 ppm | -0.0003 ppm | 0.0037 ppm | 0.3873 ppm | 0.9529 ppm |
| Concentration RSD | 106.4 % | 172.8 % | 282.7 % | 47.1 % | 31.6 % | 5.7 % | 0.6 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0026 ppm | 0.0027 ppm | 1.7852 ppm | -0.0001 ppm | -0.0002 ppm | 0.0024 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0025 ppm | 0.0032 ppm | 1.7757 ppm | -0.0003 ppm | -0.0001 ppm | 0.0031 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0025 ppm | 0.0028 ppm | 1.7843 ppm | 0.0000 ppm | -0.0007 ppm | 0.0024 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0027 ppm | 0.0023 ppm | 1.7954 ppm | 0.0000 ppm | 0.0001 ppm | 0.0018 ppm | 0.0001 ppm |
| Concentration RSD | 4.1 % | 15.4 % | 0.6 % | 151.7 % | 173.1 % | 26.8 % | 333.2 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3235 ppm | 0.0014 ppm | 0.0159 ppm | 0.0002 ppm | -0.0006 ppm | 0.0002 ppm | 0.0028 ppm |
| Concentration per Run 1 | 0.3277 ppm | 0.0017 ppm | 0.0157 ppm | 0.0001 ppm | -0.0001 ppm | 0.0003 ppm | 0.0028 ppm |
| Concentration per Run 2 | 0.3214 ppm | 0.0014 ppm | 0.0159 ppm | 0.0004 ppm | -0.0004 ppm | 0.0003 ppm | 0.0028 ppm |
| Concentration per Run 3 | 0.3213 ppm | 0.0012 ppm | 0.0160 ppm | 0.0002 ppm | -0.0014 ppm | 0.0000 ppm | 0.0028 ppm |
| Concentration RSD | 1.1 % | 17.3 % | 0.9 % | 60.0 % | 105.1 % | 109.9 % | 1.3 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.7232 % | 104.0825 % | 102.0993 % | 101.6705 % | 102.5457 % | 102.7417 % | -0.0001 ppm |
| Concentration per Run 1 | 102.6724 % | 105.0834 % | 101.2811 % | 102.7416 % | 101.7570 % | 103.6393 % | 0.0001 ppm |
| Concentration per Run 2 | 100.6552 % | 102.9598 % | 102.4340 % | 101.9585 % | 102.9385 % | 101.7980 % | 0.0004 ppm |
| Concentration per Run 3 | 98.8419 % | 104.2043 % | 102.5829 % | 100.3116 % | 102.9417 % | 102.7878 % | -0.0006 ppm |
| Concentration RSD | 1.9 % | 1.0 % | 0.7 % | 1.2 % | 0.7 % | 0.9 % | 710.0 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCV
Analysis started at: 3/12/2025 4:14:37 PM
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4688 ppm | 0.4793 ppm | 0.4623 ppm | 0.4610 ppm | 0.4588 ppm | 0.4807 ppm | 0.4976 ppm |
| Concentration per Run 1 | 0.4498 ppm | 0.4694 ppm | 0.4648 ppm | 0.4614 ppm | 0.4492 ppm | 0.4710 ppm | 0.4877 ppm |
| Concentration per Run 2 | 0.4680 ppm | 0.4824 ppm | 0.4584 ppm | 0.4583 ppm | 0.4612 ppm | 0.4849 ppm | 0.5048 ppm |
| Concentration per Run 3 | 0.4887 ppm | 0.4862 ppm | 0.4638 ppm | 0.4633 ppm | 0.4659 ppm | 0.4862 ppm | 0.5004 ppm |
| Recovery Percentage 1 | 93.767 % | 95.864 % | 92.461 % | 92.201 % | 91.754 % | 96.144 % | 99.527 % |
| Concentration RSD | 4.2 % | 1.8 % | 0.7 % | 0.6 % | 1.9 % | 1.8 % | 1.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4523 ppm | 0.4609 ppm | 0.4754 ppm | 0.4531 ppm | 0.4869 ppm | 5.0607 ppm | 0.4830 ppm |
| Concentration per Run 1 | 0.4549 ppm | 0.4627 ppm | 0.4555 ppm | 0.4337 ppm | 0.4729 ppm | 4.9716 ppm | 0.4652 ppm |
| Concentration per Run 2 | 0.4493 ppm | 0.4581 ppm | 0.4725 ppm | 0.4482 ppm | 0.4925 ppm | 5.0865 ppm | 0.4790 ppm |
| Concentration per Run 3 | 0.4526 ppm | 0.4617 ppm | 0.4984 ppm | 0.4775 ppm | 0.4955 ppm | 5.1239 ppm | 0.5048 ppm |
| Recovery Percentage 1 | 90.456 % | 92.173 % | 95.090 % | 90.627 % | 97.386 % | 101.213 % | 96.599 % |
| Concentration RSD | 0.6 % | 0.5 % | 4.5 % | 4.9 % | 2.5 % | 1.6 % | 4.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4713 ppm | 0.4610 ppm | 9.2589 ppm | 0.4593 ppm | 0.4576 ppm | 0.4667 ppm | 0.4719 ppm |
| Concentration per Run 1 | 0.4617 ppm | 0.4620 ppm | 9.0960 ppm | 0.4614 ppm | 0.4592 ppm | 0.4679 ppm | 0.4725 ppm |
| Concentration per Run 2 | 0.4758 ppm | 0.4583 ppm | 9.2931 ppm | 0.4561 ppm | 0.4535 ppm | 0.4627 ppm | 0.4692 ppm |
| Concentration per Run 3 | 0.4763 ppm | 0.4627 ppm | 9.3875 ppm | 0.4604 ppm | 0.4600 ppm | 0.4696 ppm | 0.4740 ppm |
| Recovery Percentage 1 | 94.252 % | 92.200 % | 92.589 % | 91.868 % | 91.514 % | 93.349 % | 94.374 % |
| Concentration RSD | 1.8 % | 0.5 % | 1.6 % | 0.6 % | 0.8 % | 0.8 % | 0.5 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.9588 ppm | 0.4557 ppm | 0.4695 ppm | 0.4883 ppm | 0.4614 ppm | 0.4623 ppm | 0.4623 ppm |
| Concentration per Run 1 | 4.9663 ppm | 0.4575 ppm | 0.4600 ppm | 0.4687 ppm | 0.4608 ppm | 0.4600 ppm | 0.4647 ppm |
| Concentration per Run 2 | 4.9301 ppm | 0.4521 ppm | 0.4724 ppm | 0.4862 ppm | 0.4593 ppm | 0.4594 ppm | 0.4594 ppm |
| Concentration per Run 3 | 4.9802 ppm | 0.4574 ppm | 0.4762 ppm | 0.5100 ppm | 0.4640 ppm | 0.4674 ppm | 0.4627 ppm |
| Recovery Percentage 1 | 94.454 % | 91.135 % | 93.909 % | 97.654 % | 92.273 % | 92.456 % | 92.456 % |
| Concentration RSD | 0.5 % | 0.7 % | 1.8 % | 4.2 % | 0.5 % | 1.0 % | 0.6 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.4342 % | 103.4128 % | 102.1084 % | 103.3072 % | 99.6993 % | 103.2963 % | 0.4672 ppm |
| Concentration per Run 1 | 101.5272 % | 107.0072 % | 102.0095 % | 105.9148 % | 99.4533 % | 106.8644 % | 0.4593 ppm |
| Concentration per Run 2 | 98.0068 % | 104.8651 % | 102.5281 % | 101.8532 % | 100.3191 % | 103.4913 % | 0.4671 ppm |
| Concentration per Run 3 | 98.7687 % | 98.3660 % | 101.7877 % | 102.1537 % | 99.3255 % | 99.5333 % | 0.4753 ppm |
| Recovery Percentage 1 | | | | | | | 93.446 % |
| Concentration RSD | 1.9 % | 4.4 % | 0.4 % | 2.2 % | 0.5 % | 3.6 % | 1.7 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCB
Analysis started at: 3/12/2025 4:20:56 PM
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0003 ppm | -0.0003 ppm | 0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0015 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0028 ppm | -0.0008 ppm | 0.0001 ppm | -0.0001 ppm | 0.0000 ppm | 0.0006 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0012 ppm | 0.0002 ppm | 0.0003 ppm | 0.0001 ppm | 0.0000 ppm | 0.0046 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0024 ppm | -0.0005 ppm | 0.0002 ppm | 0.0000 ppm | 0.0000 ppm | -0.0007 ppm |
| Recovery Percentage 1 | 1.783 % | -0.255 % | -6.791 % | 0.655 % | -0.146 % | 0.025 % | 1.512 % |
| Concentration RSD | 235.1 % | 1,071.1 % | 158.4 % | 67.0 % | 610.1 % | 2,036.6 % | 180.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | -0.0003 ppm | 0.0003 ppm | 0.0132 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | -0.0004 ppm | 0.0007 ppm | 0.0250 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | -0.0001 ppm | -0.0002 ppm | 0.0002 ppm | 0.0226 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | 0.0002 ppm | -0.0004 ppm | 0.0002 ppm | -0.0081 ppm | -0.0005 ppm |
| Recovery Percentage 1 | -0.526 % | 0.317 % | -0.065 % | -3.147 % | 0.658 % | 0.527 % | -0.208 % |
| Concentration RSD | 52.9 % | 89.6 % | 2,955.7 % | 28.9 % | 86.1 % | 139.9 % | 137.5 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0006 ppm | -0.0062 ppm | -0.0001 ppm | -0.0003 ppm | 0.0004 ppm | -0.0003 ppm |
| Concentration per Run 1 | -0.0005 ppm | 0.0008 ppm | -0.0086 ppm | -0.0001 ppm | -0.0004 ppm | 0.0001 ppm | -0.0011 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0006 ppm | -0.0035 ppm | 0.0000 ppm | -0.0001 ppm | 0.0002 ppm | 0.0007 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0005 ppm | -0.0065 ppm | -0.0002 ppm | -0.0003 ppm | 0.0009 ppm | -0.0004 ppm |
| Recovery Percentage 1 | -2.306 % | 1.240 % | -0.310 % | -0.328 % | -2.636 % | 0.814 % | -2.685 % |
| Concentration RSD | 118.4 % | 20.0 % | 41.5 % | 138.1 % | 52.2 % | 116.0 % | 349.7 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0003 ppm | 0.0001 ppm | -0.0002 ppm | 0.0003 ppm | 0.0001 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0007 ppm | 0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0011 ppm | 0.0003 ppm | -0.0002 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0001 ppm | 0.0001 ppm | -0.0003 ppm | 0.0005 ppm | 0.0001 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0006 ppm | 0.0001 ppm | -0.0004 ppm | -0.0005 ppm | 0.0000 ppm | -0.0001 ppm |
| Recovery Percentage 1 | -0.057 % | 0.608 % | 0.626 % | -2.493 % | 1.727 % | 1.429 % | -2.185 % |
| Concentration RSD | 145.7 % | 110.1 % | 34.4 % | 70.6 % | 224.7 % | 109.3 % | 58.5 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.7669 % | 105.5585 % | 103.1652 % | 100.2325 % | 103.8052 % | 103.0754 % | -0.0002 ppm |
| Concentration per Run 1 | 102.5268 % | 106.2423 % | 103.2375 % | 100.6519 % | 104.3136 % | 103.9100 % | -0.0011 ppm |
| Concentration per Run 2 | 100.3730 % | 104.3075 % | 103.3837 % | 100.0235 % | 104.3770 % | 101.7537 % | -0.0005 ppm |
| Concentration per Run 3 | 99.4010 % | 106.1258 % | 102.8743 % | 100.0220 % | 102.7251 % | 103.5625 % | 0.0010 ppm |
| Recovery Percentage 1 | | | | | | | -2.019 % |
| Concentration RSD | 1.6 % | 1.0 % | 0.3 % | 0.4 % | 0.9 % | 1.1 % | 517.8 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2037871-1 WG2037871
Analysis started at: 3/12/2025 4:33:48 PM
Rack: 1
Vial: 53

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0114 ppm | -0.0020 ppm | 0.0003 ppm | 0.0001 ppm | 0.0000 ppm | 0.0264 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0114 ppm | -0.0023 ppm | 0.0004 ppm | 0.0001 ppm | 0.0000 ppm | 0.0257 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0124 ppm | -0.0025 ppm | 0.0005 ppm | 0.0001 ppm | 0.0000 ppm | 0.0236 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0103 ppm | -0.0011 ppm | 0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0298 ppm |
| Recovery Percentage 1 | 0.789 % | 11.351 % | -39.022 % | 1.083 % | 0.974 % | 0.061 % | 26.383 % |
| Concentration RSD | 109.7 % | 9.3 % | 38.8 % | 66.0 % | 22.8 % | 791.7 % | 11.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0004 ppm | 0.0006 ppm | 0.0001 ppm | 0.0193 ppm | 0.0113 ppm | 0.0049 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0004 ppm | 0.0007 ppm | 0.0001 ppm | 0.0180 ppm | 0.0182 ppm | 0.0043 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0004 ppm | 0.0006 ppm | 0.0001 ppm | 0.0199 ppm | -0.0003 ppm | 0.0063 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0004 ppm | 0.0005 ppm | 0.0001 ppm | 0.0199 ppm | 0.0160 ppm | 0.0040 ppm |
| Recovery Percentage 1 | 2.818 % | -1.880 % | 5.936 % | 1.191 % | 38.572 % | 0.452 % | 4.860 % |
| Concentration RSD | 9.9 % | 5.1 % | 16.0 % | 30.4 % | 5.8 % | 89.7 % | 26.5 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0001 ppm | 0.0153 ppm | 0.0002 ppm | 0.0008 ppm | 0.0000 ppm | -0.0008 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0003 ppm | 0.0134 ppm | 0.0000 ppm | 0.0009 ppm | 0.0001 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0001 ppm | 0.0169 ppm | 0.0003 ppm | 0.0005 ppm | -0.0005 ppm | -0.0014 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0000 ppm | 0.0156 ppm | 0.0003 ppm | 0.0009 ppm | 0.0003 ppm | -0.0009 ppm |
| Recovery Percentage 1 | 5.985 % | 0.263 % | 0.764 % | 0.799 % | 7.691 % | -0.061 % | -7.784 % |
| Concentration RSD | 6.0 % | 92.3 % | 11.6 % | 67.6 % | 25.6 % | 1,384.7 % | 84.9 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0200 ppm | 0.0068 ppm | 0.0001 ppm | 0.0004 ppm | -0.0023 ppm | 0.0001 ppm | 0.0029 ppm |
| Concentration per Run 1 | 0.0206 ppm | 0.0069 ppm | 0.0001 ppm | 0.0008 ppm | -0.0024 ppm | 0.0002 ppm | 0.0029 ppm |
| Concentration per Run 2 | 0.0193 ppm | 0.0069 ppm | 0.0001 ppm | -0.0002 ppm | -0.0023 ppm | 0.0001 ppm | 0.0029 ppm |
| Concentration per Run 3 | 0.0200 ppm | 0.0065 ppm | 0.0001 ppm | 0.0005 ppm | -0.0023 ppm | 0.0000 ppm | 0.0029 ppm |
| Recovery Percentage 1 | 3.991 % | 13.569 % | 0.897 % | 3.543 % | -11.688 % | 0.939 % | 58.455 % |
| Concentration RSD | 3.3 % | 3.3 % | 28.4 % | 132.5 % | 3.0 % | 113.4 % | 0.7 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.1875 % | 103.3784 % | 101.9723 % | 108.8813 % | 98.4874 % | 103.3659 % | 0.0002 ppm |
| Concentration per Run 1 | 100.2314 % | 103.3046 % | 101.5020 % | 113.5251 % | 98.1171 % | 103.4420 % | 0.0005 ppm |
| Concentration per Run 2 | 98.9062 % | 103.2518 % | 102.4017 % | 108.0713 % | 98.7536 % | 103.2452 % | -0.0004 ppm |
| Concentration per Run 3 | 98.4250 % | 103.5788 % | 102.0133 % | 105.0475 % | 98.5916 % | 103.4104 % | 0.0006 ppm |
| Recovery Percentage 1 | | | | | | | 2.271 % |
| Concentration RSD | 0.9 % | 0.2 % | 0.4 % | 3.9 % | 0.3 % | 0.1 % | 241.6 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2037871-2d2 WG2037871
Analysis started at: 3/12/2025 4:40:25 PM
Rack: 1
Vial: 54

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0513 ppm | 2.2263 ppm | 0.1167 ppm | 0.9475 ppm | 2.1077 ppm | 0.0547 ppm | 11.6050 ppm |
| Concentration per Run 1 | 0.0505 ppm | 2.2483 ppm | 0.1179 ppm | 0.9609 ppm | 2.1339 ppm | 0.0551 ppm | 11.6873 ppm |
| Concentration per Run 2 | 0.0524 ppm | 2.2246 ppm | 0.1167 ppm | 0.9520 ppm | 2.1053 ppm | 0.0548 ppm | 11.6146 ppm |
| Concentration per Run 3 | 0.0511 ppm | 2.2061 ppm | 0.1154 ppm | 0.9295 ppm | 2.0838 ppm | 0.0543 ppm | 11.5133 ppm |
| Concentration RSD | 1.9 % | 1.0 % | 1.1 % | 1.7 % | 1.2 % | 0.7 % | 0.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0502 ppm | 0.4683 ppm | 0.2036 ppm | 0.2489 ppm | 1.1370 ppm | 11.7560 ppm | 10.5736 ppm |
| Concentration per Run 1 | 0.0510 ppm | 0.4754 ppm | 0.1996 ppm | 0.2492 ppm | 1.1440 ppm | 11.8869 ppm | 10.3933 ppm |
| Concentration per Run 2 | 0.0501 ppm | 0.4666 ppm | 0.2075 ppm | 0.2518 ppm | 1.1354 ppm | 11.7513 ppm | 10.8096 ppm |
| Concentration per Run 3 | 0.0497 ppm | 0.4627 ppm | 0.2039 ppm | 0.2458 ppm | 1.1315 ppm | 11.6299 ppm | 10.5180 ppm |
| Concentration RSD | 1.3 % | 1.4 % | 1.9 % | 1.2 % | 0.6 % | 1.1 % | 2.0 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5434 ppm | 0.9686 ppm | 11.3784 ppm | 0.4702 ppm | 0.5158 ppm | 0.4678 ppm | 0.1149 ppm |
| Concentration per Run 1 | 0.5471 ppm | 0.9820 ppm | 11.5282 ppm | 0.4769 ppm | 0.5238 ppm | 0.4761 ppm | 0.1157 ppm |
| Concentration per Run 2 | 0.5436 ppm | 0.9720 ppm | 11.3784 ppm | 0.4687 ppm | 0.5134 ppm | 0.4642 ppm | 0.1141 ppm |
| Concentration per Run 3 | 0.5395 ppm | 0.9518 ppm | 11.2285 ppm | 0.4649 ppm | 0.5102 ppm | 0.4632 ppm | 0.1150 ppm |
| Concentration RSD | 0.7 % | 1.6 % | 1.3 % | 1.3 % | 1.4 % | 1.5 % | 0.7 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.5758 ppm | 0.9519 ppm | 1.0919 ppm | 1.0646 ppm | 0.1146 ppm | 0.4924 ppm | 0.4745 ppm |
| Concentration per Run 1 | 1.6004 ppm | 0.9669 ppm | 1.1053 ppm | 1.0454 ppm | 0.1162 ppm | 0.4927 ppm | 0.4811 ppm |
| Concentration per Run 2 | 1.5722 ppm | 0.9474 ppm | 1.0909 ppm | 1.0862 ppm | 0.1135 ppm | 0.4948 ppm | 0.4731 ppm |
| Concentration per Run 3 | 1.5548 ppm | 0.9413 ppm | 1.0796 ppm | 1.0623 ppm | 0.1142 ppm | 0.4896 ppm | 0.4693 ppm |
| Concentration RSD | 1.5 % | 1.4 % | 1.2 % | 1.9 % | 1.2 % | 0.5 % | 1.3 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.2561 % | 102.3768 % | 101.1587 % | 99.5034 % | 97.3298 % | 101.2136 % | 0.0002 ppm |
| Concentration per Run 1 | 99.1952 % | 103.1449 % | 101.3838 % | 99.2448 % | 97.4020 % | 103.4656 % | 0.0000 ppm |
| Concentration per Run 2 | 98.5122 % | 101.5516 % | 100.6813 % | 99.6038 % | 97.7497 % | 99.2313 % | 0.0004 ppm |
| Concentration per Run 3 | 97.0610 % | 102.4338 % | 101.4109 % | 99.6616 % | 96.8378 % | 100.9440 % | 0.0004 ppm |
| Concentration RSD | 1.1 % | 0.8 % | 0.4 % | 0.2 % | 0.5 % | 2.1 % | 104.5 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512075-01d2 WG2037871
Analysis started at: 3/12/2025 4:49:52 PM
Rack: 1
Vial: 55

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 73.2757 ppm | 0.1299 ppm | 0.0242 ppm | 0.6759 ppm | 0.0096 ppm | 34.9056 ppm |
| Concentration per Run 1 | -0.0005 ppm | 70.5397 ppm | 0.1312 ppm | 0.0246 ppm | 0.6503 ppm | 0.0092 ppm | 33.6647 ppm |
| Concentration per Run 2 | -0.0003 ppm | 74.1424 ppm | 0.1327 ppm | 0.0243 ppm | 0.6838 ppm | 0.0097 ppm | 35.1693 ppm |
| Concentration per Run 3 | -0.0003 ppm | 75.1448 ppm | 0.1259 ppm | 0.0236 ppm | 0.6935 ppm | 0.0099 ppm | 35.8828 ppm |
| Concentration RSD | 37.6 % | 3.3 % | 2.8 % | 2.2 % | 3.4 % | 3.5 % | 3.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0623 ppm | 0.1517 ppm | 0.2098 ppm | 306.6360 [SIC 500] | 8.5641 ppm | 18.6891 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0637 ppm | 0.1532 ppm | 0.2100 ppm | 294.1637 ppm | 8.2397 ppm | 18.7782 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0625 ppm | 0.1518 ppm | 0.2106 ppm | 311.1276 ppm | 8.7028 ppm | 18.7137 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0607 ppm | 0.1503 ppm | 0.2086 ppm | 314.6166 ppm | 8.7498 ppm | 18.5754 ppm |
| Concentration RSD | 108.5 % | 2.5 % | 1.0 % | 0.5 % | 3.6 % | 3.3 % | 0.6 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.3233 ppm | 0.0058 ppm | 15.2507 ppm | 0.1171 ppm | 0.1864 ppm | -0.0072 ppm | 0.0120 ppm |
| Concentration per Run 1 | 2.2413 ppm | 0.0059 ppm | 14.6499 ppm | 0.1198 ppm | 0.1909 ppm | -0.0061 ppm | 0.0121 ppm |
| Concentration per Run 2 | 2.3421 ppm | 0.0060 ppm | 15.4984 ppm | 0.1175 ppm | 0.1866 ppm | -0.0073 ppm | 0.0125 ppm |
| Concentration per Run 3 | 2.3865 ppm | 0.0056 ppm | 15.6037 ppm | 0.1140 ppm | 0.1819 ppm | -0.0082 ppm | 0.0115 ppm |
| Concentration RSD | 3.2 % | 3.8 % | 3.4 % | 2.5 % | 2.4 % | 15.1 % | 3.8 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 7.0060 ppm | 0.0071 ppm | 0.1330 ppm | 0.6836 ppm | -0.0052 ppm | 0.1746 ppm | 0.4641 ppm |
| Concentration per Run 1 | 7.1675 ppm | 0.0071 ppm | 0.1280 ppm | 0.6868 ppm | -0.0042 ppm | 0.1757 ppm | 0.4753 ppm |
| Concentration per Run 2 | 7.0246 ppm | 0.0077 ppm | 0.1344 ppm | 0.6837 ppm | -0.0060 ppm | 0.1753 ppm | 0.4657 ppm |
| Concentration per Run 3 | 6.8258 ppm | 0.0064 ppm | 0.1366 ppm | 0.6805 ppm | -0.0054 ppm | 0.1729 ppm | 0.4512 ppm |
| Concentration RSD | 2.4 % | 9.3 % | 3.4 % | 0.5 % | 17.0 % | 0.9 % | 2.6 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 114.1437 % | 111.9523 % | 109.6371 % | 111.9245 % | 91.1589 % | 103.5209 % | 0.0868 ppm |
| Concentration per Run 1 | 115.0761 % | 112.0963 % | 109.7176 % | 116.1124 % | 91.0123 % | 103.7216 % | 0.0834 ppm |
| Concentration per Run 2 | 113.9367 % | 112.0627 % | 109.5108 % | 111.1015 % | 90.7984 % | 103.5561 % | 0.0885 ppm |
| Concentration per Run 3 | 113.4182 % | 111.6979 % | 109.6830 % | 108.5595 % | 91.6660 % | 103.2849 % | 0.0884 ppm |
| Concentration RSD | 0.7 % | 0.2 % | 0.1 % | 3.4 % | 0.5 % | 0.2 % | 3.4 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2037871-3d2 WG2037871
Analysis started at: 3/12/2025 4:56:22 PM
Rack: 1
Vial: 56

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0409 ppm | 75.3418 ppm | 0.2604 ppm | 0.7478 ppm | 2.3230 ppm | 0.0487 ppm | 27.2516 ppm |
| Concentration per Run 1 | 0.0409 ppm | 75.6581 ppm | 0.2636 ppm | 0.7531 ppm | 2.3310 ppm | 0.0489 ppm | 27.4176 ppm |
| Concentration per Run 2 | 0.0408 ppm | 75.1658 ppm | 0.2609 ppm | 0.7514 ppm | 2.3221 ppm | 0.0486 ppm | 27.1194 ppm |
| Concentration per Run 3 | 0.0409 ppm | 75.2015 ppm | 0.2568 ppm | 0.7388 ppm | 2.3158 ppm | 0.0487 ppm | 27.2179 ppm |
| Concentration RSD | 0.2 % | 0.4 % | 1.3 % | 1.0 % | 0.3 % | 0.3 % | 0.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0447 ppm | 0.4590 ppm | 0.2938 ppm | 0.3898 ppm | 306.2289 [SIC 500] | 17.6684 ppm | 25.3496 ppm |
| Concentration per Run 1 | 0.0451 ppm | 0.4612 ppm | 0.2939 ppm | 0.3911 ppm | 305.4462 ppm | 17.7272 ppm | 25.3860 ppm |
| Concentration per Run 2 | 0.0445 ppm | 0.4573 ppm | 0.2929 ppm | 0.3926 ppm | 304.7780 ppm | 17.6266 ppm | 25.2993 ppm |
| Concentration per Run 3 | 0.0443 ppm | 0.4584 ppm | 0.2945 ppm | 0.3858 ppm | 308.4624 ppm | 17.6514 ppm | 25.3636 ppm |
| Concentration RSD | 0.9 % | 0.4 % | 0.3 % | 0.9 % | 0.6 % | 0.3 % | 0.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.8778 ppm | 0.7508 ppm | 26.4868 ppm | 0.5192 ppm | 0.6757 ppm | 0.1100 ppm | 0.0855 ppm |
| Concentration per Run 1 | 2.8933 ppm | 0.7562 ppm | 26.5979 ppm | 0.5228 ppm | 0.6810 ppm | 0.1099 ppm | 0.0873 ppm |
| Concentration per Run 2 | 2.8707 ppm | 0.7533 ppm | 26.4358 ppm | 0.5171 ppm | 0.6726 ppm | 0.1101 ppm | 0.0839 ppm |
| Concentration per Run 3 | 2.8694 ppm | 0.7428 ppm | 26.4267 ppm | 0.5176 ppm | 0.6736 ppm | 0.1099 ppm | 0.0854 ppm |
| Concentration RSD | 0.5 % | 0.9 % | 0.4 % | 0.6 % | 0.7 % | 0.1 % | 2.0 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.2025 ppm | 0.7563 ppm | 1.0649 ppm | 1.3410 ppm | 0.0934 ppm | 0.5196 ppm | 0.8349 ppm |
| Concentration per Run 1 | 8.2646 ppm | 0.7600 ppm | 1.0679 ppm | 1.3455 ppm | 0.0941 ppm | 0.5206 ppm | 0.8389 ppm |
| Concentration per Run 2 | 8.1806 ppm | 0.7547 ppm | 1.0644 ppm | 1.3381 ppm | 0.0919 ppm | 0.5205 ppm | 0.8309 ppm |
| Concentration per Run 3 | 8.1623 ppm | 0.7540 ppm | 1.0624 ppm | 1.3393 ppm | 0.0941 ppm | 0.5177 ppm | 0.8350 ppm |
| Concentration RSD | 0.7 % | 0.4 % | 0.3 % | 0.3 % | 1.4 % | 0.3 % | 0.5 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 110.1116 % | 109.4631 % | 107.5419 % | 105.4526 % | 90.1039 % | 102.7400 % | 0.0918 ppm |
| Concentration per Run 1 | 110.0385 % | 109.2793 % | 107.5400 % | 104.6983 % | 90.2123 % | 102.5615 % | 0.0921 ppm |
| Concentration per Run 2 | 110.5452 % | 109.5976 % | 107.2049 % | 106.1805 % | 90.4736 % | 102.8385 % | 0.0923 ppm |
| Concentration per Run 3 | 109.7510 % | 109.5124 % | 107.8809 % | 105.4791 % | 89.6258 % | 102.8201 % | 0.0910 ppm |
| Concentration RSD | 0.4 % | 0.2 % | 0.3 % | 0.7 % | 0.5 % | 0.2 % | 0.7 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2037871-4d2 WG2037871
Analysis started at: 3/12/2025 5:02:47 PM
Rack: 1
Vial: 57

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 75.5636 ppm | 0.1235 ppm | 0.0201 ppm | 0.6684 ppm | 0.0084 ppm | 21.2694 ppm |
| Concentration per Run 1 | -0.0004 ppm | 75.9643 ppm | 0.1290 ppm | 0.0208 ppm | 0.6723 ppm | 0.0085 ppm | 21.3198 ppm |
| Concentration per Run 2 | -0.0006 ppm | 75.5485 ppm | 0.1234 ppm | 0.0204 ppm | 0.6685 ppm | 0.0084 ppm | 21.3076 ppm |
| Concentration per Run 3 | -0.0002 ppm | 75.1780 ppm | 0.1182 ppm | 0.0192 ppm | 0.6644 ppm | 0.0084 ppm | 21.1807 ppm |
| Concentration RSD | 56.6 % | 0.5 % | 4.3 % | 4.2 % | 0.6 % | 0.6 % | 0.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0550 ppm | 0.1456 ppm | 0.1809 ppm | 317.1162 [SIC 500] | 8.7641 ppm | 16.3188 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0570 ppm | 0.1464 ppm | 0.1815 ppm | 318.6847 ppm | 8.8560 ppm | 16.4345 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0552 ppm | 0.1457 ppm | 0.1814 ppm | 318.6316 ppm | 8.7290 ppm | 16.3222 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0528 ppm | 0.1446 ppm | 0.1799 ppm | 314.0321 ppm | 8.7073 ppm | 16.1996 ppm |
| Concentration RSD | 298.8 % | 3.8 % | 0.6 % | 0.5 % | 0.8 % | 0.9 % | 0.7 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.3530 ppm | 0.0047 ppm | 13.7899 ppm | 0.1103 ppm | 0.1575 ppm | -0.0076 ppm | 0.0129 ppm |
| Concentration per Run 1 | 2.3617 ppm | 0.0049 ppm | 13.9313 ppm | 0.1142 ppm | 0.1645 ppm | -0.0072 ppm | 0.0150 ppm |
| Concentration per Run 2 | 2.3568 ppm | 0.0048 ppm | 13.7358 ppm | 0.1108 ppm | 0.1564 ppm | -0.0091 ppm | 0.0109 ppm |
| Concentration per Run 3 | 2.3404 ppm | 0.0044 ppm | 13.7025 ppm | 0.1058 ppm | 0.1516 ppm | -0.0065 ppm | 0.0127 ppm |
| Concentration RSD | 0.5 % | 5.8 % | 0.9 % | 3.8 % | 4.1 % | 17.6 % | 15.8 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.7569 ppm | 0.0069 ppm | 0.1042 ppm | 0.6654 ppm | -0.0051 ppm | 0.1691 ppm | 0.4278 ppm |
| Concentration per Run 1 | 3.9049 ppm | 0.0076 ppm | 0.1047 ppm | 0.6703 ppm | -0.0068 ppm | 0.1711 ppm | 0.4416 ppm |
| Concentration per Run 2 | 3.7618 ppm | 0.0066 ppm | 0.1043 ppm | 0.6659 ppm | -0.0042 ppm | 0.1686 ppm | 0.4286 ppm |
| Concentration per Run 3 | 3.6039 ppm | 0.0065 ppm | 0.1035 ppm | 0.6598 ppm | -0.0043 ppm | 0.1676 ppm | 0.4133 ppm |
| Concentration RSD | 4.0 % | 8.6 % | 0.6 % | 0.8 % | 28.3 % | 1.1 % | 3.3 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 111.1478 % | 110.3273 % | 108.4873 % | 106.4475 % | 92.2469 % | 103.4074 % | 0.0907 ppm |
| Concentration per Run 1 | 112.4160 % | 110.3722 % | 107.9210 % | 106.7797 % | 91.5681 % | 103.4060 % | 0.0913 ppm |
| Concentration per Run 2 | 110.5163 % | 110.0516 % | 108.5499 % | 106.1604 % | 92.0994 % | 103.1677 % | 0.0906 ppm |
| Concentration per Run 3 | 110.5111 % | 110.5582 % | 108.9911 % | 106.4026 % | 93.0730 % | 103.6484 % | 0.0901 ppm |
| Concentration RSD | 1.0 % | 0.2 % | 0.5 % | 0.3 % | 0.8 % | 0.2 % | 0.7 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2037871-5d2 WG2037871
Analysis started at: 3/12/2025 5:09:19 PM
Rack: 1
Vial: 58

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0326 ppm | 78.1357 ppm | 0.2398 ppm | 0.8125 ppm | 2.4880 ppm | 0.0570 ppm | 43.5800 ppm |
| Concentration per Run 1 | 0.0338 ppm | 78.1258 ppm | 0.2400 ppm | 0.8092 ppm | 2.4889 ppm | 0.0572 ppm | 43.6228 ppm |
| Concentration per Run 2 | 0.0323 ppm | 77.9947 ppm | 0.2389 ppm | 0.8152 ppm | 2.4830 ppm | 0.0570 ppm | 43.6942 ppm |
| Concentration per Run 3 | 0.0317 ppm | 78.2867 ppm | 0.2405 ppm | 0.8132 ppm | 2.4922 ppm | 0.0567 ppm | 43.4228 ppm |
| Concentration RSD | 3.3 % | 0.2 % | 0.3 % | 0.4 % | 0.2 % | 0.4 % | 0.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0522 ppm | 0.5347 ppm | 0.3496 ppm | 0.4350 ppm | 333.0531 [SIC 500] | 18.7539 ppm | 28.2762 ppm |
| Concentration per Run 1 | 0.0521 ppm | 0.5331 ppm | 0.3586 ppm | 0.4513 ppm | 332.3123 ppm | 18.7413 ppm | 29.1279 ppm |
| Concentration per Run 2 | 0.0523 ppm | 0.5371 ppm | 0.3465 ppm | 0.4265 ppm | 334.1241 ppm | 18.6308 ppm | 27.9822 ppm |
| Concentration per Run 3 | 0.0522 ppm | 0.5340 ppm | 0.3436 ppm | 0.4272 ppm | 332.7229 ppm | 18.8896 ppm | 27.7184 ppm |
| Concentration RSD | 0.2 % | 0.4 % | 2.3 % | 3.2 % | 0.3 % | 0.7 % | 2.6 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.7914 ppm | 0.8210 ppm | 24.5187 ppm | 0.5931 ppm | 0.6935 ppm | 0.4637 ppm | 0.1082 ppm |
| Concentration per Run 1 | 2.7983 ppm | 0.8171 ppm | 24.4864 ppm | 0.5911 ppm | 0.6907 ppm | 0.4629 ppm | 0.1070 ppm |
| Concentration per Run 2 | 2.7890 ppm | 0.8235 ppm | 24.3859 ppm | 0.5961 ppm | 0.6967 ppm | 0.4661 ppm | 0.1081 ppm |
| Concentration per Run 3 | 2.7870 ppm | 0.8223 ppm | 24.6837 ppm | 0.5923 ppm | 0.6930 ppm | 0.4623 ppm | 0.1095 ppm |
| Concentration RSD | 0.2 % | 0.4 % | 0.6 % | 0.4 % | 0.4 % | 0.4 % | 1.2 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.4284 ppm | 0.9254 ppm | 1.0449 ppm | 1.6129 ppm | 0.1042 ppm | 0.6012 ppm | 0.9842 ppm |
| Concentration per Run 1 | 10.3729 ppm | 0.9234 ppm | 1.0451 ppm | 1.6606 ppm | 0.1044 ppm | 0.6013 ppm | 0.9837 ppm |
| Concentration per Run 2 | 10.4820 ppm | 0.9286 ppm | 1.0428 ppm | 1.5948 ppm | 0.1037 ppm | 0.6007 ppm | 0.9871 ppm |
| Concentration per Run 3 | 10.4304 ppm | 0.9243 ppm | 1.0467 ppm | 1.5832 ppm | 0.1043 ppm | 0.6017 ppm | 0.9818 ppm |
| Concentration RSD | 0.5 % | 0.3 % | 0.2 % | 2.6 % | 0.4 % | 0.1 % | 0.3 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 113.7569 % | 111.0272 % | 110.5323 % | 105.9575 % | 90.0278 % | 100.7737 % | 0.0878 ppm |
| Concentration per Run 1 | 114.4611 % | 107.5903 % | 110.9000 % | 105.7677 % | 90.3604 % | 98.2666 % | 0.0874 ppm |
| Concentration per Run 2 | 113.2099 % | 112.6887 % | 110.3415 % | 105.8288 % | 89.6411 % | 101.5671 % | 0.0879 ppm |
| Concentration per Run 3 | 113.5997 % | 112.8027 % | 110.3553 % | 106.2761 % | 90.0820 % | 102.4874 % | 0.0881 ppm |
| Concentration RSD | 0.6 % | 2.7 % | 0.3 % | 0.3 % | 0.4 % | 2.2 % | 0.4 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2037871-6d10 WG2037871
Analysis started at: 3/12/2025 5:15:44 PM
Rack: 1
Vial: 59

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 14.2705 ppm | 0.0293 ppm | 0.0068 ppm | 0.1314 ppm | 0.0019 ppm | 6.9974 ppm |
| Concentration per Run 1 | 0.0002 ppm | 13.8607 ppm | 0.0304 ppm | 0.0070 ppm | 0.1274 ppm | 0.0018 ppm | 6.8049 ppm |
| Concentration per Run 2 | -0.0002 ppm | 14.4182 ppm | 0.0279 ppm | 0.0067 ppm | 0.1330 ppm | 0.0019 ppm | 7.0898 ppm |
| Concentration per Run 3 | -0.0001 ppm | 14.5327 ppm | 0.0296 ppm | 0.0066 ppm | 0.1339 ppm | 0.0019 ppm | 7.0974 ppm |
| Concentration RSD | 529.7 % | 2.5 % | 4.3 % | 3.0 % | 2.7 % | 3.6 % | 2.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0125 ppm | 0.0311 ppm | 0.0422 ppm | 65.3371 ppm | 1.6745 ppm | 3.9263 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0124 ppm | 0.0308 ppm | 0.0419 ppm | 63.5368 ppm | 1.6487 ppm | 3.8688 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0126 ppm | 0.0313 ppm | 0.0422 ppm | 66.1460 ppm | 1.6807 ppm | 3.9657 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0124 ppm | 0.0313 ppm | 0.0423 ppm | 66.3284 ppm | 1.6941 ppm | 3.9443 ppm |
| Concentration RSD | 0.5 % | 1.1 % | 0.9 % | 0.5 % | 2.4 % | 1.4 % | 1.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4668 ppm | 0.0017 ppm | 2.8633 ppm | 0.0212 ppm | 0.0377 ppm | -0.0017 ppm | 0.0009 ppm |
| Concentration per Run 1 | 0.4542 ppm | 0.0017 ppm | 2.7646 ppm | 0.0210 ppm | 0.0378 ppm | -0.0020 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.4716 ppm | 0.0018 ppm | 2.8930 ppm | 0.0214 ppm | 0.0377 ppm | -0.0010 ppm | -0.0005 ppm |
| Concentration per Run 3 | 0.4746 ppm | 0.0016 ppm | 2.9322 ppm | 0.0212 ppm | 0.0377 ppm | -0.0020 ppm | 0.0025 ppm |
| Concentration RSD | 2.4 % | 7.3 % | 3.1 % | 1.0 % | 0.2 % | 36.3 % | 178.7 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.4633 ppm | 0.0016 ppm | 0.0264 ppm | 0.1376 ppm | -0.0009 ppm | 0.0375 ppm | 0.0962 ppm |
| Concentration per Run 1 | 1.4584 ppm | 0.0013 ppm | 0.0256 ppm | 0.1358 ppm | -0.0008 ppm | 0.0374 ppm | 0.0958 ppm |
| Concentration per Run 2 | 1.4686 ppm | 0.0020 ppm | 0.0266 ppm | 0.1390 ppm | -0.0011 ppm | 0.0376 ppm | 0.0966 ppm |
| Concentration per Run 3 | 1.4629 ppm | 0.0015 ppm | 0.0269 ppm | 0.1379 ppm | -0.0009 ppm | 0.0374 ppm | 0.0962 ppm |
| Concentration RSD | 0.3 % | 21.8 % | 2.5 % | 1.2 % | 15.7 % | 0.2 % | 0.4 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 103.0616 % | 105.9334 % | 104.8728 % | 106.0628 % | 99.4217 % | 104.0500 % | 0.0172 ppm |
| Concentration per Run 1 | 104.3959 % | 107.2416 % | 104.7811 % | 108.6187 % | 99.7764 % | 105.4810 % | 0.0158 ppm |
| Concentration per Run 2 | 102.5349 % | 105.1107 % | 104.6934 % | 105.1380 % | 99.1335 % | 103.1316 % | 0.0176 ppm |
| Concentration per Run 3 | 102.2539 % | 105.4480 % | 105.1439 % | 104.4317 % | 99.3550 % | 103.5375 % | 0.0183 ppm |
| Concentration RSD | 1.1 % | 1.1 % | 0.2 % | 2.1 % | 0.3 % | 1.2 % | 7.4 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512009-01d2 WG2037871
Analysis started at: 3/12/2025 5:22:12 PM
Rack: 1
Vial: 60

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | 279.3172 ppm | 0.0090 ppm | 0.0136 ppm | 2.0684 ppm | 0.0021 ppm | 119.6855 ppm |
| Concentration per Run 1 | -0.0007 ppm | 274.4644 ppm | 0.0102 ppm | 0.0137 ppm | 2.0838 ppm | 0.0022 ppm | 120.3398 ppm |
| Concentration per Run 2 | -0.0011 ppm | 280.0578 ppm | 0.0099 ppm | 0.0138 ppm | 2.0595 ppm | 0.0021 ppm | 119.8763 ppm |
| Concentration per Run 3 | -0.0006 ppm | 283.4294 ppm | 0.0069 ppm | 0.0134 ppm | 2.0620 ppm | 0.0021 ppm | 118.8402 ppm |
| Concentration RSD | 29.7 % | 1.6 % | 20.1 % | 1.3 % | 0.6 % | 1.6 % | 0.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.2202 ppm | 0.4250 ppm | 0.7671 ppm | 365.0714 [SIC 500] | 204.9816 ppm | 258.2959 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.2233 ppm | 0.4347 ppm | 0.7887 ppm | 364.1699 ppm | 207.3051 ppm | 264.1345 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.2202 ppm | 0.4347 ppm | 0.7783 ppm | 369.5773 ppm | 203.4301 ppm | 264.0346 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.2172 ppm | 0.4057 ppm | 0.7344 ppm | 361.4671 ppm | 204.2097 ppm | 246.7186 ppm |
| Concentration RSD | 24.3 % | 1.4 % | 3.9 % | 3.8 % | 1.1 % | 1.0 % | 3.9 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.8427 ppm | 0.0202 ppm | 5.6238 ppm | 0.5173 ppm | 0.0488 ppm | -0.0092 ppm | 0.0145 ppm |
| Concentration per Run 1 | 3.8666 ppm | 0.0204 ppm | 5.7055 ppm | 0.5248 ppm | 0.0497 ppm | -0.0098 ppm | 0.0112 ppm |
| Concentration per Run 2 | 3.8433 ppm | 0.0200 ppm | 5.5576 ppm | 0.5157 ppm | 0.0470 ppm | -0.0093 ppm | 0.0167 ppm |
| Concentration per Run 3 | 3.8182 ppm | 0.0202 ppm | 5.6082 ppm | 0.5115 ppm | 0.0497 ppm | -0.0087 ppm | 0.0156 ppm |
| Concentration RSD | 0.6 % | 1.1 % | 1.3 % | 1.3 % | 3.1 % | 5.8 % | 20.0 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 17.9963 ppm | 0.0128 ppm | 0.1623 ppm | 16.4559 ppm | -0.0072 ppm | 0.6829 ppm | 0.6929 ppm |
| Concentration per Run 1 | 18.2310 ppm | 0.0130 ppm | 0.1633 ppm | 16.9048 ppm | -0.0052 ppm | 0.6851 ppm | 0.7024 ppm |
| Concentration per Run 2 | 17.9340 ppm | 0.0118 ppm | 0.1617 ppm | 16.7378 ppm | -0.0089 ppm | 0.6843 ppm | 0.6923 ppm |
| Concentration per Run 3 | 17.8238 ppm | 0.0135 ppm | 0.1619 ppm | 15.7252 ppm | -0.0077 ppm | 0.6792 ppm | 0.6840 ppm |
| Concentration RSD | 1.2 % | 6.6 % | 0.6 % | 3.9 % | 26.0 % | 0.5 % | 1.3 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 104.4721 % | 103.2614 % | 99.3709 % | 105.1705 % | 79.6875 % | 100.7030 % | 0.5188 ppm |
| Concentration per Run 1 | 105.1344 % | 101.5889 % | 99.2191 % | 104.9261 % | 78.9846 % | 98.4747 % | 0.5263 ppm |
| Concentration per Run 2 | 103.7969 % | 101.5528 % | 99.3744 % | 104.8535 % | 79.8737 % | 98.7354 % | 0.5132 ppm |
| Concentration per Run 3 | 104.4851 % | 106.6425 % | 99.5191 % | 105.7319 % | 80.2042 % | 104.8988 % | 0.5170 ppm |
| Concentration RSD | 0.6 % | 2.8 % | 0.2 % | 0.5 % | 0.8 % | 3.6 % | 1.3 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCV
Analysis started at: 3/12/2025 5:35:35 PM
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4703 ppm | 0.4843 ppm | 0.4594 ppm | 0.4571 ppm | 0.4580 ppm | 0.4832 ppm | 0.5055 ppm |
| Concentration per Run 1 | 0.4569 ppm | 0.4809 ppm | 0.4601 ppm | 0.4564 ppm | 0.4506 ppm | 0.4756 ppm | 0.4911 ppm |
| Concentration per Run 2 | 0.4784 ppm | 0.4877 ppm | 0.4585 ppm | 0.4561 ppm | 0.4621 ppm | 0.4853 ppm | 0.5071 ppm |
| Concentration per Run 3 | 0.4756 ppm | 0.4842 ppm | 0.4595 ppm | 0.4589 ppm | 0.4613 ppm | 0.4887 ppm | 0.5184 ppm |
| Recovery Percentage 1 | 94.061 % | 96.850 % | 91.875 % | 91.423 % | 91.595 % | 96.635 % | 101.105 % |
| Concentration RSD | 2.5 % | 0.7 % | 0.2 % | 0.3 % | 1.4 % | 1.4 % | 2.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4522 ppm | 0.4579 ppm | 0.4755 ppm | 0.4486 ppm | 0.4932 ppm | 5.1352 ppm | 0.4852 ppm |
| Concentration per Run 1 | 0.4520 ppm | 0.4578 ppm | 0.4582 ppm | 0.4398 ppm | 0.4843 ppm | 5.0560 ppm | 0.4704 ppm |
| Concentration per Run 2 | 0.4531 ppm | 0.4585 ppm | 0.4861 ppm | 0.4534 ppm | 0.4958 ppm | 5.1714 ppm | 0.4941 ppm |
| Concentration per Run 3 | 0.4517 ppm | 0.4574 ppm | 0.4823 ppm | 0.4526 ppm | 0.4995 ppm | 5.1784 ppm | 0.4910 ppm |
| Recovery Percentage 1 | 90.450 % | 91.584 % | 95.103 % | 89.724 % | 98.646 % | 102.705 % | 97.033 % |
| Concentration RSD | 0.2 % | 0.1 % | 3.2 % | 1.7 % | 1.6 % | 1.3 % | 2.7 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4758 ppm | 0.4596 ppm | 9.2301 ppm | 0.4585 ppm | 0.4563 ppm | 0.4609 ppm | 0.4692 ppm |
| Concentration per Run 1 | 0.4688 ppm | 0.4592 ppm | 9.0829 ppm | 0.4583 ppm | 0.4571 ppm | 0.4622 ppm | 0.4698 ppm |
| Concentration per Run 2 | 0.4770 ppm | 0.4592 ppm | 9.3236 ppm | 0.4589 ppm | 0.4564 ppm | 0.4591 ppm | 0.4670 ppm |
| Concentration per Run 3 | 0.4815 ppm | 0.4604 ppm | 9.2839 ppm | 0.4584 ppm | 0.4554 ppm | 0.4615 ppm | 0.4707 ppm |
| Recovery Percentage 1 | 95.161 % | 91.926 % | 92.301 % | 91.704 % | 91.260 % | 92.185 % | 93.840 % |
| Concentration RSD | 1.4 % | 0.2 % | 1.4 % | 0.1 % | 0.2 % | 0.3 % | 0.4 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.9381 ppm | 0.4537 ppm | 0.4708 ppm | 0.4864 ppm | 0.4580 ppm | 0.4599 ppm | 0.4632 ppm |
| Concentration per Run 1 | 4.9422 ppm | 0.4546 ppm | 0.4634 ppm | 0.4705 ppm | 0.4584 ppm | 0.4581 ppm | 0.4630 ppm |
| Concentration per Run 2 | 4.9306 ppm | 0.4532 ppm | 0.4745 ppm | 0.4958 ppm | 0.4583 ppm | 0.4606 ppm | 0.4643 ppm |
| Concentration per Run 3 | 4.9415 ppm | 0.4533 ppm | 0.4746 ppm | 0.4928 ppm | 0.4574 ppm | 0.4610 ppm | 0.4621 ppm |
| Recovery Percentage 1 | 94.059 % | 90.741 % | 94.160 % | 97.271 % | 91.604 % | 91.978 % | 92.631 % |
| Concentration RSD | 0.1 % | 0.2 % | 1.4 % | 2.8 % | 0.1 % | 0.3 % | 0.2 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.1721 % | 104.9420 % | 103.4411 % | 102.5399 % | 101.2014 % | 104.3092 % | 0.4668 ppm |
| Concentration per Run 1 | 101.6106 % | 107.4335 % | 103.4926 % | 104.7875 % | 101.2333 % | 107.4744 % | 0.4620 ppm |
| Concentration per Run 2 | 98.4571 % | 103.5101 % | 103.5113 % | 102.1075 % | 101.0542 % | 102.4581 % | 0.4707 ppm |
| Concentration per Run 3 | 97.4487 % | 103.8823 % | 103.3192 % | 100.7248 % | 101.3167 % | 102.9953 % | 0.4678 ppm |
| Recovery Percentage 1 | | | | | | | 93.364 % |
| Concentration RSD | 2.2 % | 2.1 % | 0.1 % | 2.0 % | 0.1 % | 2.6 % | 0.9 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCB
Analysis started at: 3/12/2025 5:41:55 PM
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0035 ppm | 0.0002 ppm | -0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0026 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0064 ppm | -0.0012 ppm | -0.0004 ppm | 0.0001 ppm | 0.0000 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0012 ppm | 0.0007 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm | -0.0008 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0053 ppm | 0.0011 ppm | -0.0002 ppm | -0.0001 ppm | 0.0000 ppm | 0.0086 ppm |
| Recovery Percentage 1 | -1.888 % | -3.479 % | 3.864 % | -0.584 % | -0.043 % | -0.088 % | 2.577 % |
| Concentration RSD | 228.3 % | 117.9 % | 651.6 % | 145.1 % | 2,044.3 % | 399.0 % | 202.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | -0.0003 ppm | 0.0006 ppm | 0.0282 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | -0.0002 ppm | -0.0003 ppm | 0.0023 ppm | 0.0199 ppm | -0.0007 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | -0.0003 ppm | 0.0003 ppm | 0.0295 ppm | -0.0004 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0001 ppm | -0.0002 ppm | -0.0004 ppm | -0.0009 ppm | 0.0352 ppm | 0.0000 ppm |
| Recovery Percentage 1 | -1.081 % | -0.129 % | -1.045 % | -3.414 % | 1.155 % | 1.128 % | -0.366 % |
| Concentration RSD | 67.8 % | 196.8 % | 189.6 % | 15.6 % | 275.2 % | 27.4 % | 84.1 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0003 ppm | -0.0119 ppm | -0.0001 ppm | -0.0001 ppm | 0.0003 ppm | -0.0010 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0004 ppm | -0.0095 ppm | 0.0000 ppm | 0.0000 ppm | 0.0015 ppm | -0.0021 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0003 ppm | -0.0138 ppm | -0.0001 ppm | -0.0007 ppm | -0.0002 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0003 ppm | -0.0123 ppm | -0.0002 ppm | 0.0005 ppm | -0.0004 ppm | -0.0005 ppm |
| Recovery Percentage 1 | -0.388 % | 0.613 % | -0.594 % | -0.410 % | -0.520 % | 0.562 % | -10.223 % |
| Concentration RSD | 575.9 % | 26.2 % | 18.5 % | 98.7 % | 1,154.4 % | 372.4 % | 95.9 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0032 ppm | 0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0007 ppm | 0.0001 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0037 ppm | 0.0006 ppm | 0.0001 ppm | -0.0001 ppm | 0.0011 ppm | 0.0001 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0030 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0028 ppm | 0.0001 ppm | 0.0000 ppm | 0.0002 ppm | 0.0011 ppm | 0.0001 ppm | 0.0005 ppm |
| Recovery Percentage 1 | 0.632 % | 0.433 % | 0.319 % | 0.351 % | 3.731 % | 1.147 % | 6.273 % |
| Concentration RSD | 16.0 % | 146.5 % | 84.7 % | 315.2 % | 80.1 % | 23.3 % | 82.8 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.4040 % | 107.4126 % | 105.4535 % | 103.5345 % | 105.6865 % | 104.2054 % | -0.0003 ppm |
| Concentration per Run 1 | 103.1403 % | 108.8220 % | 105.5963 % | 105.3823 % | 105.2329 % | 105.3948 % | -0.0007 ppm |
| Concentration per Run 2 | 99.1106 % | 106.5725 % | 105.3291 % | 103.0410 % | 105.8083 % | 103.5774 % | -0.0004 ppm |
| Concentration per Run 3 | 98.9610 % | 106.8432 % | 105.4351 % | 102.1801 % | 106.0184 % | 103.6442 % | 0.0001 ppm |
| Recovery Percentage 1 | | | | | | | -3.258 % |
| Concentration RSD | 2.4 % | 1.1 % | 0.1 % | 1.6 % | 0.4 % | 1.0 % | 134.5 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512075-07d2 WG2037871
Analysis started at: 3/12/2025 5:48:35 PM
Rack: 2
Vial: 1

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 78.6919 ppm | 0.0274 ppm | 0.0115 ppm | 0.4145 ppm | 0.0081 ppm | 86.9814 ppm |
| Concentration per Run 1 | -0.0001 ppm | 78.6967 ppm | 0.0280 ppm | 0.0117 ppm | 0.4152 ppm | 0.0081 ppm | 86.6492 ppm |
| Concentration per Run 2 | -0.0003 ppm | 78.6900 ppm | 0.0274 ppm | 0.0115 ppm | 0.4138 ppm | 0.0081 ppm | 87.1434 ppm |
| Concentration per Run 3 | 0.0005 ppm | 78.6891 ppm | 0.0268 ppm | 0.0112 ppm | 0.4144 ppm | 0.0081 ppm | 87.1514 ppm |
| Concentration RSD | 10,755.0 % | 0.0 % | 2.3 % | 2.0 % | 0.2 % | 0.3 % | 0.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0020 ppm | 0.1960 ppm | 0.1396 ppm | 0.1830 ppm | 388.5761 [SIC 500] | 10.0510 ppm | 38.5034 ppm |
| Concentration per Run 1 | 0.0023 ppm | 0.1989 ppm | 0.1440 ppm | 0.1855 ppm | 386.3599 ppm | 10.0730 ppm | 39.5647 ppm |
| Concentration per Run 2 | 0.0020 ppm | 0.1963 ppm | 0.1371 ppm | 0.1812 ppm | 390.9936 ppm | 10.0109 ppm | 38.0382 ppm |
| Concentration per Run 3 | 0.0018 ppm | 0.1929 ppm | 0.1377 ppm | 0.1824 ppm | 388.3747 ppm | 10.0692 ppm | 37.9073 ppm |
| Concentration RSD | 12.9 % | 1.5 % | 2.8 % | 1.2 % | 0.6 % | 0.3 % | 2.4 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.8822 ppm | 0.0031 ppm | 9.6889 ppm | 0.2850 ppm | 0.2211 ppm | -0.0084 ppm | 0.0116 ppm |
| Concentration per Run 1 | 8.8664 ppm | 0.0031 ppm | 9.7019 ppm | 0.2896 ppm | 0.2242 ppm | -0.0068 ppm | 0.0132 ppm |
| Concentration per Run 2 | 8.8855 ppm | 0.0031 ppm | 9.6597 ppm | 0.2860 ppm | 0.2225 ppm | -0.0085 ppm | 0.0124 ppm |
| Concentration per Run 3 | 8.8947 ppm | 0.0032 ppm | 9.7050 ppm | 0.2794 ppm | 0.2166 ppm | -0.0098 ppm | 0.0093 ppm |
| Concentration RSD | 0.2 % | 1.8 % | 0.3 % | 1.8 % | 1.8 % | 17.8 % | 17.5 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.6252 ppm | 0.0067 ppm | 0.1711 ppm | 0.3224 ppm | -0.0086 ppm | 0.1473 ppm | 0.7183 ppm |
| Concentration per Run 1 | 4.6930 ppm | 0.0066 ppm | 0.1712 ppm | 0.3318 ppm | -0.0082 ppm | 0.1481 ppm | 0.7301 ppm |
| Concentration per Run 2 | 4.6400 ppm | 0.0068 ppm | 0.1709 ppm | 0.3184 ppm | -0.0090 ppm | 0.1472 ppm | 0.7189 ppm |
| Concentration per Run 3 | 4.5426 ppm | 0.0066 ppm | 0.1713 ppm | 0.3171 ppm | -0.0087 ppm | 0.1466 ppm | 0.7058 ppm |
| Concentration RSD | 1.6 % | 1.7 % | 0.1 % | 2.5 % | 4.9 % | 0.5 % | 1.7 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 110.9198 % | 110.7977 % | 108.7554 % | 104.1209 % | 87.2808 % | 98.7501 % | 0.1647 ppm |
| Concentration per Run 1 | 112.1325 % | 110.0740 % | 108.5963 % | 104.2876 % | 86.7303 % | 96.4349 % | 0.1648 ppm |
| Concentration per Run 2 | 110.3203 % | 111.1876 % | 108.7425 % | 104.1103 % | 87.1600 % | 99.7741 % | 0.1646 ppm |
| Concentration per Run 3 | 110.3068 % | 111.1315 % | 108.9274 % | 103.9648 % | 87.9522 % | 100.0413 % | 0.1646 ppm |
| Concentration RSD | 0.9 % | 0.6 % | 0.2 % | 0.2 % | 0.7 % | 2.0 % | 0.1 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512075-11d2 WG2037871
Analysis started at: 3/12/2025 5:55:09 PM
Rack: 2
Vial: 2

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 116.2913 ppm | 0.0417 ppm | 0.0070 ppm | 1.3745 ppm | 0.0057 ppm | 5.6871 ppm |
| Concentration per Run 1 | -0.0007 ppm | 117.0647 ppm | 0.0404 ppm | 0.0067 ppm | 1.3844 ppm | 0.0057 ppm | 5.7092 ppm |
| Concentration per Run 2 | -0.0008 ppm | 114.7455 ppm | 0.0422 ppm | 0.0069 ppm | 1.3556 ppm | 0.0057 ppm | 5.6221 ppm |
| Concentration per Run 3 | -0.0006 ppm | 117.0636 ppm | 0.0424 ppm | 0.0074 ppm | 1.3834 ppm | 0.0058 ppm | 5.7301 ppm |
| Concentration RSD | 14.8 % | 1.2 % | 2.6 % | 5.0 % | 1.2 % | 1.0 % | 1.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.1163 ppm | 0.2212 ppm | 0.2618 ppm | 257.6187 [SIC 500] | 6.5556 ppm | 46.1143 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.1191 ppm | 0.2165 ppm | 0.2583 ppm | 259.7952 ppm | 6.6135 ppm | 45.1764 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.1138 ppm | 0.2270 ppm | 0.2663 ppm | 256.2268 ppm | 6.4912 ppm | 47.3778 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.1160 ppm | 0.2200 ppm | 0.2609 ppm | 256.8341 ppm | 6.5621 ppm | 45.7885 ppm |
| Concentration RSD | 363.1 % | 2.3 % | 2.4 % | 1.6 % | 0.7 % | 0.9 % | 2.5 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.3868 ppm | -0.0002 ppm | 14.5621 ppm | 0.3328 ppm | 0.1311 ppm | -0.0062 ppm | 0.0077 ppm |
| Concentration per Run 1 | 2.4032 ppm | -0.0001 ppm | 14.6842 ppm | 0.3404 ppm | 0.1335 ppm | -0.0065 ppm | 0.0065 ppm |
| Concentration per Run 2 | 2.3568 ppm | -0.0002 ppm | 14.3731 ppm | 0.3250 ppm | 0.1285 ppm | -0.0069 ppm | 0.0065 ppm |
| Concentration per Run 3 | 2.4005 ppm | -0.0004 ppm | 14.6289 ppm | 0.3329 ppm | 0.1314 ppm | -0.0051 ppm | 0.0101 ppm |
| Concentration RSD | 1.1 % | 57.6 % | 1.1 % | 2.3 % | 1.9 % | 15.5 % | 26.9 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.7193 ppm | 0.0075 ppm | 0.0668 ppm | 1.0894 ppm | -0.0057 ppm | 0.1669 ppm | 0.9494 ppm |
| Concentration per Run 1 | 4.8329 ppm | 0.0077 ppm | 0.0673 ppm | 1.0651 ppm | -0.0054 ppm | 0.1675 ppm | 0.9740 ppm |
| Concentration per Run 2 | 4.6065 ppm | 0.0072 ppm | 0.0657 ppm | 1.1213 ppm | -0.0058 ppm | 0.1652 ppm | 0.9301 ppm |
| Concentration per Run 3 | 4.7186 ppm | 0.0077 ppm | 0.0672 ppm | 1.0819 ppm | -0.0059 ppm | 0.1680 ppm | 0.9440 ppm |
| Concentration RSD | 2.4 % | 4.0 % | 1.3 % | 2.6 % | 4.5 % | 0.9 % | 2.4 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 111.1185 % | 113.9838 % | 111.0503 % | 105.7473 % | 92.6455 % | 104.4570 % | 0.2819 ppm |
| Concentration per Run 1 | 112.0161 % | 115.1262 % | 110.8505 % | 105.5116 % | 91.8917 % | 106.9563 % | 0.2845 ppm |
| Concentration per Run 2 | 110.9000 % | 112.1519 % | 112.0951 % | 106.9492 % | 94.9153 % | 101.5060 % | 0.2770 ppm |
| Concentration per Run 3 | 110.4394 % | 114.6733 % | 110.2054 % | 104.7812 % | 91.1295 % | 104.9085 % | 0.2841 ppm |
| Concentration RSD | 0.7 % | 1.4 % | 0.9 % | 1.0 % | 2.2 % | 2.6 % | 1.5 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: eL2512075-12d2 WG2037871
Analysis started at: 3/12/2025 6:01:41 PM
Rack: 2
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 29.8789 ppm | 0.2393 ppm | 0.0203 ppm | 0.5469 ppm | 0.0084 ppm | 4.5148 ppm |
| Concentration per Run 1 | -0.0002 ppm | 29.8547 ppm | 0.2437 ppm | 0.0206 ppm | 0.5466 ppm | 0.0084 ppm | 4.4834 ppm |
| Concentration per Run 2 | -0.0007 ppm | 29.9459 ppm | 0.2375 ppm | 0.0204 ppm | 0.5471 ppm | 0.0084 ppm | 4.5414 ppm |
| Concentration per Run 3 | 0.0001 ppm | 29.8361 ppm | 0.2367 ppm | 0.0199 ppm | 0.5470 ppm | 0.0084 ppm | 4.5196 ppm |
| Concentration RSD | 159.5 % | 0.2 % | 1.6 % | 1.7 % | 0.0 % | 0.4 % | 0.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0038 ppm | 0.0394 ppm | 0.1173 ppm | 0.1795 ppm | 514.5962 [SIC 500] | 11.3945 ppm | 7.6393 ppm |
| Concentration per Run 1 | 0.0040 ppm | 0.0404 ppm | 0.1178 ppm | 0.1787 ppm | 513.9782 ppm | 11.4510 ppm | 7.6677 ppm |
| Concentration per Run 2 | 0.0036 ppm | 0.0392 ppm | 0.1169 ppm | 0.1800 ppm | 519.2395 ppm | 11.3110 ppm | 7.6430 ppm |
| Concentration per Run 3 | 0.0038 ppm | 0.0386 ppm | 0.1171 ppm | 0.1797 ppm | 510.5709 ppm | 11.4214 ppm | 7.6073 ppm |
| Concentration RSD | 4.6 % | 2.3 % | 0.4 % | 0.4 % | 0.8 % | 0.6 % | 0.4 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.3079 ppm | 0.0046 ppm | 8.4787 ppm | 0.0797 ppm | 0.2829 ppm | -0.0083 ppm | 0.0245 ppm |
| Concentration per Run 1 | 1.3039 ppm | 0.0048 ppm | 8.5102 ppm | 0.0812 ppm | 0.2892 ppm | -0.0078 ppm | 0.0232 ppm |
| Concentration per Run 2 | 1.3106 ppm | 0.0046 ppm | 8.4380 ppm | 0.0795 ppm | 0.2813 ppm | -0.0095 ppm | 0.0259 ppm |
| Concentration per Run 3 | 1.3092 ppm | 0.0043 ppm | 8.4878 ppm | 0.0782 ppm | 0.2783 ppm | -0.0076 ppm | 0.0245 ppm |
| Concentration RSD | 0.3 % | 5.4 % | 0.4 % | 1.9 % | 2.0 % | 12.8 % | 5.5 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.2426 ppm | 0.0087 ppm | 0.1880 ppm | 0.4358 ppm | -0.0041 ppm | 0.1798 ppm | 0.4562 ppm |
| Concentration per Run 1 | 3.3156 ppm | 0.0089 ppm | 0.1880 ppm | 0.4373 ppm | -0.0037 ppm | 0.1800 ppm | 0.4660 ppm |
| Concentration per Run 2 | 3.2322 ppm | 0.0086 ppm | 0.1880 ppm | 0.4355 ppm | -0.0036 ppm | 0.1793 ppm | 0.4557 ppm |
| Concentration per Run 3 | 3.1799 ppm | 0.0087 ppm | 0.1880 ppm | 0.4345 ppm | -0.0050 ppm | 0.1799 ppm | 0.4467 ppm |
| Concentration RSD | 2.1 % | 1.8 % | 0.0 % | 0.3 % | 18.7 % | 0.2 % | 2.1 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 109.3449 % | 109.5626 % | 105.4251 % | 106.8360 % | 88.6725 % | 103.0658 % | 0.0375 ppm |
| Concentration per Run 1 | 110.3666 % | 109.0218 % | 104.8947 % | 107.3421 % | 87.6402 % | 102.6010 % | 0.0373 ppm |
| Concentration per Run 2 | 108.6191 % | 109.5057 % | 105.4349 % | 106.3923 % | 88.8037 % | 103.0923 % | 0.0375 ppm |
| Concentration per Run 3 | 109.0488 % | 110.1602 % | 105.9455 % | 106.7737 % | 89.5736 % | 103.5042 % | 0.0377 ppm |
| Concentration RSD | 0.8 % | 0.5 % | 0.5 % | 0.4 % | 1.1 % | 0.4 % | 0.6 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: LDR 500 Fe fails
Analysis started at: 3/12/2025 6:08:13 PM
Rack: 2
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0018 ppm | 0.0056 ppm | -0.0011 ppm | 0.0004 ppm | 0.0000 ppm | 0.0073 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0001 ppm | 0.0056 ppm | -0.0013 ppm | 0.0004 ppm | 0.0000 ppm | 0.0036 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0006 ppm | 0.0067 ppm | -0.0010 ppm | 0.0004 ppm | 0.0000 ppm | 0.0098 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0050 ppm | 0.0044 ppm | -0.0012 ppm | 0.0005 ppm | 0.0000 ppm | 0.0086 ppm |
| Concentration RSD | 57.7 % | 151.9 % | 21.4 % | 16.5 % | 15.9 % | 302.7 % | 44.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0029 ppm | 0.0001 ppm | -0.0020 ppm | -0.0055 ppm | 438.2295 [SIC 500] | 0.0166 ppm | 0.0342 ppm |
| Concentration per Run 1 | 0.0029 ppm | 0.0003 ppm | -0.0020 ppm | -0.0050 ppm | 433.4181 ppm | 0.0148 ppm | 0.0338 ppm |
| Concentration per Run 2 | 0.0029 ppm | -0.0002 ppm | -0.0021 ppm | -0.0054 ppm | 440.4791 ppm | 0.0173 ppm | 0.0352 ppm |
| Concentration per Run 3 | 0.0028 ppm | 0.0001 ppm | -0.0019 ppm | -0.0060 ppm | 440.7912 ppm | 0.0179 ppm | 0.0336 ppm |
| Concentration RSD | 1.0 % | 289.9 % | 5.9 % | 9.8 % | 1.0 % | 9.9 % | 2.5 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | -0.0042 ppm | -0.0036 ppm | -0.0126 ppm | 0.0027 ppm | -0.0079 ppm | 0.0134 ppm |
| Concentration per Run 1 | 0.0007 ppm | -0.0041 ppm | -0.0045 ppm | -0.0124 ppm | 0.0035 ppm | -0.0089 ppm | 0.0128 ppm |
| Concentration per Run 2 | 0.0004 ppm | -0.0042 ppm | -0.0049 ppm | -0.0131 ppm | 0.0024 ppm | -0.0063 ppm | 0.0142 ppm |
| Concentration per Run 3 | 0.0006 ppm | -0.0042 ppm | -0.0015 ppm | -0.0122 ppm | 0.0021 ppm | -0.0085 ppm | 0.0133 ppm |
| Concentration RSD | 24.2 % | 1.3 % | 52.2 % | 3.6 % | 27.2 % | 18.0 % | 5.2 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0090 ppm | 0.0023 ppm | 0.0005 ppm | -0.0002 ppm | -0.0017 ppm | 0.0024 ppm | 0.0027 ppm |
| Concentration per Run 1 | 0.0092 ppm | 0.0020 ppm | 0.0004 ppm | -0.0003 ppm | -0.0030 ppm | 0.0023 ppm | 0.0027 ppm |
| Concentration per Run 2 | 0.0088 ppm | 0.0023 ppm | 0.0005 ppm | -0.0001 ppm | -0.0006 ppm | 0.0024 ppm | 0.0026 ppm |
| Concentration per Run 3 | 0.0090 ppm | 0.0024 ppm | 0.0005 ppm | -0.0003 ppm | -0.0015 ppm | 0.0024 ppm | 0.0026 ppm |
| Concentration RSD | 2.6 % | 8.3 % | 13.7 % | 61.9 % | 71.1 % | 2.9 % | 0.9 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 98.5460 % | 102.3158 % | 99.5179 % | 103.1334 % | 92.2397 % | 101.0675 % | 0.0001 ppm |
| Concentration per Run 1 | 100.2613 % | 102.5298 % | 99.1896 % | 105.6064 % | 91.7735 % | 101.2920 % | -0.0005 ppm |
| Concentration per Run 2 | 99.0268 % | 104.5691 % | 98.4046 % | 102.8062 % | 90.9365 % | 103.2877 % | 0.0006 ppm |
| Concentration per Run 3 | 96.3499 % | 99.8485 % | 100.9594 % | 100.9876 % | 94.0091 % | 98.6228 % | 0.0002 ppm |
| Concentration RSD | 2.0 % | 2.3 % | 1.3 % | 2.3 % | 1.7 % | 2.3 % | 587.0 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: LDR 400 Fe fails
Analysis started at: 3/12/2025 6:19:59 PM
Rack: 2
Vial: 5

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | -0.0050 ppm | 0.0029 ppm | -0.0013 ppm | 0.0002 ppm | 0.0000 ppm | 0.0047 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0011 ppm | 0.0033 ppm | -0.0013 ppm | 0.0002 ppm | 0.0000 ppm | -0.0023 ppm |
| Concentration per Run 2 | 0.0003 ppm | -0.0052 ppm | 0.0035 ppm | -0.0013 ppm | 0.0002 ppm | 0.0001 ppm | 0.0077 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0088 ppm | 0.0018 ppm | -0.0014 ppm | 0.0003 ppm | 0.0000 ppm | 0.0087 ppm |
| Concentration RSD | 46.6 % | 77.1 % | 31.8 % | 5.2 % | 39.3 % | 85.0 % | 128.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 0.0000 ppm | -0.0009 ppm | -0.0024 ppm | 224.4278 [SIC 500] | 0.0148 ppm | 0.0164 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.0002 ppm | -0.0011 ppm | -0.0025 ppm | 220.2179 ppm | 0.0182 ppm | 0.0151 ppm |
| Concentration per Run 2 | 0.0013 ppm | 0.0001 ppm | -0.0011 ppm | -0.0023 ppm | 224.3760 ppm | 0.0065 ppm | 0.0169 ppm |
| Concentration per Run 3 | 0.0012 ppm | -0.0001 ppm | -0.0005 ppm | -0.0024 ppm | 228.6896 ppm | 0.0197 ppm | 0.0171 ppm |
| Concentration RSD | 6.1 % | 321.2 % | 34.3 % | 3.7 % | 1.9 % | 48.6 % | 6.7 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0025 ppm | -0.0035 ppm | -0.0115 ppm | 0.0011 ppm | -0.0041 ppm | 0.0063 ppm |
| Concentration per Run 1 | 0.0003 ppm | -0.0025 ppm | -0.0047 ppm | -0.0117 ppm | 0.0011 ppm | -0.0050 ppm | 0.0078 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0025 ppm | -0.0060 ppm | -0.0113 ppm | 0.0007 ppm | -0.0041 ppm | 0.0063 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0026 ppm | 0.0004 ppm | -0.0114 ppm | 0.0017 ppm | -0.0032 ppm | 0.0049 ppm |
| Concentration RSD | 165.2 % | 1.4 % | 97.5 % | 1.9 % | 40.8 % | 22.9 % | 23.0 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0034 ppm | 0.0010 ppm | 0.0003 ppm | -0.0002 ppm | -0.0003 ppm | 0.0011 ppm | 0.0017 ppm |
| Concentration per Run 1 | 0.0040 ppm | 0.0010 ppm | 0.0002 ppm | -0.0002 ppm | -0.0007 ppm | 0.0012 ppm | 0.0018 ppm |
| Concentration per Run 2 | 0.0031 ppm | 0.0009 ppm | 0.0003 ppm | -0.0003 ppm | -0.0008 ppm | 0.0009 ppm | 0.0018 ppm |
| Concentration per Run 3 | 0.0032 ppm | 0.0012 ppm | 0.0002 ppm | -0.0003 ppm | 0.0007 ppm | 0.0013 ppm | 0.0017 ppm |
| Concentration RSD | 14.9 % | 13.5 % | 17.7 % | 22.1 % | 322.7 % | 17.4 % | 4.3 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.0161 % | 104.7174 % | 102.0553 % | 105.3214 % | 97.9184 % | 104.3721 % | 0.0000 ppm |
| Concentration per Run 1 | 99.4598 % | 105.8682 % | 102.5500 % | 107.6150 % | 97.8700 % | 105.1677 % | -0.0007 ppm |
| Concentration per Run 2 | 98.8975 % | 104.1970 % | 101.2501 % | 104.9065 % | 97.3258 % | 104.1016 % | 0.0004 ppm |
| Concentration per Run 3 | 98.6909 % | 104.0870 % | 102.3657 % | 103.4428 % | 98.5593 % | 103.8468 % | 0.0004 ppm |
| Concentration RSD | 0.4 % | 1.0 % | 0.7 % | 2.0 % | 0.6 % | 0.7 % | 4,305.2 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCV
Analysis started at: 3/12/2025 6:30:06 PM
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4697 ppm | 0.4790 ppm | 0.4531 ppm | 0.4516 ppm | 0.4528 ppm | 0.4756 ppm | 0.5002 ppm |
| Concentration per Run 1 | 0.4707 ppm | 0.4692 ppm | 0.4549 ppm | 0.4527 ppm | 0.4469 ppm | 0.4685 ppm | 0.4932 ppm |
| Concentration per Run 2 | 0.4696 ppm | 0.4872 ppm | 0.4532 ppm | 0.4514 ppm | 0.4550 ppm | 0.4788 ppm | 0.5028 ppm |
| Concentration per Run 3 | 0.4688 ppm | 0.4806 ppm | 0.4511 ppm | 0.4506 ppm | 0.4566 ppm | 0.4796 ppm | 0.5046 ppm |
| Recovery Percentage 1 | 93.939 % | 95.806 % | 90.614 % | 90.315 % | 90.561 % | 95.130 % | 100.044 % |
| Concentration RSD | 0.2 % | 1.9 % | 0.4 % | 0.2 % | 1.1 % | 1.3 % | 1.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4477 ppm | 0.4532 ppm | 0.4738 ppm | 0.4481 ppm | 0.4856 ppm | 5.0244 ppm | 0.4849 ppm |
| Concentration per Run 1 | 0.4478 ppm | 0.4537 ppm | 0.4757 ppm | 0.4483 ppm | 0.4794 ppm | 4.9683 ppm | 0.4868 ppm |
| Concentration per Run 2 | 0.4481 ppm | 0.4529 ppm | 0.4721 ppm | 0.4482 ppm | 0.4877 ppm | 5.0446 ppm | 0.4846 ppm |
| Concentration per Run 3 | 0.4473 ppm | 0.4532 ppm | 0.4736 ppm | 0.4479 ppm | 0.4896 ppm | 5.0604 ppm | 0.4833 ppm |
| Recovery Percentage 1 | 89.541 % | 90.647 % | 94.760 % | 89.624 % | 97.117 % | 100.489 % | 96.981 % |
| Concentration RSD | 0.1 % | 0.1 % | 0.4 % | 0.0 % | 1.1 % | 1.0 % | 0.4 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4701 ppm | 0.4560 ppm | 9.1457 ppm | 0.4544 ppm | 0.4525 ppm | 0.4552 ppm | 0.4619 ppm |
| Concentration per Run 1 | 0.4637 ppm | 0.4563 ppm | 9.0676 ppm | 0.4546 ppm | 0.4528 ppm | 0.4549 ppm | 0.4641 ppm |
| Concentration per Run 2 | 0.4729 ppm | 0.4559 ppm | 9.1795 ppm | 0.4546 ppm | 0.4527 ppm | 0.4551 ppm | 0.4593 ppm |
| Concentration per Run 3 | 0.4737 ppm | 0.4558 ppm | 9.1901 ppm | 0.4541 ppm | 0.4520 ppm | 0.4558 ppm | 0.4622 ppm |
| Recovery Percentage 1 | 94.020 % | 91.198 % | 91.457 % | 90.882 % | 90.497 % | 91.050 % | 92.372 % |
| Concentration RSD | 1.2 % | 0.1 % | 0.7 % | 0.1 % | 0.1 % | 0.1 % | 0.5 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.8922 ppm | 0.4503 ppm | 0.4649 ppm | 0.4844 ppm | 0.4542 ppm | 0.4550 ppm | 0.4585 ppm |
| Concentration per Run 1 | 4.8970 ppm | 0.4506 ppm | 0.4584 ppm | 0.4850 ppm | 0.4552 ppm | 0.4550 ppm | 0.4579 ppm |
| Concentration per Run 2 | 4.8926 ppm | 0.4500 ppm | 0.4674 ppm | 0.4831 ppm | 0.4533 ppm | 0.4563 ppm | 0.4592 ppm |
| Concentration per Run 3 | 4.8870 ppm | 0.4503 ppm | 0.4689 ppm | 0.4851 ppm | 0.4540 ppm | 0.4537 ppm | 0.4583 ppm |
| Recovery Percentage 1 | 93.185 % | 90.058 % | 92.983 % | 96.878 % | 90.835 % | 90.999 % | 91.692 % |
| Concentration RSD | 0.1 % | 0.1 % | 1.2 % | 0.2 % | 0.2 % | 0.3 % | 0.1 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.9985 % | 104.9829 % | 104.3725 % | 103.7800 % | 102.2336 % | 104.5917 % | 0.4620 ppm |
| Concentration per Run 1 | 101.7205 % | 104.8276 % | 104.2894 % | 105.3550 % | 102.3670 % | 104.3866 % | 0.4570 ppm |
| Concentration per Run 2 | 99.2197 % | 105.4852 % | 104.3307 % | 103.0856 % | 102.0675 % | 105.0376 % | 0.4635 ppm |
| Concentration per Run 3 | 99.0552 % | 104.6360 % | 104.4974 % | 102.8993 % | 102.2665 % | 104.3509 % | 0.4656 ppm |
| Recovery Percentage 1 | | | | | | | 92.409 % |
| Concentration RSD | 1.5 % | 0.4 % | 0.1 % | 1.3 % | 0.1 % | 0.4 % | 1.0 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCB
Analysis started at: 3/12/2025 6:36:26 PM
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0026 ppm | -0.0006 ppm | -0.0006 ppm | 0.0000 ppm | 0.0000 ppm | 0.0035 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0021 ppm | -0.0010 ppm | -0.0007 ppm | 0.0000 ppm | 0.0000 ppm | 0.0035 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0069 ppm | -0.0002 ppm | -0.0007 ppm | -0.0001 ppm | 0.0000 ppm | 0.0027 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0012 ppm | -0.0006 ppm | -0.0005 ppm | 0.0000 ppm | 0.0000 ppm | 0.0045 ppm |
| Recovery Percentage 1 | -1.326 % | -2.599 % | -11.812 % | -2.151 % | -0.382 % | 0.557 % | 3.537 % |
| Concentration RSD | 36.0 % | 157.0 % | 74.4 % | 18.9 % | 248.8 % | 47.8 % | 26.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | -0.0003 ppm | 0.0005 ppm | 0.0081 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | -0.0004 ppm | 0.0008 ppm | 0.0032 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | -0.0004 ppm | 0.0006 ppm | 0.0095 ppm | -0.0006 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | -0.0003 ppm | 0.0001 ppm | 0.0117 ppm | 0.0005 ppm |
| Recovery Percentage 1 | -0.106 % | -0.071 % | 0.402 % | -3.366 % | 0.980 % | 0.324 % | -0.107 % |
| Concentration RSD | 187.6 % | 527.7 % | 154.7 % | 21.3 % | 80.9 % | 54.5 % | 543.6 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0002 ppm | -0.0165 ppm | 0.0000 ppm | 0.0001 ppm | 0.0005 ppm | -0.0008 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0004 ppm | -0.0171 ppm | 0.0001 ppm | 0.0004 ppm | 0.0004 ppm | -0.0018 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0002 ppm | -0.0166 ppm | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0002 ppm | -0.0158 ppm | -0.0001 ppm | -0.0001 ppm | 0.0012 ppm | -0.0004 ppm |
| Recovery Percentage 1 | -1.827 % | 0.477 % | -0.825 % | 0.005 % | 0.544 % | 1.078 % | -8.293 % |
| Concentration RSD | 120.9 % | 44.4 % | 3.9 % | 6,795.2 % | 490.1 % | 113.2 % | 101.6 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0003 ppm | 0.0000 ppm | -0.0002 ppm | 0.0006 ppm | 0.0002 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0001 ppm | 0.0001 ppm | -0.0003 ppm | 0.0005 ppm | 0.0000 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0003 ppm | 0.0000 ppm | -0.0001 ppm | 0.0008 ppm | 0.0004 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0004 ppm | 0.0000 ppm | -0.0002 ppm | 0.0006 ppm | 0.0002 ppm | 0.0002 ppm |
| Recovery Percentage 1 | 0.009 % | 0.547 % | 0.215 % | -1.872 % | 3.096 % | 2.300 % | 2.986 % |
| Concentration RSD | 1,019.1 % | 52.9 % | 220.5 % | 47.3 % | 31.9 % | 86.1 % | 50.6 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 101.7162 % | 106.8695 % | 105.8415 % | 104.3372 % | 105.7931 % | 105.5304 % | -0.0004 ppm |
| Concentration per Run 1 | 103.4360 % | 107.0919 % | 106.2001 % | 105.4484 % | 107.1068 % | 105.8228 % | -0.0011 ppm |
| Concentration per Run 2 | 101.4251 % | 106.7192 % | 106.1492 % | 104.2950 % | 106.2444 % | 105.3976 % | -0.0009 ppm |
| Concentration per Run 3 | 100.2875 % | 106.7975 % | 105.1750 % | 103.2681 % | 104.0280 % | 105.3707 % | 0.0007 ppm |
| Recovery Percentage 1 | | | | | | | -4.248 % |
| Concentration RSD | 1.6 % | 0.2 % | 0.5 % | 1.0 % | 1.5 % | 0.2 % | 225.2 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512075-01d4 WG2037871
Analysis started at: 3/12/2025 6:54:20 PM
Rack: 2
Vial: 6

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 34.6248 ppm | 0.0671 ppm | 0.0119 ppm | 0.3052 ppm | 0.0045 ppm | 16.6621 ppm |
| Concentration per Run 1 | 0.0002 ppm | 33.7915 ppm | 0.0677 ppm | 0.0118 ppm | 0.3004 ppm | 0.0043 ppm | 16.2052 ppm |
| Concentration per Run 2 | -0.0006 ppm | 34.9634 ppm | 0.0672 ppm | 0.0123 ppm | 0.3076 ppm | 0.0046 ppm | 16.8815 ppm |
| Concentration per Run 3 | -0.0005 ppm | 35.1196 ppm | 0.0664 ppm | 0.0116 ppm | 0.3075 ppm | 0.0045 ppm | 16.8995 ppm |
| Concentration RSD | 148.9 % | 2.1 % | 1.0 % | 3.0 % | 1.4 % | 2.8 % | 2.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0302 ppm | 0.0742 ppm | 0.1019 ppm | 152.1468 ppm | 4.0064 ppm | 9.2610 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0306 ppm | 0.0743 ppm | 0.1021 ppm | 149.6586 ppm | 3.9365 ppm | 9.2640 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0302 ppm | 0.0732 ppm | 0.1017 ppm | 155.4974 ppm | 4.0384 ppm | 9.1261 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0300 ppm | 0.0752 ppm | 0.1019 ppm | 151.2842 ppm | 4.0444 ppm | 9.3927 ppm |
| Concentration RSD | 11.6 % | 1.1 % | 1.4 % | 0.2 % | 2.0 % | 1.5 % | 1.4 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.1049 ppm | 0.0022 ppm | 6.8565 ppm | 0.0548 ppm | 0.0912 ppm | -0.0031 ppm | 0.0046 ppm |
| Concentration per Run 1 | 1.0771 ppm | 0.0022 ppm | 6.6957 ppm | 0.0552 ppm | 0.0925 ppm | -0.0033 ppm | 0.0064 ppm |
| Concentration per Run 2 | 1.1182 ppm | 0.0022 ppm | 6.9260 ppm | 0.0547 ppm | 0.0902 ppm | -0.0034 ppm | 0.0044 ppm |
| Concentration per Run 3 | 1.1193 ppm | 0.0022 ppm | 6.9479 ppm | 0.0543 ppm | 0.0910 ppm | -0.0027 ppm | 0.0029 ppm |
| Concentration RSD | 2.2 % | 1.3 % | 2.0 % | 0.8 % | 1.3 % | 10.8 % | 37.9 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.7544 ppm | 0.0034 ppm | 0.0627 ppm | 0.3244 ppm | -0.0021 ppm | 0.0883 ppm | 0.2313 ppm |
| Concentration per Run 1 | 3.7793 ppm | 0.0033 ppm | 0.0613 ppm | 0.3254 ppm | -0.0028 ppm | 0.0883 ppm | 0.2339 ppm |
| Concentration per Run 2 | 3.7459 ppm | 0.0034 ppm | 0.0632 ppm | 0.3189 ppm | -0.0012 ppm | 0.0883 ppm | 0.2312 ppm |
| Concentration per Run 3 | 3.7381 ppm | 0.0034 ppm | 0.0636 ppm | 0.3289 ppm | -0.0025 ppm | 0.0883 ppm | 0.2289 ppm |
| Concentration RSD | 0.6 % | 1.4 % | 2.0 % | 1.6 % | 39.9 % | 0.0 % | 1.1 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 108.3089 % | 109.4883 % | 108.8361 % | 110.0234 % | 98.7812 % | 105.9732 % | 0.0403 ppm |
| Concentration per Run 1 | 110.1003 % | 109.6367 % | 108.4733 % | 112.7709 % | 98.0543 % | 105.8742 % | 0.0392 ppm |
| Concentration per Run 2 | 107.1477 % | 109.7753 % | 108.9415 % | 108.6537 % | 99.0204 % | 107.4523 % | 0.0408 ppm |
| Concentration per Run 3 | 107.6788 % | 109.0528 % | 109.0936 % | 108.6458 % | 99.2688 % | 104.5932 % | 0.0410 ppm |
| Concentration RSD | 1.5 % | 0.4 % | 0.3 % | 2.2 % | 0.6 % | 1.4 % | 2.4 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2037871-3d4 WG2037871
Analysis started at: 3/12/2025 7:00:46 PM
Rack: 2
Vial: 7

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0206 ppm | 36.6733 ppm | 0.1376 ppm | 0.3960 ppm | 1.0731 ppm | 0.0231 ppm | 13.3389 ppm |
| Concentration per Run 1 | 0.0211 ppm | 35.7157 ppm | 0.1384 ppm | 0.3933 ppm | 1.0531 ppm | 0.0226 ppm | 13.0054 ppm |
| Concentration per Run 2 | 0.0205 ppm | 36.9606 ppm | 0.1356 ppm | 0.3964 ppm | 1.0799 ppm | 0.0233 ppm | 13.4319 ppm |
| Concentration per Run 3 | 0.0201 ppm | 37.3435 ppm | 0.1387 ppm | 0.3983 ppm | 1.0864 ppm | 0.0235 ppm | 13.5795 ppm |
| Concentration RSD | 2.5 % | 2.3 % | 1.3 % | 0.6 % | 1.6 % | 1.9 % | 2.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0219 ppm | 0.2249 ppm | 0.1489 ppm | 0.1994 ppm | 156.6134 ppm | 8.3916 ppm | 13.1131 ppm |
| Concentration per Run 1 | 0.0219 ppm | 0.2237 ppm | 0.1512 ppm | 0.2045 ppm | 152.6605 ppm | 8.1932 ppm | 13.3137 ppm |
| Concentration per Run 2 | 0.0219 ppm | 0.2251 ppm | 0.1485 ppm | 0.1951 ppm | 157.7692 ppm | 8.4512 ppm | 13.1069 ppm |
| Concentration per Run 3 | 0.0220 ppm | 0.2261 ppm | 0.1468 ppm | 0.1985 ppm | 159.4104 ppm | 8.5302 ppm | 12.9186 ppm |
| Concentration RSD | 0.2 % | 0.5 % | 1.5 % | 2.4 % | 2.2 % | 2.1 % | 1.5 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.4024 ppm | 0.3876 ppm | 12.2137 ppm | 0.2533 ppm | 0.3338 ppm | 0.0514 ppm | 0.0451 ppm |
| Concentration per Run 1 | 1.3692 ppm | 0.3851 ppm | 11.8956 ppm | 0.2522 ppm | 0.3328 ppm | 0.0515 ppm | 0.0438 ppm |
| Concentration per Run 2 | 1.4122 ppm | 0.3879 ppm | 12.3086 ppm | 0.2536 ppm | 0.3339 ppm | 0.0517 ppm | 0.0462 ppm |
| Concentration per Run 3 | 1.4259 ppm | 0.3899 ppm | 12.4368 ppm | 0.2540 ppm | 0.3348 ppm | 0.0510 ppm | 0.0454 ppm |
| Concentration RSD | 2.1 % | 0.6 % | 2.3 % | 0.4 % | 0.3 % | 0.7 % | 2.7 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.2797 ppm | 0.3840 ppm | 0.5080 ppm | 0.6605 ppm | 0.0451 ppm | 0.2670 ppm | 0.4164 ppm |
| Concentration per Run 1 | 4.2475 ppm | 0.3833 ppm | 0.4943 ppm | 0.6699 ppm | 0.0443 ppm | 0.2668 ppm | 0.4151 ppm |
| Concentration per Run 2 | 4.2855 ppm | 0.3828 ppm | 0.5118 ppm | 0.6609 ppm | 0.0456 ppm | 0.2657 ppm | 0.4159 ppm |
| Concentration per Run 3 | 4.3060 ppm | 0.3860 ppm | 0.5179 ppm | 0.6508 ppm | 0.0454 ppm | 0.2686 ppm | 0.4182 ppm |
| Concentration RSD | 0.7 % | 0.4 % | 2.4 % | 1.4 % | 1.5 % | 0.5 % | 0.4 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 105.8850 % | 106.4408 % | 107.0833 % | 107.3272 % | 96.7673 % | 103.7932 % | 0.0436 ppm |
| Concentration per Run 1 | 107.3948 % | 104.5113 % | 107.7606 % | 109.7278 % | 97.4243 % | 102.7647 % | 0.0424 ppm |
| Concentration per Run 2 | 105.0549 % | 108.1207 % | 107.0086 % | 106.3953 % | 96.5679 % | 103.3415 % | 0.0438 ppm |
| Concentration per Run 3 | 105.2053 % | 106.6904 % | 106.4806 % | 105.8585 % | 96.3097 % | 105.2733 % | 0.0447 ppm |
| Concentration RSD | 1.2 % | 1.7 % | 0.6 % | 2.0 % | 0.6 % | 1.3 % | 2.6 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2037871-4d4 WG2037871
Analysis started at: 3/12/2025 7:07:04 PM
Rack: 2
Vial: 8

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 34.4860 ppm | 0.0647 ppm | 0.0099 ppm | 0.2953 ppm | 0.0038 ppm | 9.6828 ppm |
| Concentration per Run 1 | 0.0000 ppm | 33.5086 ppm | 0.0650 ppm | 0.0099 ppm | 0.2897 ppm | 0.0037 ppm | 9.3929 ppm |
| Concentration per Run 2 | -0.0004 ppm | 34.8056 ppm | 0.0655 ppm | 0.0101 ppm | 0.2971 ppm | 0.0038 ppm | 9.7798 ppm |
| Concentration per Run 3 | -0.0005 ppm | 35.1440 ppm | 0.0637 ppm | 0.0099 ppm | 0.2990 ppm | 0.0039 ppm | 9.8756 ppm |
| Concentration RSD | 82.1 % | 2.5 % | 1.4 % | 1.4 % | 1.7 % | 2.7 % | 2.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0275 ppm | 0.0714 ppm | 0.0886 ppm | 153.2541 ppm | 3.9185 ppm | 8.1663 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0274 ppm | 0.0710 ppm | 0.0892 ppm | 149.0772 ppm | 3.8082 ppm | 8.1975 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0277 ppm | 0.0708 ppm | 0.0867 ppm | 155.2417 ppm | 3.9408 ppm | 8.0537 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0275 ppm | 0.0724 ppm | 0.0899 ppm | 155.4433 ppm | 4.0067 ppm | 8.2476 ppm |
| Concentration RSD | 8.7 % | 0.6 % | 1.2 % | 1.9 % | 2.4 % | 2.6 % | 1.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0749 ppm | 0.0021 ppm | 5.9820 ppm | 0.0525 ppm | 0.0789 ppm | -0.0034 ppm | 0.0056 ppm |
| Concentration per Run 1 | 1.0422 ppm | 0.0023 ppm | 5.8126 ppm | 0.0521 ppm | 0.0780 ppm | -0.0036 ppm | 0.0067 ppm |
| Concentration per Run 2 | 1.0866 ppm | 0.0019 ppm | 6.0271 ppm | 0.0527 ppm | 0.0792 ppm | -0.0044 ppm | 0.0042 ppm |
| Concentration per Run 3 | 1.0957 ppm | 0.0020 ppm | 6.1063 ppm | 0.0526 ppm | 0.0794 ppm | -0.0020 ppm | 0.0057 ppm |
| Concentration RSD | 2.7 % | 8.5 % | 2.5 % | 0.6 % | 1.0 % | 36.1 % | 22.1 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.5431 ppm | 0.0036 ppm | 0.0478 ppm | 0.3098 ppm | -0.0019 ppm | 0.0863 ppm | 0.2183 ppm |
| Concentration per Run 1 | 2.5230 ppm | 0.0042 ppm | 0.0463 ppm | 0.3101 ppm | -0.0026 ppm | 0.0853 ppm | 0.2178 ppm |
| Concentration per Run 2 | 2.5576 ppm | 0.0035 ppm | 0.0482 ppm | 0.3063 ppm | -0.0010 ppm | 0.0866 ppm | 0.2185 ppm |
| Concentration per Run 3 | 2.5487 ppm | 0.0031 ppm | 0.0490 ppm | 0.3129 ppm | -0.0020 ppm | 0.0869 ppm | 0.2186 ppm |
| Concentration RSD | 0.7 % | 14.1 % | 2.8 % | 1.1 % | 44.0 % | 1.0 % | 0.2 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 106.9852 % | 108.0369 % | 107.4389 % | 109.2227 % | 98.5655 % | 105.1990 % | 0.0398 ppm |
| Concentration per Run 1 | 109.0067 % | 108.1757 % | 108.0760 % | 112.4004 % | 99.0459 % | 105.0806 % | 0.0381 ppm |
| Concentration per Run 2 | 106.0418 % | 109.3432 % | 107.0024 % | 108.0348 % | 98.2418 % | 106.2321 % | 0.0406 ppm |
| Concentration per Run 3 | 105.9070 % | 106.5918 % | 107.2383 % | 107.2328 % | 98.4089 % | 104.2844 % | 0.0407 ppm |
| Concentration RSD | 1.6 % | 1.3 % | 0.5 % | 2.5 % | 0.4 % | 0.9 % | 3.7 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2037871-5d4 WG2037871
Analysis started at: 3/12/2025 7:13:30 PM
Rack: 2
Vial: 9

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0319 ppm | 37.9802 ppm | 0.1755 ppm | 0.8547 ppm | 2.0023 ppm | 0.0504 ppm | 26.0476 ppm |
| Concentration per Run 1 | 0.0320 ppm | 36.8710 ppm | 0.1744 ppm | 0.8449 ppm | 1.9673 ppm | 0.0490 ppm | 25.4504 ppm |
| Concentration per Run 2 | 0.0303 ppm | 38.3839 ppm | 0.1756 ppm | 0.8601 ppm | 2.0157 ppm | 0.0508 ppm | 26.2265 ppm |
| Concentration per Run 3 | 0.0335 ppm | 38.6856 ppm | 0.1766 ppm | 0.8593 ppm | 2.0239 ppm | 0.0512 ppm | 26.4659 ppm |
| Concentration RSD | 5.0 % | 2.6 % | 0.6 % | 1.0 % | 1.5 % | 2.3 % | 2.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0498 ppm | 0.4861 ppm | 0.2585 ppm | 0.3215 ppm | 162.7586 ppm | 13.9999 ppm | 18.3745 ppm |
| Concentration per Run 1 | 0.0489 ppm | 0.4777 ppm | 0.2611 ppm | 0.3221 ppm | 159.6659 ppm | 13.6020 ppm | 18.5538 ppm |
| Concentration per Run 2 | 0.0503 ppm | 0.4897 ppm | 0.2394 ppm | 0.3035 ppm | 162.0505 ppm | 14.1281 ppm | 17.0425 ppm |
| Concentration per Run 3 | 0.0502 ppm | 0.4909 ppm | 0.2749 ppm | 0.3389 ppm | 166.5595 ppm | 14.2696 ppm | 19.5273 ppm |
| Concentration RSD | 1.5 % | 1.5 % | 6.9 % | 5.5 % | 2.2 % | 2.5 % | 6.8 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.5800 ppm | 0.8505 ppm | 16.2613 ppm | 0.5124 ppm | 0.5871 ppm | 0.4495 ppm | 0.1132 ppm |
| Concentration per Run 1 | 1.5415 ppm | 0.8389 ppm | 15.7533 ppm | 0.5033 ppm | 0.5760 ppm | 0.4392 ppm | 0.1123 ppm |
| Concentration per Run 2 | 1.5924 ppm | 0.8545 ppm | 16.4518 ppm | 0.5167 ppm | 0.5933 ppm | 0.4543 ppm | 0.1149 ppm |
| Concentration per Run 3 | 1.6061 ppm | 0.8580 ppm | 16.5787 ppm | 0.5174 ppm | 0.5921 ppm | 0.4550 ppm | 0.1124 ppm |
| Concentration RSD | 2.2 % | 1.2 % | 2.7 % | 1.6 % | 1.6 % | 2.0 % | 1.3 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.2232 ppm | 0.9013 ppm | 0.9523 ppm | 1.2435 ppm | 0.1083 ppm | 0.5225 ppm | 0.7039 ppm |
| Concentration per Run 1 | 5.1112 ppm | 0.8833 ppm | 0.9231 ppm | 1.2554 ppm | 0.1067 ppm | 0.5179 ppm | 0.6912 ppm |
| Concentration per Run 2 | 5.2804 ppm | 0.9106 ppm | 0.9629 ppm | 1.1548 ppm | 0.1093 ppm | 0.5211 ppm | 0.7086 ppm |
| Concentration per Run 3 | 5.2781 ppm | 0.9102 ppm | 0.9709 ppm | 1.3202 ppm | 0.1089 ppm | 0.5285 ppm | 0.7121 ppm |
| Concentration RSD | 1.9 % | 1.7 % | 2.7 % | 6.7 % | 1.3 % | 1.0 % | 1.6 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 107.5433 % | 110.2101 % | 107.4893 % | 107.8503 % | 95.6430 % | 105.6415 % | 0.0410 ppm |
| Concentration per Run 1 | 108.2001 % | 109.7972 % | 108.6248 % | 109.9006 % | 97.4388 % | 104.5145 % | 0.0401 ppm |
| Concentration per Run 2 | 107.4674 % | 116.3479 % | 107.0148 % | 107.2935 % | 94.7542 % | 112.8103 % | 0.0413 ppm |
| Concentration per Run 3 | 106.9624 % | 104.4852 % | 106.8284 % | 106.3568 % | 94.7360 % | 99.5995 % | 0.0416 ppm |
| Concentration RSD | 0.6 % | 5.4 % | 0.9 % | 1.7 % | 1.6 % | 6.3 % | 1.9 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2037871-6d20 WG2037871
Analysis started at: 3/12/2025 7:19:52 PM
Rack: 2
Vial: 10

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 7.1412 ppm | 0.0141 ppm | 0.0033 ppm | 0.0654 ppm | 0.0009 ppm | 3.5024 ppm |
| Concentration per Run 1 | 0.0002 ppm | 6.9440 ppm | 0.0132 ppm | 0.0034 ppm | 0.0638 ppm | 0.0009 ppm | 3.4089 ppm |
| Concentration per Run 2 | 0.0000 ppm | 7.2080 ppm | 0.0143 ppm | 0.0032 ppm | 0.0664 ppm | 0.0009 ppm | 3.5475 ppm |
| Concentration per Run 3 | -0.0001 ppm | 7.2716 ppm | 0.0149 ppm | 0.0032 ppm | 0.0661 ppm | 0.0009 ppm | 3.5507 ppm |
| Concentration RSD | 454.3 % | 2.4 % | 6.1 % | 4.0 % | 2.2 % | 2.5 % | 2.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0061 ppm | 0.0157 ppm | 0.0207 ppm | 32.4819 ppm | 0.8172 ppm | 1.9917 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0062 ppm | 0.0155 ppm | 0.0207 ppm | 31.5882 ppm | 0.7988 ppm | 1.9822 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0061 ppm | 0.0159 ppm | 0.0205 ppm | 32.8223 ppm | 0.8338 ppm | 1.9956 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0061 ppm | 0.0158 ppm | 0.0208 ppm | 33.0351 ppm | 0.8189 ppm | 1.9972 ppm |
| Concentration RSD | 19.3 % | 1.3 % | 1.3 % | 0.8 % | 2.4 % | 2.2 % | 0.4 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2301 ppm | 0.0015 ppm | 1.3978 ppm | 0.0101 ppm | 0.0185 ppm | 0.0001 ppm | 0.0018 ppm |
| Concentration per Run 1 | 0.2240 ppm | 0.0015 ppm | 1.3508 ppm | 0.0099 ppm | 0.0181 ppm | -0.0003 ppm | 0.0021 ppm |
| Concentration per Run 2 | 0.2324 ppm | 0.0016 ppm | 1.4163 ppm | 0.0103 ppm | 0.0191 ppm | -0.0001 ppm | 0.0023 ppm |
| Concentration per Run 3 | 0.2339 ppm | 0.0014 ppm | 1.4262 ppm | 0.0100 ppm | 0.0182 ppm | 0.0006 ppm | 0.0012 ppm |
| Concentration RSD | 2.3 % | 5.1 % | 2.9 % | 2.1 % | 2.9 % | 881.0 % | 31.7 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7537 ppm | 0.0008 ppm | 0.0130 ppm | 0.0673 ppm | -0.0002 ppm | 0.0188 ppm | 0.0466 ppm |
| Concentration per Run 1 | 0.7519 ppm | 0.0010 ppm | 0.0125 ppm | 0.0672 ppm | -0.0001 ppm | 0.0185 ppm | 0.0467 ppm |
| Concentration per Run 2 | 0.7552 ppm | 0.0006 ppm | 0.0132 ppm | 0.0671 ppm | -0.0001 ppm | 0.0190 ppm | 0.0466 ppm |
| Concentration per Run 3 | 0.7542 ppm | 0.0007 ppm | 0.0134 ppm | 0.0676 ppm | -0.0004 ppm | 0.0188 ppm | 0.0466 ppm |
| Concentration RSD | 0.2 % | 20.7 % | 3.4 % | 0.4 % | 82.7 % | 1.3 % | 0.2 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 103.1443 % | 106.5134 % | 105.4807 % | 108.2138 % | 104.0603 % | 105.6086 % | 0.0077 ppm |
| Concentration per Run 1 | 105.5277 % | 106.5667 % | 105.8819 % | 110.6991 % | 104.0564 % | 105.7038 % | 0.0080 ppm |
| Concentration per Run 2 | 101.3459 % | 106.3407 % | 105.5768 % | 106.9365 % | 103.8860 % | 105.4303 % | 0.0077 ppm |
| Concentration per Run 3 | 102.5593 % | 106.6327 % | 104.9835 % | 107.0059 % | 104.2384 % | 105.6917 % | 0.0075 ppm |
| Concentration RSD | 2.1 % | 0.1 % | 0.4 % | 2.0 % | 0.2 % | 0.1 % | 2.8 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512075-07d4 WG2037871
Analysis started at: 3/12/2025 7:26:24 PM
Rack: 2
Vial: 11

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 37.5560 ppm | 0.0134 ppm | 0.0060 ppm | 0.1905 ppm | 0.0038 ppm | 41.6575 ppm |
| Concentration per Run 1 | 0.0001 ppm | 36.8644 ppm | 0.0137 ppm | 0.0061 ppm | 0.1889 ppm | 0.0038 ppm | 40.9637 ppm |
| Concentration per Run 2 | 0.0001 ppm | 37.7574 ppm | 0.0127 ppm | 0.0060 ppm | 0.1912 ppm | 0.0039 ppm | 41.8926 ppm |
| Concentration per Run 3 | 0.0001 ppm | 38.0463 ppm | 0.0139 ppm | 0.0059 ppm | 0.1912 ppm | 0.0039 ppm | 42.1161 ppm |
| Concentration RSD | 24.0 % | 1.6 % | 4.8 % | 1.9 % | 0.7 % | 1.6 % | 1.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 0.0953 ppm | 0.0676 ppm | 0.0927 ppm | 196.0184 ppm | 4.6366 ppm | 19.1152 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0947 ppm | 0.0675 ppm | 0.0929 ppm | 190.4768 ppm | 4.5294 ppm | 19.1313 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0963 ppm | 0.0680 ppm | 0.0932 ppm | 197.0675 ppm | 4.6727 ppm | 19.1266 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0948 ppm | 0.0675 ppm | 0.0921 ppm | 200.5109 ppm | 4.7077 ppm | 19.0876 ppm |
| Concentration RSD | 6.0 % | 0.9 % | 0.4 % | 0.6 % | 2.6 % | 2.0 % | 0.1 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.2688 ppm | 0.0013 ppm | 4.5006 ppm | 0.1347 ppm | 0.1083 ppm | -0.0037 ppm | 0.0058 ppm |
| Concentration per Run 1 | 4.1953 ppm | 0.0015 ppm | 4.4119 ppm | 0.1342 ppm | 0.1074 ppm | -0.0031 ppm | 0.0047 ppm |
| Concentration per Run 2 | 4.2906 ppm | 0.0013 ppm | 4.5287 ppm | 0.1363 ppm | 0.1093 ppm | -0.0044 ppm | 0.0058 ppm |
| Concentration per Run 3 | 4.3206 ppm | 0.0012 ppm | 4.5612 ppm | 0.1337 ppm | 0.1081 ppm | -0.0035 ppm | 0.0070 ppm |
| Concentration RSD | 1.5 % | 10.5 % | 1.7 % | 1.0 % | 0.9 % | 17.5 % | 20.3 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.4068 ppm | 0.0033 ppm | 0.0807 ppm | 0.1534 ppm | -0.0038 ppm | 0.0767 ppm | 0.3517 ppm |
| Concentration per Run 1 | 2.3940 ppm | 0.0032 ppm | 0.0792 ppm | 0.1536 ppm | -0.0034 ppm | 0.0765 ppm | 0.3492 ppm |
| Concentration per Run 2 | 2.4331 ppm | 0.0034 ppm | 0.0810 ppm | 0.1540 ppm | -0.0044 ppm | 0.0770 ppm | 0.3559 ppm |
| Concentration per Run 3 | 2.3932 ppm | 0.0032 ppm | 0.0820 ppm | 0.1526 ppm | -0.0035 ppm | 0.0766 ppm | 0.3500 ppm |
| Concentration RSD | 0.9 % | 2.6 % | 1.7 % | 0.5 % | 13.8 % | 0.3 % | 1.0 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 104.8030 % | 107.9322 % | 105.7263 % | 106.6282 % | 93.7571 % | 103.4473 % | 0.0761 ppm |
| Concentration per Run 1 | 105.3763 % | 108.0290 % | 106.1929 % | 108.4446 % | 94.3476 % | 103.4611 % | 0.0733 ppm |
| Concentration per Run 2 | 104.4135 % | 107.9430 % | 105.2522 % | 106.0292 % | 92.8012 % | 103.5231 % | 0.0772 ppm |
| Concentration per Run 3 | 104.6192 % | 107.8245 % | 105.7339 % | 105.4109 % | 94.1223 % | 103.3577 % | 0.0778 ppm |
| Concentration RSD | 0.5 % | 0.1 % | 0.4 % | 1.5 % | 0.9 % | 0.1 % | 3.2 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512075-11d4 WG2037871
Analysis started at: 3/12/2025 7:32:56 PM
Rack: 2
Vial: 12

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 51.4275 ppm | 0.0227 ppm | 0.0035 ppm | 0.6059 ppm | 0.0025 ppm | 2.4910 ppm |
| Concentration per Run 1 | -0.0004 ppm | 50.6951 ppm | 0.0220 ppm | 0.0033 ppm | 0.6017 ppm | 0.0025 ppm | 2.4400 ppm |
| Concentration per Run 2 | -0.0003 ppm | 52.5532 ppm | 0.0224 ppm | 0.0036 ppm | 0.6148 ppm | 0.0026 ppm | 2.5545 ppm |
| Concentration per Run 3 | 0.0001 ppm | 51.0342 ppm | 0.0237 ppm | 0.0035 ppm | 0.6013 ppm | 0.0025 ppm | 2.4785 ppm |
| Concentration RSD | 153.8 % | 1.9 % | 3.9 % | 4.5 % | 1.3 % | 1.2 % | 2.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0551 ppm | 0.1052 ppm | 0.1301 ppm | 119.9405 ppm | 2.8733 ppm | 22.2557 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0547 ppm | 0.1056 ppm | 0.1301 ppm | 118.2295 ppm | 2.8328 ppm | 22.3591 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0546 ppm | 0.1063 ppm | 0.1320 ppm | 122.4684 ppm | 2.9340 ppm | 22.4977 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0560 ppm | 0.1036 ppm | 0.1281 ppm | 119.1237 ppm | 2.8530 ppm | 21.9103 ppm |
| Concentration RSD | 16.1 % | 1.4 % | 1.3 % | 1.5 % | 1.9 % | 1.9 % | 1.4 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0754 ppm | -0.0003 ppm | 6.5833 ppm | 0.1581 ppm | 0.0654 ppm | -0.0025 ppm | 0.0038 ppm |
| Concentration per Run 1 | 1.0613 ppm | -0.0002 ppm | 6.4675 ppm | 0.1572 ppm | 0.0644 ppm | -0.0036 ppm | 0.0031 ppm |
| Concentration per Run 2 | 1.0981 ppm | -0.0003 ppm | 6.7403 ppm | 0.1566 ppm | 0.0650 ppm | -0.0017 ppm | 0.0054 ppm |
| Concentration per Run 3 | 1.0668 ppm | -0.0003 ppm | 6.5422 ppm | 0.1606 ppm | 0.0667 ppm | -0.0021 ppm | 0.0029 ppm |
| Concentration RSD | 1.8 % | 25.8 % | 2.1 % | 1.4 % | 1.8 % | 39.8 % | 36.6 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.8947 ppm | 0.0038 ppm | 0.0295 ppm | 0.5140 ppm | -0.0033 ppm | 0.0825 ppm | 0.4532 ppm |
| Concentration per Run 1 | 1.8782 ppm | 0.0038 ppm | 0.0290 ppm | 0.5166 ppm | -0.0040 ppm | 0.0821 ppm | 0.4490 ppm |
| Concentration per Run 2 | 1.8772 ppm | 0.0037 ppm | 0.0301 ppm | 0.5212 ppm | -0.0029 ppm | 0.0816 ppm | 0.4492 ppm |
| Concentration per Run 3 | 1.9287 ppm | 0.0039 ppm | 0.0293 ppm | 0.5042 ppm | -0.0032 ppm | 0.0838 ppm | 0.4614 ppm |
| Concentration RSD | 1.6 % | 2.1 % | 1.9 % | 1.7 % | 16.8 % | 1.5 % | 1.6 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 106.7397 % | 108.8875 % | 105.9898 % | 108.8597 % | 96.7899 % | 105.6612 % | 0.1222 ppm |
| Concentration per Run 1 | 107.0986 % | 107.9601 % | 106.8042 % | 110.0076 % | 97.2689 % | 105.2359 % | 0.1212 ppm |
| Concentration per Run 2 | 105.7418 % | 108.1177 % | 106.9314 % | 107.0803 % | 97.7105 % | 104.2969 % | 0.1239 ppm |
| Concentration per Run 3 | 107.3787 % | 110.5848 % | 104.2337 % | 109.4912 % | 95.3901 % | 107.4509 % | 0.1217 ppm |
| Concentration RSD | 0.8 % | 1.4 % | 1.4 % | 1.4 % | 1.3 % | 1.5 % | 1.2 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512075-12d10 WG2037871
Analysis started at: 3/12/2025 7:39:21 PM
Rack: 2
Vial: 13

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 5.9043 ppm | 0.0502 ppm | 0.0039 ppm | 0.1089 ppm | 0.0016 ppm | 0.9179 ppm |
| Concentration per Run 1 | 0.0002 ppm | 5.6842 ppm | 0.0512 ppm | 0.0038 ppm | 0.1061 ppm | 0.0016 ppm | 0.8932 ppm |
| Concentration per Run 2 | -0.0001 ppm | 5.9688 ppm | 0.0492 ppm | 0.0039 ppm | 0.1101 ppm | 0.0017 ppm | 0.9194 ppm |
| Concentration per Run 3 | 0.0003 ppm | 6.0601 ppm | 0.0503 ppm | 0.0041 ppm | 0.1105 ppm | 0.0016 ppm | 0.9410 ppm |
| Concentration RSD | 139.5 % | 3.3 % | 2.0 % | 4.8 % | 2.2 % | 2.5 % | 2.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0074 ppm | 0.0243 ppm | 0.0379 ppm | 115.1140 ppm | 2.1750 ppm | 1.7015 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0073 ppm | 0.0245 ppm | 0.0379 ppm | 111.3535 ppm | 2.0914 ppm | 1.7035 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0073 ppm | 0.0242 ppm | 0.0378 ppm | 116.2870 ppm | 2.1978 ppm | 1.7015 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0075 ppm | 0.0241 ppm | 0.0379 ppm | 117.7016 ppm | 2.2356 ppm | 1.6995 ppm |
| Concentration RSD | 5.7 % | 1.2 % | 0.9 % | 0.2 % | 2.9 % | 3.4 % | 0.1 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2631 ppm | 0.0004 ppm | 1.6419 ppm | 0.0097 ppm | 0.0548 ppm | -0.0024 ppm | 0.0046 ppm |
| Concentration per Run 1 | 0.2543 ppm | 0.0005 ppm | 1.5694 ppm | 0.0097 ppm | 0.0540 ppm | -0.0020 ppm | 0.0052 ppm |
| Concentration per Run 2 | 0.2655 ppm | 0.0004 ppm | 1.6602 ppm | 0.0096 ppm | 0.0543 ppm | -0.0033 ppm | 0.0056 ppm |
| Concentration per Run 3 | 0.2693 ppm | 0.0004 ppm | 1.6961 ppm | 0.0099 ppm | 0.0561 ppm | -0.0018 ppm | 0.0029 ppm |
| Concentration RSD | 3.0 % | 16.0 % | 4.0 % | 1.8 % | 2.1 % | 35.0 % | 32.8 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6873 ppm | 0.0016 ppm | 0.0372 ppm | 0.0877 ppm | -0.0002 ppm | 0.0373 ppm | 0.0878 ppm |
| Concentration per Run 1 | 0.6860 ppm | 0.0020 ppm | 0.0357 ppm | 0.0876 ppm | -0.0002 ppm | 0.0373 ppm | 0.0880 ppm |
| Concentration per Run 2 | 0.6790 ppm | 0.0011 ppm | 0.0376 ppm | 0.0877 ppm | -0.0012 ppm | 0.0372 ppm | 0.0867 ppm |
| Concentration per Run 3 | 0.6967 ppm | 0.0016 ppm | 0.0382 ppm | 0.0878 ppm | 0.0007 ppm | 0.0372 ppm | 0.0886 ppm |
| Concentration RSD | 1.3 % | 27.6 % | 3.6 % | 0.1 % | 456.4 % | 0.1 % | 1.1 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 102.8721 % | 105.6931 % | 105.2493 % | 108.8668 % | 102.0246 % | 105.3482 % | 0.0071 ppm |
| Concentration per Run 1 | 104.4681 % | 105.9629 % | 105.5291 % | 111.7790 % | 102.0619 % | 105.6668 % | 0.0072 ppm |
| Concentration per Run 2 | 102.1092 % | 105.7224 % | 105.7014 % | 107.9896 % | 103.0397 % | 105.2788 % | 0.0072 ppm |
| Concentration per Run 3 | 102.0392 % | 105.3941 % | 104.5174 % | 106.8318 % | 100.9722 % | 105.0991 % | 0.0069 ppm |
| Concentration RSD | 1.3 % | 0.3 % | 0.6 % | 2.4 % | 1.0 % | 0.3 % | 2.6 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCV
Analysis started at: 3/12/2025 7:45:47 PM
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4700 ppm | 0.4723 ppm | 0.4554 ppm | 0.4501 ppm | 0.4546 ppm | 0.4690 ppm | 0.4950 ppm |
| Concentration per Run 1 | 0.4707 ppm | 0.4627 ppm | 0.4550 ppm | 0.4483 ppm | 0.4478 ppm | 0.4589 ppm | 0.4867 ppm |
| Concentration per Run 2 | 0.4704 ppm | 0.4725 ppm | 0.4534 ppm | 0.4495 ppm | 0.4579 ppm | 0.4724 ppm | 0.4982 ppm |
| Concentration per Run 3 | 0.4691 ppm | 0.4815 ppm | 0.4578 ppm | 0.4524 ppm | 0.4581 ppm | 0.4758 ppm | 0.5000 ppm |
| Recovery Percentage 1 | 94.010 % | 94.454 % | 91.083 % | 90.016 % | 90.922 % | 93.807 % | 98.995 % |
| Concentration RSD | 0.2 % | 2.0 % | 0.5 % | 0.5 % | 1.3 % | 1.9 % | 1.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4554 ppm | 0.4557 ppm | 0.4730 ppm | 0.4516 ppm | 0.4849 ppm | 4.9459 ppm | 0.4821 ppm |
| Concentration per Run 1 | 0.4545 ppm | 0.4544 ppm | 0.4753 ppm | 0.4516 ppm | 0.4798 ppm | 4.8017 ppm | 0.4855 ppm |
| Concentration per Run 2 | 0.4487 ppm | 0.4513 ppm | 0.4696 ppm | 0.4522 ppm | 0.4867 ppm | 5.0012 ppm | 0.4788 ppm |
| Concentration per Run 3 | 0.4630 ppm | 0.4615 ppm | 0.4742 ppm | 0.4509 ppm | 0.4882 ppm | 5.0349 ppm | 0.4819 ppm |
| Recovery Percentage 1 | 91.083 % | 91.148 % | 94.605 % | 90.312 % | 96.981 % | 98.919 % | 96.410 % |
| Concentration RSD | 1.6 % | 1.2 % | 0.6 % | 0.1 % | 0.9 % | 2.5 % | 0.7 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4647 ppm | 0.4625 ppm | 9.0540 ppm | 0.4601 ppm | 0.4607 ppm | 0.4564 ppm | 0.4618 ppm |
| Concentration per Run 1 | 0.4559 ppm | 0.4597 ppm | 8.8166 ppm | 0.4593 ppm | 0.4591 ppm | 0.4543 ppm | 0.4598 ppm |
| Concentration per Run 2 | 0.4666 ppm | 0.4609 ppm | 9.1703 ppm | 0.4542 ppm | 0.4563 ppm | 0.4519 ppm | 0.4607 ppm |
| Concentration per Run 3 | 0.4715 ppm | 0.4670 ppm | 9.1750 ppm | 0.4669 ppm | 0.4667 ppm | 0.4630 ppm | 0.4651 ppm |
| Recovery Percentage 1 | 92.932 % | 92.499 % | 90.540 % | 92.029 % | 92.137 % | 91.281 % | 92.366 % |
| Concentration RSD | 1.7 % | 0.8 % | 2.3 % | 1.4 % | 1.2 % | 1.3 % | 0.6 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.9634 ppm | 0.4559 ppm | 0.4581 ppm | 0.4796 ppm | 0.4598 ppm | 0.4560 ppm | 0.4632 ppm |
| Concentration per Run 1 | 4.9383 ppm | 0.4544 ppm | 0.4470 ppm | 0.4812 ppm | 0.4586 ppm | 0.4555 ppm | 0.4622 ppm |
| Concentration per Run 2 | 4.9351 ppm | 0.4515 ppm | 0.4633 ppm | 0.4778 ppm | 0.4544 ppm | 0.4545 ppm | 0.4555 ppm |
| Concentration per Run 3 | 5.0167 ppm | 0.4620 ppm | 0.4639 ppm | 0.4799 ppm | 0.4662 ppm | 0.4580 ppm | 0.4720 ppm |
| Recovery Percentage 1 | 94.540 % | 91.189 % | 91.613 % | 95.927 % | 91.951 % | 91.203 % | 92.646 % |
| Concentration RSD | 0.9 % | 1.2 % | 2.1 % | 0.4 % | 1.3 % | 0.4 % | 1.8 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.2086 % | 104.3620 % | 104.2524 % | 105.1061 % | 101.6176 % | 104.8516 % | 0.4566 ppm |
| Concentration per Run 1 | 99.5820 % | 103.9837 % | 104.4109 % | 106.4582 % | 101.8157 % | 104.4711 % | 0.4428 ppm |
| Concentration per Run 2 | 99.9129 % | 104.6168 % | 104.4522 % | 105.4600 % | 102.4563 % | 105.0724 % | 0.4645 ppm |
| Concentration per Run 3 | 98.1309 % | 104.4855 % | 103.8941 % | 103.4002 % | 100.5807 % | 105.0112 % | 0.4626 ppm |
| Recovery Percentage 1 | | | | | | | 91.323 % |
| Concentration RSD | 1.0 % | 0.3 % | 0.3 % | 1.5 % | 0.9 % | 0.3 % | 2.6 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCB
Analysis started at: 3/12/2025 7:52:06 PM
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0015 ppm | 0.0004 ppm | -0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0031 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0001 ppm | 0.0002 ppm | -0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0032 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0023 ppm | 0.0007 ppm | -0.0005 ppm | 0.0000 ppm | 0.0000 ppm | 0.0052 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0023 ppm | 0.0003 ppm | -0.0005 ppm | 0.0001 ppm | 0.0000 ppm | 0.0008 ppm |
| Recovery Percentage 1 | -0.727 % | -1.548 % | 7.966 % | -1.473 % | 0.265 % | -0.035 % | 3.082 % |
| Concentration RSD | 339.6 % | 81.3 % | 65.9 % | 10.4 % | 165.3 % | 887.1 % | 70.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | -0.0001 ppm | 0.0010 ppm | 0.0118 ppm | 0.0011 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | -0.0002 ppm | 0.0000 ppm | 0.0016 ppm | -0.0083 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | -0.0001 ppm | -0.0002 ppm | -0.0001 ppm | 0.0357 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | -0.0001 ppm | 0.0015 ppm | 0.0078 ppm | 0.0030 ppm |
| Recovery Percentage 1 | 0.085 % | 0.076 % | -1.245 % | -1.075 % | 1.974 % | 0.470 % | 1.120 % |
| Concentration RSD | 372.6 % | 573.5 % | 56.1 % | 88.2 % | 96.8 % | 189.2 % | 145.9 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0003 ppm | -0.0162 ppm | 0.0000 ppm | -0.0001 ppm | -0.0005 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0005 ppm | -0.0176 ppm | 0.0001 ppm | 0.0000 ppm | 0.0005 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0003 ppm | -0.0131 ppm | 0.0000 ppm | -0.0001 ppm | -0.0011 ppm | 0.0010 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0002 ppm | -0.0180 ppm | 0.0000 ppm | -0.0002 ppm | -0.0010 ppm | -0.0005 ppm |
| Recovery Percentage 1 | -1.285 % | 0.693 % | -0.811 % | 0.070 % | -0.902 % | -0.972 % | 4.311 % |
| Concentration RSD | 133.6 % | 48.2 % | 16.8 % | 305.7 % | 114.0 % | 184.6 % | 187.1 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0001 ppm | 0.0000 ppm | 0.0002 ppm | 0.0003 ppm | 0.0001 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0002 ppm | 0.0001 ppm | 0.0000 ppm | 0.0006 ppm | 0.0001 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0006 ppm | -0.0002 ppm | 0.0000 ppm | 0.0006 ppm | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0004 ppm | 0.0000 ppm | 0.0001 ppm | 0.0004 ppm | 0.0001 ppm | 0.0002 ppm |
| Recovery Percentage 1 | 0.086 % | 0.253 % | 0.150 % | 2.368 % | 1.661 % | 0.805 % | 3.313 % |
| Concentration RSD | 39.2 % | 229.5 % | 213.2 % | 148.9 % | 90.3 % | 52.9 % | 14.4 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.9066 % | 105.9918 % | 104.6281 % | 103.5535 % | 106.5195 % | 106.1930 % | -0.0003 ppm |
| Concentration per Run 1 | 103.9917 % | 105.7547 % | 105.1888 % | 105.2616 % | 106.7972 % | 105.8991 % | -0.0005 ppm |
| Concentration per Run 2 | 99.0191 % | 105.9067 % | 103.7934 % | 101.9569 % | 105.5292 % | 106.1425 % | -0.0001 ppm |
| Concentration per Run 3 | 99.7090 % | 106.3141 % | 104.9020 % | 103.4422 % | 107.2321 % | 106.5373 % | -0.0002 ppm |
| Recovery Percentage 1 | | | | | | | -2.550 % |
| Concentration RSD | 2.7 % | 0.3 % | 0.7 % | 1.6 % | 0.8 % | 0.3 % | 79.9 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512368-13 WG2039059
Analysis started at: 3/12/2025 8:35:53 PM
Rack: 1
Vial: 42

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0129 ppm | -0.0015 ppm | 0.0161 ppm | 0.0401 ppm | 0.0000 ppm | 12.9141 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0106 ppm | -0.0006 ppm | 0.0161 ppm | 0.0392 ppm | 0.0000 ppm | 12.4078 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0143 ppm | -0.0029 ppm | 0.0162 ppm | 0.0405 ppm | 0.0000 ppm | 12.9816 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0137 ppm | -0.0011 ppm | 0.0159 ppm | 0.0405 ppm | 0.0000 ppm | 13.3527 ppm |
| Concentration RSD | 148.9 % | 15.5 % | 80.7 % | 1.0 % | 1.9 % | 133.4 % | 3.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0004 ppm | 0.0008 ppm | 0.0007 ppm | 0.0084 ppm | 1.8335 ppm | 4.4613 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0004 ppm | 0.0009 ppm | 0.0006 ppm | 0.0072 ppm | 1.7448 ppm | 4.4705 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0004 ppm | 0.0008 ppm | 0.0006 ppm | 0.0090 ppm | 1.8497 ppm | 4.4603 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0004 ppm | 0.0006 ppm | 0.0008 ppm | 0.0089 ppm | 1.9061 ppm | 4.4532 ppm |
| Concentration RSD | 109.2 % | 7.9 % | 18.8 % | 14.5 % | 11.9 % | 4.5 % | 0.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0044 ppm | -0.0003 ppm | 10.4138 ppm | 0.0000 ppm | -0.0030 ppm | -0.0004 ppm | 0.0007 ppm |
| Concentration per Run 1 | 0.0040 ppm | -0.0003 ppm | 9.9868 ppm | 0.0001 ppm | -0.0029 ppm | -0.0001 ppm | -0.0009 ppm |
| Concentration per Run 2 | 0.0046 ppm | -0.0004 ppm | 10.5033 ppm | -0.0001 ppm | -0.0031 ppm | -0.0011 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0045 ppm | -0.0003 ppm | 10.7514 ppm | 0.0001 ppm | -0.0031 ppm | 0.0001 ppm | 0.0018 ppm |
| Concentration RSD | 7.2 % | 15.4 % | 3.7 % | 995.3 % | 3.5 % | 183.7 % | 214.0 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.2248 ppm | 0.0003 ppm | 0.0650 ppm | 0.0004 ppm | -0.0010 ppm | 0.0001 ppm | 0.0124 ppm |
| Concentration per Run 1 | 6.2311 ppm | 0.0003 ppm | 0.0623 ppm | 0.0003 ppm | -0.0014 ppm | 0.0000 ppm | 0.0123 ppm |
| Concentration per Run 2 | 6.2165 ppm | 0.0000 ppm | 0.0654 ppm | 0.0007 ppm | -0.0001 ppm | 0.0002 ppm | 0.0123 ppm |
| Concentration per Run 3 | 6.2268 ppm | 0.0006 ppm | 0.0673 ppm | 0.0003 ppm | -0.0015 ppm | 0.0003 ppm | 0.0125 ppm |
| Concentration RSD | 0.1 % | 99.9 % | 3.9 % | 58.3 % | 76.3 % | 88.4 % | 0.7 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.7961 % | 102.2497 % | 101.4574 % | 115.8680 % | 102.7623 % | 106.7537 % | -0.0004 ppm |
| Concentration per Run 1 | 102.7670 % | 102.0016 % | 101.2151 % | 120.2720 % | 102.9516 % | 106.8029 % | -0.0001 ppm |
| Concentration per Run 2 | 100.2891 % | 102.3805 % | 101.5458 % | 115.4487 % | 102.9822 % | 106.7840 % | -0.0011 ppm |
| Concentration per Run 3 | 99.3324 % | 102.3671 % | 101.6114 % | 111.8833 % | 102.3532 % | 106.6740 % | -0.0001 ppm |
| Concentration RSD | 1.8 % | 0.2 % | 0.2 % | 3.6 % | 0.3 % | 0.1 % | 150.4 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512368-14 WG2039059
Analysis started at: 3/12/2025 8:42:26 PM
Rack: 1
Vial: 43

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0491 ppm | -0.0016 ppm | 0.0106 ppm | 0.0015 ppm | 0.0000 ppm | 31.9265 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0488 ppm | -0.0006 ppm | 0.0106 ppm | 0.0014 ppm | 0.0000 ppm | 31.8209 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0548 ppm | -0.0037 ppm | 0.0107 ppm | 0.0015 ppm | 0.0000 ppm | 32.1188 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0438 ppm | -0.0005 ppm | 0.0107 ppm | 0.0015 ppm | 0.0000 ppm | 31.8396 ppm |
| Concentration RSD | 973.8 % | 11.2 % | 113.0 % | 0.5 % | 2.6 % | 619.7 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0009 ppm | 0.0068 ppm | 0.0005 ppm | 0.1821 ppm | 1.6527 ppm | 3.8889 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0009 ppm | 0.0066 ppm | 0.0006 ppm | 0.1816 ppm | 1.6411 ppm | 3.8979 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0010 ppm | 0.0069 ppm | 0.0005 ppm | 0.1826 ppm | 1.6531 ppm | 3.8867 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0009 ppm | 0.0069 ppm | 0.0004 ppm | 0.1821 ppm | 1.6640 ppm | 3.8822 ppm |
| Concentration RSD | 18.9 % | 5.7 % | 2.4 % | 27.2 % | 0.3 % | 0.7 % | 0.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0623 ppm | -0.0001 ppm | 7.8311 ppm | 0.0029 ppm | -0.0097 ppm | -0.0003 ppm | -0.0009 ppm |
| Concentration per Run 1 | 0.0622 ppm | -0.0002 ppm | 7.7493 ppm | 0.0029 ppm | -0.0093 ppm | -0.0007 ppm | -0.0017 ppm |
| Concentration per Run 2 | 0.0623 ppm | -0.0001 ppm | 7.8791 ppm | 0.0028 ppm | -0.0097 ppm | 0.0003 ppm | -0.0005 ppm |
| Concentration per Run 3 | 0.0625 ppm | -0.0001 ppm | 7.8648 ppm | 0.0030 ppm | -0.0101 ppm | -0.0005 ppm | -0.0006 ppm |
| Concentration RSD | 0.3 % | 61.0 % | 0.9 % | 3.1 % | 4.0 % | 186.1 % | 67.8 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 20.5304 [SIC 200] | 0.0002 ppm | 0.1526 ppm | 0.0031 ppm | -0.0005 ppm | 0.0004 ppm | 0.0139 ppm |
| Concentration per Run 1 | 20.5027 ppm | 0.0004 ppm | 0.1518 ppm | 0.0034 ppm | -0.0011 ppm | 0.0002 ppm | 0.0140 ppm |
| Concentration per Run 2 | 20.4923 ppm | 0.0001 ppm | 0.1535 ppm | 0.0029 ppm | -0.0007 ppm | 0.0005 ppm | 0.0138 ppm |
| Concentration per Run 3 | 20.5961 ppm | 0.0002 ppm | 0.1526 ppm | 0.0032 ppm | 0.0002 ppm | 0.0003 ppm | 0.0138 ppm |
| Concentration RSD | 0.3 % | 63.3 % | 0.5 % | 8.3 % | 123.8 % | 44.2 % | 0.8 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 101.1685 % | 102.8385 % | 102.4707 % | 102.4707 % | 100.7441 % | 103.7378 % | 0.0027 ppm |
| Concentration per Run 1 | 102.8611 % | 102.7186 % | 102.9360 % | 102.5745 % | 100.6756 % | 103.5469 % | 0.0032 ppm |
| Concentration per Run 2 | 100.2887 % | 102.9310 % | 102.4031 % | 102.1279 % | 101.0964 % | 103.8351 % | 0.0028 ppm |
| Concentration per Run 3 | 100.3558 % | 102.8659 % | 102.0731 % | 102.7097 % | 100.4605 % | 103.8314 % | 0.0022 ppm |
| Concentration RSD | 1.4 % | 0.1 % | 0.4 % | 0.3 % | 0.3 % | 0.2 % | 18.7 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512368-16 WG2039059
Analysis started at: 3/12/2025 8:49:01 PM
Rack: 1
Vial: 44

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0082 ppm | -0.0015 ppm | 0.0136 ppm | 0.0405 ppm | 0.0000 ppm | 20.5336 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0127 ppm | -0.0015 ppm | 0.0135 ppm | 0.0393 ppm | 0.0000 ppm | 20.3326 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0083 ppm | -0.0021 ppm | 0.0134 ppm | 0.0408 ppm | 0.0000 ppm | 20.3547 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0035 ppm | -0.0009 ppm | 0.0139 ppm | 0.0415 ppm | 0.0000 ppm | 20.9137 ppm |
| Concentration RSD | 133.4 % | 56.0 % | 42.7 % | 2.2 % | 2.8 % | 78.6 % | 1.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0004 ppm | 0.0006 ppm | 0.0003 ppm | 0.0035 ppm | 1.9946 ppm | 6.0085 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0004 ppm | 0.0003 ppm | 0.0003 ppm | 0.0028 ppm | 1.9609 ppm | 6.0109 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0005 ppm | 0.0008 ppm | 0.0002 ppm | 0.0045 ppm | 1.9988 ppm | 6.0035 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0004 ppm | 0.0008 ppm | 0.0004 ppm | 0.0032 ppm | 2.0242 ppm | 6.0111 ppm |
| Concentration RSD | 164.0 % | 19.1 % | 41.9 % | 33.6 % | 25.3 % | 1.6 % | 0.1 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0047 ppm | -0.0003 ppm | 10.4871 ppm | 0.0001 ppm | -0.0038 ppm | -0.0007 ppm | -0.0011 ppm |
| Concentration per Run 1 | 0.0044 ppm | -0.0006 ppm | 10.3147 ppm | 0.0002 ppm | -0.0037 ppm | -0.0017 ppm | -0.0010 ppm |
| Concentration per Run 2 | 0.0050 ppm | -0.0003 ppm | 10.4664 ppm | 0.0002 ppm | -0.0042 ppm | -0.0004 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0049 ppm | -0.0002 ppm | 10.6802 ppm | 0.0000 ppm | -0.0036 ppm | 0.0001 ppm | -0.0027 ppm |
| Concentration RSD | 7.0 % | 57.5 % | 1.8 % | 64.5 % | 7.5 % | 141.6 % | 140.0 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 7.4040 ppm | 0.0007 ppm | 0.0909 ppm | 0.0003 ppm | -0.0011 ppm | 0.0002 ppm | 0.0125 ppm |
| Concentration per Run 1 | 7.3865 ppm | 0.0012 ppm | 0.0896 ppm | 0.0004 ppm | -0.0006 ppm | 0.0003 ppm | 0.0124 ppm |
| Concentration per Run 2 | 7.4402 ppm | 0.0006 ppm | 0.0906 ppm | 0.0002 ppm | -0.0016 ppm | 0.0002 ppm | 0.0125 ppm |
| Concentration per Run 3 | 7.3852 ppm | 0.0003 ppm | 0.0925 ppm | 0.0004 ppm | -0.0010 ppm | 0.0001 ppm | 0.0125 ppm |
| Concentration RSD | 0.4 % | 66.1 % | 1.7 % | 45.2 % | 51.0 % | 50.6 % | 0.5 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 101.2237 % | 102.7456 % | 101.9821 % | 101.8784 % | 100.9668 % | 103.6144 % | 0.0001 ppm |
| Concentration per Run 1 | 103.3297 % | 102.9173 % | 102.3044 % | 102.4869 % | 101.5161 % | 103.7755 % | -0.0002 ppm |
| Concentration per Run 2 | 101.3228 % | 102.8984 % | 102.2266 % | 102.9010 % | 100.4668 % | 103.7474 % | 0.0006 ppm |
| Concentration per Run 3 | 99.0187 % | 102.4212 % | 101.4152 % | 100.2472 % | 100.9176 % | 103.3203 % | -0.0001 ppm |
| Concentration RSD | 2.1 % | 0.3 % | 0.5 % | 1.4 % | 0.5 % | 0.2 % | 437.9 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512368-17 WG2039059
Analysis started at: 3/12/2025 8:55:35 PM
Rack: 1
Vial: 45

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0020 ppm | -0.0014 ppm | 0.0117 ppm | 0.0231 ppm | 0.0001 ppm | 14.5303 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0005 ppm | -0.0017 ppm | 0.0116 ppm | 0.0224 ppm | 0.0001 ppm | 14.3760 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0050 ppm | -0.0010 ppm | 0.0120 ppm | 0.0234 ppm | 0.0000 ppm | 14.4922 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0014 ppm | -0.0015 ppm | 0.0114 ppm | 0.0235 ppm | 0.0000 ppm | 14.7227 ppm |
| Concentration RSD | 342.2 % | 143.0 % | 27.1 % | 2.3 % | 2.7 % | 39.1 % | 1.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0029 ppm | 0.0013 ppm | 0.0004 ppm | 0.3405 ppm | 1.2358 ppm | 6.1818 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0029 ppm | 0.0013 ppm | 0.0002 ppm | 0.3348 ppm | 1.2086 ppm | 6.1901 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0029 ppm | 0.0013 ppm | 0.0005 ppm | 0.3420 ppm | 1.2451 ppm | 6.1867 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0030 ppm | 0.0014 ppm | 0.0005 ppm | 0.3447 ppm | 1.2538 ppm | 6.1685 ppm |
| Concentration RSD | 5.8 % | 2.9 % | 6.5 % | 41.4 % | 1.5 % | 1.9 % | 0.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0245 ppm | -0.0004 ppm | 14.1655 ppm | 0.0049 ppm | -0.0052 ppm | -0.0003 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0242 ppm | -0.0005 ppm | 13.9495 ppm | 0.0050 ppm | -0.0052 ppm | -0.0006 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0247 ppm | -0.0004 ppm | 14.1521 ppm | 0.0049 ppm | -0.0049 ppm | -0.0002 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0248 ppm | -0.0003 ppm | 14.3950 ppm | 0.0047 ppm | -0.0055 ppm | 0.0000 ppm | -0.0001 ppm |
| Concentration RSD | 1.3 % | 24.8 % | 1.6 % | 3.3 % | 6.2 % | 122.5 % | 115.3 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.8654 ppm | 0.0003 ppm | 0.0739 ppm | 0.0004 ppm | -0.0006 ppm | 0.0001 ppm | 0.0257 ppm |
| Concentration per Run 1 | 9.8637 ppm | 0.0001 ppm | 0.0727 ppm | 0.0005 ppm | -0.0003 ppm | 0.0000 ppm | 0.0257 ppm |
| Concentration per Run 2 | 9.8602 ppm | 0.0001 ppm | 0.0740 ppm | 0.0002 ppm | -0.0012 ppm | 0.0001 ppm | 0.0256 ppm |
| Concentration per Run 3 | 9.8723 ppm | 0.0007 ppm | 0.0749 ppm | 0.0004 ppm | -0.0002 ppm | 0.0002 ppm | 0.0259 ppm |
| Concentration RSD | 0.1 % | 95.4 % | 1.5 % | 40.1 % | 99.3 % | 58.2 % | 0.7 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.3271 % | 103.2289 % | 102.5356 % | 102.3442 % | 101.7602 % | 104.7617 % | 0.0025 ppm |
| Concentration per Run 1 | 102.7555 % | 103.0036 % | 102.2192 % | 103.3808 % | 102.0090 % | 104.4225 % | 0.0029 ppm |
| Concentration per Run 2 | 100.1091 % | 103.0990 % | 102.4792 % | 102.8901 % | 101.8049 % | 104.7086 % | 0.0027 ppm |
| Concentration per Run 3 | 98.1165 % | 103.5842 % | 102.9084 % | 100.7617 % | 101.4668 % | 105.1540 % | 0.0018 ppm |
| Concentration RSD | 2.3 % | 0.3 % | 0.3 % | 1.4 % | 0.3 % | 0.4 % | 23.8 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512368-19 WG2039059
Analysis started at: 3/12/2025 9:02:10 PM
Rack: 1
Vial: 46

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0074 ppm | -0.0005 ppm | 0.0138 ppm | 0.0410 ppm | 0.0000 ppm | 20.8918 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0117 ppm | -0.0004 ppm | 0.0138 ppm | 0.0403 ppm | 0.0000 ppm | 20.8542 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0109 ppm | 0.0006 ppm | 0.0136 ppm | 0.0414 ppm | 0.0000 ppm | 20.9429 ppm |
| Concentration per Run 3 | 0.0003 ppm | -0.0003 ppm | -0.0015 ppm | 0.0139 ppm | 0.0414 ppm | 0.0000 ppm | 20.8782 ppm |
| Concentration RSD | 348.4 % | 90.0 % | 232.9 % | 1.1 % | 1.5 % | 114.6 % | 0.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0005 ppm | 0.0007 ppm | 0.0003 ppm | 0.0035 ppm | 2.0301 ppm | 6.1118 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0005 ppm | 0.0006 ppm | 0.0004 ppm | 0.0042 ppm | 2.0207 ppm | 6.0926 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0006 ppm | 0.0008 ppm | 0.0002 ppm | 0.0042 ppm | 2.0320 ppm | 6.1166 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0004 ppm | 0.0006 ppm | 0.0004 ppm | 0.0022 ppm | 2.0376 ppm | 6.1263 ppm |
| Concentration RSD | 6.0 % | 24.2 % | 15.6 % | 35.8 % | 32.8 % | 0.4 % | 0.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0029 ppm | -0.0005 ppm | 10.6556 ppm | 0.0001 ppm | -0.0039 ppm | -0.0003 ppm | -0.0021 ppm |
| Concentration per Run 1 | 0.0030 ppm | -0.0006 ppm | 10.5721 ppm | -0.0003 ppm | -0.0040 ppm | -0.0006 ppm | -0.0028 ppm |
| Concentration per Run 2 | 0.0028 ppm | -0.0003 ppm | 10.7102 ppm | 0.0004 ppm | -0.0036 ppm | 0.0000 ppm | -0.0031 ppm |
| Concentration per Run 3 | 0.0031 ppm | -0.0005 ppm | 10.6844 ppm | 0.0001 ppm | -0.0041 ppm | -0.0003 ppm | -0.0004 ppm |
| Concentration RSD | 5.7 % | 32.9 % | 0.7 % | 527.5 % | 6.5 % | 90.4 % | 69.7 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 7.5192 ppm | 0.0004 ppm | 0.0923 ppm | 0.0004 ppm | -0.0006 ppm | 0.0001 ppm | 0.0129 ppm |
| Concentration per Run 1 | 7.4942 ppm | 0.0003 ppm | 0.0920 ppm | 0.0005 ppm | -0.0009 ppm | 0.0002 ppm | 0.0129 ppm |
| Concentration per Run 2 | 7.4970 ppm | 0.0003 ppm | 0.0929 ppm | 0.0003 ppm | 0.0000 ppm | 0.0002 ppm | 0.0130 ppm |
| Concentration per Run 3 | 7.5665 ppm | 0.0004 ppm | 0.0921 ppm | 0.0003 ppm | -0.0008 ppm | 0.0000 ppm | 0.0129 ppm |
| Concentration RSD | 0.5 % | 22.9 % | 0.5 % | 26.9 % | 92.9 % | 100.1 % | 0.5 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 101.2225 % | 103.2014 % | 102.5529 % | 102.3316 % | 101.3335 % | 103.9444 % | 0.0007 ppm |
| Concentration per Run 1 | 103.1592 % | 103.2218 % | 103.2842 % | 102.7041 % | 101.5855 % | 103.9388 % | 0.0012 ppm |
| Concentration per Run 2 | 100.5556 % | 103.1401 % | 102.3605 % | 102.3369 % | 101.5472 % | 103.8676 % | 0.0011 ppm |
| Concentration per Run 3 | 99.9527 % | 103.2422 % | 102.0140 % | 101.9539 % | 100.8678 % | 104.0267 % | -0.0004 ppm |
| Concentration RSD | 1.7 % | 0.1 % | 0.6 % | 0.4 % | 0.4 % | 0.1 % | 134.7 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512607-01 WG2039059
Analysis started at: 3/12/2025 9:08:46 PM
Rack: 1
Vial: 47

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0075 ppm | -0.0018 ppm | 0.0401 ppm | 0.0486 ppm | 0.0000 ppm | 15.4183 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0107 ppm | -0.0023 ppm | 0.0400 ppm | 0.0474 ppm | 0.0000 ppm | 15.4023 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0056 ppm | -0.0017 ppm | 0.0401 ppm | 0.0491 ppm | 0.0000 ppm | 15.3835 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0063 ppm | -0.0013 ppm | 0.0403 ppm | 0.0493 ppm | 0.0000 ppm | 15.4692 ppm |
| Concentration RSD | 130.1 % | 36.8 % | 29.9 % | 0.3 % | 2.2 % | 1,661.5 % | 0.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0002 ppm | 0.0003 ppm | 0.0004 ppm | 0.0086 ppm | 1.7260 ppm | 4.8788 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0003 ppm | 0.0003 ppm | 0.0005 ppm | 0.0089 ppm | 1.7363 ppm | 4.8744 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0003 ppm | 0.0004 ppm | 0.0084 ppm | 1.7412 ppm | 4.8856 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0003 ppm | 0.0003 ppm | 0.0004 ppm | 0.0085 ppm | 1.7006 ppm | 4.8763 ppm |
| Concentration RSD | 137.5 % | 45.5 % | 0.7 % | 11.8 % | 3.0 % | 1.3 % | 0.1 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0042 ppm | -0.0004 ppm | 55.9326 ppm | 0.0001 ppm | -0.0017 ppm | -0.0006 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0040 ppm | -0.0004 ppm | 55.6976 ppm | 0.0002 ppm | -0.0017 ppm | -0.0005 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0046 ppm | -0.0003 ppm | 56.2505 ppm | 0.0000 ppm | -0.0017 ppm | -0.0011 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0040 ppm | -0.0004 ppm | 55.8497 ppm | 0.0000 ppm | -0.0018 ppm | -0.0003 ppm | -0.0005 ppm |
| Concentration RSD | 8.0 % | 18.3 % | 0.5 % | 187.0 % | 4.2 % | 67.3 % | 209.6 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.2567 ppm | 0.0002 ppm | 0.0641 ppm | 0.0004 ppm | -0.0004 ppm | 0.0002 ppm | 0.0006 ppm |
| Concentration per Run 1 | 3.2701 ppm | 0.0000 ppm | 0.0639 ppm | 0.0003 ppm | -0.0006 ppm | 0.0002 ppm | 0.0006 ppm |
| Concentration per Run 2 | 3.2721 ppm | 0.0005 ppm | 0.0643 ppm | 0.0005 ppm | -0.0004 ppm | 0.0003 ppm | 0.0007 ppm |
| Concentration per Run 3 | 3.2280 ppm | 0.0001 ppm | 0.0641 ppm | 0.0005 ppm | -0.0001 ppm | 0.0001 ppm | 0.0005 ppm |
| Concentration RSD | 0.8 % | 120.9 % | 0.3 % | 20.2 % | 72.4 % | 33.7 % | 17.6 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.7310 % | 102.7501 % | 102.4037 % | 102.4906 % | 100.4146 % | 103.4608 % | -0.0003 ppm |
| Concentration per Run 1 | 102.7385 % | 103.0938 % | 102.9463 % | 102.4581 % | 100.3210 % | 103.6550 % | -0.0005 ppm |
| Concentration per Run 2 | 100.4181 % | 102.5647 % | 101.9176 % | 102.8055 % | 99.9262 % | 103.3592 % | -0.0001 ppm |
| Concentration per Run 3 | 99.0363 % | 102.5918 % | 102.3473 % | 102.2083 % | 100.9965 % | 103.3682 % | -0.0002 ppm |
| Concentration RSD | 1.9 % | 0.3 % | 0.5 % | 0.3 % | 0.5 % | 0.2 % | 80.7 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512607-02 WG2039059
Analysis started at: 3/12/2025 9:15:21 PM
Rack: 1
Vial: 48

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 0.0298 ppm | -0.0013 ppm | 0.0063 ppm | 0.0122 ppm | 0.0000 ppm | 10.3237 ppm |
| Concentration per Run 1 | 0.0015 ppm | 0.0296 ppm | -0.0012 ppm | 0.0062 ppm | 0.0117 ppm | 0.0000 ppm | 10.2247 ppm |
| Concentration per Run 2 | 0.0017 ppm | 0.0308 ppm | -0.0010 ppm | 0.0066 ppm | 0.0125 ppm | 0.0000 ppm | 10.4164 ppm |
| Concentration per Run 3 | 0.0014 ppm | 0.0290 ppm | -0.0019 ppm | 0.0062 ppm | 0.0123 ppm | 0.0001 ppm | 10.3301 ppm |
| Concentration RSD | 11.1 % | 3.0 % | 33.6 % | 3.4 % | 3.3 % | 218.8 % | 0.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | -0.0002 ppm | 0.0055 ppm | 0.0017 ppm | 0.0570 ppm | 0.8542 ppm | 4.4269 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0002 ppm | 0.0056 ppm | 0.0018 ppm | 0.0541 ppm | 0.8509 ppm | 4.4680 ppm |
| Concentration per Run 2 | 0.0002 ppm | -0.0002 ppm | 0.0053 ppm | 0.0017 ppm | 0.0586 ppm | 0.8829 ppm | 4.3964 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0002 ppm | 0.0056 ppm | 0.0016 ppm | 0.0585 ppm | 0.8289 ppm | 4.4162 ppm |
| Concentration RSD | 9.0 % | 13.8 % | 3.7 % | 5.6 % | 4.5 % | 3.2 % | 0.8 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0019 ppm | 0.0002 ppm | 6.4076 ppm | 0.0022 ppm | -0.0041 ppm | 0.0001 ppm | -0.0010 ppm |
| Concentration per Run 1 | 0.0017 ppm | 0.0001 ppm | 6.3785 ppm | 0.0022 ppm | -0.0045 ppm | 0.0000 ppm | -0.0023 ppm |
| Concentration per Run 2 | 0.0019 ppm | 0.0001 ppm | 6.4484 ppm | 0.0023 ppm | -0.0039 ppm | 0.0011 ppm | -0.0011 ppm |
| Concentration per Run 3 | 0.0020 ppm | 0.0002 ppm | 6.3959 ppm | 0.0021 ppm | -0.0038 ppm | -0.0009 ppm | 0.0005 ppm |
| Concentration RSD | 8.3 % | 25.9 % | 0.6 % | 3.7 % | 9.2 % | 1,347.9 % | 147.4 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.9361 ppm | 0.0003 ppm | 0.0518 ppm | 0.0018 ppm | -0.0006 ppm | 0.0002 ppm | 0.0074 ppm |
| Concentration per Run 1 | 8.9319 ppm | 0.0003 ppm | 0.0515 ppm | 0.0019 ppm | -0.0009 ppm | 0.0001 ppm | 0.0074 ppm |
| Concentration per Run 2 | 8.9263 ppm | 0.0002 ppm | 0.0520 ppm | 0.0017 ppm | -0.0003 ppm | 0.0002 ppm | 0.0073 ppm |
| Concentration per Run 3 | 8.9502 ppm | 0.0005 ppm | 0.0518 ppm | 0.0019 ppm | -0.0008 ppm | 0.0003 ppm | 0.0073 ppm |
| Concentration RSD | 0.1 % | 34.2 % | 0.5 % | 6.9 % | 50.6 % | 64.5 % | 0.9 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 101.7414 % | 104.4248 % | 103.4738 % | 103.5811 % | 103.3480 % | 105.4342 % | 0.0016 ppm |
| Concentration per Run 1 | 104.6262 % | 104.3088 % | 103.3999 % | 104.4206 % | 103.4135 % | 104.4463 % | 0.0014 ppm |
| Concentration per Run 2 | 100.0564 % | 104.5706 % | 103.4045 % | 102.9608 % | 103.5262 % | 105.8624 % | 0.0015 ppm |
| Concentration per Run 3 | 100.5417 % | 104.3949 % | 103.6170 % | 103.3620 % | 103.1043 % | 105.9938 % | 0.0020 ppm |
| Concentration RSD | 2.5 % | 0.1 % | 0.1 % | 0.7 % | 0.2 % | 0.8 % | 18.6 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512607-03 WG2039059
Analysis started at: 3/12/2025 9:21:57 PM
Rack: 1
Vial: 49

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0301 ppm | -0.0008 ppm | 0.0168 ppm | 0.0580 ppm | 0.0000 ppm | 5.8430 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0342 ppm | -0.0009 ppm | 0.0169 ppm | 0.0566 ppm | 0.0000 ppm | 5.8026 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0249 ppm | -0.0008 ppm | 0.0166 ppm | 0.0585 ppm | 0.0000 ppm | 5.8712 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0312 ppm | -0.0008 ppm | 0.0169 ppm | 0.0587 ppm | 0.0001 ppm | 5.8552 ppm |
| Concentration RSD | 190.4 % | 15.7 % | 8.0 % | 1.0 % | 2.0 % | 119.3 % | 0.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0002 ppm | 0.0012 ppm | 0.0006 ppm | 0.0603 ppm | 1.2515 ppm | 2.0324 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0001 ppm | 0.0010 ppm | 0.0006 ppm | 0.0586 ppm | 1.2539 ppm | 2.0097 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0003 ppm | 0.0015 ppm | 0.0005 ppm | 0.0615 ppm | 1.2461 ppm | 2.0290 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0003 ppm | 0.0010 ppm | 0.0007 ppm | 0.0608 ppm | 1.2545 ppm | 2.0583 ppm |
| Concentration RSD | 44.1 % | 63.4 % | 22.1 % | 12.4 % | 2.6 % | 0.4 % | 1.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0206 ppm | -0.0003 ppm | 73.3367 ppm | 0.0006 ppm | -0.0023 ppm | -0.0008 ppm | 0.0018 ppm |
| Concentration per Run 1 | 0.0204 ppm | -0.0002 ppm | 72.8266 ppm | 0.0004 ppm | -0.0024 ppm | -0.0007 ppm | 0.0013 ppm |
| Concentration per Run 2 | 0.0208 ppm | -0.0003 ppm | 73.3232 ppm | 0.0008 ppm | -0.0023 ppm | -0.0007 ppm | 0.0016 ppm |
| Concentration per Run 3 | 0.0207 ppm | -0.0003 ppm | 73.8602 ppm | 0.0006 ppm | -0.0022 ppm | -0.0009 ppm | 0.0024 ppm |
| Concentration RSD | 1.1 % | 21.7 % | 0.7 % | 33.7 % | 5.5 % | 13.9 % | 33.8 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.4971 ppm | 0.0136 ppm | 0.0301 ppm | 0.0021 ppm | -0.0001 ppm | 0.0002 ppm | 0.0025 ppm |
| Concentration per Run 1 | 4.5073 ppm | 0.0136 ppm | 0.0297 ppm | 0.0021 ppm | 0.0008 ppm | 0.0003 ppm | 0.0025 ppm |
| Concentration per Run 2 | 4.4535 ppm | 0.0130 ppm | 0.0302 ppm | 0.0022 ppm | -0.0011 ppm | 0.0002 ppm | 0.0024 ppm |
| Concentration per Run 3 | 4.5304 ppm | 0.0141 ppm | 0.0303 ppm | 0.0019 ppm | -0.0001 ppm | 0.0002 ppm | 0.0025 ppm |
| Concentration RSD | 0.9 % | 3.8 % | 1.0 % | 6.2 % | 746.2 % | 23.2 % | 2.8 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.3123 % | 100.8841 % | 101.6833 % | 103.7811 % | 99.3470 % | 101.3685 % | -0.0001 ppm |
| Concentration per Run 1 | 102.5206 % | 101.0040 % | 101.9389 % | 104.4912 % | 99.3957 % | 102.0777 % | -0.0002 ppm |
| Concentration per Run 2 | 99.0796 % | 100.5875 % | 102.6071 % | 103.3187 % | 100.2952 % | 101.2351 % | 0.0001 ppm |
| Concentration per Run 3 | 99.3366 % | 101.0607 % | 100.5039 % | 103.5334 % | 98.3500 % | 100.7926 % | -0.0001 ppm |
| Concentration RSD | 1.9 % | 0.3 % | 1.1 % | 0.6 % | 1.0 % | 0.6 % | 252.2 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512607-04 WG2039059
Analysis started at: 3/12/2025 9:28:33 PM
Rack: 1
Vial: 50

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 0.0124 ppm | -0.0021 ppm | 0.0123 ppm | 0.0344 ppm | 0.0000 ppm | 13.6478 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.0130 ppm | -0.0026 ppm | 0.0122 ppm | 0.0335 ppm | 0.0000 ppm | 13.5676 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0124 ppm | -0.0014 ppm | 0.0123 ppm | 0.0346 ppm | 0.0001 ppm | 13.6747 ppm |
| Concentration per Run 3 | 0.0011 ppm | 0.0117 ppm | -0.0023 ppm | 0.0126 ppm | 0.0350 ppm | 0.0000 ppm | 13.7012 ppm |
| Concentration RSD | 6.7 % | 5.5 % | 29.9 % | 1.9 % | 2.2 % | 171.3 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0002 ppm | 0.0044 ppm | 0.0017 ppm | 0.0163 ppm | 1.1170 ppm | 5.3918 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0002 ppm | 0.0042 ppm | 0.0016 ppm | 0.0157 ppm | 1.0993 ppm | 5.3919 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0003 ppm | 0.0044 ppm | 0.0018 ppm | 0.0162 ppm | 1.1392 ppm | 5.4069 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0002 ppm | 0.0047 ppm | 0.0018 ppm | 0.0168 ppm | 1.1124 ppm | 5.3764 ppm |
| Concentration RSD | 24.2 % | 34.0 % | 5.8 % | 5.9 % | 3.3 % | 1.8 % | 0.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | -0.0002 ppm | 13.2700 ppm | 0.0037 ppm | -0.0048 ppm | -0.0002 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0013 ppm | -0.0003 ppm | 13.1618 ppm | 0.0037 ppm | -0.0044 ppm | 0.0002 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0015 ppm | -0.0002 ppm | 13.3559 ppm | 0.0037 ppm | -0.0054 ppm | -0.0009 ppm | -0.0012 ppm |
| Concentration per Run 3 | 0.0009 ppm | -0.0002 ppm | 13.2922 ppm | 0.0036 ppm | -0.0045 ppm | 0.0002 ppm | 0.0001 ppm |
| Concentration RSD | 24.9 % | 18.9 % | 0.7 % | 1.8 % | 11.3 % | 331.2 % | 435.2 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.1250 ppm | 0.0015 ppm | 0.0774 ppm | 0.0006 ppm | -0.0003 ppm | 0.0003 ppm | 0.0115 ppm |
| Concentration per Run 1 | 9.1063 ppm | 0.0012 ppm | 0.0765 ppm | 0.0005 ppm | -0.0006 ppm | 0.0005 ppm | 0.0116 ppm |
| Concentration per Run 2 | 9.1170 ppm | 0.0016 ppm | 0.0780 ppm | 0.0008 ppm | 0.0005 ppm | 0.0003 ppm | 0.0115 ppm |
| Concentration per Run 3 | 9.1516 ppm | 0.0017 ppm | 0.0777 ppm | 0.0004 ppm | -0.0007 ppm | 0.0003 ppm | 0.0115 ppm |
| Concentration RSD | 0.3 % | 18.4 % | 1.0 % | 32.1 % | 260.2 % | 31.7 % | 0.2 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.3486 % | 103.1591 % | 102.6134 % | 102.7284 % | 102.1034 % | 104.4303 % | 0.0020 ppm |
| Concentration per Run 1 | 102.9176 % | 103.2970 % | 102.6617 % | 103.3757 % | 102.2873 % | 104.4946 % | 0.0017 ppm |
| Concentration per Run 2 | 99.7183 % | 103.0806 % | 103.3321 % | 102.6338 % | 101.9440 % | 104.3563 % | 0.0019 ppm |
| Concentration per Run 3 | 98.4099 % | 103.0996 % | 101.8462 % | 102.1756 % | 102.0788 % | 104.4400 % | 0.0023 ppm |
| Concentration RSD | 2.3 % | 0.1 % | 0.7 % | 0.6 % | 0.2 % | 0.1 % | 17.0 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512607-05 WG2039059
Analysis started at: 3/12/2025 9:35:06 PM
Rack: 1
Vial: 51

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0096 ppm | -0.0006 ppm | 0.0237 ppm | 0.0150 ppm | 0.0000 ppm | 14.3873 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0108 ppm | -0.0001 ppm | 0.0232 ppm | 0.0146 ppm | 0.0000 ppm | 14.3007 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0064 ppm | -0.0004 ppm | 0.0241 ppm | 0.0153 ppm | 0.0001 ppm | 14.4321 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0116 ppm | -0.0012 ppm | 0.0238 ppm | 0.0152 ppm | 0.0000 ppm | 14.4293 ppm |
| Concentration RSD | 289.7 % | 29.1 % | 97.6 % | 1.8 % | 2.6 % | 235.2 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0004 ppm | 0.0016 ppm | 0.0003 ppm | 0.0626 ppm | 1.5278 ppm | 6.1254 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0004 ppm | 0.0016 ppm | 0.0002 ppm | 0.0614 ppm | 1.5388 ppm | 6.1516 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0004 ppm | 0.0018 ppm | 0.0003 ppm | 0.0640 ppm | 1.5321 ppm | 6.1116 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0004 ppm | 0.0014 ppm | 0.0005 ppm | 0.0625 ppm | 1.5125 ppm | 6.1129 ppm |
| Concentration RSD | 21.7 % | 8.2 % | 11.7 % | 32.1 % | 2.1 % | 0.9 % | 0.4 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0169 ppm | -0.0004 ppm | 22.0035 ppm | -0.0001 ppm | -0.0039 ppm | -0.0004 ppm | -0.0008 ppm |
| Concentration per Run 1 | 0.0170 ppm | -0.0005 ppm | 21.8565 ppm | 0.0000 ppm | -0.0036 ppm | 0.0004 ppm | -0.0008 ppm |
| Concentration per Run 2 | 0.0169 ppm | -0.0004 ppm | 22.1466 ppm | -0.0002 ppm | -0.0041 ppm | -0.0007 ppm | -0.0007 ppm |
| Concentration per Run 3 | 0.0170 ppm | -0.0003 ppm | 22.0075 ppm | -0.0001 ppm | -0.0040 ppm | -0.0008 ppm | -0.0009 ppm |
| Concentration RSD | 0.3 % | 17.8 % | 0.7 % | 65.2 % | 7.8 % | 183.1 % | 9.6 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 7.8663 ppm | 0.0002 ppm | 0.0773 ppm | 0.0006 ppm | -0.0006 ppm | 0.0000 ppm | 0.0007 ppm |
| Concentration per Run 1 | 7.8424 ppm | 0.0002 ppm | 0.0768 ppm | 0.0008 ppm | -0.0004 ppm | 0.0003 ppm | 0.0007 ppm |
| Concentration per Run 2 | 7.8798 ppm | 0.0002 ppm | 0.0776 ppm | 0.0003 ppm | -0.0007 ppm | -0.0002 ppm | 0.0006 ppm |
| Concentration per Run 3 | 7.8769 ppm | 0.0001 ppm | 0.0773 ppm | 0.0008 ppm | -0.0006 ppm | -0.0002 ppm | 0.0008 ppm |
| Concentration RSD | 0.3 % | 43.3 % | 0.5 % | 38.8 % | 23.5 % | 798.9 % | 13.9 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.9255 % | 103.7809 % | 102.4789 % | 102.5048 % | 101.8574 % | 104.6419 % | 0.0019 ppm |
| Concentration per Run 1 | 103.3862 % | 103.3740 % | 103.4048 % | 103.2915 % | 102.1509 % | 104.3282 % | 0.0017 ppm |
| Concentration per Run 2 | 100.2627 % | 103.9884 % | 102.1562 % | 102.5020 % | 101.6116 % | 104.9553 % | 0.0011 ppm |
| Concentration per Run 3 | 99.1278 % | 103.9803 % | 101.8757 % | 101.7210 % | 101.8097 % | 104.6421 % | 0.0030 ppm |
| Concentration RSD | 2.2 % | 0.3 % | 0.8 % | 0.8 % | 0.3 % | 0.3 % | 49.4 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCV
Analysis started at: 3/12/2025 9:41:40 PM
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4672 ppm | 0.4651 ppm | 0.4564 ppm | 0.4505 ppm | 0.4539 ppm | 0.4633 ppm | 0.4933 ppm |
| Concentration per Run 1 | 0.4610 ppm | 0.4581 ppm | 0.4563 ppm | 0.4497 ppm | 0.4459 ppm | 0.4519 ppm | 0.4809 ppm |
| Concentration per Run 2 | 0.4723 ppm | 0.4668 ppm | 0.4590 ppm | 0.4516 ppm | 0.4568 ppm | 0.4683 ppm | 0.5025 ppm |
| Concentration per Run 3 | 0.4682 ppm | 0.4704 ppm | 0.4540 ppm | 0.4501 ppm | 0.4590 ppm | 0.4697 ppm | 0.4964 ppm |
| Recovery Percentage 1 | 93.439 % | 93.016 % | 91.286 % | 90.091 % | 90.776 % | 92.660 % | 98.656 % |
| Concentration RSD | 1.2 % | 1.4 % | 0.6 % | 0.2 % | 1.5 % | 2.1 % | 2.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4503 ppm | 0.4487 ppm | 0.4660 ppm | 0.4572 ppm | 0.4727 ppm | 4.8856 ppm | 0.4814 ppm |
| Concentration per Run 1 | 0.4483 ppm | 0.4471 ppm | 0.4612 ppm | 0.4538 ppm | 0.4595 ppm | 4.7873 ppm | 0.4757 ppm |
| Concentration per Run 2 | 0.4500 ppm | 0.4484 ppm | 0.4718 ppm | 0.4596 ppm | 0.4796 ppm | 4.9393 ppm | 0.4837 ppm |
| Concentration per Run 3 | 0.4526 ppm | 0.4506 ppm | 0.4649 ppm | 0.4581 ppm | 0.4789 ppm | 4.9301 ppm | 0.4849 ppm |
| Recovery Percentage 1 | 90.056 % | 89.741 % | 93.190 % | 91.441 % | 94.535 % | 97.711 % | 96.288 % |
| Concentration RSD | 0.5 % | 0.4 % | 1.2 % | 0.7 % | 2.4 % | 1.7 % | 1.0 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4605 ppm | 0.4660 ppm | 9.0129 ppm | 0.4546 ppm | 0.4589 ppm | 0.4488 ppm | 0.4598 ppm |
| Concentration per Run 1 | 0.4499 ppm | 0.4647 ppm | 8.8172 ppm | 0.4535 ppm | 0.4578 ppm | 0.4477 ppm | 0.4600 ppm |
| Concentration per Run 2 | 0.4650 ppm | 0.4675 ppm | 9.0951 ppm | 0.4538 ppm | 0.4586 ppm | 0.4491 ppm | 0.4615 ppm |
| Concentration per Run 3 | 0.4665 ppm | 0.4659 ppm | 9.1264 ppm | 0.4566 ppm | 0.4601 ppm | 0.4497 ppm | 0.4580 ppm |
| Recovery Percentage 1 | 92.091 % | 93.204 % | 90.129 % | 90.926 % | 91.770 % | 89.768 % | 91.966 % |
| Concentration RSD | 2.0 % | 0.3 % | 1.9 % | 0.4 % | 0.3 % | 0.2 % | 0.4 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.9462 ppm | 0.4510 ppm | 0.4520 ppm | 0.4687 ppm | 0.4562 ppm | 0.4592 ppm | 0.4552 ppm |
| Concentration per Run 1 | 4.9385 ppm | 0.4495 ppm | 0.4410 ppm | 0.4641 ppm | 0.4558 ppm | 0.4589 ppm | 0.4532 ppm |
| Concentration per Run 2 | 4.9446 ppm | 0.4516 ppm | 0.4565 ppm | 0.4734 ppm | 0.4568 ppm | 0.4598 ppm | 0.4546 ppm |
| Concentration per Run 3 | 4.9554 ppm | 0.4518 ppm | 0.4585 ppm | 0.4687 ppm | 0.4559 ppm | 0.4590 ppm | 0.4576 ppm |
| Recovery Percentage 1 | 94.213 % | 90.191 % | 90.397 % | 93.750 % | 91.232 % | 91.847 % | 91.035 % |
| Concentration RSD | 0.2 % | 0.3 % | 2.1 % | 1.0 % | 0.1 % | 0.1 % | 0.5 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.3966 % | 104.0107 % | 103.3411 % | 106.3506 % | 102.5043 % | 106.3076 % | 0.4537 ppm |
| Concentration per Run 1 | 100.9510 % | 104.2737 % | 103.4668 % | 108.7107 % | 102.8313 % | 107.4543 % | 0.4441 ppm |
| Concentration per Run 2 | 98.8212 % | 103.5848 % | 103.3147 % | 105.4140 % | 102.6595 % | 105.3256 % | 0.4571 ppm |
| Concentration per Run 3 | 98.4176 % | 104.1737 % | 103.2417 % | 104.9272 % | 102.0220 % | 106.1430 % | 0.4599 ppm |
| Recovery Percentage 1 | | | | | | | 90.735 % |
| Concentration RSD | 1.4 % | 0.4 % | 0.1 % | 1.9 % | 0.4 % | 1.0 % | 1.9 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCB
Analysis started at: 3/12/2025 9:48:00 PM
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0003 ppm | -0.0002 ppm | -0.0006 ppm | -0.0001 ppm | 0.0000 ppm | 0.0031 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0010 ppm | 0.0008 ppm | -0.0005 ppm | 0.0000 ppm | 0.0000 ppm | 0.0086 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0011 ppm | -0.0009 ppm | -0.0007 ppm | -0.0001 ppm | 0.0001 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0009 ppm | -0.0004 ppm | -0.0008 ppm | 0.0000 ppm | 0.0000 ppm | 0.0011 ppm |
| Recovery Percentage 1 | 0.244 % | -0.259 % | -3.515 % | -2.146 % | -0.540 % | 0.354 % | 3.103 % |
| Concentration RSD | 111.2 % | 442.9 % | 483.5 % | 24.0 % | 108.5 % | 164.2 % | 155.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0000 ppm | 0.0073 ppm | -0.0014 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | -0.0007 ppm | 0.0100 ppm | -0.0005 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | 0.0001 ppm | 0.0006 ppm | -0.0091 ppm | -0.0019 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | -0.0003 ppm | 0.0000 ppm | 0.0001 ppm | 0.0211 ppm | -0.0018 ppm |
| Recovery Percentage 1 | -0.668 % | 0.064 % | -1.396 % | 0.264 % | 0.031 % | 0.293 % | -1.384 % |
| Concentration RSD | 26.9 % | 144.0 % | 119.9 % | 132.4 % | 4,282.5 % | 208.8 % | 55.6 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0002 ppm | -0.0138 ppm | 0.0000 ppm | -0.0001 ppm | 0.0001 ppm | 0.0007 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0003 ppm | -0.0151 ppm | 0.0001 ppm | -0.0002 ppm | 0.0002 ppm | 0.0005 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0002 ppm | -0.0119 ppm | -0.0001 ppm | -0.0001 ppm | -0.0004 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0001 ppm | -0.0144 ppm | -0.0001 ppm | 0.0001 ppm | 0.0007 ppm | 0.0014 ppm |
| Recovery Percentage 1 | -1.330 % | 0.458 % | -0.688 % | -0.175 % | -0.581 % | 0.287 % | 7.172 % |
| Concentration RSD | 170.7 % | 46.7 % | 12.3 % | 289.9 % | 257.1 % | 386.2 % | 81.6 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | -0.0001 ppm | 0.0000 ppm | -0.0001 ppm | 0.0008 ppm | 0.0001 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0001 ppm | 0.0000 ppm | -0.0004 ppm | 0.0008 ppm | -0.0001 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0005 ppm | -0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0013 ppm | 0.0001 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0010 ppm | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | 0.0004 ppm | 0.0003 ppm | 0.0000 ppm |
| Recovery Percentage 1 | -0.109 % | -0.178 % | 0.107 % | -1.443 % | 4.078 % | 1.041 % | 0.338 % |
| Concentration RSD | 81.9 % | 305.9 % | 467.0 % | 148.8 % | 58.3 % | 165.8 % | 581.7 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.2201 % | 105.1820 % | 104.5168 % | 102.7110 % | 106.1809 % | 105.6666 % | 0.0000 ppm |
| Concentration per Run 1 | 102.5251 % | 105.3812 % | 104.2077 % | 103.4893 % | 105.9262 % | 105.8006 % | 0.0002 ppm |
| Concentration per Run 2 | 99.6189 % | 104.8543 % | 104.6892 % | 102.5468 % | 106.1989 % | 105.3287 % | -0.0001 ppm |
| Concentration per Run 3 | 98.5163 % | 105.3106 % | 104.6536 % | 102.0968 % | 106.4176 % | 105.8706 % | -0.0001 ppm |
| Recovery Percentage 1 | | | | | | | -0.025 % |
| Concentration RSD | 2.1 % | 0.3 % | 0.3 % | 0.7 % | 0.2 % | 0.3 % | 8,237.5 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: XWRONG SPOT
Analysis started at: 3/12/2025 9:54:39 PM
Rack: 1
Vial: 14

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0549 ppm | 0.0008 ppm | -0.0019 ppm | 0.0319 ppm | 0.0000 ppm | 13.9679 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0522 ppm | 0.0000 ppm | 0.0000 ppm | 0.0321 ppm | 0.0000 ppm | 14.0656 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0539 ppm | 0.0008 ppm | -0.0019 ppm | 0.0319 ppm | 0.0000 ppm | 13.9200 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0586 ppm | 0.0007 ppm | -0.0019 ppm | 0.0318 ppm | 0.0000 ppm | 13.9180 ppm |
| Recovery Percentage 1 | 1.334 % | 54.913 % | 15.485 % | -6.327 % | 319.357 % | 0.483 % | 13,967.853 % |
| Concentration RSD | 74.5 % | 6.0 % | 5.4 % | 2.9 % | 0.4 % | 66.9 % | 0.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0002 ppm | 0.0639 ppm | 0.0035 ppm | 0.3577 ppm | 0.5545 ppm | 0.7824 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0631 ppm | 0.0035 ppm | 0.3597 ppm | 0.5397 ppm | 0.7768 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0002 ppm | 0.0647 ppm | 0.0035 ppm | 0.3561 ppm | 0.5676 ppm | 0.7879 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.3574 ppm | 0.5561 ppm | 0.0000 ppm |
| Recovery Percentage 1 | -0.252 % | -0.987 % | 638.971 % | 34.797 % | 715.473 % | 22.178 % | 782.357 % |
| Concentration RSD | 6.3 % | 11.9 % | 1.8 % | 1.1 % | 0.5 % | 2.5 % | 1.0 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1443 ppm | -0.0004 ppm | 126.4784 ppm | 0.0006 ppm | 0.0005 ppm | -0.0006 ppm | 0.0015 ppm |
| Concentration per Run 1 | 0.1459 ppm | 0.0000 ppm | 128.3018 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.1437 ppm | -0.0004 ppm | 126.6044 ppm | 0.0005 ppm | 0.0005 ppm | -0.0009 ppm | 0.0018 ppm |
| Concentration per Run 3 | 0.1432 ppm | -0.0004 ppm | 124.5290 ppm | 0.0006 ppm | 0.0005 ppm | -0.0004 ppm | 0.0013 ppm |
| Recovery Percentage 1 | 1,442.898 % | -0.848 % | 6,323.920 % | 2.281 % | 4.689 % | -1.247 % | 15.202 % |
| Concentration RSD | 1.0 % | 0.4 % | 1.5 % | 15.8 % | 3.7 % | 59.7 % | 23.1 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0031 ppm | -0.0001 ppm | 0.0639 ppm | 0.0003 ppm | 0.0019 ppm | 0.0013 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0639 ppm | 0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0049 ppm | 0.0000 ppm | 0.0640 ppm | 0.0001 ppm | 0.0017 ppm | 0.0013 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0111 ppm | -0.0001 ppm | 0.0638 ppm | 0.0000 ppm | 0.0021 ppm | 0.0013 ppm | 0.0002 ppm |
| Recovery Percentage 1 | 0.619 % | -0.176 % | 639.217 % | 2.622 % | 9.414 % | 12.856 % | 2.845 % |
| Concentration RSD | 366.7 % | 85.8 % | 0.1 % | 82.1 % | 12.8 % | 2.9 % | 82.9 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 96.7348 % | 97.7098 % | 439.2913 % | 100.9091 % | 390.4014 % | 99.0143 % | 0.0021 ppm |
| Concentration per Run 1 | 97.0000 % | 99.0719 % | 0.0000 % | 99.5085 % | 0.0000 % | 99.6008 % | 0.0020 ppm |
| Concentration per Run 2 | 96.2594 % | 96.3476 % | 465.4478 % | 101.1621 % | 379.2035 % | 98.4277 % | 0.0019 ppm |
| Concentration per Run 3 | 96.9451 % | 0.0000 % | 413.1348 % | 102.0566 % | 401.5993 % | 0.0000 % | 0.0024 ppm |
| Recovery Percentage 1 | | | | | | | 21.016 % |
| Concentration RSD | 0.4 % | 2.0 % | 8.4 % | 1.3 % | 4.1 % | 0.8 % | 12.0 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: XWRONG SPOT
Analysis started at: 3/12/2025 10:01:21 PM
Rack: 1
Vial: 15

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0010 ppm | 0.0002 ppm | -0.0014 ppm | 0.0000 ppm | 0.0000 ppm | 0.0147 ppm |
| Concentration per Run 1 | -0.0003 ppm | -0.0014 ppm | -0.0008 ppm | -0.0009 ppm | 0.0001 ppm | 0.0001 ppm | 0.0157 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0038 ppm | **0.0000 ppm** | **0.0000 ppm** | 0.0000 ppm | 0.0001 ppm | 0.0143 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0007 ppm | 0.0012 ppm | -0.0019 ppm | -0.0001 ppm | 0.0000 ppm | 0.0140 ppm |
| Concentration RSD | 325.5 % | 261.0 % | 828.6 % | 50.4 % | 474.0 % | 130.0 % | 6.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0080 ppm | 0.0197 ppm | 0.0024 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0003 ppm | -0.0001 ppm | 0.0079 ppm | 0.0252 ppm | 0.0025 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0001 ppm | 0.0083 ppm | 0.0191 ppm | 0.0026 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0002 ppm | 0.0000 ppm | 0.0001 ppm | 0.0078 ppm | 0.0148 ppm | 0.0019 ppm |
| Concentration RSD | 28,107.2 % | 81.8 % | 134.7 % | 275.6 % | 3.0 % | 26.5 % | 16.5 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | -0.0003 ppm | -0.0069 ppm | 0.0003 ppm | 0.0000 ppm | -0.0001 ppm | 0.0014 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0004 ppm | -0.0111 ppm | 0.0001 ppm | -0.0005 ppm | 0.0002 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0001 ppm | -0.0077 ppm | 0.0003 ppm | 0.0000 ppm | 0.0002 ppm | **0.0000 ppm** |
| Concentration per Run 3 | 0.0004 ppm | -0.0005 ppm | -0.0018 ppm | 0.0006 ppm | 0.0006 ppm | -0.0006 ppm | 0.0020 ppm |
| Concentration RSD | 63.3 % | 127.7 % | 68.6 % | 71.8 % | 4,224.4 % | 489.6 % | 66.4 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0036 ppm | 0.0002 ppm | 0.0000 ppm | -0.0003 ppm | 0.0006 ppm | 0.0007 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0073 ppm | 0.0004 ppm | 0.0001 ppm | -0.0001 ppm | 0.0003 ppm | 0.0001 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0084 ppm | 0.0003 ppm | 0.0000 ppm | -0.0005 ppm | -0.0003 ppm | **0.0000 ppm** | 0.0003 ppm |
| Concentration per Run 3 | -0.0048 ppm | 0.0000 ppm | 0.0000 ppm | -0.0002 ppm | 0.0018 ppm | 0.0012 ppm | 0.0001 ppm |
| Concentration RSD | 201.5 % | 112.4 % | 520.1 % | 94.7 % | 178.0 % | 114.8 % | 78.4 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 101.2812 % | 106.3600 % | **289.1989 %** | 100.5189 % | **202.5590 %** | 105.8052 % | -0.0001 ppm |
| Concentration per Run 1 | 103.9129 % | 106.3359 % | 105.5417 % | 100.3040 % | 106.6456 % | 105.8830 % | -0.0002 ppm |
| Concentration per Run 2 | 100.5475 % | 105.6262 % | **0.0000 %** | 100.5864 % | 130.8589 % | 105.1198 % | -0.0004 ppm |
| Concentration per Run 3 | 99.3833 % | 107.1179 % | **472.8562 %** | 100.6664 % | **370.1726 %** | 106.4128 % | 0.0003 ppm |
| Concentration RSD | 2.3 % | 0.7 % | **89.8 %** | 0.2 % | **71.9 %** | 0.6 % | 417.5 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2039569-1 WG2039569
Analysis started at: 3/12/2025 10:10:24 PM
Rack: 2
Vial: 14

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0009 ppm | -0.0014 ppm | -0.0010 ppm | -0.0001 ppm | 0.0000 ppm | 0.0303 ppm |
| Concentration per Run 1 | 0.0003 ppm | -0.0002 ppm | -0.0009 ppm | -0.0011 ppm | 0.0000 ppm | 0.0000 ppm | 0.0335 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0042 ppm | -0.0016 ppm | -0.0009 ppm | -0.0001 ppm | 0.0000 ppm | 0.0273 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0014 ppm | -0.0017 ppm | -0.0012 ppm | -0.0001 ppm | 0.0000 ppm | 0.0301 ppm |
| Concentration RSD | 341.6 % | 346.8 % | 29.3 % | 15.1 % | 76.0 % | 164.1 % | 10.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | 0.0002 ppm | 0.0003 ppm | 0.0049 ppm | 0.0005 ppm | 0.0024 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0003 ppm | 0.0028 ppm | -0.0047 ppm | 0.0032 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | 0.0003 ppm | 0.0003 ppm | 0.0072 ppm | -0.0019 ppm | 0.0023 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0001 ppm | 0.0004 ppm | 0.0003 ppm | 0.0048 ppm | 0.0081 ppm | 0.0017 ppm |
| Concentration RSD | 917.2 % | 33.9 % | 98.3 % | 13.4 % | 44.2 % | 1,373.5 % | 31.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0004 ppm | -0.0101 ppm | 0.0001 ppm | 0.0001 ppm | -0.0013 ppm | -0.0007 ppm |
| Concentration per Run 1 | 0.0003 ppm | -0.0004 ppm | -0.0116 ppm | 0.0001 ppm | -0.0001 ppm | -0.0011 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0003 ppm | -0.0003 ppm | -0.0090 ppm | 0.0002 ppm | 0.0003 ppm | -0.0012 ppm | -0.0010 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0005 ppm | -0.0097 ppm | 0.0000 ppm | 0.0002 ppm | -0.0016 ppm | -0.0014 ppm |
| Concentration RSD | 32,294.6 % | 19.2 % | 13.1 % | 81.3 % | 145.5 % | 20.4 % | 104.2 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0026 ppm | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | -0.0003 ppm | 0.0000 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0022 ppm | -0.0001 ppm | 0.0001 ppm | -0.0002 ppm | -0.0004 ppm | -0.0001 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0027 ppm | 0.0002 ppm | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0031 ppm | -0.0002 ppm | 0.0000 ppm | -0.0001 ppm | -0.0006 ppm | 0.0001 ppm | 0.0002 ppm |
| Concentration RSD | 16.5 % | 507.8 % | 256.0 % | 241.1 % | 111.0 % | 2,007.3 % | 16.3 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 101.3761 % | 104.6505 % | 103.6580 % | 103.8109 % | 105.9762 % | 106.4763 % | -0.0005 ppm |
| Concentration per Run 1 | 104.1286 % | 104.8324 % | 104.6994 % | 104.3630 % | 106.5662 % | 106.5244 % | -0.0007 ppm |
| Concentration per Run 2 | 99.7041 % | 104.5471 % | 103.0596 % | 102.8634 % | 105.8509 % | 106.4487 % | -0.0003 ppm |
| Concentration per Run 3 | 100.2957 % | 104.5721 % | 103.2149 % | 104.2063 % | 105.5115 % | 106.4559 % | -0.0004 ppm |
| Concentration RSD | 2.4 % | 0.2 % | 0.9 % | 0.8 % | 0.5 % | 0.0 % | 40.6 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2039569-2 WG2039569
Analysis started at: 3/12/2025 10:17:03 PM
Rack: 2
Vial: 15

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0510 ppm | 1.9973 ppm | 0.1090 ppm | 0.9158 ppm | 1.8899 ppm | 0.0485 ppm | 10.2230 ppm |
| Concentration per Run 1 | 0.0505 ppm | 1.9911 ppm | 0.1112 ppm | 0.9133 ppm | 1.8842 ppm | 0.0484 ppm | 10.2061 ppm |
| Concentration per Run 2 | 0.0518 ppm | 1.9995 ppm | 0.1074 ppm | 0.9165 ppm | 1.8933 ppm | 0.0487 ppm | 10.2867 ppm |
| Concentration per Run 3 | 0.0508 ppm | 2.0014 ppm | 0.1084 ppm | 0.9177 ppm | 1.8921 ppm | 0.0485 ppm | 10.1762 ppm |
| Concentration RSD | 1.3 % | 0.3 % | 1.8 % | 0.2 % | 0.3 % | 0.3 % | 0.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0486 ppm | 0.4488 ppm | 0.1939 ppm | 0.2467 ppm | 0.9993 ppm | 10.5601 ppm | 10.1859 ppm |
| Concentration per Run 1 | 0.0484 ppm | 0.4467 ppm | 0.1912 ppm | 0.2459 ppm | 0.9917 ppm | 10.5404 ppm | 10.0390 ppm |
| Concentration per Run 2 | 0.0487 ppm | 0.4495 ppm | 0.1989 ppm | 0.2470 ppm | 1.0030 ppm | 10.5673 ppm | 10.4344 ppm |
| Concentration per Run 3 | 0.0488 ppm | 0.4503 ppm | 0.1915 ppm | 0.2471 ppm | 1.0032 ppm | 10.5726 ppm | 10.0843 ppm |
| Concentration RSD | 0.4 % | 0.4 % | 2.3 % | 0.3 % | 0.7 % | 0.2 % | 2.1 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4964 ppm | 0.8922 ppm | 10.1025 ppm | 0.4604 ppm | 0.5043 ppm | 0.4480 ppm | 0.1095 ppm |
| Concentration per Run 1 | 0.4954 ppm | 0.8814 ppm | 10.0926 ppm | 0.4583 ppm | 0.5030 ppm | 0.4443 ppm | 0.1087 ppm |
| Concentration per Run 2 | 0.4986 ppm | 0.8949 ppm | 10.1068 ppm | 0.4608 ppm | 0.5036 ppm | 0.4491 ppm | 0.1097 ppm |
| Concentration per Run 3 | 0.4953 ppm | 0.9002 ppm | 10.1080 ppm | 0.4622 ppm | 0.5062 ppm | 0.4505 ppm | 0.1101 ppm |
| Concentration RSD | 0.4 % | 1.1 % | 0.1 % | 0.4 % | 0.3 % | 0.7 % | 0.6 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.8284 ppm | 0.8984 ppm | 0.9516 ppm | 0.9750 ppm | 0.1069 ppm | 0.4773 ppm | 0.4539 ppm |
| Concentration per Run 1 | 0.8251 ppm | 0.8933 ppm | 0.9490 ppm | 0.9619 ppm | 0.1057 ppm | 0.4743 ppm | 0.4509 ppm |
| Concentration per Run 2 | 0.8293 ppm | 0.8993 ppm | 0.9533 ppm | 0.9976 ppm | 0.1075 ppm | 0.4800 ppm | 0.4544 ppm |
| Concentration per Run 3 | 0.8310 ppm | 0.9027 ppm | 0.9526 ppm | 0.9654 ppm | 0.1076 ppm | 0.4775 ppm | 0.4565 ppm |
| Concentration RSD | 0.4 % | 0.5 % | 0.2 % | 2.0 % | 1.0 % | 0.6 % | 0.6 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.7830 % | 102.5622 % | 101.7764 % | 103.9646 % | 101.6406 % | 104.0254 % | -0.0007 ppm |
| Concentration per Run 1 | 100.7605 % | 102.7824 % | 102.3070 % | 104.2009 % | 102.4251 % | 105.3266 % | -0.0009 ppm |
| Concentration per Run 2 | 98.8055 % | 102.2245 % | 101.4897 % | 103.0486 % | 101.1780 % | 101.8690 % | -0.0005 ppm |
| Concentration per Run 3 | 99.7830 % | 102.6796 % | 101.5325 % | 104.6445 % | 101.3187 % | 104.8806 % | -0.0008 ppm |
| Concentration RSD | 1.0 % | 0.3 % | 0.5 % | 0.8 % | 0.7 % | 1.8 % | 26.1 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2039569-2 WG2039569
Analysis started at: 3/12/2025 10:23:24 PM
Rack: 2
Vial: 16

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0022 ppm | -0.0014 ppm | 0.0006 ppm | 0.0019 ppm | 0.0001 ppm | 0.0133 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0017 ppm | -0.0017 ppm | 0.0009 ppm | 0.0019 ppm | 0.0000 ppm | 0.0211 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0040 ppm | -0.0012 ppm | 0.0005 ppm | 0.0019 ppm | 0.0001 ppm | 0.0099 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0010 ppm | -0.0015 ppm | 0.0005 ppm | 0.0019 ppm | 0.0001 ppm | 0.0089 ppm |
| Concentration RSD | 176.0 % | 68.7 % | 14.8 % | 36.0 % | 1.7 % | 51.8 % | 50.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0002 ppm | 0.0006 ppm | 0.0004 ppm | 0.0056 ppm | 0.0157 ppm | 0.0037 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0003 ppm | 0.0007 ppm | 0.0004 ppm | 0.0066 ppm | 0.0257 ppm | 0.0044 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0001 ppm | 0.0006 ppm | 0.0005 ppm | 0.0046 ppm | 0.0204 ppm | 0.0012 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0002 ppm | 0.0005 ppm | 0.0003 ppm | 0.0055 ppm | 0.0012 ppm | 0.0055 ppm |
| Concentration RSD | 46.6 % | 42.6 % | 16.7 % | 16.2 % | 18.1 % | 81.8 % | 59.9 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0024 ppm | -0.0083 ppm | 0.0005 ppm | -0.0009 ppm | 0.0020 ppm | -0.0005 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0028 ppm | -0.0112 ppm | 0.0005 ppm | -0.0007 ppm | 0.0020 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0022 ppm | -0.0070 ppm | 0.0006 ppm | -0.0003 ppm | 0.0028 ppm | -0.0018 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0022 ppm | -0.0067 ppm | 0.0003 ppm | -0.0016 ppm | 0.0013 ppm | -0.0002 ppm |
| Concentration RSD | 56.8 % | 15.8 % | 30.8 % | 27.5 % | 75.9 % | 37.4 % | 261.6 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.9791 ppm | 0.0009 ppm | 0.0000 ppm | 0.0001 ppm | -0.0010 ppm | 0.0005 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.9776 ppm | 0.0009 ppm | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | 0.0005 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.9804 ppm | 0.0011 ppm | -0.0001 ppm | 0.0002 ppm | -0.0015 ppm | 0.0004 ppm | 0.0010 ppm |
| Concentration per Run 3 | 0.9795 ppm | 0.0007 ppm | 0.0000 ppm | 0.0002 ppm | -0.0015 ppm | 0.0005 ppm | 0.0010 ppm |
| Concentration RSD | 0.1 % | 24.7 % | 2,232.1 % | 84.8 % | 81.5 % | 15.6 % | 4.1 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.8767 % | 104.5751 % | 103.8420 % | 104.7786 % | 104.6503 % | 106.8223 % | 0.0000 ppm |
| Concentration per Run 1 | 102.8142 % | 104.3965 % | 104.1025 % | 105.8389 % | 104.9308 % | 106.6474 % | 0.0000 ppm |
| Concentration per Run 2 | 100.1612 % | 104.6471 % | 103.9863 % | 104.4119 % | 104.5432 % | 106.9053 % | 0.0008 ppm |
| Concentration per Run 3 | 99.6547 % | 104.6818 % | 103.4372 % | 104.0849 % | 104.4768 % | 106.9140 % | -0.0009 ppm |
| Concentration RSD | 1.7 % | 0.1 % | 0.3 % | 0.9 % | 0.2 % | 0.1 % | 3,444.1 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512805-01 WG2039569
Analysis started at: 3/12/2025 10:30:01 PM
Rack: 2
Vial: 17

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.2942 ppm | -0.0013 ppm | 0.0071 ppm | 0.0158 ppm | 0.0001 ppm | 0.5699 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.2919 ppm | 0.0008 ppm | 0.0074 ppm | 0.0156 ppm | 0.0001 ppm | 0.5722 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.2965 ppm | -0.0026 ppm | 0.0070 ppm | 0.0158 ppm | 0.0002 ppm | 0.5697 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.2941 ppm | -0.0020 ppm | 0.0069 ppm | 0.0159 ppm | 0.0001 ppm | 0.5679 ppm |
| Concentration RSD | 355.8 % | 0.8 % | 143.6 % | 3.4 % | 1.0 % | 18.0 % | 0.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0002 ppm | 0.0003 ppm | 0.0037 ppm | 0.0171 ppm | 0.4406 ppm | 0.6256 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0002 ppm | 0.0002 ppm | 0.0037 ppm | 0.0169 ppm | 0.4152 ppm | 0.6340 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0002 ppm | 0.0005 ppm | 0.0037 ppm | 0.0163 ppm | 0.4602 ppm | 0.6238 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0002 ppm | 0.0003 ppm | 0.0036 ppm | 0.0182 ppm | 0.4465 ppm | 0.6190 ppm |
| Concentration RSD | 10.4 % | 17.8 % | 37.3 % | 1.6 % | 5.6 % | 5.2 % | 1.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1050 ppm | 0.0004 ppm | 4.4752 ppm | 0.0022 ppm | -0.0007 ppm | 0.0004 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.1048 ppm | 0.0004 ppm | 4.4460 ppm | 0.0024 ppm | -0.0004 ppm | 0.0012 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.1052 ppm | 0.0004 ppm | 4.4822 ppm | 0.0020 ppm | -0.0008 ppm | 0.0005 ppm | 0.0012 ppm |
| Concentration per Run 3 | 0.1051 ppm | 0.0003 ppm | 4.4975 ppm | 0.0022 ppm | -0.0010 ppm | -0.0006 ppm | -0.0004 ppm |
| Concentration RSD | 0.2 % | 12.2 % | 0.6 % | 10.2 % | 43.6 % | 248.9 % | 411.5 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.9307 ppm | 0.0005 ppm | 0.0088 ppm | 0.0000 ppm | -0.0010 ppm | 0.0003 ppm | 0.0057 ppm |
| Concentration per Run 1 | 2.9372 ppm | 0.0005 ppm | 0.0088 ppm | -0.0001 ppm | -0.0011 ppm | 0.0004 ppm | 0.0056 ppm |
| Concentration per Run 2 | 2.9368 ppm | 0.0004 ppm | 0.0088 ppm | -0.0001 ppm | -0.0005 ppm | 0.0003 ppm | 0.0056 ppm |
| Concentration per Run 3 | 2.9181 ppm | 0.0006 ppm | 0.0089 ppm | 0.0003 ppm | -0.0015 ppm | 0.0003 ppm | 0.0057 ppm |
| Concentration RSD | 0.4 % | 23.7 % | 0.6 % | 833.8 % | 48.6 % | 20.6 % | 0.6 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 102.0528 % | 104.6053 % | 104.1323 % | 104.7513 % | 104.2441 % | 106.3349 % | -0.0006 ppm |
| Concentration per Run 1 | 103.7962 % | 104.0483 % | 104.3383 % | 105.1116 % | 104.4481 % | 105.6427 % | 0.0000 ppm |
| Concentration per Run 2 | 101.6781 % | 104.7218 % | 103.8076 % | 104.7821 % | 103.9004 % | 106.5096 % | -0.0007 ppm |
| Concentration per Run 3 | 100.6841 % | 105.0458 % | 104.2512 % | 104.3603 % | 104.3839 % | 106.8524 % | -0.0012 ppm |
| Concentration RSD | 1.6 % | 0.5 % | 0.3 % | 0.4 % | 0.3 % | 0.6 % | 92.6 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2039569-3 WG2039569
Analysis started at: 3/12/2025 10:36:36 PM
Rack: 2
Vial: 18

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0495 ppm | 2.1896 ppm | 0.1082 ppm | 0.9112 ppm | 1.8435 ppm | 0.0471 ppm | 10.2943 ppm |
| Concentration per Run 1 | 0.0493 ppm | 2.1509 ppm | 0.1086 ppm | 0.9098 ppm | 1.8106 ppm | 0.0461 ppm | 10.0846 ppm |
| Concentration per Run 2 | 0.0495 ppm | 2.2056 ppm | 0.1073 ppm | 0.9084 ppm | 1.8564 ppm | 0.0475 ppm | 10.3756 ppm |
| Concentration per Run 3 | 0.0498 ppm | 2.2124 ppm | 0.1089 ppm | 0.9152 ppm | 1.8635 ppm | 0.0478 ppm | 10.4228 ppm |
| Concentration RSD | 0.5 % | 1.5 % | 0.8 % | 0.4 % | 1.6 % | 2.0 % | 1.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0480 ppm | 0.4444 ppm | 0.1890 ppm | 0.2425 ppm | 0.9684 ppm | 10.5941 ppm | 10.3951 ppm |
| Concentration per Run 1 | 0.0482 ppm | 0.4452 ppm | 0.1887 ppm | 0.2413 ppm | 0.9455 ppm | 10.4136 ppm | 10.3633 ppm |
| Concentration per Run 2 | 0.0478 ppm | 0.4428 ppm | 0.1887 ppm | 0.2427 ppm | 0.9779 ppm | 10.6350 ppm | 10.4052 ppm |
| Concentration per Run 3 | 0.0481 ppm | 0.4452 ppm | 0.1896 ppm | 0.2434 ppm | 0.9817 ppm | 10.7337 ppm | 10.4167 ppm |
| Concentration RSD | 0.4 % | 0.3 % | 0.3 % | 0.4 % | 2.0 % | 1.5 % | 0.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5693 ppm | 0.8683 ppm | 13.7435 ppm | 0.4558 ppm | 0.4931 ppm | 0.4481 ppm | 0.1083 ppm |
| Concentration per Run 1 | 0.5576 ppm | 0.8634 ppm | 13.5046 ppm | 0.4564 ppm | 0.4934 ppm | 0.4468 ppm | 0.1096 ppm |
| Concentration per Run 2 | 0.5736 ppm | 0.8670 ppm | 13.8173 ppm | 0.4541 ppm | 0.4912 ppm | 0.4453 ppm | 0.1085 ppm |
| Concentration per Run 3 | 0.5766 ppm | 0.8746 ppm | 13.9085 ppm | 0.4568 ppm | 0.4947 ppm | 0.4524 ppm | 0.1068 ppm |
| Concentration RSD | 1.8 % | 0.7 % | 1.5 % | 0.3 % | 0.4 % | 0.8 % | 1.3 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.5001 ppm | 0.8794 ppm | 0.9208 ppm | 0.9478 ppm | 0.1047 ppm | 0.4699 ppm | 0.4543 ppm |
| Concentration per Run 1 | 3.4994 ppm | 0.8802 ppm | 0.9039 ppm | 0.9473 ppm | 0.1047 ppm | 0.4699 ppm | 0.4561 ppm |
| Concentration per Run 2 | 3.4874 ppm | 0.8768 ppm | 0.9273 ppm | 0.9475 ppm | 0.1048 ppm | 0.4678 ppm | 0.4531 ppm |
| Concentration per Run 3 | 3.5134 ppm | 0.8810 ppm | 0.9313 ppm | 0.9487 ppm | 0.1046 ppm | 0.4720 ppm | 0.4538 ppm |
| Concentration RSD | 0.4 % | 0.3 % | 1.6 % | 0.1 % | 0.1 % | 0.4 % | 0.3 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 102.1017 % | 103.6190 % | 102.3897 % | 106.1221 % | 101.6691 % | 105.2242 % | -0.0001 ppm |
| Concentration per Run 1 | 105.6265 % | 103.6439 % | 102.5370 % | 108.2893 % | 101.7926 % | 105.3811 % | 0.0004 ppm |
| Concentration per Run 2 | 100.8049 % | 103.5082 % | 102.5225 % | 105.5444 % | 101.8909 % | 104.9973 % | -0.0003 ppm |
| Concentration per Run 3 | 99.8735 % | 103.7048 % | 102.1098 % | 104.5325 % | 101.3238 % | 105.2941 % | -0.0003 ppm |
| Concentration RSD | 3.0 % | 0.1 % | 0.2 % | 1.8 % | 0.3 % | 0.2 % | 851.1 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2039569-4 WG2039569
Analysis started at: 3/12/2025 10:42:52 PM
Rack: 2
Vial: 19

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.3023 ppm | -0.0008 ppm | 0.0080 ppm | 0.0161 ppm | 0.0002 ppm | 0.5752 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.3023 ppm | 0.0000 ppm | 0.0081 ppm | 0.0160 ppm | 0.0002 ppm | 0.5784 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.3070 ppm | -0.0018 ppm | 0.0081 ppm | 0.0162 ppm | 0.0001 ppm | 0.5774 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.2977 ppm | -0.0007 ppm | 0.0080 ppm | 0.0161 ppm | 0.0001 ppm | 0.5698 ppm |
| Concentration RSD | 125.5 % | 1.5 % | 108.2 % | 0.9 % | 0.7 % | 43.2 % | 0.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0002 ppm | 0.0001 ppm | 0.0036 ppm | 0.0169 ppm | 0.4317 ppm | 0.6294 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0003 ppm | 0.0002 ppm | 0.0036 ppm | 0.0158 ppm | 0.4184 ppm | 0.6320 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0002 ppm | 0.0001 ppm | 0.0037 ppm | 0.0183 ppm | 0.4470 ppm | 0.6305 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0002 ppm | 0.0000 ppm | 0.0036 ppm | 0.0167 ppm | 0.4297 ppm | 0.6258 ppm |
| Concentration RSD | 21.0 % | 20.3 % | 95.7 % | 2.3 % | 7.4 % | 3.3 % | 0.5 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1070 ppm | 0.0025 ppm | 4.5338 ppm | 0.0022 ppm | -0.0005 ppm | 0.0011 ppm | -0.0011 ppm |
| Concentration per Run 1 | 0.1070 ppm | 0.0029 ppm | 4.4918 ppm | 0.0024 ppm | -0.0006 ppm | 0.0010 ppm | -0.0020 ppm |
| Concentration per Run 2 | 0.1076 ppm | 0.0026 ppm | 4.5590 ppm | 0.0022 ppm | -0.0006 ppm | 0.0024 ppm | -0.0018 ppm |
| Concentration per Run 3 | 0.1065 ppm | 0.0021 ppm | 4.5504 ppm | 0.0021 ppm | -0.0004 ppm | -0.0002 ppm | 0.0005 ppm |
| Concentration RSD | 0.5 % | 15.3 % | 0.8 % | 6.9 % | 20.9 % | 121.2 % | 124.8 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.9440 ppm | 0.0009 ppm | 0.0090 ppm | 0.0001 ppm | -0.0009 ppm | 0.0003 ppm | 0.0058 ppm |
| Concentration per Run 1 | 2.9508 ppm | 0.0010 ppm | 0.0089 ppm | 0.0001 ppm | -0.0002 ppm | 0.0003 ppm | 0.0058 ppm |
| Concentration per Run 2 | 2.9477 ppm | 0.0009 ppm | 0.0090 ppm | 0.0004 ppm | -0.0016 ppm | 0.0002 ppm | 0.0058 ppm |
| Concentration per Run 3 | 2.9335 ppm | 0.0008 ppm | 0.0089 ppm | -0.0001 ppm | -0.0008 ppm | 0.0004 ppm | 0.0058 ppm |
| Concentration RSD | 0.3 % | 10.2 % | 0.7 % | 179.6 % | 82.3 % | 37.7 % | 0.6 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 102.2034 % | 105.0773 % | 104.2483 % | 103.5147 % | 104.2007 % | 106.3089 % | -0.0003 ppm |
| Concentration per Run 1 | 104.2543 % | 104.9322 % | 104.3206 % | 103.8857 % | 103.9824 % | 106.1144 % | -0.0007 ppm |
| Concentration per Run 2 | 100.9134 % | 104.9904 % | 103.9940 % | 102.7384 % | 104.1032 % | 106.2979 % | 0.0001 ppm |
| Concentration per Run 3 | 101.4424 % | 105.3092 % | 104.4303 % | 103.9199 % | 104.5165 % | 106.5144 % | -0.0003 ppm |
| Concentration RSD | 1.8 % | 0.2 % | 0.2 % | 0.6 % | 0.3 % | 0.2 % | 139.1 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2039569-5 WG2039569
Analysis started at: 3/12/2025 10:49:26 PM
Rack: 2
Vial: 20

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0264 ppm | 2.2798 ppm | 0.1147 ppm | 0.9064 ppm | 1.8988 ppm | 0.0490 ppm | 10.7161 ppm |
| Concentration per Run 1 | 0.0263 ppm | 2.2426 ppm | 0.1143 ppm | 0.9067 ppm | 1.8665 ppm | 0.0482 ppm | 10.5500 ppm |
| Concentration per Run 2 | 0.0264 ppm | 2.2908 ppm | 0.1151 ppm | 0.9043 ppm | 1.9079 ppm | 0.0493 ppm | 10.7610 ppm |
| Concentration per Run 3 | 0.0266 ppm | 2.3060 ppm | 0.1147 ppm | 0.9083 ppm | 1.9219 ppm | 0.0495 ppm | 10.8375 ppm |
| Concentration RSD | 0.5 % | 1.5 % | 0.4 % | 0.2 % | 1.5 % | 1.5 % | 1.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0484 ppm | 0.4445 ppm | 0.1905 ppm | 0.2463 ppm | 1.0132 ppm | 11.0166 ppm | 10.5444 ppm |
| Concentration per Run 1 | 0.0487 ppm | 0.4460 ppm | 0.1906 ppm | 0.2478 ppm | 0.9944 ppm | 10.8180 ppm | 10.5576 ppm |
| Concentration per Run 2 | 0.0482 ppm | 0.4435 ppm | 0.1906 ppm | 0.2461 ppm | 1.0181 ppm | 11.0900 ppm | 10.5589 ppm |
| Concentration per Run 3 | 0.0484 ppm | 0.4441 ppm | 0.1902 ppm | 0.2449 ppm | 1.0271 ppm | 11.1417 ppm | 10.5167 ppm |
| Concentration RSD | 0.5 % | 0.3 % | 0.1 % | 0.6 % | 1.7 % | 1.6 % | 0.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5954 ppm | 0.8708 ppm | 14.4098 ppm | 0.4562 ppm | 0.5016 ppm | 0.4373 ppm | 0.1139 ppm |
| Concentration per Run 1 | 0.5872 ppm | 0.8687 ppm | 14.1836 ppm | 0.4579 ppm | 0.5031 ppm | 0.4359 ppm | 0.1140 ppm |
| Concentration per Run 2 | 0.5974 ppm | 0.8688 ppm | 14.4977 ppm | 0.4552 ppm | 0.5004 ppm | 0.4376 ppm | 0.1150 ppm |
| Concentration per Run 3 | 0.6014 ppm | 0.8750 ppm | 14.5481 ppm | 0.4555 ppm | 0.5014 ppm | 0.4383 ppm | 0.1127 ppm |
| Concentration RSD | 1.2 % | 0.4 % | 1.4 % | 0.3 % | 0.3 % | 0.3 % | 1.0 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.6311 ppm | 0.8898 ppm | 0.9580 ppm | 0.9557 ppm | 0.1113 ppm | 0.4743 ppm | 0.4574 ppm |
| Concentration per Run 1 | 3.6225 ppm | 0.8918 ppm | 0.9421 ppm | 0.9546 ppm | 0.1117 ppm | 0.4731 ppm | 0.4605 ppm |
| Concentration per Run 2 | 3.6291 ppm | 0.8874 ppm | 0.9622 ppm | 0.9571 ppm | 0.1112 ppm | 0.4735 ppm | 0.4545 ppm |
| Concentration per Run 3 | 3.6415 ppm | 0.8901 ppm | 0.9698 ppm | 0.9553 ppm | 0.1110 ppm | 0.4764 ppm | 0.4572 ppm |
| Concentration RSD | 0.3 % | 0.3 % | 1.5 % | 0.1 % | 0.3 % | 0.4 % | 0.7 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 101.8550 % | 103.7857 % | 102.6412 % | 106.0787 % | 101.9084 % | 105.6814 % | -0.0001 ppm |
| Concentration per Run 1 | 104.6174 % | 103.9655 % | 102.8794 % | 107.3218 % | 102.0804 % | 105.8478 % | 0.0000 ppm |
| Concentration per Run 2 | 100.5508 % | 103.4048 % | 102.7836 % | 105.4940 % | 101.9551 % | 105.3192 % | 0.0000 ppm |
| Concentration per Run 3 | 100.3969 % | 103.9867 % | 102.2607 % | 105.4205 % | 101.6898 % | 105.8771 % | -0.0004 ppm |
| Concentration RSD | 2.3 % | 0.3 % | 0.3 % | 1.0 % | 0.2 % | 0.3 % | 144.6 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: WG2039569-6d5 WG2039569
Analysis started at: 3/12/2025 10:55:43 PM
Rack: 2
Vial: 21

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0626 ppm | -0.0008 ppm | 0.0023 ppm | 0.0032 ppm | 0.0000 ppm | 0.1216 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0624 ppm | -0.0008 ppm | 0.0027 ppm | 0.0032 ppm | 0.0000 ppm | 0.1201 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0641 ppm | 0.0000 ppm | 0.0022 ppm | 0.0033 ppm | 0.0001 ppm | 0.1211 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0614 ppm | -0.0016 ppm | 0.0020 ppm | 0.0031 ppm | 0.0000 ppm | 0.1234 ppm |
| Concentration RSD | 13.2 % | 2.2 % | 106.6 % | 15.3 % | 2.7 % | 113.4 % | 1.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0008 ppm | 0.0060 ppm | 0.1180 ppm | 0.1275 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | 0.0007 ppm | 0.0055 ppm | 0.1175 ppm | 0.1266 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | 0.0010 ppm | 0.0061 ppm | 0.1224 ppm | 0.1280 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | -0.0002 ppm | 0.0008 ppm | 0.0064 ppm | 0.1141 ppm | 0.1279 ppm |
| Concentration RSD | 57.7 % | 118.1 % | 5,330.6 % | 15.4 % | 7.9 % | 3.5 % | 0.6 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0213 ppm | 0.0026 ppm | 0.8889 ppm | 0.0005 ppm | -0.0002 ppm | 0.0026 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0208 ppm | 0.0029 ppm | 0.8727 ppm | 0.0005 ppm | 0.0002 ppm | 0.0029 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0215 ppm | 0.0028 ppm | 0.8967 ppm | 0.0005 ppm | -0.0004 ppm | 0.0026 ppm | 0.0017 ppm |
| Concentration per Run 3 | 0.0217 ppm | 0.0022 ppm | 0.8974 ppm | 0.0006 ppm | -0.0003 ppm | 0.0022 ppm | -0.0008 ppm |
| Concentration RSD | 2.1 % | 14.4 % | 1.6 % | 3.7 % | 159.9 % | 14.2 % | 223.8 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5755 ppm | 0.0012 ppm | 0.0018 ppm | -0.0001 ppm | -0.0003 ppm | 0.0001 ppm | 0.0012 ppm |
| Concentration per Run 1 | 0.5766 ppm | 0.0013 ppm | 0.0017 ppm | -0.0002 ppm | 0.0000 ppm | 0.0002 ppm | 0.0012 ppm |
| Concentration per Run 2 | 0.5706 ppm | 0.0010 ppm | 0.0018 ppm | -0.0002 ppm | -0.0002 ppm | 0.0001 ppm | 0.0013 ppm |
| Concentration per Run 3 | 0.5792 ppm | 0.0014 ppm | 0.0018 ppm | 0.0001 ppm | -0.0006 ppm | 0.0001 ppm | 0.0012 ppm |
| Concentration RSD | 0.8 % | 17.3 % | 2.0 % | 156.0 % | 103.2 % | 44.2 % | 3.6 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.5854 % | 105.1809 % | 105.3696 % | 104.1364 % | 106.9302 % | 106.9161 % | -0.0006 ppm |
| Concentration per Run 1 | 103.9297 % | 105.0798 % | 105.4965 % | 106.3907 % | 107.4946 % | 106.6699 % | -0.0009 ppm |
| Concentration per Run 2 | 98.9260 % | 105.3429 % | 106.2319 % | 102.9303 % | 107.5146 % | 107.1236 % | -0.0011 ppm |
| Concentration per Run 3 | 98.9006 % | 105.1199 % | 104.3804 % | 103.0883 % | 105.7814 % | 106.9550 % | 0.0003 ppm |
| Concentration RSD | 2.9 % | 0.1 % | 0.9 % | 1.9 % | 0.9 % | 0.2 % | 134.5 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCV
Analysis started at: 3/12/2025 11:02:21 PM
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4696 ppm | 0.4677 ppm | 0.4598 ppm | 0.4552 ppm | 0.4436 ppm | 0.4672 ppm | 0.4969 ppm |
| Concentration per Run 1 | 0.4719 ppm | 0.4640 ppm | 0.4584 ppm | 0.4522 ppm | 0.4362 ppm | 0.4584 ppm | 0.4857 ppm |
| Concentration per Run 2 | 0.4704 ppm | 0.4709 ppm | 0.4587 ppm | 0.4540 ppm | 0.4470 ppm | 0.4713 ppm | 0.4988 ppm |
| Concentration per Run 3 | 0.4666 ppm | 0.4682 ppm | 0.4623 ppm | 0.4594 ppm | 0.4476 ppm | 0.4721 ppm | 0.5063 ppm |
| Recovery Percentage 1 | 93.924 % | 93.540 % | 91.956 % | 91.040 % | 88.719 % | 93.449 % | 99.387 % |
| Concentration RSD | 0.6 % | 0.8 % | 0.5 % | 0.8 % | 1.4 % | 1.6 % | 2.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4547 ppm | 0.4523 ppm | 0.4707 ppm | 0.4572 ppm | 0.4769 ppm | 4.8873 ppm | 0.4845 ppm |
| Concentration per Run 1 | 0.4516 ppm | 0.4495 ppm | 0.4701 ppm | 0.4595 ppm | 0.4642 ppm | 4.8096 ppm | 0.4859 ppm |
| Concentration per Run 2 | 0.4524 ppm | 0.4493 ppm | 0.4701 ppm | 0.4579 ppm | 0.4823 ppm | 4.9270 ppm | 0.4856 ppm |
| Concentration per Run 3 | 0.4601 ppm | 0.4582 ppm | 0.4720 ppm | 0.4542 ppm | 0.4842 ppm | 4.9253 ppm | 0.4820 ppm |
| Recovery Percentage 1 | 90.937 % | 90.465 % | 94.141 % | 91.438 % | 95.385 % | 97.747 % | 96.898 % |
| Concentration RSD | 1.0 % | 1.1 % | 0.2 % | 0.6 % | 2.3 % | 1.4 % | 0.5 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4649 ppm | 0.4480 ppm | 9.0789 ppm | 0.4587 ppm | 0.4634 ppm | 0.4522 ppm | 0.4645 ppm |
| Concentration per Run 1 | 0.4552 ppm | 0.4436 ppm | 8.9434 ppm | 0.4558 ppm | 0.4598 ppm | 0.4483 ppm | 0.4621 ppm |
| Concentration per Run 2 | 0.4699 ppm | 0.4447 ppm | 9.1601 ppm | 0.4557 ppm | 0.4613 ppm | 0.4507 ppm | 0.4617 ppm |
| Concentration per Run 3 | 0.4696 ppm | 0.4557 ppm | 9.1331 ppm | 0.4647 ppm | 0.4692 ppm | 0.4578 ppm | 0.4697 ppm |
| Recovery Percentage 1 | 92.975 % | 89.599 % | 90.789 % | 91.741 % | 92.685 % | 90.446 % | 92.901 % |
| Concentration RSD | 1.8 % | 1.5 % | 1.3 % | 1.1 % | 1.1 % | 1.1 % | 1.0 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.9916 ppm | 0.4569 ppm | 0.4531 ppm | 0.4728 ppm | 0.4592 ppm | 0.4622 ppm | 0.4589 ppm |
| Concentration per Run 1 | 4.9535 ppm | 0.4543 ppm | 0.4447 ppm | 0.4727 ppm | 0.4559 ppm | 0.4595 ppm | 0.4561 ppm |
| Concentration per Run 2 | 4.9642 ppm | 0.4555 ppm | 0.4569 ppm | 0.4726 ppm | 0.4554 ppm | 0.4605 ppm | 0.4563 ppm |
| Concentration per Run 3 | 5.0570 ppm | 0.4610 ppm | 0.4576 ppm | 0.4730 ppm | 0.4662 ppm | 0.4666 ppm | 0.4642 ppm |
| Recovery Percentage 1 | 95.078 % | 91.387 % | 90.619 % | 94.559 % | 91.835 % | 92.438 % | 91.776 % |
| Concentration RSD | 1.1 % | 0.8 % | 1.6 % | 0.0 % | 1.3 % | 0.8 % | 1.0 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.0790 % | 103.5868 % | 102.8093 % | 104.7779 % | 101.8488 % | 105.5202 % | 0.4543 ppm |
| Concentration per Run 1 | 101.4815 % | 103.9019 % | 103.3050 % | 107.6881 % | 102.4837 % | 105.4429 % | 0.4480 ppm |
| Concentration per Run 2 | 97.9801 % | 103.5502 % | 103.1513 % | 103.5197 % | 102.5045 % | 105.6261 % | 0.4579 ppm |
| Concentration per Run 3 | 97.7754 % | 103.3083 % | 101.9715 % | 103.1257 % | 100.5582 % | 105.4915 % | 0.4570 ppm |
| Recovery Percentage 1 | | | | | | | 90.861 % |
| Concentration RSD | 2.1 % | 0.3 % | 0.7 % | 2.4 % | 1.1 % | 0.1 % | 1.2 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCB
Analysis started at: 3/12/2025 11:08:40 PM
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | -0.0008 ppm | 0.0001 ppm | 0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0019 ppm |
| Concentration per Run 1 | 0.0003 ppm | -0.0026 ppm | 0.0003 ppm | 0.0007 ppm | 0.0000 ppm | 0.0000 ppm | 0.0019 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0030 ppm | -0.0008 ppm | 0.0003 ppm | -0.0001 ppm | 0.0000 ppm | -0.0016 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0034 ppm | 0.0006 ppm | -0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0054 ppm |
| Recovery Percentage 1 | 2.362 % | -0.752 % | 1.160 % | 0.793 % | -0.397 % | 0.798 % | 1.894 % |
| Concentration RSD | 72.8 % | 480.5 % | 1,254.6 % | 192.7 % | 156.7 % | 8.4 % | 184.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | -0.0003 ppm | 0.0255 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | -0.0001 ppm | -0.0006 ppm | 0.0299 ppm | 0.0018 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | 0.0004 ppm | 0.0190 ppm | 0.0020 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | 0.0001 ppm | -0.0008 ppm | 0.0277 ppm | -0.0008 ppm |
| Recovery Percentage 1 | -0.137 % | -0.084 % | 0.157 % | 0.704 % | -0.610 % | 1.022 % | 0.989 % |
| Concentration RSD | 140.0 % | 88.0 % | 722.0 % | 179.1 % | 215.4 % | 22.4 % | 159.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0007 ppm | -0.0166 ppm | 0.0000 ppm | -0.0002 ppm | 0.0002 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0009 ppm | -0.0183 ppm | -0.0001 ppm | -0.0002 ppm | 0.0002 ppm | -0.0007 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0007 ppm | -0.0155 ppm | 0.0001 ppm | 0.0000 ppm | 0.0001 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0006 ppm | -0.0160 ppm | 0.0001 ppm | -0.0005 ppm | 0.0003 ppm | 0.0001 ppm |
| Recovery Percentage 1 | -1.347 % | 1.412 % | -0.831 % | 0.036 % | -2.454 % | 0.415 % | 0.712 % |
| Concentration RSD | 170.5 % | 21.9 % | 8.9 % | 1,419.0 % | 112.4 % | 52.4 % | 993.7 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 0.0002 ppm | 0.0000 ppm | 0.0001 ppm | 0.0008 ppm | 0.0001 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0005 ppm | -0.0001 ppm | 0.0003 ppm | 0.0008 ppm | 0.0001 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0008 ppm | 0.0003 ppm | 0.0000 ppm | -0.0001 ppm | 0.0010 ppm | 0.0001 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0008 ppm | -0.0001 ppm | 0.0000 ppm | 0.0001 ppm | 0.0005 ppm | 0.0000 ppm | 0.0000 ppm |
| Recovery Percentage 1 | -0.124 % | 0.456 % | -0.389 % | 0.885 % | 3.887 % | 0.511 % | 0.104 % |
| Concentration RSD | 44.1 % | 124.9 % | 176.6 % | 208.4 % | 37.8 % | 90.3 % | 79.8 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.7503 % | 104.4235 % | 104.1559 % | 101.9354 % | 106.3711 % | 105.1825 % | -0.0005 ppm |
| Concentration per Run 1 | 103.0613 % | 105.0849 % | 103.9208 % | 103.4893 % | 105.5991 % | 106.1829 % | 0.0000 ppm |
| Concentration per Run 2 | 98.6552 % | 104.3739 % | 104.1966 % | 101.6237 % | 107.1170 % | 105.5948 % | -0.0009 ppm |
| Concentration per Run 3 | 97.5345 % | 103.8117 % | 104.3504 % | 100.6934 % | 106.3971 % | 103.7697 % | -0.0008 ppm |
| Recovery Percentage 1 | | | | | | | -5.289 % |
| Concentration RSD | 2.9 % | 0.6 % | 0.2 % | 1.4 % | 0.7 % | 1.2 % | 94.0 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512207-01 WG2039569
Analysis started at: 3/12/2025 11:15:20 PM
Rack: 2
Vial: 22

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0529 ppm | -0.0014 ppm | 0.0058 ppm | 0.0431 ppm | 0.0000 ppm | 31.1570 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0570 ppm | 0.0000 ppm | 0.0060 ppm | 0.0426 ppm | 0.0000 ppm | 30.8779 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0501 ppm | -0.0026 ppm | 0.0058 ppm | 0.0435 ppm | 0.0000 ppm | 31.4114 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0518 ppm | -0.0017 ppm | 0.0057 ppm | 0.0431 ppm | 0.0000 ppm | 31.1817 ppm |
| Concentration RSD | 49.3 % | 6.8 % | 91.7 % | 2.4 % | 1.0 % | 180.8 % | 0.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0003 ppm | 0.0005 ppm | 0.0039 ppm | 0.0324 ppm | 1.4951 ppm | 14.1002 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0002 ppm | 0.0005 ppm | 0.0038 ppm | 0.0303 ppm | 1.4872 ppm | 14.0892 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0003 ppm | 0.0003 ppm | 0.0040 ppm | 0.0319 ppm | 1.5099 ppm | 14.0521 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0003 ppm | 0.0008 ppm | 0.0041 ppm | 0.0349 ppm | 1.4881 ppm | 14.1593 ppm |
| Concentration RSD | 31.1 % | 19.6 % | 41.4 % | 3.8 % | 7.3 % | 0.9 % | 0.4 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0003 ppm | 2.1136 ppm | 0.0050 ppm | -0.0010 ppm | 0.0002 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0001 ppm | 2.0890 ppm | 0.0048 ppm | -0.0008 ppm | 0.0003 ppm | -0.0006 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0004 ppm | 2.1266 ppm | 0.0052 ppm | -0.0010 ppm | 0.0003 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0003 ppm | 2.1251 ppm | 0.0050 ppm | -0.0011 ppm | 0.0001 ppm | 0.0003 ppm |
| Concentration RSD | 34.1 % | 49.5 % | 1.0 % | 3.9 % | 15.1 % | 41.8 % | 628.6 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.0609 ppm | 0.0006 ppm | 0.0476 ppm | 0.0013 ppm | -0.0009 ppm | 0.0001 ppm | 0.0685 ppm |
| Concentration per Run 1 | 4.0528 ppm | 0.0005 ppm | 0.0470 ppm | 0.0011 ppm | -0.0008 ppm | 0.0001 ppm | 0.0685 ppm |
| Concentration per Run 2 | 4.0602 ppm | 0.0004 ppm | 0.0478 ppm | 0.0014 ppm | -0.0014 ppm | 0.0000 ppm | 0.0682 ppm |
| Concentration per Run 3 | 4.0696 ppm | 0.0009 ppm | 0.0479 ppm | 0.0014 ppm | -0.0003 ppm | 0.0003 ppm | 0.0687 ppm |
| Concentration RSD | 0.2 % | 40.8 % | 1.0 % | 12.8 % | 64.3 % | 113.6 % | 0.4 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.8538 % | 103.4802 % | 101.7687 % | 103.6478 % | 101.1358 % | 105.5350 % | 0.0006 ppm |
| Concentration per Run 1 | 102.4688 % | 103.4793 % | 102.0290 % | 104.6857 % | 101.4546 % | 105.5348 % | 0.0006 ppm |
| Concentration per Run 2 | 98.3896 % | 103.8628 % | 101.5736 % | 102.7534 % | 101.1270 % | 105.9577 % | 0.0004 ppm |
| Concentration per Run 3 | 98.7030 % | 103.0985 % | 101.7036 % | 103.5041 % | 100.8260 % | 105.1124 % | 0.0008 ppm |
| Concentration RSD | 2.3 % | 0.4 % | 0.2 % | 0.9 % | 0.3 % | 0.4 % | 40.6 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512805-02 WG2039569
Analysis started at: 3/12/2025 11:21:54 PM
Rack: 2
Vial: 23

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0155 ppm | -0.0015 ppm | 0.0135 ppm | 0.0077 ppm | 0.0000 ppm | 5.3943 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0139 ppm | -0.0013 ppm | 0.0135 ppm | 0.0076 ppm | 0.0000 ppm | 5.3524 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0161 ppm | -0.0021 ppm | 0.0134 ppm | 0.0077 ppm | 0.0000 ppm | 5.4260 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0164 ppm | -0.0010 ppm | 0.0134 ppm | 0.0077 ppm | 0.0000 ppm | 5.4044 ppm |
| Concentration RSD | 1,213.9 % | 8.8 % | 39.0 % | 0.6 % | 0.9 % | 31.0 % | 0.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0002 ppm | 0.0001 ppm | 0.0027 ppm | 0.0178 ppm | 4.0606 ppm | 1.7401 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0002 ppm | 0.0002 ppm | 0.0027 ppm | 0.0173 ppm | 4.0187 ppm | 1.7389 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0001 ppm | 0.0002 ppm | 0.0025 ppm | 0.0178 ppm | 4.0500 ppm | 1.7328 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0001 ppm | 0.0000 ppm | 0.0028 ppm | 0.0183 ppm | 4.1131 ppm | 1.7486 ppm |
| Concentration RSD | 18.1 % | 36.9 % | 104.0 % | 5.6 % | 2.7 % | 1.2 % | 0.5 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2695 ppm | -0.0001 ppm | 5.3497 ppm | 0.0000 ppm | -0.0018 ppm | -0.0001 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.2667 ppm | -0.0001 ppm | 5.3119 ppm | -0.0001 ppm | -0.0020 ppm | -0.0004 ppm | -0.0009 ppm |
| Concentration per Run 2 | 0.2713 ppm | -0.0001 ppm | 5.3641 ppm | 0.0001 ppm | -0.0013 ppm | -0.0005 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.2704 ppm | 0.0000 ppm | 5.3732 ppm | 0.0000 ppm | -0.0020 ppm | 0.0005 ppm | -0.0007 ppm |
| Concentration RSD | 0.9 % | 140.3 % | 0.6 % | 2,384.1 % | 23.8 % | 446.7 % | 293.7 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.3762 ppm | 0.0001 ppm | 0.0147 ppm | 0.0002 ppm | -0.0016 ppm | 0.0006 ppm | 0.0020 ppm |
| Concentration per Run 1 | 3.3906 ppm | 0.0001 ppm | 0.0145 ppm | 0.0000 ppm | -0.0014 ppm | 0.0006 ppm | 0.0020 ppm |
| Concentration per Run 2 | 3.3678 ppm | 0.0003 ppm | 0.0147 ppm | 0.0002 ppm | -0.0015 ppm | 0.0006 ppm | 0.0020 ppm |
| Concentration per Run 3 | 3.3702 ppm | 0.0001 ppm | 0.0149 ppm | 0.0003 ppm | -0.0020 ppm | 0.0006 ppm | 0.0021 ppm |
| Concentration RSD | 0.4 % | 99.1 % | 1.6 % | 97.4 % | 18.7 % | 9.3 % | 2.8 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 101.9987 % | 105.1408 % | 104.1496 % | 102.8853 % | 103.5907 % | 105.3722 % | -0.0007 ppm |
| Concentration per Run 1 | 104.2536 % | 104.9695 % | 104.1363 % | 103.5615 % | 103.3381 % | 105.1272 % | -0.0006 ppm |
| Concentration per Run 2 | 100.8474 % | 105.7534 % | 104.2458 % | 102.1415 % | 103.7993 % | 106.0131 % | -0.0004 ppm |
| Concentration per Run 3 | 100.8952 % | 104.6994 % | 104.0668 % | 102.9529 % | 103.6348 % | 104.9763 % | -0.0011 ppm |
| Concentration RSD | 1.9 % | 0.5 % | 0.1 % | 0.7 % | 0.2 % | 0.5 % | 50.5 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512805-03 WG2039569
Analysis started at: 3/12/2025 11:28:29 PM
Rack: 2
Vial: 24

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0216 ppm | -0.0005 ppm | 0.0197 ppm | 0.0318 ppm | 0.0000 ppm | 21.8540 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0215 ppm | -0.0010 ppm | 0.0196 ppm | 0.0315 ppm | 0.0000 ppm | 21.7661 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0213 ppm | 0.0000 ppm | 0.0198 ppm | 0.0318 ppm | 0.0001 ppm | 21.9440 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0220 ppm | -0.0003 ppm | 0.0196 ppm | 0.0319 ppm | 0.0000 ppm | 21.8518 ppm |
| Concentration RSD | 25.5 % | 1.7 % | 115.8 % | 0.5 % | 0.6 % | 217.1 % | 0.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0107 ppm | 0.0025 ppm | 0.0033 ppm | 0.2663 ppm | 10.6391 ppm | 9.6527 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0107 ppm | 0.0024 ppm | 0.0034 ppm | 0.2623 ppm | 10.5852 ppm | 9.6719 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0106 ppm | 0.0027 ppm | 0.0033 ppm | 0.2665 ppm | 10.6741 ppm | 9.6388 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0107 ppm | 0.0025 ppm | 0.0032 ppm | 0.2700 ppm | 10.6581 ppm | 9.6473 ppm |
| Concentration RSD | 17.4 % | 0.8 % | 6.3 % | 2.8 % | 1.4 % | 0.4 % | 0.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.4366 ppm | 0.0000 ppm | 9.2554 ppm | 0.0043 ppm | -0.0013 ppm | -0.0001 ppm | -0.0022 ppm |
| Concentration per Run 1 | 3.4183 ppm | -0.0001 ppm | 9.1738 ppm | 0.0044 ppm | -0.0017 ppm | -0.0007 ppm | -0.0019 ppm |
| Concentration per Run 2 | 3.4496 ppm | 0.0001 ppm | 9.2981 ppm | 0.0045 ppm | -0.0016 ppm | 0.0004 ppm | -0.0024 ppm |
| Concentration per Run 3 | 3.4419 ppm | -0.0001 ppm | 9.2942 ppm | 0.0042 ppm | -0.0006 ppm | -0.0001 ppm | -0.0021 ppm |
| Concentration RSD | 0.5 % | 279.6 % | 0.8 % | 2.8 % | 45.7 % | 393.4 % | 12.8 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.7269 ppm | 0.0003 ppm | 0.0458 ppm | 0.0008 ppm | -0.0022 ppm | 0.0069 ppm | 0.0029 ppm |
| Concentration per Run 1 | 2.7260 ppm | 0.0005 ppm | 0.0455 ppm | 0.0009 ppm | -0.0011 ppm | 0.0070 ppm | 0.0028 ppm |
| Concentration per Run 2 | 2.7355 ppm | 0.0003 ppm | 0.0460 ppm | 0.0006 ppm | -0.0025 ppm | 0.0069 ppm | 0.0029 ppm |
| Concentration per Run 3 | 2.7193 ppm | 0.0001 ppm | 0.0459 ppm | 0.0008 ppm | -0.0031 ppm | 0.0069 ppm | 0.0030 ppm |
| Concentration RSD | 0.3 % | 55.2 % | 0.6 % | 17.7 % | 45.1 % | 0.8 % | 3.4 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 102.2201 % | 103.8018 % | 102.3932 % | 103.3639 % | 100.9444 % | 104.1792 % | -0.0004 ppm |
| Concentration per Run 1 | 104.5239 % | 103.2211 % | 102.8058 % | 103.7825 % | 101.1460 % | 103.6063 % | -0.0001 ppm |
| Concentration per Run 2 | 101.2869 % | 104.0167 % | 101.9519 % | 103.1004 % | 100.5731 % | 104.3589 % | -0.0007 ppm |
| Concentration per Run 3 | 100.8495 % | 104.1676 % | 102.4218 % | 103.2089 % | 101.1140 % | 104.5724 % | -0.0004 ppm |
| Concentration RSD | 2.0 % | 0.5 % | 0.4 % | 0.4 % | 0.3 % | 0.5 % | 73.6 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: L2512805-04 WG2039569
Analysis started at: 3/12/2025 11:35:04 PM
Rack: 2
Vial: 25

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0186 ppm | -0.0005 ppm | 0.0327 ppm | 0.0131 ppm | 0.0000 ppm | 36.1076 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0184 ppm | 0.0002 ppm | 0.0327 ppm | 0.0130 ppm | 0.0000 ppm | 35.7838 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0216 ppm | -0.0002 ppm | 0.0326 ppm | 0.0132 ppm | 0.0000 ppm | 36.3322 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0157 ppm | -0.0014 ppm | 0.0329 ppm | 0.0131 ppm | 0.0000 ppm | 36.2070 ppm |
| Concentration RSD | 270.4 % | 15.7 % | 168.1 % | 0.5 % | 0.8 % | 60.8 % | 0.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0002 ppm | 0.0004 ppm | 0.0119 ppm | 0.0170 ppm | 15.8919 ppm | 3.3777 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0001 ppm | 0.0004 ppm | 0.0119 ppm | 0.0161 ppm | 15.7525 ppm | 3.3791 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0002 ppm | 0.0005 ppm | 0.0121 ppm | 0.0174 ppm | 15.9591 ppm | 3.3902 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0002 ppm | 0.0003 ppm | 0.0116 ppm | 0.0176 ppm | 15.9643 ppm | 3.3638 ppm |
| Concentration RSD | 61.8 % | 31.7 % | 22.5 % | 2.3 % | 4.7 % | 0.8 % | 0.4 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0052 ppm | 0.0011 ppm | 16.9720 ppm | 0.0001 ppm | -0.0024 ppm | -0.0001 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0051 ppm | 0.0010 ppm | 16.8447 ppm | 0.0002 ppm | -0.0024 ppm | 0.0010 ppm | -0.0011 ppm |
| Concentration per Run 2 | 0.0052 ppm | 0.0011 ppm | 17.0204 ppm | -0.0001 ppm | -0.0022 ppm | -0.0012 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0052 ppm | 0.0012 ppm | 17.0509 ppm | 0.0003 ppm | -0.0025 ppm | 0.0000 ppm | 0.0004 ppm |
| Concentration RSD | 1.1 % | 5.2 % | 0.7 % | 175.0 % | 6.3 % | 2,119.6 % | 1,159.9 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.9038 ppm | 0.0002 ppm | 0.1207 ppm | 0.0006 ppm | -0.0011 ppm | 0.0012 ppm | 0.0066 ppm |
| Concentration per Run 1 | 3.9073 ppm | 0.0005 ppm | 0.1198 ppm | 0.0008 ppm | -0.0006 ppm | 0.0011 ppm | 0.0066 ppm |
| Concentration per Run 2 | 3.8972 ppm | -0.0001 ppm | 0.1214 ppm | 0.0003 ppm | -0.0010 ppm | 0.0011 ppm | 0.0066 ppm |
| Concentration per Run 3 | 3.9069 ppm | 0.0001 ppm | 0.1210 ppm | 0.0008 ppm | -0.0016 ppm | 0.0012 ppm | 0.0067 ppm |
| Concentration RSD | 0.1 % | 181.8 % | 0.7 % | 46.4 % | 45.5 % | 3.5 % | 1.2 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.6262 % | 103.5123 % | 101.5966 % | 102.2588 % | 100.7800 % | 104.0346 % | -0.0001 ppm |
| Concentration per Run 1 | 103.2158 % | 103.2437 % | 101.6893 % | 103.1536 % | 100.7397 % | 103.6837 % | 0.0002 ppm |
| Concentration per Run 2 | 99.3659 % | 103.8307 % | 101.6209 % | 101.6642 % | 101.0404 % | 104.2582 % | 0.0003 ppm |
| Concentration per Run 3 | 99.2971 % | 103.4624 % | 101.4797 % | 101.9585 % | 100.5598 % | 104.1618 % | -0.0008 ppm |
| Concentration RSD | 2.2 % | 0.3 % | 0.1 % | 0.8 % | 0.2 % | 0.3 % | 721.6 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCV
Analysis started at: 3/12/2025 11:41:39 PM
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4703 ppm | 0.4730 ppm | 0.4549 ppm | 0.4506 ppm | 0.4466 ppm | 0.4695 ppm | 0.4962 ppm |
| Concentration per Run 1 | 0.4706 ppm | 0.4635 ppm | 0.4521 ppm | 0.4479 ppm | 0.4357 ppm | 0.4577 ppm | 0.4821 ppm |
| Concentration per Run 2 | 0.4710 ppm | 0.4769 ppm | 0.4567 ppm | 0.4513 ppm | 0.4515 ppm | 0.4747 ppm | 0.4986 ppm |
| Concentration per Run 3 | 0.4692 ppm | 0.4787 ppm | 0.4558 ppm | 0.4526 ppm | 0.4527 ppm | 0.4761 ppm | 0.5079 ppm |
| Recovery Percentage 1 | 94.050 % | 94.601 % | 90.973 % | 90.121 % | 89.328 % | 93.905 % | 99.241 % |
| Concentration RSD | 0.2 % | 1.8 % | 0.5 % | 0.5 % | 2.1 % | 2.2 % | 2.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4510 ppm | 0.4504 ppm | 0.4752 ppm | 0.4542 ppm | 0.4795 ppm | 4.9730 ppm | 0.4865 ppm |
| Concentration per Run 1 | 0.4423 ppm | 0.4418 ppm | 0.4766 ppm | 0.4544 ppm | 0.4667 ppm | 4.8665 ppm | 0.4872 ppm |
| Concentration per Run 2 | 0.4579 ppm | 0.4568 ppm | 0.4738 ppm | 0.4554 ppm | 0.4844 ppm | 4.9988 ppm | 0.4848 ppm |
| Concentration per Run 3 | 0.4529 ppm | 0.4526 ppm | 0.4753 ppm | 0.4527 ppm | 0.4874 ppm | 5.0538 ppm | 0.4874 ppm |
| Recovery Percentage 1 | 90.203 % | 90.078 % | 95.048 % | 90.837 % | 95.905 % | 99.461 % | 97.297 % |
| Concentration RSD | 1.8 % | 1.7 % | 0.3 % | 0.3 % | 2.3 % | 1.9 % | 0.3 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4650 ppm | 0.4414 ppm | 9.1091 ppm | 0.4541 ppm | 0.4567 ppm | 0.4491 ppm | 0.4628 ppm |
| Concentration per Run 1 | 0.4533 ppm | 0.4309 ppm | 8.8855 ppm | 0.4457 ppm | 0.4485 ppm | 0.4385 ppm | 0.4589 ppm |
| Concentration per Run 2 | 0.4705 ppm | 0.4484 ppm | 9.1996 ppm | 0.4602 ppm | 0.4628 ppm | 0.4563 ppm | 0.4623 ppm |
| Concentration per Run 3 | 0.4711 ppm | 0.4450 ppm | 9.2421 ppm | 0.4565 ppm | 0.4586 ppm | 0.4526 ppm | 0.4671 ppm |
| Recovery Percentage 1 | 92.993 % | 88.283 % | 91.091 % | 90.825 % | 91.331 % | 89.827 % | 92.556 % |
| Concentration RSD | 2.2 % | 2.1 % | 2.1 % | 1.7 % | 1.6 % | 2.1 % | 0.9 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.9127 ppm | 0.4518 ppm | 0.4559 ppm | 0.4775 ppm | 0.4559 ppm | 0.4573 ppm | 0.4579 ppm |
| Concentration per Run 1 | 4.8234 ppm | 0.4424 ppm | 0.4447 ppm | 0.4781 ppm | 0.4481 ppm | 0.4547 ppm | 0.4484 ppm |
| Concentration per Run 2 | 4.9742 ppm | 0.4595 ppm | 0.4607 ppm | 0.4779 ppm | 0.4618 ppm | 0.4580 ppm | 0.4652 ppm |
| Concentration per Run 3 | 4.9405 ppm | 0.4536 ppm | 0.4623 ppm | 0.4766 ppm | 0.4579 ppm | 0.4591 ppm | 0.4600 ppm |
| Recovery Percentage 1 | 93.575 % | 90.369 % | 91.182 % | 95.505 % | 91.185 % | 91.458 % | 91.576 % |
| Concentration RSD | 1.6 % | 1.9 % | 2.1 % | 0.2 % | 1.5 % | 0.5 % | 1.9 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.2220 % | 103.6956 % | 103.9124 % | 104.7378 % | 102.8911 % | 104.8118 % | 0.4591 ppm |
| Concentration per Run 1 | 100.4846 % | 103.5935 % | 104.4167 % | 107.0418 % | 104.7445 % | 104.7298 % | 0.4473 ppm |
| Concentration per Run 2 | 98.9425 % | 103.7316 % | 103.7252 % | 104.1037 % | 101.5056 % | 104.8475 % | 0.4636 ppm |
| Concentration per Run 3 | 98.2390 % | 103.7617 % | 103.5951 % | 103.0678 % | 102.4233 % | 104.8579 % | 0.4663 ppm |
| Recovery Percentage 1 | | | | | | | 91.817 % |
| Concentration RSD | 1.2 % | 0.1 % | 0.4 % | 2.0 % | 1.6 % | 0.1 % | 2.2 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCB
Analysis started at: 3/12/2025 11:47:59 PM
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0008 ppm | 0.0005 ppm | -0.0003 ppm | 0.0000 ppm | 0.0000 ppm | 0.0037 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0053 ppm | 0.0009 ppm | -0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0014 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0027 ppm | 0.0002 ppm | -0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0055 ppm | 0.0004 ppm | -0.0005 ppm | 0.0001 ppm | 0.0000 ppm | 0.0090 ppm |
| Recovery Percentage 1 | -0.665 % | -0.838 % | 9.651 % | -1.115 % | 0.031 % | 0.236 % | 3.662 % |
| Concentration RSD | 427.5 % | 668.8 % | 79.6 % | 45.1 % | 1,868.7 % | 308.6 % | 126.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | -0.0002 ppm | 0.0000 ppm | 0.0123 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | -0.0004 ppm | 0.0000 ppm | -0.0001 ppm | 0.0232 ppm | 0.0027 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | -0.0002 ppm | -0.0002 ppm | -0.0003 ppm | 0.0002 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0001 ppm | 0.0002 ppm | -0.0002 ppm | 0.0003 ppm | 0.0135 ppm | -0.0013 ppm |
| Recovery Percentage 1 | -0.819 % | 0.115 % | -1.291 % | -1.605 % | -0.062 % | 0.493 % | 0.396 % |
| Concentration RSD | 70.7 % | 422.6 % | 237.4 % | 70.8 % | 942.6 % | 93.6 % | 518.4 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0003 ppm | -0.0103 ppm | 0.0000 ppm | 0.0000 ppm | -0.0004 ppm | -0.0008 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0004 ppm | -0.0116 ppm | 0.0000 ppm | 0.0003 ppm | -0.0002 ppm | -0.0017 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0002 ppm | -0.0105 ppm | 0.0002 ppm | -0.0001 ppm | 0.0000 ppm | -0.0008 ppm |
| Concentration per Run 3 | -0.0006 ppm | 0.0002 ppm | -0.0088 ppm | -0.0001 ppm | -0.0001 ppm | -0.0011 ppm | 0.0001 ppm |
| Recovery Percentage 1 | -2.873 % | 0.520 % | -0.515 % | 0.060 % | 0.331 % | -0.878 % | -8.109 % |
| Concentration RSD | 110.4 % | 33.6 % | 13.5 % | 1,029.0 % | 671.0 % | 134.0 % | 113.3 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | 0.0003 ppm | -0.0001 ppm | 0.0002 ppm | 0.0008 ppm | 0.0001 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0009 ppm | 0.0004 ppm | -0.0002 ppm | 0.0002 ppm | 0.0008 ppm | 0.0002 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0008 ppm | 0.0000 ppm | -0.0001 ppm | 0.0004 ppm | 0.0003 ppm | 0.0001 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0009 ppm | 0.0005 ppm | 0.0000 ppm | 0.0000 ppm | 0.0012 ppm | 0.0000 ppm | 0.0001 ppm |
| Recovery Percentage 1 | -0.171 % | 0.617 % | -0.863 % | 1.733 % | 3.778 % | 1.361 % | 0.297 % |
| Concentration RSD | 8.9 % | 75.8 % | 77.8 % | 102.4 % | 54.5 % | 75.6 % | 349.3 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.8438 % | 105.3987 % | 106.0359 % | 102.5960 % | 108.3170 % | 104.8454 % | -0.0002 ppm |
| Concentration per Run 1 | 103.3335 % | 105.2228 % | 105.9436 % | 103.7195 % | 108.9742 % | 104.5675 % | 0.0001 ppm |
| Concentration per Run 2 | 99.2224 % | 105.4358 % | 106.1190 % | 101.8498 % | 108.5811 % | 103.8793 % | -0.0003 ppm |
| Concentration per Run 3 | 99.9756 % | 105.5374 % | 106.0451 % | 102.2186 % | 107.3959 % | 106.0896 % | -0.0005 ppm |
| Recovery Percentage 1 | | | | | | | -2.178 % |
| Concentration RSD | 2.2 % | 0.2 % | 0.1 % | 1.0 % | 0.8 % | 1.1 % | 141.9 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCV
Analysis started at: 3/12/2025 11:54:38 PM
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4757 ppm | 0.4670 ppm | 0.4547 ppm | 0.4485 ppm | 0.4457 ppm | 0.4696 ppm | 0.4957 ppm |
| Concentration per Run 1 | 0.4834 ppm | 0.4551 ppm | 0.4556 ppm | 0.4499 ppm | 0.4379 ppm | 0.4612 ppm | 0.4829 ppm |
| Concentration per Run 2 | 0.4728 ppm | 0.4737 ppm | 0.4541 ppm | 0.4482 ppm | 0.4484 ppm | 0.4731 ppm | 0.5031 ppm |
| Concentration per Run 3 | 0.4708 ppm | 0.4721 ppm | 0.4546 ppm | 0.4473 ppm | 0.4508 ppm | 0.4745 ppm | 0.5010 ppm |
| Recovery Percentage 1 | 95.134 % | 93.394 % | 90.948 % | 89.694 % | 89.133 % | 93.927 % | 99.130 % |
| Concentration RSD | 1.4 % | 2.2 % | 0.2 % | 0.3 % | 1.5 % | 1.6 % | 2.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4522 ppm | 0.4516 ppm | 0.4796 ppm | 0.4583 ppm | 0.4789 ppm | 4.9449 ppm | 0.4924 ppm |
| Concentration per Run 1 | 0.4519 ppm | 0.4516 ppm | 0.4876 ppm | 0.4633 ppm | 0.4699 ppm | 4.8616 ppm | 0.4992 ppm |
| Concentration per Run 2 | 0.4495 ppm | 0.4493 ppm | 0.4756 ppm | 0.4577 ppm | 0.4812 ppm | 4.9616 ppm | 0.4904 ppm |
| Concentration per Run 3 | 0.4553 ppm | 0.4540 ppm | 0.4756 ppm | 0.4539 ppm | 0.4857 ppm | 5.0114 ppm | 0.4877 ppm |
| Recovery Percentage 1 | 90.447 % | 90.327 % | 95.915 % | 91.664 % | 95.788 % | 98.897 % | 98.482 % |
| Concentration RSD | 0.6 % | 0.5 % | 1.4 % | 1.0 % | 1.7 % | 1.5 % | 1.2 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4652 ppm | 0.4422 ppm | 9.0500 ppm | 0.4548 ppm | 0.4570 ppm | 0.4511 ppm | 0.4591 ppm |
| Concentration per Run 1 | 0.4578 ppm | 0.4413 ppm | 8.8913 ppm | 0.4547 ppm | 0.4571 ppm | 0.4488 ppm | 0.4599 ppm |
| Concentration per Run 2 | 0.4684 ppm | 0.4396 ppm | 9.1003 ppm | 0.4529 ppm | 0.4566 ppm | 0.4508 ppm | 0.4582 ppm |
| Concentration per Run 3 | 0.4695 ppm | 0.4457 ppm | 9.1584 ppm | 0.4568 ppm | 0.4574 ppm | 0.4538 ppm | 0.4594 ppm |
| Recovery Percentage 1 | 93.048 % | 88.443 % | 90.500 % | 90.962 % | 91.408 % | 90.222 % | 91.829 % |
| Concentration RSD | 1.4 % | 0.7 % | 1.6 % | 0.4 % | 0.1 % | 0.6 % | 0.2 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.9101 ppm | 0.4516 ppm | 0.4550 ppm | 0.4823 ppm | 0.4553 ppm | 0.4577 ppm | 0.4603 ppm |
| Concentration per Run 1 | 4.9128 ppm | 0.4521 ppm | 0.4467 ppm | 0.4895 ppm | 0.4568 ppm | 0.4582 ppm | 0.4600 ppm |
| Concentration per Run 2 | 4.8855 ppm | 0.4498 ppm | 0.4578 ppm | 0.4802 ppm | 0.4526 ppm | 0.4564 ppm | 0.4574 ppm |
| Concentration per Run 3 | 4.9320 ppm | 0.4530 ppm | 0.4604 ppm | 0.4772 ppm | 0.4566 ppm | 0.4585 ppm | 0.4634 ppm |
| Recovery Percentage 1 | 93.526 % | 90.328 % | 90.992 % | 96.458 % | 91.063 % | 91.540 % | 92.060 % |
| Concentration RSD | 0.5 % | 0.4 % | 1.6 % | 1.3 % | 0.5 % | 0.3 % | 0.7 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.9915 % | 104.2707 % | 104.3743 % | 104.7244 % | 102.6806 % | 104.5656 % | 0.4562 ppm |
| Concentration per Run 1 | 101.1604 % | 102.9744 % | 104.2155 % | 106.3227 % | 102.8500 % | 102.9005 % | 0.4480 ppm |
| Concentration per Run 2 | 99.0510 % | 104.7994 % | 104.6700 % | 103.7631 % | 103.3341 % | 105.2060 % | 0.4586 ppm |
| Concentration per Run 3 | 99.7632 % | 105.0382 % | 104.2375 % | 104.0875 % | 101.8577 % | 105.5904 % | 0.4619 ppm |
| Recovery Percentage 1 | | | | | | | 91.232 % |
| Concentration RSD | 1.1 % | 1.1 % | 0.2 % | 1.3 % | 0.7 % | 1.4 % | 1.6 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: CCB
Analysis started at: 3/13/2025 12:01:01 AM
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0007 ppm | -0.0001 ppm | -0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0058 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0013 ppm | 0.0000 ppm | -0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0042 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0046 ppm | 0.0000 ppm | -0.0003 ppm | 0.0001 ppm | 0.0000 ppm | 0.0091 ppm |
| Concentration per Run 3 | 0.0003 ppm | -0.0037 ppm | -0.0004 ppm | -0.0004 ppm | -0.0001 ppm | 0.0001 ppm | 0.0041 ppm |
| Recovery Percentage 1 | 0.100 % | 0.739 % | -2.462 % | -1.282 % | -0.288 % | 0.646 % | 5.804 % |
| Concentration RSD | 3,754.4 % | 560.9 % | 165.9 % | 20.2 % | 312.3 % | 125.2 % | 49.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | -0.0002 ppm | 0.0005 ppm | 0.0186 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0003 ppm | -0.0002 ppm | 0.0010 ppm | 0.0303 ppm | -0.0008 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | 0.0003 ppm | -0.0002 ppm | 0.0011 ppm | -0.0015 ppm | 0.0022 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0000 ppm | 0.0002 ppm | -0.0002 ppm | -0.0006 ppm | 0.0269 ppm | 0.0009 ppm |
| Recovery Percentage 1 | -0.510 % | -0.028 % | 2.398 % | -2.060 % | 1.068 % | 0.742 % | 0.774 % |
| Concentration RSD | 148.3 % | 1,340.2 % | 32.6 % | 17.2 % | 176.6 % | 94.1 % | 196.7 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0004 ppm | -0.0145 ppm | -0.0001 ppm | 0.0000 ppm | -0.0002 ppm | -0.0006 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0004 ppm | -0.0158 ppm | -0.0001 ppm | -0.0004 ppm | -0.0003 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0004 ppm | -0.0130 ppm | -0.0001 ppm | 0.0004 ppm | 0.0000 ppm | -0.0018 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0003 ppm | -0.0146 ppm | -0.0001 ppm | 0.0001 ppm | -0.0004 ppm | -0.0001 ppm |
| Recovery Percentage 1 | 0.634 % | 0.740 % | -0.724 % | -0.441 % | 0.188 % | -0.397 % | -5.617 % |
| Concentration RSD | 560.9 % | 19.8 % | 9.5 % | 13.1 % | 2,189.8 % | 107.5 % | 193.9 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | 0.0002 ppm | 0.0000 ppm | 0.0001 ppm | 0.0007 ppm | 0.0001 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0006 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm | 0.0008 ppm | 0.0001 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0006 ppm | 0.0000 ppm | 0.0001 ppm | 0.0004 ppm | 0.0003 ppm | 0.0003 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0014 ppm | 0.0002 ppm | 0.0000 ppm | -0.0002 ppm | 0.0008 ppm | 0.0001 ppm | 0.0000 ppm |
| Recovery Percentage 1 | -0.176 % | 0.310 % | 0.179 % | 0.664 % | 3.283 % | 1.405 % | -0.683 % |
| Concentration RSD | 56.1 % | 95.0 % | 247.3 % | 445.1 % | 40.8 % | 86.3 % | 80.2 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 100.6411 % | 106.4683 % | 106.5102 % | 101.9964 % | 108.5244 % | 105.9635 % | 0.0001 ppm |
| Concentration per Run 1 | 103.3222 % | 106.0514 % | 107.0054 % | 103.0600 % | 109.0337 % | 105.4804 % | -0.0004 ppm |
| Concentration per Run 2 | 99.1643 % | 106.3693 % | 106.2775 % | 100.9745 % | 108.1224 % | 105.8858 % | 0.0000 ppm |
| Concentration per Run 3 | 99.4368 % | 106.9841 % | 106.2477 % | 101.9548 % | 108.4169 % | 106.5243 % | 0.0005 ppm |
| Recovery Percentage 1 | | | | | | | 0.598 % |
| Concentration RSD | 2.3 % | 0.4 % | 0.4 % | 1.0 % | 0.4 % | 0.5 % | 728.0 % |

# ICP DataTrace 6

3/13/2025 7:06:13 AM

LabBook: WG2039408_03122025T6.imexp

Sample: LLOQ RL check
Analysis started at: 3/13/2025 12:07:41 AM
Rack: 0
Vial: 5

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0050 ppm | 0.0973 ppm | **0.0038 ppm** | 0.0272 ppm | 0.0092 ppm | 0.0049 ppm | 0.1053 ppm |
| Concentration per Run 1 | 0.0049 ppm | 0.0953 ppm | 0.0036 ppm | 0.0274 ppm | 0.0092 ppm | 0.0048 ppm | 0.1012 ppm |
| Concentration per Run 2 | 0.0050 ppm | 0.1004 ppm | 0.0035 ppm | 0.0271 ppm | 0.0093 ppm | 0.0049 ppm | 0.1069 ppm |
| Concentration per Run 3 | 0.0052 ppm | 0.0962 ppm | 0.0043 ppm | 0.0273 ppm | 0.0093 ppm | 0.0049 ppm | 0.1078 ppm |
| Recovery Percentage 1 | 100.638 % | 97.310 % | 75.911 % | 90.794 % | 92.398 % | 97.404 % | 105.310 % |
| Concentration RSD | 2.6 % | 2.8 % | **12.0 %** | 0.5 % | 0.7 % | 0.5 % | 3.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Mg 279.079 {121} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0038 ppm | 0.0089 ppm | 0.0100 ppm | 0.0093 ppm | 0.0502 ppm | 2.5316 ppm | 0.1038 ppm |
| Concentration per Run 1 | 0.0038 ppm | 0.0088 ppm | 0.0099 ppm | 0.0091 ppm | 0.0498 ppm | 2.4805 ppm | 0.1048 ppm |
| Concentration per Run 2 | 0.0037 ppm | 0.0090 ppm | 0.0100 ppm | 0.0093 ppm | 0.0497 ppm | 2.5801 ppm | 0.1040 ppm |
| Concentration per Run 3 | 0.0038 ppm | 0.0089 ppm | 0.0102 ppm | 0.0094 ppm | 0.0512 ppm | 2.5342 ppm | 0.1028 ppm |
| Recovery Percentage 1 | 94.474 % | 89.098 % | 100.072 % | 92.677 % | 100.452 % | 101.265 % | 103.841 % |
| Concentration RSD | 0.8 % | 0.9 % | 1.6 % | 1.6 % | 1.7 % | 2.0 % | 1.0 % |

| | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) | Se 196.090 {472} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0099 ppm | 0.0449 ppm | 1.8783 ppm | 0.0181 ppm | 0.0087 ppm | 0.0451 ppm | 0.0088 ppm |
| Concentration per Run 1 | 0.0096 ppm | 0.0450 ppm | 1.8535 ppm | 0.0182 ppm | 0.0084 ppm | 0.0464 ppm | 0.0077 ppm |
| Concentration per Run 2 | 0.0099 ppm | 0.0450 ppm | 1.8925 ppm | 0.0181 ppm | 0.0091 ppm | 0.0449 ppm | 0.0096 ppm |
| Concentration per Run 3 | 0.0102 ppm | 0.0449 ppm | 1.8890 ppm | 0.0180 ppm | 0.0085 ppm | 0.0441 ppm | 0.0090 ppm |
| Recovery Percentage 1 | 99.270 % | 89.884 % | 93.917 % | 90.375 % | 86.520 % | 90.268 % | 87.778 % |
| Concentration RSD | 3.3 % | 0.2 % | 1.2 % | 0.6 % | 4.9 % | 2.6 % | 10.8 % |

| | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) | Zn 206.200 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4810 ppm | 0.0459 ppm | 0.0093 ppm | 0.0099 ppm | 0.0177 ppm | 0.0095 ppm | 0.0052 ppm |
| Concentration per Run 1 | 0.4797 ppm | 0.0456 ppm | 0.0091 ppm | 0.0099 ppm | 0.0180 ppm | 0.0095 ppm | 0.0052 ppm |
| Concentration per Run 2 | 0.4828 ppm | 0.0461 ppm | 0.0095 ppm | 0.0101 ppm | 0.0175 ppm | 0.0095 ppm | 0.0051 ppm |
| Concentration per Run 3 | 0.4805 ppm | 0.0460 ppm | 0.0093 ppm | 0.0097 ppm | 0.0177 ppm | 0.0094 ppm | 0.0052 ppm |
| Recovery Percentage 1 | 96.204 % | 91.825 % | 93.121 % | 99.132 % | 88.726 % | 94.777 % | 103.323 % |
| Concentration RSD | 0.3 % | 0.5 % | 2.2 % | 1.8 % | 1.4 % | 0.7 % | 1.0 % |

| | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 99.3052 % | 105.2114 % | 105.4632 % | 102.4139 % | 104.6070 % | 105.9059 % | 0.0092 ppm |
| Concentration per Run 1 | 100.3312 % | 105.2102 % | 105.5587 % | 102.8627 % | 104.6959 % | 105.5902 % | 0.0086 ppm |
| Concentration per Run 2 | 99.5758 % | 105.2333 % | 105.3857 % | 102.6611 % | 104.4099 % | 106.0196 % | 0.0095 ppm |
| Concentration per Run 3 | 98.0087 % | 105.1905 % | 105.4452 % | 101.7179 % | 104.7153 % | 106.1079 % | 0.0095 ppm |
| Recovery Percentage 1 | | | | | | | 92.200 % |
| Concentration RSD | 1.2 % | 0.0 % | 0.1 % | 0.6 % | 0.2 % | 0.3 % | 5.5 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: Blank DMC Trace5
Analysis started at: 3/12/2025 5:40:15 AM
Comments <Comment>
Rack: 0
Vial: 1

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -0.4 % | 0.1 % | 0.8 % | 0.5 % | 0.1 % | 0.5 % | 0.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | 2.9 % | 0.1 % | -0.2 % | 0.0 % | -1.3 % | 0.1 % | 0.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | 1.6 % | 0.8 % | 3.3 % | 0.2 % | -0.1 % | -0.1 % | -0.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -0.1 % | 0.0 % | 0.2 % | -0.3 % | -0.2 % | -0.6 % | -0.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % |
| Concentration per Run | 0.0000 ppm | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % |
| Concentration RSD | 0.3 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: ICAL
Analysis started at: 3/12/2025 5:46:41 AM
Comments <Comment>
Rack: 0
Vial: 2

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 10.0000 ppm |
| Concentration per Run 1 | 1.0007 ppm | 25.6148 ppm | 1.0003 ppm | 1.0002 ppm | 1.0249 ppm | 1.0251 ppm | 10.2512 ppm |
| Concentration per Run 2 | 0.9997 ppm | 24.8686 ppm | 0.9999 ppm | 1.0015 ppm | 0.9958 ppm | 0.9970 ppm | 9.9585 ppm |
| Concentration per Run 3 | 0.9996 ppm | 24.5166 ppm | 0.9998 ppm | 0.9984 ppm | 0.9793 ppm | 0.9779 ppm | 9.7903 ppm |
| Concentration RSD | 0.1 % | 2.2 % | 0.0 % | 0.2 % | 2.3 % | 2.4 % | 2.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 35.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 1.0001 ppm | 1.0005 ppm | 1.0013 ppm | 1.0014 ppm | 25.6311 ppm | 35.8975 ppm | 1.0260 ppm |
| Concentration per Run 2 | 1.0015 ppm | 1.0015 ppm | 0.9958 ppm | 0.9961 ppm | 24.8715 ppm | 34.8277 ppm | 0.9930 ppm |
| Concentration per Run 3 | 0.9984 ppm | 0.9979 ppm | 1.0028 ppm | 1.0025 ppm | 24.4975 ppm | 34.2748 ppm | 0.9809 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 0.4 % | 0.3 % | 2.3 % | 2.4 % | 2.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.0000 ppm | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 10.0066 ppm | 1.0256 ppm | 0.9976 ppm | 25.6657 ppm | 1.0013 ppm | 1.0000 ppm | 1.0001 ppm |
| Concentration per Run 2 | 9.9865 ppm | 0.9948 ppm | 1.0023 ppm | 24.8665 ppm | 1.0009 ppm | 1.0017 ppm | 1.0002 ppm |
| Concentration per Run 3 | 10.0069 ppm | 0.9796 ppm | 1.0001 ppm | 24.4678 ppm | 0.9979 ppm | 0.9984 ppm | 0.9996 ppm |
| Concentration RSD | 0.1 % | 2.3 % | 0.2 % | 2.4 % | 0.2 % | 0.2 % | 0.0 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 10.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 1.0005 ppm | 10.0159 ppm | 1.0022 ppm | 1.0267 ppm | 1.0013 ppm | 1.0009 ppm | 1.0000 ppm |
| Concentration per Run 2 | 1.0042 ppm | 10.0005 ppm | 1.0003 ppm | 0.9953 ppm | 0.9980 ppm | 1.0022 ppm | 0.9974 ppm |
| Concentration per Run 3 | 0.9953 ppm | 9.9836 ppm | 0.9976 ppm | 0.9780 ppm | 1.0007 ppm | 0.9969 ppm | 1.0026 ppm |
| Concentration RSD | 0.4 % | 0.2 % | 0.2 % | 2.5 % | 0.2 % | 0.3 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 94.8877 % | 96.4603 % | 97.2058 % | 96.6548 % | 94.9056 % | 98.5532 % |
| Concentration per Run 1 | 1.0005 ppm | 92.5191 % | 96.2957 % | 96.9919 % | 94.1679 % | 94.7806 % | 98.3584 % |
| Concentration per Run 2 | 1.0021 ppm | 95.5440 % | 96.5322 % | 97.2969 % | 97.2892 % | 94.7901 % | 98.7781 % |
| Concentration per Run 3 | 0.9973 ppm | 96.6002 % | 96.5530 % | 97.3287 % | 98.5073 % | 95.1461 % | 98.5231 % |
| Concentration RSD | 0.2 % | 2.2 % | 0.1 % | 0.2 % | 2.3 % | 0.2 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: ICV
Analysis started at: 3/12/2025 5:52:43 AM
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4934 ppm | 0.5041 ppm | 0.4853 ppm | 0.4807 ppm | 0.4877 ppm | 0.5079 ppm | 0.5151 ppm |
| Concentration per Run 1 | 0.4949 ppm | 0.5163 ppm | 0.4875 ppm | 0.4813 ppm | 0.4993 ppm | 0.5203 ppm | 0.5301 ppm |
| Concentration per Run 2 | 0.4928 ppm | 0.5051 ppm | 0.4850 ppm | 0.4805 ppm | 0.4856 ppm | 0.5061 ppm | 0.5135 ppm |
| Concentration per Run 3 | 0.4925 ppm | 0.4910 ppm | 0.4833 ppm | 0.4802 ppm | 0.4783 ppm | 0.4974 ppm | 0.5017 ppm |
| Recovery Percentage 1 | 98.680 % | 100.828 % | 97.051 % | 96.134 % | 97.545 % | 101.588 % | 103.021 % |
| Concentration RSD | 0.3 % | 2.5 % | 0.4 % | 0.1 % | 2.2 % | 2.3 % | 2.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4917 ppm | 0.5022 ppm | 0.4993 ppm | 0.4898 ppm | 0.5279 ppm | 5.2029 ppm | 0.5008 ppm |
| Concentration per Run 1 | 0.4927 ppm | 0.5028 ppm | 0.5004 ppm | 0.4904 ppm | 0.5420 ppm | 5.3533 ppm | 0.5101 ppm |
| Concentration per Run 2 | 0.4913 ppm | 0.5022 ppm | 0.4976 ppm | 0.4887 ppm | 0.5270 ppm | 5.1568 ppm | 0.4999 ppm |
| Concentration per Run 3 | 0.4910 ppm | 0.5017 ppm | 0.4999 ppm | 0.4904 ppm | 0.5148 ppm | 5.0986 ppm | 0.4923 ppm |
| Recovery Percentage 1 | 98.334 % | 100.445 % | 99.857 % | 97.967 % | 105.580 % | 104.058 % | 100.158 % |
| Concentration RSD | 0.2 % | 0.1 % | 0.3 % | 0.2 % | 2.6 % | 2.6 % | 1.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5058 ppm | 0.5026 ppm | 0.4879 ppm | 10.0526 ppm | 0.5020 ppm | 0.5037 ppm | 0.4969 ppm |
| Concentration per Run 1 | 0.5071 ppm | 0.5148 ppm | 0.4875 ppm | 10.2966 ppm | 0.5028 ppm | 0.5059 ppm | 0.4974 ppm |
| Concentration per Run 2 | 0.5020 ppm | 0.5009 ppm | 0.4877 ppm | 10.0117 ppm | 0.5018 ppm | 0.5035 ppm | 0.4969 ppm |
| Concentration per Run 3 | 0.5083 ppm | 0.4922 ppm | 0.4886 ppm | 9.8496 ppm | 0.5015 ppm | 0.5015 ppm | 0.4963 ppm |
| Recovery Percentage 1 | 101.157 % | 100.529 % | 97.587 % | 100.526 % | 100.405 % | 100.733 % | 99.378 % |
| Concentration RSD | 0.7 % | 2.3 % | 0.1 % | 2.3 % | 0.1 % | 0.4 % | 0.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4879 ppm | 5.5671 ppm | 0.5150 ppm | 0.5046 ppm | 0.4987 ppm | 0.5068 ppm | 0.4921 ppm |
| Concentration per Run 1 | 0.4870 ppm | 5.5748 ppm | 0.5159 ppm | 0.5162 ppm | 0.5003 ppm | 0.5074 ppm | 0.4936 ppm |
| Concentration per Run 2 | 0.4908 ppm | 5.5638 ppm | 0.5152 ppm | 0.5025 ppm | 0.4974 ppm | 0.5061 ppm | 0.4910 ppm |
| Concentration per Run 3 | 0.4860 ppm | 5.5627 ppm | 0.5139 ppm | 0.4951 ppm | 0.4985 ppm | 0.5067 ppm | 0.4919 ppm |
| Recovery Percentage 1 | 97.585 % | 106.040 % | 102.995 % | 100.915 % | 99.746 % | 101.352 % | 98.426 % |
| Concentration RSD | 0.5 % | 0.1 % | 0.2 % | 2.1 % | 0.3 % | 0.1 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4977 ppm | 95.3610 % | 98.6989 % | 99.1812 % | 97.0764 % | 98.5735 % | 100.6364 % |
| Concentration per Run 1 | 0.4987 ppm | 92.7749 % | 98.5975 % | 99.2184 % | 94.4612 % | 98.4957 % | 100.5081 % |
| Concentration per Run 2 | 0.4976 ppm | 95.6514 % | 99.1674 % | 99.1794 % | 97.4187 % | 98.5810 % | 101.1822 % |
| Concentration per Run 3 | 0.4969 ppm | 97.6567 % | 98.3317 % | 99.1459 % | 99.3493 % | 98.6437 % | 100.2190 % |
| Recovery Percentage 1 | 99.539 % | | | | | | |
| Concentration RSD | 0.2 % | 2.6 % | 0.4 % | 0.0 % | 2.5 % | 0.1 % | 0.5 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: ICB
Analysis started at: 3/12/2025 5:58:50 AM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | -0.0031 ppm | -0.0012 ppm | 0.0017 ppm | 0.0001 ppm | 0.0000 ppm | -0.0012 ppm |
| Concentration per Run 1 | 0.0006 ppm | -0.0114 ppm | -0.0004 ppm | 0.0017 ppm | 0.0001 ppm | 0.0000 ppm | 0.0033 ppm |
| Concentration per Run 2 | 0.0005 ppm | -0.0004 ppm | -0.0014 ppm | 0.0018 ppm | 0.0001 ppm | 0.0000 ppm | -0.0028 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0025 ppm | -0.0017 ppm | 0.0016 ppm | 0.0000 ppm | -0.0001 ppm | -0.0041 ppm |
| Recovery Percentage 1 | 6.846 % | -3.072 % | -23.717 % | 5.598 % | 0.905 % | -0.901 % | -1.201 % |
| Concentration RSD | 25.8 % | 239.0 % | 55.5 % | 4.5 % | 57.4 % | 164.7 % | 330.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | -0.0001 ppm | 0.0011 ppm | 0.0103 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | -0.0003 ppm | -0.0002 ppm | 0.0017 ppm | 0.0148 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | -0.0002 ppm | 0.0004 ppm | -0.0038 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | -0.0001 ppm | 0.0012 ppm | 0.0198 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 0.932 % | 0.073 % | -1.031 % | -1.325 % | 2.152 % | 0.411 % | 2.245 % |
| Concentration RSD | 40.5 % | 685.1 % | 157.4 % | 52.4 % | 60.8 % | 121.0 % | 263.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 0.0002 ppm | 0.0015 ppm | -0.0130 ppm | 0.0000 ppm | 0.0002 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0010 ppm | 0.0003 ppm | 0.0017 ppm | -0.0111 ppm | 0.0001 ppm | -0.0008 ppm | -0.0005 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0001 ppm | 0.0015 ppm | -0.0094 ppm | 0.0001 ppm | 0.0006 ppm | -0.0007 ppm |
| Concentration per Run 3 | -0.0007 ppm | 0.0001 ppm | 0.0014 ppm | -0.0184 ppm | -0.0001 ppm | 0.0008 ppm | 0.0009 ppm |
| Recovery Percentage 1 | -0.353 % | 1.648 % | 3.009 % | -0.648 % | 0.114 % | 1.736 % | -0.216 % |
| Concentration RSD | 253.2 % | 48.6 % | 12.2 % | 37.0 % | 459.0 % | 508.6 % | 799.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0001 ppm | 0.0002 ppm | 0.0001 ppm | 0.0002 ppm | 0.0005 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0013 ppm | 0.0007 ppm | 0.0008 ppm | 0.0000 ppm | 0.0004 ppm | 0.0013 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0011 ppm | -0.0006 ppm | -0.0002 ppm | 0.0001 ppm | 0.0002 ppm | -0.0006 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0016 ppm | 0.0003 ppm | 0.0001 ppm | 0.0000 ppm | 0.0001 ppm | 0.0009 ppm | 0.0000 ppm |
| Recovery Percentage 1 | -3.000 % | 0.029 % | 0.412 % | 0.503 % | 2.319 % | 2.567 % | -0.103 % |
| Concentration RSD | 534.9 % | 458.2 % | 245.9 % | 46.1 % | 50.6 % | 194.2 % | 396.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 100.5718 % | 99.9510 % | 100.0044 % | 101.2042 % | 99.8289 % | 100.5873 % |
| Concentration per Run 1 | 0.0000 ppm | 99.3086 % | 99.8899 % | 100.0118 % | 99.5708 % | 99.7194 % | 100.6852 % |
| Concentration per Run 2 | 0.0000 ppm | 101.0583 % | 99.9773 % | 100.1167 % | 101.6419 % | 100.0757 % | 100.7472 % |
| Concentration per Run 3 | -0.0001 ppm | 101.3484 % | 99.9860 % | 99.8849 % | 102.3999 % | 99.6916 % | 100.3294 % |
| Recovery Percentage 1 | -0.524 % | | | | | | |
| Concentration RSD | 211.9 % | 1.1 % | 0.1 % | 0.1 % | 1.4 % | 0.2 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: ICV
Analysis started at: 3/12/2025 6:09:22 AM
Comments posistion change
Rack: 0
Vial: 10

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4859 ppm | 0.4834 ppm | 0.4885 ppm | 0.4801 ppm | 0.4689 ppm | 0.4911 ppm | 0.4955 ppm |
| Concentration per Run 1 | 0.4865 ppm | 0.4971 ppm | 0.4892 ppm | 0.4803 ppm | 0.4769 ppm | 0.5002 ppm | 0.5089 ppm |
| Concentration per Run 2 | 0.4859 ppm | 0.4718 ppm | 0.4881 ppm | 0.4799 ppm | 0.4671 ppm | 0.4883 ppm | 0.4892 ppm |
| Concentration per Run 3 | 0.4853 ppm | 0.4813 ppm | 0.4882 ppm | 0.4799 ppm | 0.4627 ppm | 0.4849 ppm | 0.4885 ppm |
| Recovery Percentage 1 | 97.186 % | 96.683 % | 97.703 % | 96.014 % | 93.781 % | 98.229 % | 99.110 % |
| Concentration RSD | 0.1 % | 2.6 % | 0.1 % | 0.0 % | 1.6 % | 1.6 % | 2.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4914 ppm | 0.5016 ppm | 0.5007 ppm | 0.4929 ppm | 0.5058 ppm | 4.9964 ppm | 0.4750 ppm |
| Concentration per Run 1 | 0.4920 ppm | 0.5021 ppm | 0.5000 ppm | 0.4926 ppm | 0.5163 ppm | 5.1117 ppm | 0.4846 ppm |
| Concentration per Run 2 | 0.4913 ppm | 0.5014 ppm | 0.5006 ppm | 0.4933 ppm | 0.5021 ppm | 4.9731 ppm | 0.4726 ppm |
| Concentration per Run 3 | 0.4908 ppm | 0.5013 ppm | 0.5016 ppm | 0.4929 ppm | 0.4989 ppm | 4.9043 ppm | 0.4679 ppm |
| Recovery Percentage 1 | 98.277 % | 100.324 % | 100.142 % | 98.586 % | 101.152 % | 99.928 % | 95.009 % |
| Concentration RSD | 0.1 % | 0.1 % | 0.2 % | 0.1 % | 1.8 % | 2.1 % | 1.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5124 ppm | 0.4823 ppm | 0.4843 ppm | 9.5980 ppm | 0.5046 ppm | 0.5058 ppm | 0.5003 ppm |
| Concentration per Run 1 | 0.5155 ppm | 0.4904 ppm | 0.4842 ppm | 9.7852 ppm | 0.5055 ppm | 0.5065 ppm | 0.5010 ppm |
| Concentration per Run 2 | 0.5107 ppm | 0.4796 ppm | 0.4840 ppm | 9.5472 ppm | 0.5046 ppm | 0.5065 ppm | 0.4987 ppm |
| Concentration per Run 3 | 0.5109 ppm | 0.4770 ppm | 0.4848 ppm | 9.4616 ppm | 0.5039 ppm | 0.5043 ppm | 0.5012 ppm |
| Recovery Percentage 1 | 102.479 % | 96.469 % | 96.867 % | 95.980 % | 100.930 % | 101.156 % | 100.056 % |
| Concentration RSD | 0.5 % | 1.5 % | 0.1 % | 1.7 % | 0.2 % | 0.2 % | 0.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4849 ppm | 5.5669 ppm | 0.4951 ppm | 0.4804 ppm | 0.5027 ppm | 0.5058 ppm | 0.4959 ppm |
| Concentration per Run 1 | 0.4824 ppm | 5.5762 ppm | 0.4958 ppm | 0.4888 ppm | 0.5023 ppm | 0.5056 ppm | 0.4958 ppm |
| Concentration per Run 2 | 0.4851 ppm | 5.5644 ppm | 0.4954 ppm | 0.4786 ppm | 0.5031 ppm | 0.5078 ppm | 0.4954 ppm |
| Concentration per Run 3 | 0.4873 ppm | 5.5601 ppm | 0.4940 ppm | 0.4738 ppm | 0.5027 ppm | 0.5039 ppm | 0.4963 ppm |
| Recovery Percentage 1 | 96.984 % | 106.036 % | 99.013 % | 96.080 % | 100.540 % | 101.159 % | 99.171 % |
| Concentration RSD | 0.5 % | 0.1 % | 0.2 % | 1.6 % | 0.1 % | 0.4 % | 0.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4981 ppm | 100.4333 % | 99.5479 % | 99.3415 % | 101.6005 % | 99.5095 % | 101.0918 % |
| Concentration per Run 1 | 0.4987 ppm | 99.3004 % | 99.3337 % | 99.5783 % | 100.1460 % | 99.4896 % | 100.8882 % |
| Concentration per Run 2 | 0.4980 ppm | 101.5646 % | 99.7547 % | 99.1605 % | 102.4717 % | 99.4487 % | 101.2995 % |
| Concentration per Run 3 | 0.4975 ppm | 100.4348 % | 99.5552 % | 99.2858 % | 102.1837 % | 99.5902 % | 101.0876 % |
| Recovery Percentage 1 | 99.615 % | | | | | | |
| Concentration RSD | 0.1 % | 1.1 % | 0.2 % | 0.2 % | 1.2 % | 0.1 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: ICB
Analysis started at: 3/12/2025 6:15:31 AM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | -0.0038 ppm | -0.0014 ppm | 0.0014 ppm | 0.0000 ppm | 0.0001 ppm | -0.0035 ppm |
| Concentration per Run 1 | 0.0005 ppm | -0.0044 ppm | -0.0020 ppm | 0.0016 ppm | 0.0000 ppm | 0.0001 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0002 ppm | -0.0025 ppm | -0.0011 ppm | 0.0015 ppm | 0.0001 ppm | 0.0001 ppm | -0.0048 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0044 ppm | -0.0012 ppm | 0.0010 ppm | 0.0000 ppm | 0.0001 ppm | -0.0064 ppm |
| Recovery Percentage 1 | 3.292 % | -3.771 % | -28.322 % | 4.516 % | 0.257 % | 1.507 % | -3.546 % |
| Concentration RSD | 94.1 % | 29.5 % | 33.7 % | 24.6 % | 118.9 % | 29.0 % | 103.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | -0.0001 ppm | 0.0004 ppm | 0.0007 ppm | -0.0138 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0002 ppm | 0.0001 ppm | -0.0001 ppm | -0.0093 ppm | -0.0005 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0002 ppm | -0.0002 ppm | 0.0001 ppm | 0.0008 ppm | -0.0182 ppm | -0.0006 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0001 ppm | -0.0003 ppm | 0.0009 ppm | 0.0013 ppm | -0.0139 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 0.961 % | -0.355 % | -1.081 % | 3.940 % | 1.344 % | -0.552 % | -3.923 % |
| Concentration RSD | 38.4 % | 208.5 % | 232.3 % | 119.6 % | 103.6 % | 32.4 % | 81.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0030 ppm | 0.0001 ppm | 0.0012 ppm | -0.0123 ppm | 0.0001 ppm | 0.0000 ppm | -0.0002 ppm |
| Concentration per Run 1 | -0.0022 ppm | -0.0001 ppm | 0.0012 ppm | -0.0051 ppm | -0.0001 ppm | -0.0002 ppm | -0.0011 ppm |
| Concentration per Run 2 | -0.0025 ppm | 0.0002 ppm | 0.0013 ppm | -0.0189 ppm | -0.0001 ppm | -0.0001 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0043 ppm | 0.0000 ppm | 0.0010 ppm | -0.0130 ppm | 0.0004 ppm | 0.0002 ppm | 0.0003 ppm |
| Recovery Percentage 1 | -2.995 % | 0.500 % | 2.351 % | -0.616 % | 0.246 % | -0.145 % | -0.469 % |
| Concentration RSD | 37.4 % | 352.2 % | 15.4 % | 56.0 % | 445.1 % | 1,525.9 % | 323.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | -0.0006 ppm | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | -0.0003 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0030 ppm | -0.0010 ppm | 0.0000 ppm | 0.0001 ppm | 0.0002 ppm | -0.0005 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0007 ppm | -0.0003 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm | 0.0004 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0025 ppm | -0.0005 ppm | 0.0000 ppm | 0.0002 ppm | -0.0001 ppm | -0.0008 ppm | -0.0003 ppm |
| Recovery Percentage 1 | 3.884 % | -0.116 % | 0.061 % | 0.846 % | 0.657 % | -1.566 % | 1.376 % |
| Concentration RSD | 712.7 % | 66.7 % | 195.9 % | 104.8 % | 230.6 % | 203.5 % | 290.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 103.7365 % | 93.8045 % | 97.2115 % | 103.9729 % | 97.1682 % | 94.2305 % |
| Concentration per Run 1 | 0.0000 ppm | 102.2223 % | 100.3140 % | 94.1759 % | 102.1923 % | 93.9156 % | 100.3625 % |
| Concentration per Run 2 | 0.0001 ppm | 102.7269 % | 101.4605 % | 98.2222 % | 102.5973 % | 98.1425 % | 101.7211 % |
| Concentration per Run 3 | 0.0001 ppm | 106.2603 % | 79.6391 % | 99.2363 % | 107.1290 % | 99.4465 % | 80.6079 % |
| Recovery Percentage 1 | 1.166 % | | | | | | |
| Concentration RSD | 44.0 % | 2.1 % | 13.1 % | 2.8 % | 2.6 % | 3.0 % | 12.5 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: LLOQ RL
Analysis started at: 3/12/2025 6:21:57 AM
Comments <Comment>
Rack: 0
Vial: 5

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0055 ppm | 0.0997 ppm | 0.0035 ppm | 0.0307 ppm | 0.0094 ppm | 0.0050 ppm | 0.1010 ppm |
| Concentration per Run 1 | 0.0057 ppm | 0.1031 ppm | 0.0035 ppm | 0.0305 ppm | 0.0096 ppm | 0.0051 ppm | 0.1039 ppm |
| Concentration per Run 2 | 0.0053 ppm | 0.1036 ppm | 0.0035 ppm | 0.0306 ppm | 0.0094 ppm | 0.0049 ppm | 0.0984 ppm |
| Concentration per Run 3 | 0.0055 ppm | 0.0924 ppm | 0.0036 ppm | 0.0309 ppm | 0.0091 ppm | 0.0049 ppm | 0.1007 ppm |
| Recovery Percentage 1 | 110.162 % | 99.695 % | 70.428 % | 102.255 % | 93.771 % | 99.451 % | 100.992 % |
| Concentration RSD | 3.2 % | 6.3 % | 3.0 % | 0.7 % | 2.5 % | 2.1 % | 2.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0040 ppm | 0.0100 ppm | 0.0102 ppm | 0.0101 ppm | 0.0540 ppm | 2.4952 ppm | 0.0097 ppm |
| Concentration per Run 1 | 0.0040 ppm | 0.0100 ppm | 0.0101 ppm | 0.0100 ppm | 0.0553 ppm | 2.5729 ppm | 0.0105 ppm |
| Concentration per Run 2 | 0.0040 ppm | 0.0100 ppm | 0.0102 ppm | 0.0102 ppm | 0.0531 ppm | 2.4747 ppm | 0.0092 ppm |
| Concentration per Run 3 | 0.0040 ppm | 0.0100 ppm | 0.0102 ppm | 0.0101 ppm | 0.0534 ppm | 2.4381 ppm | 0.0096 ppm |
| Recovery Percentage 1 | 100.271 % | 100.129 % | 102.008 % | 100.972 % | 107.922 % | 99.810 % | 97.379 % |
| Concentration RSD | 0.2 % | 0.2 % | 0.8 % | 1.0 % | 2.2 % | 2.8 % | 6.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1033 ppm | 0.0100 ppm | 0.0491 ppm | 1.9247 ppm | 0.0197 ppm | 0.0103 ppm | 0.0487 ppm |
| Concentration per Run 1 | 0.1009 ppm | 0.0101 ppm | 0.0491 ppm | 1.9713 ppm | 0.0198 ppm | 0.0102 ppm | 0.0490 ppm |
| Concentration per Run 2 | 0.1044 ppm | 0.0101 ppm | 0.0491 ppm | 1.9071 ppm | 0.0196 ppm | 0.0100 ppm | 0.0495 ppm |
| Concentration per Run 3 | 0.1045 ppm | 0.0097 ppm | 0.0491 ppm | 1.8956 ppm | 0.0197 ppm | 0.0108 ppm | 0.0475 ppm |
| Recovery Percentage 1 | 103.277 % | 99.529 % | 98.204 % | 96.234 % | 98.529 % | 103.334 % | 97.301 % |
| Concentration RSD | 2.0 % | 2.3 % | 0.0 % | 2.1 % | 0.4 % | 4.1 % | 2.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0077 ppm | 0.5395 ppm | 0.0516 ppm | 0.0098 ppm | 0.0103 ppm | 0.0203 ppm | 0.0102 ppm |
| Concentration per Run 1 | 0.0069 ppm | 0.5395 ppm | 0.0517 ppm | 0.0098 ppm | 0.0102 ppm | 0.0188 ppm | 0.0101 ppm |
| Concentration per Run 2 | 0.0084 ppm | 0.5391 ppm | 0.0515 ppm | 0.0097 ppm | 0.0102 ppm | 0.0211 ppm | 0.0101 ppm |
| Concentration per Run 3 | 0.0077 ppm | 0.5399 ppm | 0.0515 ppm | 0.0097 ppm | 0.0105 ppm | 0.0210 ppm | 0.0105 ppm |
| Recovery Percentage 1 | 76.650 % | 107.905 % | 103.180 % | 97.603 % | 102.872 % | 101.514 % | 102.133 % |
| Concentration RSD | 9.7 % | 0.1 % | 0.2 % | 0.8 % | 1.5 % | 6.3 % | 2.5 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0053 ppm | 100.3425 % | 100.5914 % | 99.6985 % | 101.1309 % | 100.2898 % | 101.9427 % |
| Concentration per Run 1 | 0.0053 ppm | 98.6433 % | 100.3844 % | 99.5111 % | 98.8457 % | 100.1145 % | 101.8662 % |
| Concentration per Run 2 | 0.0052 ppm | 100.5815 % | 100.7791 % | 99.9140 % | 101.7908 % | 100.5176 % | 102.1167 % |
| Concentration per Run 3 | 0.0053 ppm | 101.8028 % | 100.6105 % | 99.6704 % | 102.7561 % | 100.2374 % | 101.8453 % |
| Recovery Percentage 1 | 105.710 % | | | | | | |
| Concentration RSD | 1.2 % | 1.6 % | 0.2 % | 0.2 % | 2.0 % | 0.2 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: ICSA
Analysis started at: 3/12/2025 6:28:19 AM
Comments <Comment>
Rack: 0
Vial: 6

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0032 ppm | **485.0638 ppm** | -0.0076 ppm | -0.0147 ppm | 0.0013 ppm | -0.0001 ppm | **451.1002 ppm** |
| Concentration per Run 1 | 0.0032 ppm | 492.8051 ppm | -0.0049 ppm | -0.0138 ppm | 0.0012 ppm | -0.0002 ppm | 454.1974 ppm |
| Concentration per Run 2 | 0.0029 ppm | 482.2782 ppm | -0.0092 ppm | -0.0152 ppm | 0.0014 ppm | -0.0001 ppm | 450.9843 ppm |
| Concentration per Run 3 | 0.0034 ppm | 480.1080 ppm | -0.0087 ppm | -0.0150 ppm | 0.0013 ppm | -0.0001 ppm | 448.1190 ppm |
| Recovery Percentage 1 | 45.314 % | 485,063.765 % | -152.706 % | -48.874 % | 12.643 % | -2.764 % | 451,100.217 % |
| Concentration RSD | 6.9 % | **1.4 %** | 30.7 % | 5.0 % | 8.3 % | 17.9 % | **0.7 %** |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0075 ppm | 0.0007 ppm | 0.0019 ppm | 0.0015 ppm | **174.6024 ppm** | 0.0060 ppm | -0.0029 ppm |
| Concentration per Run 1 | -0.0074 ppm | 0.0008 ppm | 0.0017 ppm | 0.0018 ppm | 176.6786 ppm | 0.0275 ppm | -0.0023 ppm |
| Concentration per Run 2 | -0.0077 ppm | 0.0006 ppm | 0.0019 ppm | 0.0017 ppm | 175.8753 ppm | -0.0070 ppm | -0.0030 ppm |
| Concentration per Run 3 | -0.0075 ppm | 0.0008 ppm | 0.0022 ppm | 0.0012 ppm | 171.2533 ppm | -0.0024 ppm | -0.0035 ppm |
| Recovery Percentage 1 | -187.875 % | 3.630 % | 19.181 % | 15.472 % | 349,204.811 % | 0.241 % | -29.287 % |
| Concentration RSD | 1.8 % | 20.5 % | 11.8 % | 22.1 % | **1.7 %** | 311.8 % | 19.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | **493.6756 ppm** | 0.0000 ppm | -0.0009 ppm | 0.0617 ppm | -0.0032 ppm | -0.0018 ppm | 0.0022 ppm |
| Concentration per Run 1 | 496.0259 ppm | -0.0001 ppm | -0.0010 ppm | 0.0611 ppm | -0.0034 ppm | -0.0010 ppm | 0.0036 ppm |
| Concentration per Run 2 | 495.7929 ppm | -0.0002 ppm | -0.0009 ppm | 0.0595 ppm | -0.0030 ppm | -0.0031 ppm | 0.0032 ppm |
| Concentration per Run 3 | 489.2082 ppm | 0.0001 ppm | -0.0010 ppm | 0.0646 ppm | -0.0032 ppm | -0.0013 ppm | -0.0003 ppm |
| Recovery Percentage 1 | 493,675.636 % | -0.298 % | -1.880 % | 3.086 % | -12.879 % | -18.193 % | 4.358 % |
| Concentration RSD | **0.8 %** | 474.0 % | 3.3 % | 4.2 % | 6.7 % | 63.0 % | 97.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | -0.0090 ppm | 0.0032 ppm | 0.0055 ppm | -0.0018 ppm | 0.0026 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0048 ppm | -0.0083 ppm | 0.0025 ppm | 0.0055 ppm | -0.0019 ppm | 0.0011 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0031 ppm | -0.0085 ppm | 0.0030 ppm | 0.0055 ppm | -0.0017 ppm | 0.0009 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0045 ppm | -0.0103 ppm | 0.0039 ppm | 0.0054 ppm | -0.0018 ppm | 0.0057 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 20.786 % | -1.806 % | 6.300 % | 54.749 % | -17.666 % | 12.779 % | -1.395 % |
| Concentration RSD | 214.6 % | 12.3 % | 22.4 % | 1.0 % | 6.0 % | 107.3 % | 33.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 96.4202 % | 86.8441 % | 87.1353 % | 96.7209 % | 77.4808 % | 87.8646 % |
| Concentration per Run 1 | 0.0011 ppm | 94.9108 % | 86.6721 % | 87.1057 % | 95.4656 % | 77.3991 % | 87.8025 % |
| Concentration per Run 2 | 0.0010 ppm | 96.6523 % | 86.8936 % | 87.0536 % | 96.8194 % | 77.2029 % | 87.9162 % |
| Concentration per Run 3 | 0.0011 ppm | 97.6975 % | 86.9665 % | 87.2467 % | 97.8777 % | 77.8404 % | 87.8750 % |
| Recovery Percentage 1 | 20.987 % | | | | | | |
| Concentration RSD | 8.0 % | 1.5 % | 0.2 % | 0.1 % | 1.3 % | 0.4 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: SIC Multi
Analysis started at: 3/12/2025 6:50:29 AM
Comments <Comment>
Rack: 0
Vial: 7

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | -0.0018 ppm | -0.0052 ppm | 0.0018 ppm | 0.0003 ppm | 0.0031 ppm | 0.0069 ppm |
| Concentration per Run 1 | 0.0015 ppm | 0.0057 ppm | -0.0052 ppm | 0.0017 ppm | 0.0003 ppm | 0.0031 ppm | 0.0088 ppm |
| Concentration per Run 2 | 0.0013 ppm | -0.0074 ppm | -0.0055 ppm | 0.0018 ppm | 0.0003 ppm | 0.0032 ppm | 0.0040 ppm |
| Concentration per Run 3 | 0.0017 ppm | -0.0037 ppm | -0.0050 ppm | 0.0018 ppm | 0.0003 ppm | 0.0029 ppm | 0.0079 ppm |
| Recovery Percentage 1 | 21.528 % | -1.799 % | -104.921 % | 6.006 % | 3.077 % | 61.816 % | 6.895 % |
| Concentration RSD | 11.5 % | 377.3 % | 5.0 % | 3.3 % | 7.6 % | 4.4 % | 37.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0077 ppm | 20.1660 ppm | -0.0032 ppm | -0.0055 ppm | 0.0016 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0076 ppm | 20.2135 ppm | -0.0030 ppm | -0.0054 ppm | -0.0167 ppm | 0.0013 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0077 ppm | 20.1107 ppm | -0.0035 ppm | -0.0054 ppm | 0.0267 ppm | -0.0013 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0078 ppm | 20.1739 ppm | -0.0032 ppm | -0.0057 ppm | -0.0053 ppm | 0.0003 ppm |
| Recovery Percentage 1 | -2.914 % | 38.595 % | 201,660.097 % | -32.452 % | -10.984 % | 0.062 % | 0.905 % |
| Concentration RSD | 23.2 % | 1.6 % | 0.3 % | 8.3 % | 3.1 % | 1,448.1 % | 1,447.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0280 ppm | 19.5014 ppm | 0.0038 ppm | -0.0076 ppm | 0.0005 ppm | -0.0010 ppm | 0.0061 ppm |
| Concentration per Run 1 | -0.0301 ppm | 19.5853 ppm | 0.0037 ppm | -0.0079 ppm | 0.0005 ppm | -0.0011 ppm | 0.0066 ppm |
| Concentration per Run 2 | -0.0280 ppm | 19.5682 ppm | 0.0038 ppm | -0.0062 ppm | 0.0005 ppm | -0.0015 ppm | 0.0046 ppm |
| Concentration per Run 3 | -0.0257 ppm | 19.3508 ppm | 0.0039 ppm | -0.0087 ppm | 0.0006 ppm | -0.0003 ppm | 0.0072 ppm |
| Recovery Percentage 1 | -27.957 % | 195,014.242 % | 7.617 % | -0.381 % | 2.153 % | -9.555 % | 12.256 % |
| Concentration RSD | 7.9 % | 0.7 % | 3.0 % | 16.7 % | 6.4 % | 62.8 % | 22.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0088 ppm | -0.0528 ppm | -0.0004 ppm | 0.0001 ppm | 19.7355 ppm | 0.0143 ppm | 10.0950 [SIC 10] |
| Concentration per Run 1 | -0.0075 ppm | -0.0522 ppm | -0.0006 ppm | 0.0001 ppm | 19.7047 ppm | 0.0135 ppm | 9.9996 ppm |
| Concentration per Run 2 | -0.0083 ppm | -0.0523 ppm | 0.0004 ppm | 0.0001 ppm | 19.7146 ppm | 0.0155 ppm | 10.1177 ppm |
| Concentration per Run 3 | -0.0106 ppm | -0.0539 ppm | -0.0010 ppm | 0.0000 ppm | 19.7872 ppm | 0.0140 ppm | 10.1677 ppm |
| Recovery Percentage 1 | -88.320 % | -10.556 % | -0.846 % | 1.043 % | 197,355.188 % | 71.698 % | 100,949.936 % |
| Concentration RSD | 18.2 % | 1.9 % | 169.3 % | 59.3 % | 0.2 % | 7.2 % | 0.9 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 103.3519 % | 101.3998 % | 98.8022 % | 102.5846 % | 99.3525 % | 101.5150 % |
| Concentration per Run 1 | 0.0013 ppm | 103.3120 % | 101.7415 % | 98.7149 % | 102.1921 % | 99.5161 % | 101.7060 % |
| Concentration per Run 2 | 0.0009 ppm | 102.7027 % | 101.2210 % | 98.9962 % | 101.9228 % | 99.3755 % | 101.4871 % |
| Concentration per Run 3 | 0.0009 ppm | 104.0410 % | 101.2369 % | 98.6954 % | 103.6389 % | 99.1660 % | 101.3518 % |
| Recovery Percentage 1 | 20.763 % | | | | | | |
| Concentration RSD | 19.8 % | 0.6 % | 0.3 % | 0.2 % | 0.9 % | 0.2 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: LDR Check
Analysis started at: 3/12/2025 6:57:18 AM
Comments <Comment>
Rack: 0
Vial: 8

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0030 ppm | 0.0658 ppm | 20.7759 ppm | 18.7313 ppm | 18.2807 ppm | 4.8521 ppm | 0.0119 ppm |
| Concentration per Run 1 | 0.0029 ppm | 0.0631 ppm | 20.7634 ppm | 18.7163 ppm | 18.6968 ppm | 4.9374 ppm | 0.0123 ppm |
| Concentration per Run 2 | 0.0031 ppm | 0.0605 ppm | 20.7842 ppm | 18.7479 ppm | 18.1636 ppm | 4.7821 ppm | 0.0118 ppm |
| Concentration per Run 3 | 0.0031 ppm | 0.0738 ppm | 20.7800 ppm | 18.7298 ppm | 17.9816 ppm | 4.8368 ppm | 0.0117 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 103.879 % | 93.657 % | 91.403 % | 97.042 % | 0.000 % |
| Concentration RSD | 3.9 % | 10.7 % | 0.1 % | 0.1 % | 2.0 % | 1.6 % | 2.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.8310 ppm | 4.7420 ppm | 0.0018 ppm | 19.8618 ppm | 0.0057 ppm | 493.9704 ppm | 19.6105 ppm |
| Concentration per Run 1 | 4.8257 ppm | 4.7348 ppm | 0.0018 ppm | 19.9068 ppm | 0.0054 ppm | 510.5380 ppm | 19.9129 ppm |
| Concentration per Run 2 | 4.8331 ppm | 4.7467 ppm | 0.0022 ppm | 19.7787 ppm | 0.0065 ppm | 485.9391 ppm | 19.5270 ppm |
| Concentration per Run 3 | 4.8340 ppm | 4.7446 ppm | 0.0015 ppm | 19.9000 ppm | 0.0051 ppm | 485.4340 ppm | 19.3916 ppm |
| Recovery Percentage 1 | 96.619 % | 94.840 % | 0.000 % | 99.309 % | 0.000 % | 98.794 % | 98.053 % |
| Concentration RSD | 0.1 % | 0.1 % | 16.6 % | 0.4 % | 12.8 % | 2.9 % | 1.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0119 ppm | 0.0027 ppm | 4.8534 ppm | 398.7431 ppm | 9.4047 ppm | 48.5573 ppm | 5.0993 ppm |
| Concentration per Run 1 | -0.0117 ppm | 0.0028 ppm | 4.8413 ppm | 421.4914 ppm | 9.3962 ppm | 48.5322 ppm | 5.0944 ppm |
| Concentration per Run 2 | -0.0117 ppm | 0.0029 ppm | 4.8546 ppm | 394.0743 ppm | 9.4136 ppm | 48.5952 ppm | 5.1031 ppm |
| Concentration per Run 3 | -0.0122 ppm | 0.0023 ppm | 4.8642 ppm | 380.6637 ppm | 9.4043 ppm | 48.5445 ppm | 5.1004 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 97.067 % | 79.749 % | 94.047 % | 97.115 % | 101.986 % |
| Concentration RSD | 2.5 % | 11.6 % | 0.2 % | 5.2 % | 0.1 % | 0.1 % | 0.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.8583 ppm | 22.2738 [SIC 100] | 9.7157 ppm | 4.7958 ppm | 0.0050 ppm | 4.3706 ppm | 0.0196 ppm |
| Concentration per Run 1 | 4.8510 ppm | 22.2467 ppm | 9.7121 ppm | 4.8575 ppm | 0.0055 ppm | 4.3681 ppm | 0.0196 ppm |
| Concentration per Run 2 | 4.8587 ppm | 22.3004 ppm | 9.7196 ppm | 4.7758 ppm | 0.0049 ppm | 4.3721 ppm | 0.0197 ppm |
| Concentration per Run 3 | 4.8651 ppm | 22.2744 ppm | 9.7154 ppm | 4.7539 ppm | 0.0045 ppm | 4.3715 ppm | 0.0196 ppm |
| Recovery Percentage 1 | 97.166 % | 111.369 % | 97.157 % | 95.915 % | 0.000 % | 87.412 % | 0.000 % |
| Concentration RSD | 0.1 % | 0.1 % | 0.0 % | 1.1 % | 9.8 % | 0.1 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 19.8250 ppm | 97.5114 % | 88.2779 % | 81.1892 % | 97.7208 % | 89.3770 % | 89.4255 % |
| Concentration per Run 1 | 19.8177 ppm | 95.8357 % | 88.4143 % | 81.0535 % | 95.9797 % | 89.4176 % | 89.2832 % |
| Concentration per Run 2 | 19.8305 ppm | 97.8333 % | 88.2225 % | 81.1967 % | 98.3462 % | 89.3607 % | 89.4035 % |
| Concentration per Run 3 | 19.8269 ppm | 98.8651 % | 88.1970 % | 81.3176 % | 98.8365 % | 89.3526 % | 89.5896 % |
| Recovery Percentage 1 | 99.125 % | | | | | | |
| Concentration RSD | 0.0 % | 1.6 % | 0.1 % | 0.2 % | 1.6 % | 0.0 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: LLOQ 0.005 AS PASS
Analysis started at: 3/12/2025 7:22:46 AM
Comments <Comment>
Rack: 1
Vial: 1

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0056 ppm | **0.0040 ppm** | 0.0055 ppm | **0.0150 ppm** | 0.0047 ppm | 0.0050 ppm | 0.0074 ppm |
| Concentration per Run 1 | 0.0055 ppm | 0.0070 ppm | 0.0049 ppm | 0.0153 ppm | 0.0048 ppm | 0.0051 ppm | 0.0098 ppm |
| Concentration per Run 2 | 0.0056 ppm | 0.0015 ppm | 0.0056 ppm | 0.0151 ppm | 0.0045 ppm | 0.0050 ppm | 0.0039 ppm |
| Concentration per Run 3 | 0.0056 ppm | 0.0034 ppm | 0.0060 ppm | 0.0146 ppm | 0.0048 ppm | 0.0050 ppm | 0.0084 ppm |
| Recovery Percentage 1 | 111.570 % | 79.400 % | 110.212 % | 299.710 % | 93.777 % | 100.381 % | 0.000 % |
| Concentration RSD | 0.9 % | **70.9 %** | 10.1 % | **2.3 %** | 3.7 % | 1.1 % | 42.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0050 ppm | 0.0052 ppm | 0.0051 ppm | 0.0054 ppm | **0.0073 ppm** | 0.1567 ppm | 0.0065 ppm |
| Concentration per Run 1 | 0.0050 ppm | 0.0050 ppm | 0.0051 ppm | 0.0055 ppm | 0.0069 ppm | 0.1830 ppm | 0.0067 ppm |
| Concentration per Run 2 | 0.0050 ppm | 0.0052 ppm | 0.0050 ppm | 0.0051 ppm | 0.0071 ppm | 0.1331 ppm | 0.0054 ppm |
| Concentration per Run 3 | 0.0050 ppm | 0.0052 ppm | 0.0051 ppm | 0.0054 ppm | 0.0080 ppm | 0.1539 ppm | 0.0074 ppm |
| Recovery Percentage 1 | 99.886 % | 103.055 % | 101.754 % | 107.216 % | 146.242 % | 0.000 % | 0.000 % |
| Concentration RSD | 0.2 % | 2.1 % | 0.9 % | 3.7 % | **8.2 %** | 16.0 % | 15.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0076 ppm | 0.0053 ppm | 0.0054 ppm | 0.1501 ppm | 0.0055 ppm | 0.0055 ppm | 0.0044 ppm |
| Concentration per Run 1 | 0.0073 ppm | 0.0055 ppm | 0.0052 ppm | 0.1541 ppm | 0.0055 ppm | 0.0053 ppm | 0.0049 ppm |
| Concentration per Run 2 | 0.0069 ppm | 0.0053 ppm | 0.0056 ppm | 0.1556 ppm | 0.0057 ppm | 0.0063 ppm | 0.0043 ppm |
| Concentration per Run 3 | 0.0087 ppm | 0.0050 ppm | 0.0053 ppm | 0.1406 ppm | 0.0052 ppm | 0.0050 ppm | 0.0042 ppm |
| Recovery Percentage 1 | 0.000 % | 105.532 % | 107.205 % | 0.000 % | 109.425 % | 110.666 % | 88.894 % |
| Concentration RSD | 12.5 % | 4.7 % | 3.6 % | 5.5 % | 4.6 % | 11.9 % | 9.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | **0.0024 ppm** | **0.0571 ppm** | 0.0054 ppm | 0.0050 ppm | 0.0052 ppm | 0.0060 ppm | 0.0051 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0579 ppm | 0.0055 ppm | 0.0049 ppm | 0.0053 ppm | 0.0050 ppm | 0.0050 ppm |
| Concentration per Run 2 | 0.0020 ppm | 0.0573 ppm | 0.0054 ppm | 0.0051 ppm | 0.0052 ppm | 0.0066 ppm | 0.0052 ppm |
| Concentration per Run 3 | 0.0052 ppm | 0.0560 ppm | 0.0053 ppm | 0.0049 ppm | 0.0052 ppm | 0.0064 ppm | 0.0051 ppm |
| Recovery Percentage 1 | 47.366 % | 1,141.714 % | 108.248 % | 99.710 % | 104.506 % | 120.027 % | 102.079 % |
| Concentration RSD | **112.2 %** | **1.8 %** | 2.2 % | 2.8 % | 0.5 % | 15.0 % | 2.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0053 ppm | 103.1980 % | 102.1104 % | 98.5515 % | 101.0830 % | 100.7500 % | 100.4919 % |
| Concentration per Run 1 | 0.0054 ppm | 101.9417 % | 102.0164 % | 98.7614 % | 99.7418 % | 100.6914 % | 100.2564 % |
| Concentration per Run 2 | 0.0053 ppm | 104.2602 % | 102.1457 % | 98.2390 % | 101.9055 % | 100.5248 % | 100.5431 % |
| Concentration per Run 3 | 0.0054 ppm | 103.3922 % | 102.1691 % | 98.6540 % | 101.6016 % | 101.0337 % | 100.6760 % |
| Recovery Percentage 1 | 106.763 % | | | | | | |
| Concentration RSD | 1.4 % | 1.1 % | 0.1 % | 0.3 % | 1.2 % | 0.3 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: LLOQ 0.01 SE PASS
Analysis started at: 3/12/2025 7:29:08 AM
Comments <Comment>
Rack: 1
Vial: 2

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0107 ppm | 0.0093 ppm | 0.0105 ppm | 0.0179 ppm | 0.0094 ppm | 0.0101 ppm | 0.0119 ppm |
| Concentration per Run 1 | 0.0110 ppm | 0.0083 ppm | 0.0106 ppm | 0.0181 ppm | 0.0096 ppm | 0.0102 ppm | 0.0140 ppm |
| Concentration per Run 2 | 0.0107 ppm | 0.0116 ppm | 0.0103 ppm | 0.0178 ppm | 0.0092 ppm | 0.0100 ppm | 0.0124 ppm |
| Concentration per Run 3 | 0.0102 ppm | 0.0080 ppm | 0.0107 ppm | 0.0179 ppm | 0.0092 ppm | 0.0100 ppm | 0.0095 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 105.494 % | 179.367 % | 93.572 % | 0.000 % | 0.000 % |
| Concentration RSD | 3.6 % | 21.6 % | 1.9 % | 0.9 % | 2.3 % | 1.3 % | 19.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0101 ppm | 0.0103 ppm | 0.0103 ppm | 0.0104 ppm | 0.0117 ppm | 0.1594 ppm | 0.0103 ppm |
| Concentration per Run 1 | 0.0101 ppm | 0.0103 ppm | 0.0106 ppm | 0.0103 ppm | 0.0125 ppm | 0.1643 ppm | 0.0109 ppm |
| Concentration per Run 2 | 0.0101 ppm | 0.0102 ppm | 0.0102 ppm | 0.0106 ppm | 0.0107 ppm | 0.1576 ppm | 0.0099 ppm |
| Concentration per Run 3 | 0.0101 ppm | 0.0105 ppm | 0.0102 ppm | 0.0102 ppm | 0.0120 ppm | 0.1564 ppm | 0.0101 ppm |
| Recovery Percentage 1 | 0.000 % | 103.284 % | 103.477 % | 103.697 % | 0.000 % | 0.000 % | 103.162 % |
| Concentration RSD | 0.2 % | 1.5 % | 2.5 % | 2.2 % | 7.8 % | 2.7 % | 5.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0132 ppm | 0.0103 ppm | 0.0100 ppm | 0.2117 ppm | 0.0106 ppm | 0.0110 ppm | 0.0089 ppm |
| Concentration per Run 1 | 0.0142 ppm | 0.0104 ppm | 0.0100 ppm | 0.2119 ppm | 0.0108 ppm | 0.0109 ppm | 0.0094 ppm |
| Concentration per Run 2 | 0.0111 ppm | 0.0104 ppm | 0.0101 ppm | 0.2128 ppm | 0.0103 ppm | 0.0108 ppm | 0.0087 ppm |
| Concentration per Run 3 | 0.0144 ppm | 0.0102 ppm | 0.0099 ppm | 0.2102 ppm | 0.0107 ppm | 0.0112 ppm | 0.0086 ppm |
| Recovery Percentage 1 | 0.000 % | 103.086 % | 100.053 % | 0.000 % | 106.081 % | 109.649 % | 0.000 % |
| Concentration RSD | 13.8 % | 1.3 % | 1.0 % | 0.6 % | 2.6 % | 1.7 % | 5.0 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0085 ppm | 0.1153 ppm | 0.0113 ppm | 0.0099 ppm | 0.0106 ppm | 0.0107 ppm | 0.0103 ppm |
| Concentration per Run 1 | 0.0067 ppm | 0.1151 ppm | 0.0106 ppm | 0.0102 ppm | 0.0107 ppm | 0.0104 ppm | 0.0102 ppm |
| Concentration per Run 2 | 0.0094 ppm | 0.1167 ppm | 0.0115 ppm | 0.0099 ppm | 0.0107 ppm | 0.0104 ppm | 0.0104 ppm |
| Concentration per Run 3 | 0.0095 ppm | 0.1141 ppm | 0.0116 ppm | 0.0097 ppm | 0.0105 ppm | 0.0113 ppm | 0.0104 ppm |
| Recovery Percentage 1 | 85.389 % | 0.000 % | 112.578 % | 99.416 % | 106.160 % | 107.007 % | 103.152 % |
| Concentration RSD | 18.7 % | 1.2 % | 4.7 % | 2.6 % | 1.3 % | 4.9 % | 1.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0105 ppm | 103.9904 % | 101.6385 % | 98.4058 % | 101.6462 % | 100.7187 % | 101.0242 % |
| Concentration per Run 1 | 0.0106 ppm | 102.0072 % | 101.5176 % | 98.3054 % | 99.3306 % | 100.8036 % | 100.9218 % |
| Concentration per Run 2 | 0.0106 ppm | 104.1847 % | 101.8202 % | 98.2207 % | 102.0938 % | 100.6172 % | 101.1342 % |
| Concentration per Run 3 | 0.0104 ppm | 105.7793 % | 101.5776 % | 98.6914 % | 103.5142 % | 100.7354 % | 101.0164 % |
| Recovery Percentage 1 | 105.290 % | | | | | | |
| Concentration RSD | 0.9 % | 1.8 % | 0.2 % | 0.3 % | 2.1 % | 0.1 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: IEC 20PPM SN SB+
Analysis started at: 3/12/2025 7:35:29 AM
Comments <Comment>
Rack: 1
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0083 ppm | 0.0001 ppm | 0.0167 ppm | 0.0003 ppm | 0.0000 ppm | 0.0039 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0117 ppm | -0.0002 ppm | 0.0167 ppm | 0.0003 ppm | 0.0000 ppm | 0.0014 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0029 ppm | 0.0009 ppm | 0.0169 ppm | 0.0003 ppm | 0.0000 ppm | 0.0070 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0101 ppm | -0.0005 ppm | 0.0164 ppm | 0.0002 ppm | 0.0000 ppm | 0.0032 ppm |
| Recovery Percentage 1 | 5.601 % | 8.255 % | 1.490 % | 55.506 % | 2.675 % | -0.399 % | 3.881 % |
| Concentration RSD | 35.4 % | 57.0 % | 929.7 % | 1.4 % | 19.3 % | 120.4 % | 73.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0004 ppm | 0.0001 ppm | 0.0039 ppm | 0.0158 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0001 ppm | 0.0002 ppm | 0.0001 ppm | 0.0040 ppm | 0.0040 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | 0.0002 ppm | 0.0034 ppm | 0.0100 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | 0.0008 ppm | 0.0000 ppm | 0.0044 ppm | 0.0334 ppm | -0.0008 ppm |
| Recovery Percentage 1 | 0.207 % | -0.068 % | 3.911 % | 1.297 % | 7.846 % | 0.631 % | 0.278 % |
| Concentration RSD | 216.2 % | 504.1 % | 91.9 % | 75.6 % | 12.5 % | 98.4 % | 2,651.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0002 ppm | 0.0002 ppm | 0.0174 ppm | 0.0000 ppm | 0.0005 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.0002 ppm | -0.0001 ppm | 0.0200 ppm | 0.0000 ppm | 0.0004 ppm | 0.0006 ppm |
| Concentration per Run 2 | -0.0006 ppm | 0.0002 ppm | 0.0004 ppm | 0.0222 ppm | -0.0002 ppm | 0.0004 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0003 ppm | 0.0003 ppm | 0.0099 ppm | 0.0002 ppm | 0.0007 ppm | -0.0004 ppm |
| Recovery Percentage 1 | 0.292 % | 2.454 % | 0.463 % | 0.868 % | 0.052 % | 5.104 % | 0.001 % |
| Concentration RSD | 261.6 % | 31.1 % | 113.1 % | 37.9 % | 1,487.2 % | 32.9 % | 90,932.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0015 ppm | 0.1373 ppm | 20.2413 [SIC 20] | 0.0000 ppm | 0.0009 ppm | -0.0010 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.1374 ppm | 20.3013 ppm | 0.0000 ppm | 0.0006 ppm | -0.0015 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0029 ppm | 0.1374 ppm | 20.1962 ppm | 0.0000 ppm | 0.0012 ppm | -0.0001 ppm | 0.0002 ppm |
| Concentration per Run 3 | -0.0029 ppm | 0.1370 ppm | 20.2262 ppm | -0.0001 ppm | 0.0008 ppm | -0.0014 ppm | 0.0005 ppm |
| Recovery Percentage 1 | -15.486 % | 27.455 % | 40,482.513 % | -0.328 % | 8.978 % | -4.918 % | 3.025 % |
| Concentration RSD | 151.1 % | 0.2 % | 0.3 % | 87.5 % | 32.1 % | 76.8 % | 56.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 96.2113 % | 101.8772 % | 98.4729 % | 95.1146 % | 101.1286 % | 101.5194 % |
| Concentration per Run 1 | 0.0003 ppm | 92.6606 % | 101.7405 % | 98.3778 % | 91.5821 % | 100.9584 % | 101.1448 % |
| Concentration per Run 2 | 0.0004 ppm | 96.2253 % | 101.6911 % | 98.6698 % | 95.2833 % | 101.4155 % | 101.3486 % |
| Concentration per Run 3 | 0.0004 ppm | 99.7481 % | 102.2001 % | 98.3712 % | 98.4784 % | 101.0120 % | 102.0648 % |
| Recovery Percentage 1 | 7.841 % | | | | | | |
| Concentration RSD | 14.9 % | 3.7 % | 0.3 % | 0.2 % | 3.6 % | 0.2 % | 0.5 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: LDR 200PPM FE PASS
Analysis started at: 3/12/2025 7:41:52 AM
Comments <Comment>
Rack: 1
Vial: 5

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0027 ppm | -0.0003 ppm | -0.0050 ppm | 0.0059 ppm | 0.0002 ppm | 0.0000 ppm | 0.0018 ppm |
| Concentration per Run 1 | 0.0028 ppm | 0.0019 ppm | -0.0052 ppm | 0.0060 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0026 ppm | 0.0034 ppm | -0.0056 ppm | 0.0058 ppm | 0.0003 ppm | -0.0001 ppm | 0.0055 ppm |
| Concentration per Run 3 | 0.0027 ppm | -0.0063 ppm | -0.0043 ppm | 0.0060 ppm | 0.0001 ppm | 0.0000 ppm | -0.0001 ppm |
| Recovery Percentage 1 | 38.813 % | -0.328 % | -100.875 % | 19.757 % | 1.602 % | -0.744 % | 1.804 % |
| Concentration RSD | 4.6 % | 1,581.9 % | 13.7 % | 1.2 % | 55.6 % | 92.6 % | 178.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0028 ppm | 0.0002 ppm | 0.0012 ppm | -0.0009 ppm | **182.9113 ppm** | 0.0192 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0028 ppm | 0.0001 ppm | 0.0013 ppm | -0.0009 ppm | 185.0213 ppm | 0.0258 ppm | 0.0006 ppm |
| Concentration per Run 2 | -0.0027 ppm | 0.0002 ppm | 0.0010 ppm | -0.0010 ppm | 181.0386 ppm | 0.0061 ppm | -0.0008 ppm |
| Concentration per Run 3 | -0.0029 ppm | 0.0003 ppm | 0.0013 ppm | -0.0008 ppm | 182.6740 ppm | 0.0256 ppm | 0.0004 ppm |
| Recovery Percentage 1 | -69.543 % | 0.858 % | 12.265 % | -8.795 % | 365,822.581 % | 0.767 % | 0.530 % |
| Concentration RSD | 3.1 % | 62.9 % | 13.1 % | 9.6 % | **1.1 %** | 58.9 % | 1,394.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0069 ppm | 0.0001 ppm | -0.0014 ppm | 0.0005 ppm | -0.0055 ppm | 0.0010 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0080 ppm | 0.0000 ppm | -0.0016 ppm | -0.0066 ppm | -0.0052 ppm | 0.0011 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0055 ppm | 0.0001 ppm | -0.0014 ppm | 0.0048 ppm | -0.0057 ppm | 0.0011 ppm | 0.0006 ppm |
| Concentration per Run 3 | -0.0071 ppm | 0.0001 ppm | -0.0013 ppm | 0.0032 ppm | -0.0055 ppm | 0.0008 ppm | -0.0002 ppm |
| Recovery Percentage 1 | -6.865 % | 0.557 % | -2.842 % | 0.024 % | -21.873 % | 10.057 % | 0.503 % |
| Concentration RSD | 18.3 % | 95.7 % | 11.2 % | 1,297.3 % | 4.2 % | 17.1 % | 158.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0044 ppm | 0.0005 ppm | 0.0036 ppm | 0.0002 ppm | 0.0000 ppm | 0.0021 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0075 ppm | 0.0013 ppm | 0.0041 ppm | 0.0003 ppm | -0.0001 ppm | 0.0015 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0036 ppm | -0.0001 ppm | 0.0039 ppm | 0.0000 ppm | 0.0001 ppm | 0.0018 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0020 ppm | 0.0002 ppm | 0.0028 ppm | 0.0002 ppm | 0.0000 ppm | 0.0031 ppm | 0.0003 ppm |
| Recovery Percentage 1 | 43.569 % | 0.095 % | 7.193 % | 1.626 % | -0.038 % | 10.647 % | 3.147 % |
| Concentration RSD | 65.2 % | 157.7 % | 19.6 % | 90.7 % | 3,242.3 % | 40.7 % | 44.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | 102.3249 % | 101.0730 % | 97.0940 % | 101.8671 % | 97.3354 % | 101.3848 % |
| Concentration per Run 1 | -0.0012 ppm | 101.4494 % | 99.6372 % | 97.2948 % | 101.0659 % | 97.6891 % | 99.9049 % |
| Concentration per Run 2 | -0.0011 ppm | 102.3088 % | 99.7244 % | 97.0139 % | 102.0196 % | 97.3553 % | 100.0083 % |
| Concentration per Run 3 | -0.0012 ppm | 103.2166 % | 103.8576 % | 96.9731 % | 102.5157 % | 96.9618 % | 104.2413 % |
| Recovery Percentage 1 | -23.324 % | | | | | | |
| Concentration RSD | 8.8 % | 0.9 % | 2.4 % | 0.2 % | 0.7 % | 0.4 % | 2.4 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: LDR 250PPM NA PASS
Analysis started at: 3/12/2025 7:48:21 AM
Comments <Comment>
Rack: 1
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0035 ppm | -0.0002 ppm | 0.0049 ppm | 0.0000 ppm | 0.0000 ppm | 0.0084 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0034 ppm | -0.0015 ppm | 0.0050 ppm | 0.0002 ppm | 0.0000 ppm | 0.0121 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0047 ppm | 0.0004 ppm | 0.0048 ppm | 0.0000 ppm | 0.0000 ppm | 0.0051 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0023 ppm | 0.0005 ppm | 0.0048 ppm | -0.0001 ppm | 0.0000 ppm | 0.0079 ppm |
| Concentration RSD | 67.6 % | 34.9 % | 564.5 % | 2.5 % | 1,065.0 % | 965.2 % | 42.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | -0.0001 ppm | 0.0004 ppm | 0.0706 ppm | 0.1354 ppm | 0.0031 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0001 ppm | -0.0001 ppm | 0.0004 ppm | 0.0894 ppm | 0.1234 ppm | 0.0021 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0002 ppm | 0.0002 ppm | 0.0005 ppm | 0.0708 ppm | 0.1694 ppm | 0.0033 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | -0.0003 ppm | 0.0003 ppm | 0.0517 ppm | 0.1135 ppm | 0.0039 ppm |
| Concentration RSD | 56.9 % | 143.9 % | 289.4 % | 15.1 % | 26.7 % | 22.0 % | 29.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 0.0003 ppm | 0.0001 ppm | 235.5200 ppm | -0.0003 ppm | 0.0003 ppm | -0.0006 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0004 ppm | 0.0002 ppm | 247.8048 ppm | -0.0003 ppm | 0.0004 ppm | -0.0006 ppm |
| Concentration per Run 2 | 0.0022 ppm | 0.0002 ppm | 0.0000 ppm | 234.2146 ppm | -0.0002 ppm | 0.0004 ppm | -0.0008 ppm |
| Concentration per Run 3 | 0.0016 ppm | 0.0004 ppm | 0.0001 ppm | 224.5407 ppm | -0.0002 ppm | 0.0002 ppm | -0.0005 ppm |
| Concentration RSD | 48.2 % | 40.4 % | 70.9 % | 5.0 % | 33.1 % | 24.5 % | 20.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0048 ppm | 0.0009 ppm | 0.0008 ppm | 0.0001 ppm | 0.0000 ppm | 0.0005 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0034 ppm | 0.0007 ppm | 0.0007 ppm | 0.0000 ppm | 0.0000 ppm | 0.0003 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0043 ppm | 0.0010 ppm | 0.0004 ppm | 0.0002 ppm | 0.0000 ppm | 0.0010 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0065 ppm | 0.0012 ppm | 0.0013 ppm | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | -0.0002 ppm |
| Concentration RSD | 33.3 % | 28.2 % | 52.5 % | 100.1 % | 2,188.2 % | 100.8 % | 512.5 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 96.9142 % | 94.1478 % | 93.4759 % | 96.4765 % | 91.8491 % | 95.1487 % |
| Concentration per Run 1 | 0.0005 ppm | 93.8224 % | 94.3366 % | 93.6433 % | 92.9844 % | 91.7813 % | 95.2333 % |
| Concentration per Run 2 | 0.0005 ppm | 97.4092 % | 94.0891 % | 93.4663 % | 97.1738 % | 91.9101 % | 95.0576 % |
| Concentration per Run 3 | 0.0005 ppm | 99.5109 % | 94.0178 % | 93.3183 % | 99.2713 % | 91.8559 % | 95.1554 % |
| Concentration RSD | 8.7 % | 3.0 % | 0.2 % | 0.2 % | 3.3 % | 0.1 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: IEC 20PPM CR SB+
Analysis started at: 3/12/2025 7:54:54 AM
Comments <Comment>
Rack: 1
Vial: 6

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | -0.0043 ppm | -0.0056 ppm | 0.0040 ppm | 0.0001 ppm | 0.0000 ppm | 0.0106 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0040 ppm | -0.0060 ppm | 0.0041 ppm | 0.0002 ppm | -0.0001 ppm | 0.0088 ppm |
| Concentration per Run 2 | 0.0007 ppm | -0.0047 ppm | -0.0054 ppm | 0.0042 ppm | 0.0000 ppm | 0.0000 ppm | 0.0115 ppm |
| Concentration per Run 3 | 0.0008 ppm | -0.0042 ppm | -0.0054 ppm | 0.0036 ppm | 0.0002 ppm | 0.0000 ppm | 0.0115 ppm |
| Recovery Percentage 1 | 7.449 % | -4.301 % | -112.071 % | 13.198 % | 1.377 % | -0.126 % | 10.598 % |
| Concentration RSD | 79.2 % | 7.8 % | 6.1 % | 8.9 % | 91.5 % | 1,043.1 % | 14.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 20.4911 ppm | 0.0003 ppm | 0.0351 ppm | 0.0702 ppm | 0.0018 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 20.5492 ppm | 0.0002 ppm | 0.0350 ppm | 0.0679 ppm | 0.0020 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0001 ppm | 20.4276 ppm | 0.0006 ppm | 0.0337 ppm | 0.0645 ppm | 0.0017 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0002 ppm | 20.4965 ppm | 0.0003 ppm | 0.0365 ppm | 0.0782 ppm | 0.0018 ppm |
| Recovery Percentage 1 | -0.922 % | 0.666 % | 204,911.064 % | 3.482 % | 70.203 % | 2.808 % | 18.110 % |
| Concentration RSD | 79.9 % | 50.0 % | 0.3 % | 61.8 % | 4.0 % | 10.1 % | 9.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 0.0008 ppm | 0.0005 ppm | 0.0816 ppm | 0.0000 ppm | -0.0026 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0024 ppm | 0.0006 ppm | 0.0004 ppm | 0.0823 ppm | 0.0000 ppm | -0.0025 ppm | -0.0005 ppm |
| Concentration per Run 2 | -0.0019 ppm | 0.0006 ppm | 0.0005 ppm | 0.0800 ppm | 0.0000 ppm | -0.0024 ppm | -0.0008 ppm |
| Concentration per Run 3 | 0.0037 ppm | 0.0011 ppm | 0.0005 ppm | 0.0824 ppm | 0.0000 ppm | -0.0030 ppm | 0.0012 ppm |
| Recovery Percentage 1 | 1.362 % | 7.593 % | 0.929 % | 4.078 % | 0.114 % | -26.425 % | -0.086 % |
| Concentration RSD | 215.2 % | 33.5 % | 13.2 % | 1.6 % | 60.7 % | 11.7 % | 2,458.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0049 ppm | 0.0069 ppm | -0.0011 ppm | 0.0002 ppm | -0.0008 ppm | -0.0024 ppm | -0.0094 ppm |
| Concentration per Run 1 | 0.0040 ppm | 0.0071 ppm | -0.0011 ppm | 0.0001 ppm | -0.0009 ppm | -0.0029 ppm | -0.0089 ppm |
| Concentration per Run 2 | 0.0048 ppm | 0.0064 ppm | -0.0011 ppm | 0.0002 ppm | -0.0008 ppm | -0.0025 ppm | -0.0097 ppm |
| Concentration per Run 3 | 0.0058 ppm | 0.0074 ppm | -0.0012 ppm | 0.0003 ppm | -0.0006 ppm | -0.0019 ppm | -0.0097 ppm |
| Recovery Percentage 1 | 48.772 % | 1.389 % | -2.287 % | 1.969 % | -7.612 % | -12.093 % | -94.398 % |
| Concentration RSD | 18.6 % | 7.0 % | 7.3 % | 42.2 % | 21.9 % | 19.7 % | 4.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0038 ppm | 94.9293 % | 100.7136 % | 98.0835 % | 93.2654 % | 100.0130 % | 100.7077 % |
| Concentration per Run 1 | 0.0040 ppm | 91.7551 % | 100.4480 % | 98.0592 % | 89.4323 % | 100.1473 % | 100.6404 % |
| Concentration per Run 2 | 0.0037 ppm | 94.9009 % | 101.0001 % | 97.9624 % | 93.5660 % | 99.8547 % | 100.8218 % |
| Concentration per Run 3 | 0.0038 ppm | 98.1318 % | 100.6928 % | 98.2291 % | 96.7978 % | 100.0370 % | 100.6609 % |
| Recovery Percentage 1 | 76.460 % | | | | | | |
| Concentration RSD | 4.9 % | 3.4 % | 0.3 % | 0.1 % | 4.0 % | 0.1 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCV
Analysis started at: 3/12/2025 8:33:31 AM
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5030 ppm | 0.4984 ppm | 0.4925 ppm | 0.4859 ppm | 0.4796 ppm | 0.5243 ppm | 0.5080 ppm |
| Concentration per Run 1 | 0.5021 ppm | 0.4997 ppm | 0.4933 ppm | 0.4862 ppm | 0.4862 ppm | 0.5318 ppm | 0.5122 ppm |
| Concentration per Run 2 | 0.5039 ppm | 0.4994 ppm | 0.4932 ppm | 0.4868 ppm | 0.4809 ppm | 0.5263 ppm | 0.5142 ppm |
| Concentration per Run 3 | 0.5029 ppm | 0.4960 ppm | 0.4911 ppm | 0.4846 ppm | 0.4716 ppm | 0.5147 ppm | 0.4975 ppm |
| Recovery Percentage 1 | 100.595 % | 99.670 % | 98.504 % | 97.173 % | 95.918 % | 104.858 % | 101.593 % |
| Concentration RSD | 0.2 % | 0.4 % | 0.3 % | 0.2 % | 1.5 % | 1.7 % | 1.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4852 ppm | 0.4949 ppm | 0.4899 ppm | 0.4843 ppm | 0.5121 ppm | 5.2688 ppm | 0.5088 ppm |
| Concentration per Run 1 | 0.4859 ppm | 0.4952 ppm | 0.4913 ppm | 0.4850 ppm | 0.5201 ppm | 5.3624 ppm | 0.5159 ppm |
| Concentration per Run 2 | 0.4861 ppm | 0.4959 ppm | 0.4896 ppm | 0.4849 ppm | 0.5155 ppm | 5.2906 ppm | 0.5108 ppm |
| Concentration per Run 3 | 0.4836 ppm | 0.4935 ppm | 0.4887 ppm | 0.4829 ppm | 0.5007 ppm | 5.1534 ppm | 0.4995 ppm |
| Recovery Percentage 1 | 97.047 % | 98.977 % | 97.972 % | 96.861 % | 102.419 % | 105.376 % | 101.754 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.3 % | 0.2 % | 2.0 % | 2.0 % | 1.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5269 ppm | 0.5038 ppm | 0.4718 ppm | 9.7770 ppm | 0.5118 ppm | 0.5167 ppm | 0.5001 ppm |
| Concentration per Run 1 | 0.5296 ppm | 0.5123 ppm | 0.4706 ppm | 9.9215 ppm | 0.5126 ppm | 0.5169 ppm | 0.5002 ppm |
| Concentration per Run 2 | 0.5248 ppm | 0.5058 ppm | 0.4729 ppm | 9.8165 ppm | 0.5130 ppm | 0.5172 ppm | 0.5003 ppm |
| Concentration per Run 3 | 0.5262 ppm | 0.4935 ppm | 0.4719 ppm | 9.5932 ppm | 0.5099 ppm | 0.5161 ppm | 0.4999 ppm |
| Recovery Percentage 1 | 105.381 % | 100.766 % | 94.356 % | 97.770 % | 102.365 % | 103.344 % | 100.027 % |
| Concentration RSD | 0.5 % | 1.9 % | 0.2 % | 1.7 % | 0.3 % | 0.1 % | 0.0 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4710 ppm | 5.6708 ppm | 0.5413 ppm | 0.5014 ppm | 0.5094 ppm | 0.4993 ppm | 0.4961 ppm |
| Concentration per Run 1 | 0.4710 ppm | 5.6736 ppm | 0.5424 ppm | 0.5093 ppm | 0.5092 ppm | 0.4980 ppm | 0.4966 ppm |
| Concentration per Run 2 | 0.4731 ppm | 5.6861 ppm | 0.5417 ppm | 0.5032 ppm | 0.5102 ppm | 0.5041 ppm | 0.4970 ppm |
| Concentration per Run 3 | 0.4690 ppm | 5.6527 ppm | 0.5399 ppm | 0.4918 ppm | 0.5086 ppm | 0.4958 ppm | 0.4947 ppm |
| Recovery Percentage 1 | 94.209 % | 108.015 % | 108.262 % | 100.289 % | 101.871 % | 99.858 % | 99.215 % |
| Concentration RSD | 0.4 % | 0.3 % | 0.2 % | 1.8 % | 0.2 % | 0.9 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5000 ppm | 99.3172 % | 100.4021 % | 95.5048 % | 96.7755 % | 98.3083 % | 100.0004 % |
| Concentration per Run 1 | 0.5006 ppm | 97.9509 % | 100.2599 % | 95.4578 % | 95.0825 % | 98.2687 % | 99.8820 % |
| Concentration per Run 2 | 0.5008 ppm | 98.4988 % | 100.5488 % | 95.4426 % | 96.1578 % | 98.0999 % | 99.9904 % |
| Concentration per Run 3 | 0.4985 ppm | 101.5020 % | 100.3977 % | 95.6142 % | 99.0863 % | 98.5563 % | 100.1287 % |
| Recovery Percentage 1 | 99.993 % | | | | | | |
| Concentration RSD | 0.3 % | 1.9 % | 0.1 % | 0.1 % | 2.1 % | 0.2 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCB
Analysis started at: 3/12/2025 8:39:37 AM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | -0.0029 ppm | -0.0007 ppm | 0.0019 ppm | -0.0001 ppm | 0.0000 ppm | -0.0009 ppm |
| Concentration per Run 1 | 0.0006 ppm | -0.0020 ppm | -0.0015 ppm | 0.0021 ppm | 0.0000 ppm | 0.0000 ppm | -0.0034 ppm |
| Concentration per Run 2 | 0.0003 ppm | -0.0025 ppm | 0.0004 ppm | 0.0018 ppm | -0.0002 ppm | 0.0000 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0004 ppm | -0.0042 ppm | -0.0012 ppm | 0.0017 ppm | 0.0000 ppm | 0.0000 ppm | 0.0012 ppm |
| Recovery Percentage 1 | 6.431 % | -2.926 % | -14.918 % | 6.259 % | -0.534 % | -0.338 % | -0.853 % |
| Concentration RSD | 28.6 % | 39.6 % | 139.2 % | 10.1 % | 219.1 % | 199.2 % | 275.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | -0.0002 ppm | 0.0005 ppm | 0.0009 ppm | 0.0099 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | -0.0003 ppm | 0.0004 ppm | 0.0001 ppm | 0.0133 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | 0.0005 ppm | 0.0014 ppm | 0.0092 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0005 ppm | 0.0011 ppm | 0.0070 ppm | -0.0002 ppm |
| Recovery Percentage 1 | 0.568 % | 0.045 % | -1.586 % | 4.699 % | 1.716 % | 0.395 % | 0.217 % |
| Concentration RSD | 37.1 % | 144.3 % | 87.8 % | 17.2 % | 82.3 % | 32.5 % | 791.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0014 ppm | 0.0000 ppm | 0.0011 ppm | -0.0033 ppm | -0.0001 ppm | -0.0001 ppm | -0.0005 ppm |
| Concentration per Run 1 | -0.0023 ppm | 0.0001 ppm | 0.0014 ppm | -0.0008 ppm | -0.0001 ppm | -0.0002 ppm | -0.0007 ppm |
| Concentration per Run 2 | -0.0030 ppm | 0.0000 ppm | 0.0010 ppm | -0.0045 ppm | 0.0000 ppm | -0.0001 ppm | -0.0006 ppm |
| Concentration per Run 3 | 0.0012 ppm | -0.0002 ppm | 0.0007 ppm | -0.0047 ppm | -0.0001 ppm | 0.0000 ppm | -0.0001 ppm |
| Recovery Percentage 1 | -1.362 % | -0.318 % | 2.107 % | -0.166 % | -0.246 % | -1.098 % | -0.935 % |
| Concentration RSD | 164.1 % | 425.3 % | 31.0 % | 66.7 % | 42.7 % | 53.6 % | 62.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0019 ppm | -0.0004 ppm | 0.0002 ppm | 0.0001 ppm | 0.0002 ppm | 0.0006 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0026 ppm | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0013 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0013 ppm | -0.0007 ppm | 0.0001 ppm | 0.0001 ppm | 0.0000 ppm | -0.0001 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0042 ppm | -0.0005 ppm | 0.0003 ppm | 0.0001 ppm | 0.0004 ppm | 0.0005 ppm | 0.0001 ppm |
| Recovery Percentage 1 | -18.630 % | -0.079 % | 0.311 % | 1.083 % | 1.528 % | 2.988 % | 0.689 % |
| Concentration RSD | 150.9 % | 87.8 % | 75.9 % | 31.2 % | 130.5 % | 116.0 % | 82.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 103.8067 % | 101.1511 % | 96.4958 % | 100.3142 % | 99.1767 % | 99.5096 % |
| Concentration per Run 1 | 0.0001 ppm | 102.2167 % | 101.2610 % | 96.6038 % | 98.7339 % | 99.4802 % | 99.6837 % |
| Concentration per Run 2 | 0.0000 ppm | 104.4658 % | 101.0770 % | 96.2324 % | 100.7501 % | 98.8918 % | 99.2891 % |
| Concentration per Run 3 | 0.0001 ppm | 104.7377 % | 101.1154 % | 96.6511 % | 101.4585 % | 99.1580 % | 99.5561 % |
| Recovery Percentage 1 | 1.014 % | | | | | | |
| Concentration RSD | 92.4 % | 1.3 % | 0.1 % | 0.2 % | 1.4 % | 0.3 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2513465-01 WG2039008
Analysis started at: 3/12/2025 8:56:42 AM
Comments <Comment>
Rack: 1
Vial: 26

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0301 ppm | 0.1268 ppm | 0.0197 ppm | 0.0486 ppm | -0.0001 ppm | 52.3266 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0248 ppm | 0.1282 ppm | 0.0199 ppm | 0.0500 ppm | 0.0000 ppm | 54.0645 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0342 ppm | 0.1253 ppm | 0.0195 ppm | 0.0483 ppm | 0.0000 ppm | 51.8769 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0314 ppm | 0.1270 ppm | 0.0197 ppm | 0.0475 ppm | -0.0001 ppm | 51.0384 ppm |
| Concentration RSD | 25.9 % | 16.0 % | 1.1 % | 0.9 % | 2.7 % | 47.1 % | 3.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0008 ppm | 0.0022 ppm | 0.0094 ppm | 1.9428 ppm | 73.2930 ppm | 0.2086 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0009 ppm | 0.0022 ppm | 0.0094 ppm | 2.0010 ppm | 75.6779 ppm | 0.2133 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0009 ppm | 0.0022 ppm | 0.0096 ppm | 1.9320 ppm | 72.7753 ppm | 0.2083 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0006 ppm | 0.0022 ppm | 0.0094 ppm | 1.8953 ppm | 71.4257 ppm | 0.2042 ppm |
| Concentration RSD | 5.8 % | 21.1 % | 0.6 % | 1.2 % | 2.8 % | 3.0 % | 2.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 12.7041 ppm | 0.0806 ppm | 0.0166 ppm | 124.5597 ppm | 0.0049 ppm | 0.0007 ppm | 0.0068 ppm |
| Concentration per Run 1 | 12.7282 ppm | 0.0833 ppm | 0.0164 ppm | 128.8553 ppm | 0.0050 ppm | 0.0001 ppm | 0.0072 ppm |
| Concentration per Run 2 | 12.7047 ppm | 0.0797 ppm | 0.0164 ppm | 123.8039 ppm | 0.0046 ppm | 0.0011 ppm | 0.0059 ppm |
| Concentration per Run 3 | 12.6794 ppm | 0.0789 ppm | 0.0170 ppm | 121.0201 ppm | 0.0051 ppm | 0.0011 ppm | 0.0074 ppm |
| Concentration RSD | 0.2 % | 2.9 % | 2.0 % | 3.2 % | 4.8 % | 80.8 % | 11.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 12.5266 ppm | 0.0002 ppm | 0.4541 ppm | 0.0005 ppm | -0.0003 ppm | 0.0013 ppm |
| Concentration per Run 1 | -0.0037 ppm | 12.5909 ppm | -0.0002 ppm | 0.4678 ppm | 0.0003 ppm | 0.0003 ppm | 0.0015 ppm |
| Concentration per Run 2 | 0.0025 ppm | 12.4830 ppm | 0.0003 ppm | 0.4511 ppm | 0.0004 ppm | -0.0006 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0025 ppm | 12.5059 ppm | 0.0005 ppm | 0.4435 ppm | 0.0007 ppm | -0.0007 ppm | 0.0012 ppm |
| Concentration RSD | 889.6 % | 0.5 % | 169.7 % | 2.7 % | 35.2 % | 191.6 % | 14.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0520 ppm | 100.3888 % | 96.5093 % | 90.8803 % | 97.3290 % | 91.5033 % | 95.9264 % |
| Concentration per Run 1 | 0.0522 ppm | 97.3149 % | 96.4530 % | 90.3182 % | 94.0251 % | 91.1223 % | 95.8047 % |
| Concentration per Run 2 | 0.0518 ppm | 100.8617 % | 96.4061 % | 91.0528 % | 97.9589 % | 91.7366 % | 95.7972 % |
| Concentration per Run 3 | 0.0519 ppm | 102.9899 % | 96.6689 % | 91.2699 % | 100.0029 % | 91.6511 % | 96.1772 % |
| Concentration RSD | 0.4 % | 2.9 % | 0.1 % | 0.5 % | 3.1 % | 0.4 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: eL2512350-01 WG2039008
Analysis started at: 3/12/2025 9:03:06 AM
Comments <Comment>
Rack: 1
Vial: 25

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0297 ppm | 0.0050 ppm | 35.4070 [SIC 20] | 0.0251 ppm | -0.0001 ppm | 8.1306 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0325 ppm | 0.0041 ppm | 35.5165 ppm | 0.0265 ppm | 0.0000 ppm | 8.5539 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.0283 ppm | 0.0067 ppm | 35.1453 ppm | 0.0243 ppm | -0.0001 ppm | 7.8923 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0283 ppm | 0.0041 ppm | 35.5592 ppm | 0.0244 ppm | -0.0001 ppm | 7.9455 ppm |
| Concentration RSD | 36.5 % | 8.2 % | 30.7 % | 0.6 % | 4.9 % | 91.0 % | 4.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0161 ppm | 0.3802 ppm | 0.3409 ppm | 1.3809 ppm | 72.6563 ppm | 0.0034 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0160 ppm | 0.3831 ppm | 0.3445 ppm | 1.4457 ppm | 76.3840 ppm | 0.0036 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0162 ppm | 0.3762 ppm | 0.3371 ppm | 1.3456 ppm | 70.7405 ppm | 0.0026 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0161 ppm | 0.3815 ppm | 0.3412 ppm | 1.3516 ppm | 70.8444 ppm | 0.0041 ppm |
| Concentration RSD | 5.1 % | 0.6 % | 0.9 % | 1.1 % | 4.1 % | 4.4 % | 21.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.7908 ppm | 0.1910 ppm | 0.0392 ppm | 141.6866 ppm | 0.4466 ppm | 0.0265 ppm | -0.0008 ppm |
| Concentration per Run 1 | 5.8501 ppm | 0.2010 ppm | 0.0390 ppm | 149.2862 ppm | 0.4479 ppm | 0.0267 ppm | 0.0005 ppm |
| Concentration per Run 2 | 5.7252 ppm | 0.1858 ppm | 0.0393 ppm | 137.1006 ppm | 0.4437 ppm | 0.0265 ppm | -0.0017 ppm |
| Concentration per Run 3 | 5.7972 ppm | 0.1861 ppm | 0.0393 ppm | 138.6731 ppm | 0.4481 ppm | 0.0264 ppm | -0.0010 ppm |
| Concentration RSD | 1.1 % | 4.5 % | 0.3 % | 4.7 % | 0.6 % | 0.6 % | 145.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0027 ppm | 4.5242 ppm | 0.0045 ppm | 0.0871 ppm | -0.0001 ppm | -0.0025 ppm | 0.0097 ppm |
| Concentration per Run 1 | -0.0035 ppm | 4.5391 ppm | 0.0045 ppm | 0.0914 ppm | 0.0000 ppm | -0.0030 ppm | 0.0101 ppm |
| Concentration per Run 2 | 0.0007 ppm | 4.4925 ppm | 0.0047 ppm | 0.0847 ppm | 0.0001 ppm | -0.0038 ppm | 0.0094 ppm |
| Concentration per Run 3 | -0.0054 ppm | 4.5411 ppm | 0.0042 ppm | 0.0851 ppm | -0.0006 ppm | -0.0008 ppm | 0.0098 ppm |
| Concentration RSD | 114.4 % | 0.6 % | 5.4 % | 4.3 % | 279.9 % | 61.2 % | 3.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.4353 ppm | 102.5143 % | 96.2753 % | 91.3313 % | 97.2530 % | 89.6172 % | 94.1360 % |
| Concentration per Run 1 | 1.4403 ppm | 98.7374 % | 95.5451 % | 91.3141 % | 92.8285 % | 89.5196 % | 93.2040 % |
| Concentration per Run 2 | 1.4253 ppm | 104.9741 % | 97.2189 % | 91.6184 % | 100.0022 % | 90.1252 % | 95.2362 % |
| Concentration per Run 3 | 1.4402 ppm | 103.8314 % | 96.0618 % | 91.0614 % | 98.9283 % | 89.2068 % | 93.9677 % |
| Concentration RSD | 0.6 % | 3.2 % | 0.9 % | 0.3 % | 4.0 % | 0.5 % | 1.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512121-01 WG2039008
Analysis started at: 3/12/2025 9:09:26 AM
Comments <Comment>
Rack: 1
Vial: 12

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0082 ppm | -0.0011 ppm | 0.0439 ppm | 0.0063 ppm | 0.0000 ppm | 8.8801 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0077 ppm | -0.0011 ppm | 0.0472 ppm | 0.0066 ppm | 0.0000 ppm | 9.3107 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0111 ppm | -0.0009 ppm | 0.0437 ppm | 0.0062 ppm | 0.0000 ppm | 8.7651 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0058 ppm | -0.0014 ppm | 0.0408 ppm | 0.0061 ppm | -0.0001 ppm | 8.5646 ppm |
| Concentration RSD | 31.4 % | 32.6 % | 23.8 % | 7.3 % | 4.5 % | 44.7 % | 4.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0011 ppm | 0.0005 ppm | 0.0009 ppm | 1.1192 ppm | 1.0341 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0012 ppm | 0.0004 ppm | 0.0009 ppm | 1.1707 ppm | 1.0803 ppm | -0.0008 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0011 ppm | 0.0007 ppm | 0.0009 ppm | 1.1089 ppm | 1.0364 ppm | -0.0008 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0011 ppm | 0.0003 ppm | 0.0009 ppm | 1.0780 ppm | 0.9856 ppm | 0.0008 ppm |
| Concentration RSD | 34.4 % | 1.9 % | 53.9 % | 2.0 % | 4.2 % | 4.6 % | 339.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6447 ppm | 0.0123 ppm | 0.0001 ppm | 11.1208 ppm | 0.0019 ppm | 0.0004 ppm | -0.0008 ppm |
| Concentration per Run 1 | 0.6439 ppm | 0.0132 ppm | 0.0000 ppm | 11.6499 ppm | 0.0019 ppm | 0.0005 ppm | -0.0009 ppm |
| Concentration per Run 2 | 0.6462 ppm | 0.0120 ppm | 0.0000 ppm | 11.0149 ppm | 0.0021 ppm | 0.0006 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.6439 ppm | 0.0117 ppm | 0.0002 ppm | 10.6975 ppm | 0.0019 ppm | 0.0001 ppm | -0.0012 ppm |
| Concentration RSD | 0.2 % | 6.2 % | 96.1 % | 4.4 % | 6.3 % | 61.3 % | 64.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | 1.7031 ppm | 0.0003 ppm | 0.0209 ppm | 0.0011 ppm | 0.0002 ppm | 0.0015 ppm |
| Concentration per Run 1 | -0.0011 ppm | 1.7072 ppm | 0.0006 ppm | 0.0218 ppm | 0.0011 ppm | -0.0012 ppm | 0.0017 ppm |
| Concentration per Run 2 | -0.0011 ppm | 1.7010 ppm | 0.0002 ppm | 0.0207 ppm | 0.0010 ppm | 0.0008 ppm | 0.0015 ppm |
| Concentration per Run 3 | -0.0006 ppm | 1.7011 ppm | 0.0003 ppm | 0.0202 ppm | 0.0012 ppm | 0.0009 ppm | 0.0014 ppm |
| Concentration RSD | 35.0 % | 0.2 % | 59.1 % | 3.9 % | 11.3 % | 700.1 % | 9.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 104.8505 % | 103.4692 % | 97.0498 % | 100.7203 % | 100.3291 % | 102.3526 % |
| Concentration per Run 1 | 0.0015 ppm | 100.8571 % | 103.4762 % | 97.0905 % | 96.2095 % | 100.3004 % | 102.3722 % |
| Concentration per Run 2 | 0.0014 ppm | 105.3595 % | 103.3401 % | 97.0530 % | 101.6170 % | 100.4626 % | 102.1872 % |
| Concentration per Run 3 | 0.0014 ppm | 108.3350 % | 103.5912 % | 97.0059 % | 104.3343 % | 100.2242 % | 102.4983 % |
| Concentration RSD | 2.7 % | 3.6 % | 0.1 % | 0.0 % | 4.1 % | 0.1 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512121-02 WG2039008
Analysis started at: 3/12/2025 9:15:48 AM
Comments <Comment>
Rack: 1
Vial: 13

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0325 ppm | -0.0009 ppm | 0.0263 ppm | 0.0066 ppm | 0.0000 ppm | 2.6311 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0358 ppm | -0.0007 ppm | 0.0271 ppm | 0.0067 ppm | 0.0000 ppm | 2.7264 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0299 ppm | -0.0016 ppm | 0.0260 ppm | 0.0066 ppm | 0.0000 ppm | 2.6153 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0319 ppm | -0.0002 ppm | 0.0258 ppm | 0.0064 ppm | -0.0001 ppm | 2.5516 ppm |
| Concentration RSD | 71.2 % | 9.3 % | 84.0 % | 2.6 % | 2.9 % | 400.7 % | 3.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | -0.0001 ppm | 0.0009 ppm | 0.1082 ppm | 1.0150 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0008 ppm | 0.1130 ppm | 1.0447 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | -0.0001 ppm | 0.0010 ppm | 0.1081 ppm | 1.0160 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | -0.0003 ppm | 0.0009 ppm | 0.1034 ppm | 0.9842 ppm | -0.0002 ppm |
| Concentration RSD | 186.5 % | 93.8 % | 175.7 % | 9.0 % | 4.5 % | 3.0 % | 455.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6157 ppm | 0.0129 ppm | 0.0001 ppm | 11.3147 ppm | 0.0002 ppm | 0.0001 ppm | -0.0011 ppm |
| Concentration per Run 1 | 0.6143 ppm | 0.0131 ppm | 0.0001 ppm | 11.7143 ppm | 0.0003 ppm | -0.0004 ppm | -0.0004 ppm |
| Concentration per Run 2 | 0.6169 ppm | 0.0128 ppm | 0.0001 ppm | 11.2473 ppm | 0.0002 ppm | 0.0000 ppm | -0.0020 ppm |
| Concentration per Run 3 | 0.6160 ppm | 0.0128 ppm | 0.0002 ppm | 10.9825 ppm | 0.0002 ppm | 0.0006 ppm | -0.0008 ppm |
| Concentration RSD | 0.2 % | 1.4 % | 33.6 % | 3.3 % | 27.0 % | 885.3 % | 80.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0018 ppm | 1.8439 ppm | -0.0001 ppm | 0.0178 ppm | 0.0003 ppm | 0.0005 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0028 ppm | 1.8529 ppm | -0.0005 ppm | 0.0186 ppm | 0.0005 ppm | 0.0000 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0012 ppm | 1.8387 ppm | -0.0002 ppm | 0.0176 ppm | 0.0002 ppm | 0.0001 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0014 ppm | 1.8401 ppm | 0.0003 ppm | 0.0173 ppm | 0.0001 ppm | 0.0013 ppm | 0.0002 ppm |
| Concentration RSD | 47.8 % | 0.4 % | 275.4 % | 3.9 % | 76.6 % | 153.0 % | 64.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 104.1968 % | 103.0632 % | 96.9437 % | 99.9598 % | 100.3391 % | 102.0834 % |
| Concentration per Run 1 | 0.0010 ppm | 101.4021 % | 103.2545 % | 96.9453 % | 96.4400 % | 99.9791 % | 102.2184 % |
| Concentration per Run 2 | 0.0011 ppm | 105.1268 % | 102.6724 % | 96.8541 % | 100.9545 % | 100.3347 % | 101.7900 % |
| Concentration per Run 3 | 0.0010 ppm | 106.0615 % | 103.2627 % | 97.0316 % | 102.4848 % | 100.7034 % | 102.2418 % |
| Concentration RSD | 4.2 % | 2.4 % | 0.3 % | 0.1 % | 3.1 % | 0.4 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512121-03 WG2039008
Analysis started at: 3/12/2025 9:22:06 AM
Comments <Comment>
Rack: 1
Vial: 14

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0363 ppm | -0.0011 ppm | 0.0207 ppm | 0.0063 ppm | 0.0000 ppm | 8.8037 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.0427 ppm | -0.0018 ppm | 0.0210 ppm | 0.0064 ppm | -0.0001 ppm | 8.9673 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0351 ppm | -0.0013 ppm | 0.0208 ppm | 0.0062 ppm | 0.0000 ppm | 8.7348 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0312 ppm | -0.0001 ppm | 0.0202 ppm | 0.0063 ppm | 0.0000 ppm | 8.7091 ppm |
| Concentration RSD | 52.0 % | 16.0 % | 82.6 % | 1.9 % | 1.4 % | 134.6 % | 1.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0013 ppm | 0.0004 ppm | 0.0007 ppm | 8.3073 ppm | 0.9549 ppm | -0.0005 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0012 ppm | 0.0005 ppm | 0.0008 ppm | 8.4470 ppm | 0.9777 ppm | -0.0008 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0012 ppm | 0.0003 ppm | 0.0005 ppm | 8.2426 ppm | 0.9644 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0014 ppm | 0.0003 ppm | 0.0009 ppm | 8.2323 ppm | 0.9225 ppm | -0.0007 ppm |
| Concentration RSD | 5.1 % | 9.6 % | 25.1 % | 25.8 % | 1.5 % | 3.0 % | 112.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6631 ppm | 0.0163 ppm | 0.0002 ppm | 10.7417 ppm | 0.0015 ppm | 0.0006 ppm | -0.0010 ppm |
| Concentration per Run 1 | 0.6643 ppm | 0.0167 ppm | 0.0002 ppm | 10.9481 ppm | 0.0015 ppm | 0.0004 ppm | -0.0009 ppm |
| Concentration per Run 2 | 0.6623 ppm | 0.0164 ppm | 0.0003 ppm | 10.6495 ppm | 0.0014 ppm | 0.0011 ppm | -0.0007 ppm |
| Concentration per Run 3 | 0.6627 ppm | 0.0156 ppm | 0.0002 ppm | 10.6275 ppm | 0.0016 ppm | 0.0002 ppm | -0.0014 ppm |
| Concentration RSD | 0.2 % | 3.4 % | 7.2 % | 1.7 % | 6.0 % | 86.8 % | 36.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0010 ppm | 1.8922 ppm | 0.0003 ppm | 0.0203 ppm | 0.0087 ppm | 0.0002 ppm | 0.0169 ppm |
| Concentration per Run 1 | -0.0006 ppm | 1.8922 ppm | 0.0002 ppm | 0.0207 ppm | 0.0088 ppm | 0.0000 ppm | 0.0167 ppm |
| Concentration per Run 2 | -0.0018 ppm | 1.8923 ppm | 0.0005 ppm | 0.0203 ppm | 0.0085 ppm | 0.0005 ppm | 0.0171 ppm |
| Concentration per Run 3 | -0.0008 ppm | 1.8920 ppm | 0.0003 ppm | 0.0200 ppm | 0.0088 ppm | 0.0002 ppm | 0.0167 ppm |
| Concentration RSD | 61.1 % | 0.0 % | 49.7 % | 1.7 % | 2.3 % | 113.7 % | 1.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 108.6491 % | 103.0476 % | 96.9576 % | 105.2307 % | 100.4532 % | 102.5719 % |
| Concentration per Run 1 | 0.0017 ppm | 107.0667 % | 103.1802 % | 97.0524 % | 102.7160 % | 100.3979 % | 102.7635 % |
| Concentration per Run 2 | 0.0017 ppm | 109.5044 % | 103.1627 % | 96.8587 % | 105.9965 % | 100.3816 % | 102.6013 % |
| Concentration per Run 3 | 0.0017 ppm | 109.3763 % | 102.8001 % | 96.9617 % | 106.9796 % | 100.5800 % | 102.3508 % |
| Concentration RSD | 1.3 % | 1.3 % | 0.2 % | 0.1 % | 2.1 % | 0.1 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512167-03 WG2039008
Analysis started at: 3/12/2025 9:28:23 AM
Comments <Comment>
Rack: 1
Vial: 7

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0184 ppm | -0.0004 ppm | 0.1702 ppm | 0.0699 ppm | 0.0002 ppm | 9.3542 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0213 ppm | -0.0003 ppm | 0.1711 ppm | 0.0708 ppm | 0.0001 ppm | 9.4825 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0186 ppm | -0.0019 ppm | 0.1703 ppm | 0.0697 ppm | 0.0002 ppm | 9.3122 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0153 ppm | 0.0010 ppm | 0.1693 ppm | 0.0692 ppm | 0.0002 ppm | 9.2679 ppm |
| Concentration RSD | 39.5 % | 16.2 % | 362.4 % | 0.5 % | 1.2 % | 16.8 % | 1.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0046 ppm | 0.0001 ppm | 0.0287 ppm | 0.0395 ppm | 9.2085 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0047 ppm | 0.0001 ppm | 0.0287 ppm | 0.0397 ppm | 9.3260 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0046 ppm | 0.0001 ppm | 0.0286 ppm | 0.0404 ppm | 9.1817 ppm | 0.0010 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0044 ppm | 0.0001 ppm | 0.0288 ppm | 0.0384 ppm | 9.1177 ppm | 0.0010 ppm |
| Concentration RSD | 38.2 % | 3.2 % | 8.1 % | 0.3 % | 2.5 % | 1.2 % | 128.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.2625 ppm | 0.1361 ppm | 0.0000 ppm | 68.6663 ppm | 0.0076 ppm | 0.0007 ppm | -0.0019 ppm |
| Concentration per Run 1 | 6.2666 ppm | 0.1373 ppm | 0.0000 ppm | 69.5383 ppm | 0.0076 ppm | 0.0011 ppm | -0.0021 ppm |
| Concentration per Run 2 | 6.2669 ppm | 0.1361 ppm | 0.0001 ppm | 68.4257 ppm | 0.0076 ppm | 0.0007 ppm | -0.0021 ppm |
| Concentration per Run 3 | 6.2541 ppm | 0.1348 ppm | 0.0000 ppm | 68.0348 ppm | 0.0075 ppm | 0.0004 ppm | -0.0015 ppm |
| Concentration RSD | 0.1 % | 0.9 % | 114.3 % | 1.1 % | 0.6 % | 44.8 % | 19.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0017 ppm | 3.4551 ppm | -0.0004 ppm | 0.0547 ppm | 0.0003 ppm | 0.0004 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0012 ppm | 3.4565 ppm | -0.0002 ppm | 0.0553 ppm | 0.0003 ppm | 0.0015 ppm | 0.0005 ppm |
| Concentration per Run 2 | -0.0017 ppm | 3.4565 ppm | -0.0001 ppm | 0.0546 ppm | 0.0002 ppm | 0.0003 ppm | 0.0002 ppm |
| Concentration per Run 3 | -0.0022 ppm | 3.4523 ppm | -0.0008 ppm | 0.0543 ppm | 0.0003 ppm | -0.0005 ppm | 0.0003 ppm |
| Concentration RSD | 29.9 % | 0.1 % | 108.4 % | 0.9 % | 22.0 % | 221.5 % | 55.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0247 ppm | 107.5512 % | 100.5807 % | 94.9570 % | 104.0819 % | 96.5651 % | 100.3599 % |
| Concentration per Run 1 | 0.0246 ppm | 106.6273 % | 100.8792 % | 95.2372 % | 102.8063 % | 96.7962 % | 100.6652 % |
| Concentration per Run 2 | 0.0247 ppm | 107.5989 % | 100.2873 % | 94.7932 % | 104.2756 % | 96.3468 % | 100.1795 % |
| Concentration per Run 3 | 0.0249 ppm | 108.4275 % | 100.5755 % | 94.8407 % | 105.1637 % | 96.5521 % | 100.2349 % |
| Concentration RSD | 0.6 % | 0.8 % | 0.3 % | 0.3 % | 1.1 % | 0.2 % | 0.3 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039008-7 WG2039008
Analysis started at: 3/12/2025 9:34:42 AM
Comments <Comment>
Rack: 1
Vial: 8

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0520 ppm | 1.9768 ppm | 0.1166 ppm | 1.1235 ppm | 1.9595 ppm | 0.0522 ppm | 18.8106 ppm |
| Concentration per Run 1 | 0.0518 ppm | 2.0032 ppm | 0.1174 ppm | 1.1232 ppm | 1.9859 ppm | 0.0529 ppm | 19.0747 ppm |
| Concentration per Run 2 | 0.0521 ppm | 1.9678 ppm | 0.1158 ppm | 1.1242 ppm | 1.9510 ppm | 0.0519 ppm | 18.7352 ppm |
| Concentration per Run 3 | 0.0522 ppm | 1.9593 ppm | 0.1166 ppm | 1.1229 ppm | 1.9415 ppm | 0.0518 ppm | 18.6218 ppm |
| Concentration RSD | 0.3 % | 1.2 % | 0.7 % | 0.1 % | 1.2 % | 1.2 % | 1.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0531 ppm | 0.5049 ppm | 0.2001 ppm | 0.2671 ppm | 1.0058 ppm | 19.4537 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0532 ppm | 0.5050 ppm | 0.1999 ppm | 0.2675 ppm | 1.0166 ppm | 19.7591 ppm | -0.0006 ppm |
| Concentration per Run 2 | 0.0531 ppm | 0.5054 ppm | 0.1996 ppm | 0.2662 ppm | 1.0064 ppm | 19.3299 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0529 ppm | 0.5044 ppm | 0.2007 ppm | 0.2678 ppm | 0.9945 ppm | 19.2720 ppm | 0.0006 ppm |
| Concentration RSD | 0.3 % | 0.1 % | 0.3 % | 0.3 % | 1.1 % | 1.4 % | 393.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 16.4868 ppm | 0.6276 ppm | 0.8934 ppm | 79.3146 ppm | 0.5330 ppm | 0.5290 ppm | 0.5238 ppm |
| Concentration per Run 1 | 16.4645 ppm | 0.6353 ppm | 0.8853 ppm | 80.5039 ppm | 0.5334 ppm | 0.5300 ppm | 0.5215 ppm |
| Concentration per Run 2 | 16.4652 ppm | 0.6248 ppm | 0.8948 ppm | 78.9818 ppm | 0.5332 ppm | 0.5297 ppm | 0.5259 ppm |
| Concentration per Run 3 | 16.5306 ppm | 0.6226 ppm | 0.9000 ppm | 78.4579 ppm | 0.5324 ppm | 0.5272 ppm | 0.5240 ppm |
| Concentration RSD | 0.2 % | 1.1 % | 0.8 % | 1.3 % | 0.1 % | 0.3 % | 0.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1068 ppm | 4.8598 ppm | 1.0134 ppm | 0.9714 ppm | 0.9847 ppm | 0.1084 ppm | 0.5181 ppm |
| Concentration per Run 1 | 0.1051 ppm | 4.8634 ppm | 1.0113 ppm | 0.9841 ppm | 0.9830 ppm | 0.1097 ppm | 0.5180 ppm |
| Concentration per Run 2 | 0.1059 ppm | 4.8631 ppm | 1.0154 ppm | 0.9674 ppm | 0.9829 ppm | 0.1080 ppm | 0.5168 ppm |
| Concentration per Run 3 | 0.1096 ppm | 4.8530 ppm | 1.0135 ppm | 0.9626 ppm | 0.9881 ppm | 0.1074 ppm | 0.5194 ppm |
| Concentration RSD | 2.3 % | 0.1 % | 0.2 % | 1.2 % | 0.3 % | 1.1 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5583 ppm | 106.5950 % | 99.8009 % | 93.9570 % | 103.8760 % | 95.9764 % | 99.5487 % |
| Concentration per Run 1 | 0.5599 ppm | 104.9282 % | 99.9569 % | 94.1524 % | 102.1319 % | 95.9243 % | 99.6409 % |
| Concentration per Run 2 | 0.5582 ppm | 107.0927 % | 99.9062 % | 93.9538 % | 104.1894 % | 95.8915 % | 99.8251 % |
| Concentration per Run 3 | 0.5567 ppm | 107.7640 % | 99.5398 % | 93.7646 % | 105.3069 % | 96.1133 % | 99.1800 % |
| Concentration RSD | 0.3 % | 1.4 % | 0.2 % | 0.2 % | 1.6 % | 0.1 % | 0.3 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039008-8 WG2039008
Analysis started at: 3/12/2025 9:40:48 AM
Comments <Comment>
Rack: 1
Vial: 9

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0516 ppm | 1.9680 ppm | 0.1164 ppm | 1.1172 ppm | 1.9522 ppm | 0.0520 ppm | 18.7430 ppm |
| Concentration per Run 1 | 0.0523 ppm | 2.0172 ppm | 0.1146 ppm | 1.1170 ppm | 2.0015 ppm | 0.0534 ppm | 19.2554 ppm |
| Concentration per Run 2 | 0.0511 ppm | 1.9484 ppm | 0.1166 ppm | 1.1200 ppm | 1.9321 ppm | 0.0516 ppm | 18.5569 ppm |
| Concentration per Run 3 | 0.0515 ppm | 1.9384 ppm | 0.1180 ppm | 1.1145 ppm | 1.9231 ppm | 0.0511 ppm | 18.4166 ppm |
| Concentration RSD | 1.2 % | 2.2 % | 1.5 % | 0.2 % | 2.2 % | 2.3 % | 2.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0526 ppm | 0.5010 ppm | 0.1993 ppm | 0.2656 ppm | 1.0071 ppm | 19.4703 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0528 ppm | 0.5018 ppm | 0.1993 ppm | 0.2649 ppm | 1.0341 ppm | 20.0260 ppm | -0.0014 ppm |
| Concentration per Run 2 | 0.0527 ppm | 0.5016 ppm | 0.1992 ppm | 0.2657 ppm | 0.9978 ppm | 19.2443 ppm | 0.0021 ppm |
| Concentration per Run 3 | 0.0524 ppm | 0.4995 ppm | 0.1995 ppm | 0.2661 ppm | 0.9894 ppm | 19.1407 ppm | -0.0006 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 0.1 % | 0.2 % | 2.4 % | 2.5 % | 3,971.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 16.4437 ppm | 0.6256 ppm | 0.8933 ppm | 78.8907 ppm | 0.5283 ppm | 0.5277 ppm | 0.5201 ppm |
| Concentration per Run 1 | 16.4528 ppm | 0.6414 ppm | 0.8865 ppm | 80.9490 ppm | 0.5290 ppm | 0.5287 ppm | 0.5196 ppm |
| Concentration per Run 2 | 16.4543 ppm | 0.6209 ppm | 0.8957 ppm | 78.1508 ppm | 0.5293 ppm | 0.5278 ppm | 0.5200 ppm |
| Concentration per Run 3 | 16.4240 ppm | 0.6146 ppm | 0.8978 ppm | 77.5723 ppm | 0.5265 ppm | 0.5265 ppm | 0.5208 ppm |
| Concentration RSD | 0.1 % | 2.2 % | 0.7 % | 2.3 % | 0.3 % | 0.2 % | 0.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1068 ppm | 4.8041 ppm | 1.0176 ppm | 0.9766 ppm | 0.9883 ppm | 0.1076 ppm | 0.5156 ppm |
| Concentration per Run 1 | 0.1079 ppm | 4.8149 ppm | 1.0181 ppm | 1.0000 ppm | 0.9877 ppm | 0.1073 ppm | 0.5153 ppm |
| Concentration per Run 2 | 0.1049 ppm | 4.8142 ppm | 1.0199 ppm | 0.9678 ppm | 0.9880 ppm | 0.1084 ppm | 0.5161 ppm |
| Concentration per Run 3 | 0.1076 ppm | 4.7832 ppm | 1.0150 ppm | 0.9621 ppm | 0.9892 ppm | 0.1073 ppm | 0.5154 ppm |
| Concentration RSD | 1.5 % | 0.4 % | 0.2 % | 2.1 % | 0.1 % | 0.6 % | 0.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5531 ppm | 106.6073 % | 99.3146 % | 93.9720 % | 103.3733 % | 95.8747 % | 99.1558 % |
| Concentration per Run 1 | 0.5545 ppm | 104.2269 % | 99.0328 % | 93.9639 % | 100.4679 % | 95.9566 % | 98.9590 % |
| Concentration per Run 2 | 0.5538 ppm | 107.5140 % | 99.4152 % | 93.9642 % | 104.5120 % | 95.7070 % | 99.3047 % |
| Concentration per Run 3 | 0.5512 ppm | 108.0810 % | 99.4958 % | 93.9880 % | 105.1400 % | 95.9607 % | 99.2036 % |
| Concentration RSD | 0.3 % | 2.0 % | 0.2 % | 0.0 % | 2.5 % | 0.2 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039008-9 WG2039008
Analysis started at: 3/12/2025 9:46:54 AM
Comments <Comment>
Rack: 1
Vial: 10

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0270 ppm | 1.9048 ppm | 0.1274 ppm | 1.1411 ppm | 1.8781 ppm | 0.0499 ppm | 18.3723 ppm |
| Concentration per Run 1 | 0.0225 ppm | 1.9110 ppm | 0.1267 ppm | 1.1401 ppm | 1.8875 ppm | 0.0502 ppm | 18.4660 ppm |
| Concentration per Run 2 | 0.0223 ppm | 1.8951 ppm | 0.1271 ppm | 1.1386 ppm | 1.8706 ppm | 0.0497 ppm | 18.3029 ppm |
| Concentration per Run 3 | 0.0362 ppm | 1.9084 ppm | 0.1283 ppm | 1.1445 ppm | 1.8764 ppm | 0.0499 ppm | 18.3478 ppm |
| Concentration RSD | 29.5 % | 0.4 % | 0.7 % | 0.3 % | 0.5 % | 0.5 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0527 ppm | 0.4949 ppm | 0.1977 ppm | 0.2786 ppm | 0.9903 ppm | 19.0428 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0528 ppm | 0.4949 ppm | 0.1972 ppm | 0.2771 ppm | 0.9959 ppm | 19.1833 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0526 ppm | 0.4942 ppm | 0.1981 ppm | 0.2788 ppm | 0.9878 ppm | 18.9607 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0527 ppm | 0.4956 ppm | 0.1979 ppm | 0.2798 ppm | 0.9871 ppm | 18.9843 ppm | 0.0007 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 0.2 % | 0.5 % | 0.5 % | 0.6 % | 41.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 16.3526 ppm | 0.6055 ppm | 0.9326 ppm | 74.7839 ppm | 0.5143 ppm | 0.5536 ppm | 0.4780 ppm |
| Concentration per Run 1 | 16.3302 ppm | 0.6096 ppm | 0.9223 ppm | 75.2694 ppm | 0.5147 ppm | 0.5536 ppm | 0.4726 ppm |
| Concentration per Run 2 | 16.3559 ppm | 0.6032 ppm | 0.9320 ppm | 74.5500 ppm | 0.5137 ppm | 0.5531 ppm | 0.4786 ppm |
| Concentration per Run 3 | 16.3718 ppm | 0.6036 ppm | 0.9435 ppm | 74.5323 ppm | 0.5146 ppm | 0.5540 ppm | 0.4827 ppm |
| Concentration RSD | 0.1 % | 0.6 % | 1.1 % | 0.6 % | 0.1 % | 0.1 % | 1.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1199 ppm | 4.2359 ppm | 1.0500 ppm | 0.9854 ppm | 1.0206 ppm | 0.1201 ppm | 0.5065 ppm |
| Concentration per Run 1 | 0.1210 ppm | 4.2314 ppm | 1.0489 ppm | 0.9911 ppm | 1.0187 ppm | 0.1204 ppm | 0.5046 ppm |
| Concentration per Run 2 | 0.1199 ppm | 4.2268 ppm | 1.0499 ppm | 0.9819 ppm | 1.0203 ppm | 0.1202 ppm | 0.5065 ppm |
| Concentration per Run 3 | 0.1189 ppm | 4.2494 ppm | 1.0512 ppm | 0.9831 ppm | 1.0228 ppm | 0.1199 ppm | 0.5082 ppm |
| Concentration RSD | 0.9 % | 0.3 % | 0.1 % | 0.5 % | 0.2 % | 0.2 % | 0.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5328 ppm | 106.4657 % | 99.1158 % | 95.0222 % | 104.5512 % | 96.0499 % | 99.3075 % |
| Concentration per Run 1 | 0.5336 ppm | 106.0662 % | 99.0964 % | 94.9910 % | 103.8694 % | 96.0132 % | 99.4758 % |
| Concentration per Run 2 | 0.5318 ppm | 106.7789 % | 99.3148 % | 95.0140 % | 104.8040 % | 96.2442 % | 99.4061 % |
| Concentration per Run 3 | 0.5329 ppm | 106.5520 % | 98.9361 % | 95.0614 % | 104.9803 % | 95.8924 % | 99.0405 % |
| Concentration RSD | 0.2 % | 0.3 % | 0.2 % | 0.0 % | 0.6 % | 0.2 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039008-10D5 WG2039008
Analysis started at: 3/12/2025 9:53:00 AM
Comments <Comment>
Rack: 1
Vial: 11

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0029 ppm | -0.0011 ppm | 0.0379 ppm | 0.0145 ppm | 0.0000 ppm | 1.9160 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0056 ppm | -0.0006 ppm | 0.0383 ppm | 0.0148 ppm | 0.0000 ppm | 1.9329 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0044 ppm | -0.0013 ppm | 0.0379 ppm | 0.0144 ppm | 0.0000 ppm | 1.9113 ppm |
| Concentration per Run 3 | 0.0006 ppm | -0.0013 ppm | -0.0013 ppm | 0.0374 ppm | 0.0145 ppm | 0.0000 ppm | 1.9036 ppm |
| Concentration RSD | 24.9 % | 128.4 % | 37.2 % | 1.2 % | 1.5 % | 355.1 % | 0.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0011 ppm | 0.0001 ppm | 0.0061 ppm | 0.0109 ppm | 1.8502 ppm | 0.0022 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0010 ppm | 0.0001 ppm | 0.0062 ppm | 0.0115 ppm | 1.8834 ppm | 0.0019 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0010 ppm | 0.0000 ppm | 0.0063 ppm | 0.0104 ppm | 1.8313 ppm | 0.0028 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0012 ppm | 0.0002 ppm | 0.0058 ppm | 0.0108 ppm | 1.8359 ppm | 0.0020 ppm |
| Concentration RSD | 65.9 % | 9.9 % | 99.6 % | 4.4 % | 4.7 % | 1.6 % | 22.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.2788 ppm | 0.0277 ppm | 0.0064 ppm | 13.7934 ppm | 0.0017 ppm | 0.0007 ppm | 0.0084 ppm |
| Concentration per Run 1 | 1.2736 ppm | 0.0280 ppm | 0.0074 ppm | 13.9048 ppm | 0.0017 ppm | 0.0004 ppm | 0.0104 ppm |
| Concentration per Run 2 | 1.2796 ppm | 0.0277 ppm | 0.0063 ppm | 13.7701 ppm | 0.0016 ppm | 0.0009 ppm | 0.0080 ppm |
| Concentration per Run 3 | 1.2833 ppm | 0.0274 ppm | 0.0055 ppm | 13.7052 ppm | 0.0017 ppm | 0.0008 ppm | 0.0069 ppm |
| Concentration RSD | 0.4 % | 1.0 % | 14.8 % | 0.7 % | 4.1 % | 42.2 % | 21.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.6790 ppm | 0.0054 ppm | 0.0114 ppm | 0.0018 ppm | -0.0003 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0011 ppm | 0.6794 ppm | 0.0064 ppm | 0.0115 ppm | 0.0019 ppm | -0.0001 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.6805 ppm | 0.0051 ppm | 0.0114 ppm | 0.0019 ppm | -0.0002 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.6772 ppm | 0.0046 ppm | 0.0113 ppm | 0.0017 ppm | -0.0006 ppm | 0.0004 ppm |
| Concentration RSD | 1,491.1 % | 0.2 % | 17.2 % | 1.0 % | 6.7 % | 89.7 % | 76.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0052 ppm | 105.8158 % | 101.4251 % | 97.5776 % | 103.6198 % | 100.2877 % | 101.8383 % |
| Concentration per Run 1 | 0.0051 ppm | 105.2722 % | 101.8332 % | 97.4170 % | 102.9122 % | 100.1911 % | 102.2606 % |
| Concentration per Run 2 | 0.0052 ppm | 105.8887 % | 101.0665 % | 97.5390 % | 103.7613 % | 100.1093 % | 101.4056 % |
| Concentration per Run 3 | 0.0052 ppm | 106.2866 % | 101.3756 % | 97.7769 % | 104.1860 % | 100.5626 % | 101.8486 % |
| Concentration RSD | 2.0 % | 0.5 % | 0.4 % | 0.2 % | 0.6 % | 0.2 % | 0.4 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCV
Analysis started at: 3/12/2025 9:59:22 AM
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4952 ppm | 0.4850 ppm | 0.4852 ppm | 0.4826 ppm | 0.4699 ppm | 0.5031 ppm | 0.4966 ppm |
| Concentration per Run 1 | 0.4955 ppm | 0.4930 ppm | 0.4843 ppm | 0.4810 ppm | 0.4760 ppm | 0.5106 ppm | 0.5098 ppm |
| Concentration per Run 2 | 0.4949 ppm | 0.4845 ppm | 0.4859 ppm | 0.4823 ppm | 0.4699 ppm | 0.5034 ppm | 0.4963 ppm |
| Concentration per Run 3 | 0.4952 ppm | 0.4774 ppm | 0.4855 ppm | 0.4845 ppm | 0.4638 ppm | 0.4953 ppm | 0.4837 ppm |
| Recovery Percentage 1 | 99.041 % | 96.997 % | 97.049 % | 96.521 % | 93.984 % | 100.622 % | 99.319 % |
| Concentration RSD | 0.1 % | 1.6 % | 0.2 % | 0.4 % | 1.3 % | 1.5 % | 2.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4826 ppm | 0.4940 ppm | 0.4868 ppm | 0.4809 ppm | 0.5015 ppm | 5.1074 ppm | 0.4948 ppm |
| Concentration per Run 1 | 0.4809 ppm | 0.4925 ppm | 0.4888 ppm | 0.4825 ppm | 0.5070 ppm | 5.1974 ppm | 0.5035 ppm |
| Concentration per Run 2 | 0.4840 ppm | 0.4950 ppm | 0.4865 ppm | 0.4801 ppm | 0.5037 ppm | 5.0958 ppm | 0.4947 ppm |
| Concentration per Run 3 | 0.4829 ppm | 0.4944 ppm | 0.4850 ppm | 0.4801 ppm | 0.4939 ppm | 5.0290 ppm | 0.4860 ppm |
| Recovery Percentage 1 | 96.525 % | 98.797 % | 97.350 % | 96.173 % | 100.309 % | 102.148 % | 98.951 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.4 % | 0.3 % | 1.4 % | 1.7 % | 1.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5136 ppm | 0.4880 ppm | 0.4739 ppm | 9.6000 ppm | 0.5034 ppm | 0.5064 ppm | 0.5009 ppm |
| Concentration per Run 1 | 0.5141 ppm | 0.4957 ppm | 0.4717 ppm | 9.7482 ppm | 0.5018 ppm | 0.5055 ppm | 0.5000 ppm |
| Concentration per Run 2 | 0.5142 ppm | 0.4878 ppm | 0.4744 ppm | 9.5960 ppm | 0.5044 ppm | 0.5073 ppm | 0.4994 ppm |
| Concentration per Run 3 | 0.5126 ppm | 0.4804 ppm | 0.4755 ppm | 9.4558 ppm | 0.5039 ppm | 0.5063 ppm | 0.5031 ppm |
| Recovery Percentage 1 | 102.722 % | 97.595 % | 94.773 % | 96.000 % | 100.671 % | 101.274 % | 100.172 % |
| Concentration RSD | 0.2 % | 1.6 % | 0.4 % | 1.5 % | 0.3 % | 0.2 % | 0.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4724 ppm | 5.5917 ppm | 0.5271 ppm | 0.4892 ppm | 0.4983 ppm | 0.4987 ppm | 0.4867 ppm |
| Concentration per Run 1 | 0.4714 ppm | 5.5742 ppm | 0.5264 ppm | 0.4956 ppm | 0.4992 ppm | 0.4976 ppm | 0.4872 ppm |
| Concentration per Run 2 | 0.4703 ppm | 5.5923 ppm | 0.5261 ppm | 0.4895 ppm | 0.4977 ppm | 0.4992 ppm | 0.4866 ppm |
| Concentration per Run 3 | 0.4755 ppm | 5.6086 ppm | 0.5289 ppm | 0.4826 ppm | 0.4978 ppm | 0.4994 ppm | 0.4861 ppm |
| Recovery Percentage 1 | 94.472 % | 106.508 % | 105.426 % | 97.844 % | 99.652 % | 99.749 % | 97.331 % |
| Concentration RSD | 0.6 % | 0.3 % | 0.3 % | 1.3 % | 0.2 % | 0.2 % | 0.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4938 ppm | 100.9560 % | 100.7547 % | 98.1530 % | 100.1636 % | 99.5328 % | 101.7406 % |
| Concentration per Run 1 | 0.4923 ppm | 98.7921 % | 100.6204 % | 98.0432 % | 98.5706 % | 99.7895 % | 101.6275 % |
| Concentration per Run 2 | 0.4952 ppm | 100.9508 % | 100.8547 % | 98.1127 % | 99.9199 % | 99.1763 % | 101.8421 % |
| Concentration per Run 3 | 0.4938 ppm | 103.1250 % | 100.7890 % | 98.3031 % | 102.0001 % | 99.6326 % | 101.7523 % |
| Recovery Percentage 1 | 98.751 % | | | | | | |
| Concentration RSD | 0.3 % | 2.1 % | 0.1 % | 0.1 % | 1.7 % | 0.3 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCB
Analysis started at: 3/12/2025 10:05:28 AM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | -0.0032 ppm | -0.0001 ppm | 0.0041 ppm | 0.0000 ppm | 0.0000 ppm | 0.0035 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0041 ppm | 0.0000 ppm | 0.0040 ppm | -0.0001 ppm | 0.0000 ppm | -0.0036 ppm |
| Concentration per Run 2 | 0.0005 ppm | -0.0056 ppm | 0.0015 ppm | 0.0039 ppm | -0.0001 ppm | 0.0000 ppm | 0.0089 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.0001 ppm | -0.0018 ppm | 0.0043 ppm | 0.0002 ppm | 0.0000 ppm | 0.0053 ppm |
| Recovery Percentage 1 | 7.182 % | -3.167 % | -1.910 % | 13.547 % | 0.081 % | -0.081 % | 3.532 % |
| Concentration RSD | 92.8 % | 93.7 % | 1,741.1 % | 6.2 % | 2,459.0 % | 870.5 % | 181.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | 0.0017 ppm | 0.0237 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0002 ppm | 0.0020 ppm | 0.0086 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0003 ppm | 0.0014 ppm | 0.0289 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0017 ppm | 0.0337 ppm | 0.0010 ppm |
| Recovery Percentage 1 | 1.077 % | -0.010 % | -0.152 % | 2.155 % | 3.388 % | 0.949 % | 10.187 % |
| Concentration RSD | 21.6 % | 2,351.8 % | 149.0 % | 53.2 % | 16.9 % | 56.3 % | 10.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0001 ppm | 0.0017 ppm | 0.0153 ppm | 0.0001 ppm | 0.0002 ppm | 0.0014 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0002 ppm | 0.0020 ppm | 0.0184 ppm | 0.0002 ppm | 0.0002 ppm | 0.0012 ppm |
| Concentration per Run 2 | 0.0009 ppm | -0.0004 ppm | 0.0017 ppm | 0.0156 ppm | 0.0002 ppm | 0.0006 ppm | 0.0014 ppm |
| Concentration per Run 3 | -0.0007 ppm | -0.0002 ppm | 0.0013 ppm | 0.0118 ppm | -0.0003 ppm | 0.0000 ppm | 0.0014 ppm |
| Recovery Percentage 1 | 0.086 % | -1.023 % | 3.306 % | 0.763 % | 0.206 % | 2.496 % | 2.708 % |
| Concentration RSD | 916.9 % | 306.1 % | 19.3 % | 21.9 % | 551.3 % | 123.4 % | 7.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0030 ppm | 0.0000 ppm | 0.0020 ppm | 0.0001 ppm | 0.0006 ppm | 0.0008 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0024 ppm | 0.0000 ppm | 0.0016 ppm | 0.0001 ppm | 0.0004 ppm | 0.0005 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0038 ppm | 0.0000 ppm | 0.0023 ppm | 0.0000 ppm | 0.0007 ppm | 0.0010 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0030 ppm | -0.0001 ppm | 0.0022 ppm | 0.0001 ppm | 0.0008 ppm | 0.0007 ppm | 0.0001 ppm |
| Recovery Percentage 1 | -30.359 % | -0.008 % | 4.039 % | 0.718 % | 6.473 % | 3.807 % | 1.759 % |
| Concentration RSD | 23.1 % | 140.6 % | 19.1 % | 75.9 % | 30.2 % | 33.4 % | 58.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 104.9012 % | 101.6621 % | 99.3541 % | 102.8581 % | 100.7728 % | 101.8522 % |
| Concentration per Run 1 | 0.0000 ppm | 103.9678 % | 101.4910 % | 99.3781 % | 101.5321 % | 101.1425 % | 101.7693 % |
| Concentration per Run 2 | 0.0002 ppm | 104.8755 % | 101.6336 % | 99.3536 % | 102.9462 % | 100.7598 % | 101.8057 % |
| Concentration per Run 3 | 0.0000 ppm | 105.8601 % | 101.8616 % | 99.3307 % | 104.0961 % | 100.4162 % | 101.9815 % |
| Recovery Percentage 1 | 1.369 % | | | | | | |
| Concentration RSD | 147.8 % | 0.9 % | 0.2 % | 0.0 % | 1.2 % | 0.4 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512167-02 WG2039008
Analysis started at: 3/12/2025 10:21:29 AM
Comments <Comment>
Rack: 1
Vial: 15

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0130 ppm | -0.0001 ppm | 0.1658 ppm | 0.0767 ppm | 0.0001 ppm | 10.3626 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0142 ppm | -0.0001 ppm | 0.1655 ppm | 0.0802 ppm | 0.0002 ppm | 10.8324 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0165 ppm | -0.0009 ppm | 0.1660 ppm | 0.0760 ppm | 0.0001 ppm | 10.2263 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0082 ppm | 0.0006 ppm | 0.1659 ppm | 0.0741 ppm | 0.0001 ppm | 10.0290 ppm |
| Concentration RSD | 26.7 % | 33.0 % | 677.5 % | 0.2 % | 4.1 % | 8.9 % | 4.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0046 ppm | 0.0002 ppm | 0.0122 ppm | 0.0154 ppm | 10.0612 ppm | 0.0015 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0047 ppm | -0.0001 ppm | 0.0123 ppm | 0.0163 ppm | 10.5604 ppm | 0.0025 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0046 ppm | 0.0006 ppm | 0.0121 ppm | 0.0143 ppm | 9.9008 ppm | 0.0014 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0045 ppm | 0.0001 ppm | 0.0122 ppm | 0.0156 ppm | 9.7225 ppm | 0.0007 ppm |
| Concentration RSD | 38.8 % | 1.7 % | 163.1 % | 0.8 % | 6.7 % | 4.4 % | 61.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.4385 ppm | 0.1414 ppm | 0.0001 ppm | 75.8635 ppm | 0.0108 ppm | 0.0008 ppm | -0.0012 ppm |
| Concentration per Run 1 | 6.4414 ppm | 0.1477 ppm | 0.0002 ppm | 79.3659 ppm | 0.0107 ppm | 0.0001 ppm | -0.0010 ppm |
| Concentration per Run 2 | 6.4459 ppm | 0.1392 ppm | 0.0002 ppm | 74.8977 ppm | 0.0110 ppm | 0.0008 ppm | -0.0015 ppm |
| Concentration per Run 3 | 6.4283 ppm | 0.1372 ppm | 0.0000 ppm | 73.3268 ppm | 0.0106 ppm | 0.0014 ppm | -0.0012 ppm |
| Concentration RSD | 0.1 % | 3.9 % | 91.0 % | 4.1 % | 1.7 % | 81.6 % | 20.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 3.5103 ppm | 0.0006 ppm | 0.0600 ppm | 0.0003 ppm | 0.0006 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0046 ppm | 3.5021 ppm | 0.0005 ppm | 0.0629 ppm | 0.0003 ppm | -0.0003 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0018 ppm | 3.5175 ppm | 0.0006 ppm | 0.0592 ppm | 0.0002 ppm | 0.0001 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0013 ppm | 3.5112 ppm | 0.0008 ppm | 0.0579 ppm | 0.0004 ppm | 0.0019 ppm | 0.0001 ppm |
| Concentration RSD | 719.3 % | 0.2 % | 26.2 % | 4.4 % | 34.1 % | 206.1 % | 41.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0355 ppm | 100.8663 % | 99.7875 % | 96.1955 % | 97.5193 % | 97.1271 % | 99.9440 % |
| Concentration per Run 1 | 0.0356 ppm | 98.6085 % | 99.4583 % | 96.0564 % | 93.7295 % | 97.3387 % | 99.5734 % |
| Concentration per Run 2 | 0.0354 ppm | 101.5366 % | 99.9005 % | 96.1403 % | 98.8610 % | 97.0106 % | 99.9867 % |
| Concentration per Run 3 | 0.0356 ppm | 102.4537 % | 100.0038 % | 96.3898 % | 99.9674 % | 97.0319 % | 100.2719 % |
| Concentration RSD | 0.3 % | 2.0 % | 0.3 % | 0.2 % | 3.4 % | 0.2 % | 0.4 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512167-04 WG2039008
Analysis started at: 3/12/2025 10:27:44 AM
Comments <Comment>
Rack: 1
Vial: 16

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0095 ppm | 0.0003 ppm | 0.2317 ppm | 0.0508 ppm | 0.0000 ppm | 7.9282 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0048 ppm | -0.0008 ppm | 0.2319 ppm | 0.0529 ppm | 0.0000 ppm | 8.2660 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0168 ppm | 0.0006 ppm | 0.2316 ppm | 0.0502 ppm | 0.0000 ppm | 7.8492 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0070 ppm | 0.0010 ppm | 0.2316 ppm | 0.0492 ppm | 0.0000 ppm | 7.6694 ppm |
| Concentration RSD | 71.3 % | 67.0 % | 367.9 % | 0.1 % | 3.8 % | 28.3 % | 3.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0046 ppm | 0.0006 ppm | 0.0075 ppm | 0.1733 ppm | 14.5528 ppm | -0.0006 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0047 ppm | 0.0005 ppm | 0.0077 ppm | 0.1814 ppm | 15.1989 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0045 ppm | 0.0007 ppm | 0.0074 ppm | 0.1704 ppm | 14.3981 ppm | -0.0013 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0045 ppm | 0.0006 ppm | 0.0075 ppm | 0.1681 ppm | 14.0612 ppm | -0.0005 ppm |
| Concentration RSD | 49.1 % | 2.3 % | 13.6 % | 2.3 % | 4.1 % | 4.0 % | 101.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.9518 ppm | 0.1969 ppm | 0.0001 ppm | 87.4907 ppm | 0.0060 ppm | 0.0013 ppm | -0.0004 ppm |
| Concentration per Run 1 | 5.9686 ppm | 0.2059 ppm | 0.0001 ppm | 91.2246 ppm | 0.0060 ppm | 0.0017 ppm | -0.0013 ppm |
| Concentration per Run 2 | 5.9454 ppm | 0.1949 ppm | 0.0002 ppm | 86.6964 ppm | 0.0059 ppm | 0.0014 ppm | 0.0004 ppm |
| Concentration per Run 3 | 5.9414 ppm | 0.1900 ppm | 0.0000 ppm | 84.5511 ppm | 0.0061 ppm | 0.0008 ppm | -0.0003 ppm |
| Concentration RSD | 0.2 % | 4.1 % | 61.5 % | 3.9 % | 2.1 % | 36.2 % | 227.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0031 ppm | 2.8756 ppm | 0.0005 ppm | 0.0501 ppm | 0.0006 ppm | -0.0006 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0006 ppm | 2.8844 ppm | 0.0012 ppm | 0.0523 ppm | 0.0007 ppm | -0.0011 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0044 ppm | 2.8695 ppm | 0.0003 ppm | 0.0495 ppm | 0.0003 ppm | 0.0007 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0044 ppm | 2.8730 ppm | 0.0000 ppm | 0.0485 ppm | 0.0006 ppm | -0.0015 ppm | 0.0000 ppm |
| Concentration RSD | 70.0 % | 0.3 % | 129.1 % | 3.9 % | 36.8 % | 188.4 % | 83.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0179 ppm | 100.5416 % | 99.3446 % | 95.9431 % | 97.4556 % | 96.7591 % | 99.9460 % |
| Concentration per Run 1 | 0.0179 ppm | 97.4381 % | 99.1403 % | 95.8830 % | 93.8670 % | 96.4431 % | 99.7100 % |
| Concentration per Run 2 | 0.0179 ppm | 100.7057 % | 99.5527 % | 95.9061 % | 97.5679 % | 96.9291 % | 100.0907 % |
| Concentration per Run 3 | 0.0178 ppm | 103.4811 % | 99.3409 % | 96.0402 % | 100.9320 % | 96.9051 % | 100.0373 % |
| Concentration RSD | 0.3 % | 3.0 % | 0.2 % | 0.1 % | 3.6 % | 0.3 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512167-05 WG2039008
Analysis started at: 3/12/2025 10:34:01 AM
Comments <Comment>
Rack: 1
Vial: 17

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0209 ppm | -0.0012 ppm | 0.1428 ppm | 0.0736 ppm | 0.0002 ppm | 10.7575 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0241 ppm | -0.0006 ppm | 0.1430 ppm | 0.0768 ppm | 0.0001 ppm | 11.2303 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0230 ppm | -0.0016 ppm | 0.1428 ppm | 0.0729 ppm | 0.0002 ppm | 10.6536 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0157 ppm | -0.0013 ppm | 0.1425 ppm | 0.0713 ppm | 0.0001 ppm | 10.3886 ppm |
| Concentration RSD | 483.2 % | 21.9 % | 43.0 % | 0.2 % | 3.8 % | 21.7 % | 4.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0028 ppm | 0.0002 ppm | 0.0371 ppm | 0.0456 ppm | 9.1339 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0026 ppm | 0.0004 ppm | 0.0369 ppm | 0.0479 ppm | 9.5130 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0029 ppm | 0.0003 ppm | 0.0372 ppm | 0.0443 ppm | 9.0694 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0029 ppm | 0.0000 ppm | 0.0372 ppm | 0.0447 ppm | 8.8191 ppm | 0.0012 ppm |
| Concentration RSD | 11.7 % | 6.4 % | 86.9 % | 0.5 % | 4.3 % | 3.8 % | 149.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.6392 ppm | 0.0821 ppm | 0.0003 ppm | 66.1165 ppm | 0.0069 ppm | 0.0007 ppm | -0.0015 ppm |
| Concentration per Run 1 | 6.6501 ppm | 0.0855 ppm | 0.0002 ppm | 69.0556 ppm | 0.0072 ppm | 0.0006 ppm | -0.0016 ppm |
| Concentration per Run 2 | 6.6362 ppm | 0.0817 ppm | 0.0004 ppm | 65.4688 ppm | 0.0068 ppm | 0.0008 ppm | -0.0013 ppm |
| Concentration per Run 3 | 6.6314 ppm | 0.0792 ppm | 0.0004 ppm | 63.8252 ppm | 0.0069 ppm | 0.0007 ppm | -0.0015 ppm |
| Concentration RSD | 0.1 % | 3.9 % | 37.9 % | 4.0 % | 3.0 % | 12.9 % | 9.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 3.5597 ppm | 0.0002 ppm | 0.0602 ppm | 0.0003 ppm | -0.0006 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0011 ppm | 3.5623 ppm | -0.0001 ppm | 0.0631 ppm | 0.0003 ppm | -0.0008 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0011 ppm | 3.5631 ppm | 0.0007 ppm | 0.0597 ppm | 0.0003 ppm | -0.0001 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0022 ppm | 3.5535 ppm | 0.0000 ppm | 0.0579 ppm | 0.0002 ppm | -0.0010 ppm | -0.0002 ppm |
| Concentration RSD | 7,544.7 % | 0.1 % | 196.4 % | 4.3 % | 11.8 % | 70.0 % | 239.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0265 ppm | 100.5621 % | 100.3680 % | 96.3094 % | 97.7323 % | 97.5146 % | 100.2872 % |
| Concentration per Run 1 | 0.0266 ppm | 96.8110 % | 100.2298 % | 96.4616 % | 93.6227 % | 97.4103 % | 100.1299 % |
| Concentration per Run 2 | 0.0265 ppm | 101.1306 % | 100.5728 % | 96.3563 % | 98.3146 % | 97.4380 % | 100.3982 % |
| Concentration per Run 3 | 0.0265 ppm | 103.7447 % | 100.3012 % | 96.1102 % | 101.2597 % | 97.6957 % | 100.3336 % |
| Concentration RSD | 0.3 % | 3.5 % | 0.2 % | 0.2 % | 3.9 % | 0.2 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512167-06 WG2039008
Analysis started at: 3/12/2025 10:40:18 AM
Comments <Comment>
Rack: 1
Vial: 18

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0222 ppm | -0.0013 ppm | 0.1233 ppm | 0.0936 ppm | 0.0004 ppm | 10.8475 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0248 ppm | -0.0008 ppm | 0.1234 ppm | 0.0950 ppm | 0.0003 ppm | 11.0096 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0170 ppm | -0.0019 ppm | 0.1232 ppm | 0.0930 ppm | 0.0003 ppm | 10.7660 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0247 ppm | -0.0012 ppm | 0.1232 ppm | 0.0929 ppm | 0.0004 ppm | 10.7670 ppm |
| Concentration RSD | 17.3 % | 20.3 % | 43.3 % | 0.1 % | 1.3 % | 12.2 % | 1.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0064 ppm | 0.0007 ppm | 0.0348 ppm | 0.0049 ppm | 6.1821 ppm | 0.0011 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0065 ppm | 0.0008 ppm | 0.0349 ppm | 0.0050 ppm | 6.2755 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0064 ppm | 0.0004 ppm | 0.0349 ppm | 0.0055 ppm | 6.1345 ppm | 0.0012 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0065 ppm | 0.0011 ppm | 0.0347 ppm | 0.0043 ppm | 6.1362 ppm | 0.0012 ppm |
| Concentration RSD | 27.8 % | 1.3 % | 44.0 % | 0.3 % | 12.5 % | 1.3 % | 20.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.4121 ppm | 0.1556 ppm | 0.0002 ppm | 66.0453 ppm | 0.0094 ppm | 0.0012 ppm | -0.0005 ppm |
| Concentration per Run 1 | 6.4173 ppm | 0.1580 ppm | 0.0001 ppm | 67.1313 ppm | 0.0094 ppm | 0.0018 ppm | -0.0009 ppm |
| Concentration per Run 2 | 6.3934 ppm | 0.1548 ppm | 0.0003 ppm | 65.6720 ppm | 0.0093 ppm | 0.0004 ppm | -0.0008 ppm |
| Concentration per Run 3 | 6.4257 ppm | 0.1542 ppm | 0.0001 ppm | 65.3325 ppm | 0.0095 ppm | 0.0013 ppm | 0.0002 ppm |
| Concentration RSD | 0.3 % | 1.3 % | 54.0 % | 1.4 % | 1.0 % | 62.8 % | 126.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | 3.9323 ppm | 0.0003 ppm | 0.0614 ppm | 0.0004 ppm | 0.0003 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0051 ppm | 3.9306 ppm | 0.0004 ppm | 0.0624 ppm | 0.0007 ppm | -0.0004 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0008 ppm | 3.9331 ppm | -0.0003 ppm | 0.0611 ppm | 0.0003 ppm | 0.0004 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0024 ppm | 3.9333 ppm | 0.0009 ppm | 0.0608 ppm | 0.0001 ppm | 0.0009 ppm | 0.0006 ppm |
| Concentration RSD | 321.1 % | 0.0 % | 182.4 % | 1.4 % | 73.4 % | 223.2 % | 31.5 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0368 ppm | 106.8779 % | 100.5810 % | 96.2061 % | 103.6015 % | 97.5595 % | 100.3103 % |
| Concentration per Run 1 | 0.0370 ppm | 105.9411 % | 100.6554 % | 96.4400 % | 101.5096 % | 97.6857 % | 100.3928 % |
| Concentration per Run 2 | 0.0367 ppm | 107.3945 % | 100.6394 % | 96.1185 % | 104.7074 % | 97.5352 % | 100.3921 % |
| Concentration per Run 3 | 0.0369 ppm | 107.2980 % | 100.4482 % | 96.0597 % | 104.5874 % | 97.4575 % | 100.1459 % |
| Concentration RSD | 0.4 % | 0.8 % | 0.1 % | 0.2 % | 1.7 % | 0.1 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512176-01 WG2039008
Analysis started at: 3/12/2025 10:46:33 AM
Comments <Comment>
Rack: 1
Vial: 19

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0188 ppm | -0.0003 ppm | 0.0105 ppm | 0.0612 ppm | -0.0001 ppm | 83.2144 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0146 ppm | 0.0003 ppm | 0.0104 ppm | 0.0625 ppm | -0.0001 ppm | 84.9409 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0226 ppm | -0.0010 ppm | 0.0108 ppm | 0.0607 ppm | -0.0001 ppm | 82.6146 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0191 ppm | -0.0003 ppm | 0.0104 ppm | 0.0605 ppm | 0.0000 ppm | 82.0877 ppm |
| Concentration RSD | 86.4 % | 21.5 % | 207.6 % | 2.1 % | 1.8 % | 83.4 % | 1.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0016 ppm | 0.0005 ppm | 0.0022 ppm | 0.0134 ppm | 4.9635 ppm | 0.0033 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0015 ppm | 0.0006 ppm | 0.0023 ppm | 0.0145 ppm | 5.0695 ppm | 0.0030 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0015 ppm | 0.0006 ppm | 0.0022 ppm | 0.0130 ppm | 4.9157 ppm | 0.0037 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0017 ppm | 0.0004 ppm | 0.0022 ppm | 0.0129 ppm | 4.9052 ppm | 0.0033 ppm |
| Concentration RSD | 5.5 % | 6.2 % | 22.8 % | 2.8 % | 6.6 % | 1.9 % | 10.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 13.3806 ppm | 1.8993 ppm | 0.0002 ppm | 391.2875 ppm | 0.0034 ppm | 0.0005 ppm | -0.0009 ppm |
| Concentration per Run 1 | 13.3287 ppm | 1.9418 ppm | 0.0002 ppm | 409.4092 ppm | 0.0034 ppm | 0.0000 ppm | -0.0009 ppm |
| Concentration per Run 2 | 13.3979 ppm | 1.8818 ppm | 0.0000 ppm | 386.5408 ppm | 0.0035 ppm | 0.0003 ppm | 0.0008 ppm |
| Concentration per Run 3 | 13.4153 ppm | 1.8744 ppm | 0.0003 ppm | 377.9124 ppm | 0.0034 ppm | 0.0011 ppm | -0.0026 ppm |
| Concentration RSD | 0.3 % | 1.9 % | 76.1 % | 4.2 % | 1.9 % | 118.1 % | 190.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0042 ppm | 7.4808 ppm | 0.0005 ppm | 0.5921 ppm | 0.0003 ppm | -0.0013 ppm | 0.0026 ppm |
| Concentration per Run 1 | -0.0049 ppm | 7.4845 ppm | 0.0005 ppm | 0.6054 ppm | 0.0000 ppm | -0.0028 ppm | 0.0026 ppm |
| Concentration per Run 2 | -0.0033 ppm | 7.4795 ppm | 0.0004 ppm | 0.5863 ppm | 0.0004 ppm | -0.0013 ppm | 0.0026 ppm |
| Concentration per Run 3 | -0.0045 ppm | 7.4782 ppm | 0.0007 ppm | 0.5847 ppm | 0.0005 ppm | 0.0001 ppm | 0.0025 ppm |
| Concentration RSD | 19.7 % | 0.0 % | 24.0 % | 1.9 % | 79.4 % | 111.2 % | 2.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0515 ppm | 103.9900 % | 93.4404 % | 90.5879 % | 101.1339 % | 88.1255 % | 93.6826 % |
| Concentration per Run 1 | 0.0517 ppm | 102.6344 % | 93.7930 % | 90.6225 % | 99.0201 % | 88.0536 % | 94.0413 % |
| Concentration per Run 2 | 0.0516 ppm | 104.3325 % | 93.1619 % | 90.6405 % | 102.0501 % | 88.1478 % | 93.4780 % |
| Concentration per Run 3 | 0.0513 ppm | 105.0029 % | 93.3663 % | 90.5009 % | 102.3317 % | 88.1750 % | 93.5285 % |
| Concentration RSD | 0.4 % | 1.2 % | 0.3 % | 0.1 % | 1.8 % | 0.1 % | 0.3 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512176-02 WG2039008
Analysis started at: 3/12/2025 10:53:00 AM
Comments <Comment>
Rack: 1
Vial: 20

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0192 ppm | 0.0025 ppm | 0.5422 ppm | 0.0123 ppm | 0.0000 ppm | 21.0967 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0183 ppm | 0.0039 ppm | 0.5424 ppm | 0.0128 ppm | 0.0000 ppm | 21.9700 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0207 ppm | 0.0014 ppm | 0.5414 ppm | 0.0121 ppm | -0.0001 ppm | 20.8389 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0187 ppm | 0.0021 ppm | 0.5427 ppm | 0.0119 ppm | 0.0000 ppm | 20.4811 ppm |
| Concentration RSD | 52.5 % | 6.6 % | 52.2 % | 0.1 % | 3.8 % | 96.6 % | 3.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0050 ppm | 0.0005 ppm | 0.0014 ppm | 0.7854 ppm | 11.5282 ppm | 0.0214 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0051 ppm | 0.0003 ppm | 0.0013 ppm | 0.8177 ppm | 12.0012 ppm | 0.0215 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0049 ppm | 0.0004 ppm | 0.0014 ppm | 0.7769 ppm | 11.3939 ppm | 0.0216 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0051 ppm | 0.0009 ppm | 0.0013 ppm | 0.7617 ppm | 11.1894 ppm | 0.0210 ppm |
| Concentration RSD | 25.6 % | 2.4 % | 56.1 % | 4.5 % | 3.7 % | 3.7 % | 1.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 23.1538 ppm | 1.1120 ppm | 0.0010 ppm | 377.3621 ppm | 0.0039 ppm | 0.0005 ppm | -0.0010 ppm |
| Concentration per Run 1 | 23.1694 ppm | 1.1583 ppm | 0.0012 ppm | 407.2385 ppm | 0.0041 ppm | 0.0006 ppm | -0.0009 ppm |
| Concentration per Run 2 | 23.1548 ppm | 1.0989 ppm | 0.0010 ppm | 367.8370 ppm | 0.0037 ppm | 0.0003 ppm | -0.0006 ppm |
| Concentration per Run 3 | 23.1372 ppm | 1.0789 ppm | 0.0010 ppm | 357.0109 ppm | 0.0040 ppm | 0.0005 ppm | -0.0016 ppm |
| Concentration RSD | 0.1 % | 3.7 % | 14.9 % | 7.0 % | 5.0 % | 36.5 % | 49.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0041 ppm | 9.1015 ppm | 0.0004 ppm | 0.1964 ppm | 0.0008 ppm | -0.0007 ppm | 0.0014 ppm |
| Concentration per Run 1 | -0.0036 ppm | 9.1151 ppm | 0.0006 ppm | 0.2042 ppm | 0.0008 ppm | -0.0001 ppm | 0.0014 ppm |
| Concentration per Run 2 | -0.0038 ppm | 9.0918 ppm | 0.0001 ppm | 0.1943 ppm | 0.0007 ppm | -0.0012 ppm | 0.0013 ppm |
| Concentration per Run 3 | -0.0050 ppm | 9.0975 ppm | 0.0006 ppm | 0.1907 ppm | 0.0011 ppm | -0.0009 ppm | 0.0015 ppm |
| Concentration RSD | 18.8 % | 0.1 % | 68.4 % | 3.6 % | 24.2 % | 79.6 % | 8.9 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0085 ppm | 100.5263 % | 93.8271 % | 91.5100 % | 97.5049 % | 89.3677 % | 94.1517 % |
| Concentration per Run 1 | 0.0085 ppm | 96.3939 % | 93.7876 % | 91.4170 % | 93.1270 % | 89.2073 % | 94.1164 % |
| Concentration per Run 2 | 0.0086 ppm | 102.3642 % | 93.7674 % | 91.5991 % | 99.3982 % | 89.5131 % | 94.0988 % |
| Concentration per Run 3 | 0.0085 ppm | 102.8209 % | 93.9264 % | 91.5140 % | 99.9897 % | 89.3826 % | 94.2398 % |
| Concentration RSD | 0.6 % | 3.6 % | 0.1 % | 0.1 % | 3.9 % | 0.2 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512176-03 WG2039008
Analysis started at: 3/12/2025 10:59:25 AM
Comments <Comment>
Rack: 1
Vial: 21

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0200 ppm | 0.0006 ppm | 0.0196 ppm | 0.0361 ppm | -0.0001 ppm | 89.5822 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0192 ppm | -0.0004 ppm | 0.0195 ppm | 0.0377 ppm | -0.0001 ppm | 93.7433 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0275 ppm | 0.0019 ppm | 0.0199 ppm | 0.0356 ppm | -0.0001 ppm | 88.4388 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0132 ppm | 0.0004 ppm | 0.0194 ppm | 0.0351 ppm | -0.0001 ppm | 86.5645 ppm |
| Concentration RSD | 40.6 % | 35.8 % | 179.6 % | 1.2 % | 3.8 % | 27.9 % | 4.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0001 ppm | 0.0000 ppm | 0.0012 ppm | 0.0104 ppm | 5.6216 ppm | 0.0028 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0000 ppm | 0.0002 ppm | 0.0014 ppm | 0.0105 ppm | 5.8783 ppm | 0.0033 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0001 ppm | -0.0001 ppm | 0.0012 ppm | 0.0103 ppm | 5.5597 ppm | 0.0025 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0000 ppm | 0.0000 ppm | 0.0011 ppm | 0.0104 ppm | 5.4266 ppm | 0.0028 ppm |
| Concentration RSD | 7.4 % | 123.1 % | 426.7 % | 12.3 % | 1.0 % | 4.1 % | 14.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 12.7446 ppm | 0.0018 ppm | 0.0002 ppm | 230.7484 ppm | 0.0003 ppm | 0.0005 ppm | -0.0010 ppm |
| Concentration per Run 1 | 12.7746 ppm | 0.0019 ppm | 0.0002 ppm | 243.9371 ppm | 0.0002 ppm | -0.0001 ppm | -0.0009 ppm |
| Concentration per Run 2 | 12.7498 ppm | 0.0019 ppm | 0.0004 ppm | 226.3156 ppm | 0.0004 ppm | 0.0006 ppm | -0.0008 ppm |
| Concentration per Run 3 | 12.7096 ppm | 0.0017 ppm | 0.0002 ppm | 221.9925 ppm | 0.0001 ppm | 0.0008 ppm | -0.0014 ppm |
| Concentration RSD | 0.3 % | 5.5 % | 58.3 % | 5.0 % | 63.0 % | 97.7 % | 27.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0015 ppm | 4.9793 ppm | 0.0004 ppm | 0.3655 ppm | 0.0002 ppm | 0.0011 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0005 ppm | 4.9798 ppm | 0.0004 ppm | 0.3811 ppm | 0.0002 ppm | 0.0007 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0027 ppm | 4.9754 ppm | 0.0006 ppm | 0.3617 ppm | -0.0001 ppm | 0.0015 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0013 ppm | 4.9828 ppm | 0.0003 ppm | 0.3537 ppm | 0.0003 ppm | 0.0010 ppm | 0.0003 ppm |
| Concentration RSD | 72.7 % | 0.1 % | 29.0 % | 3.9 % | 150.3 % | 37.0 % | 49.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0024 ppm | 99.4827 % | 94.8495 % | 91.8180 % | 97.0351 % | 90.4000 % | 94.9642 % |
| Concentration per Run 1 | 0.0024 ppm | 95.8891 % | 94.5383 % | 91.7139 % | 92.8137 % | 90.3097 % | 94.6111 % |
| Concentration per Run 2 | 0.0024 ppm | 100.4418 % | 94.8356 % | 91.9185 % | 97.8927 % | 90.5185 % | 94.9365 % |
| Concentration per Run 3 | 0.0024 ppm | 102.1172 % | 95.1747 % | 91.8216 % | 100.3990 % | 90.3720 % | 95.3450 % |
| Concentration RSD | 1.6 % | 3.2 % | 0.3 % | 0.1 % | 4.0 % | 0.1 % | 0.4 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512176-04 WG2039008
Analysis started at: 3/12/2025 11:05:54 AM
Comments <Comment>
Rack: 1
Vial: 22

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0271 ppm | 0.0023 ppm | 0.0205 ppm | 0.0687 ppm | -0.0001 ppm | 53.1889 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0286 ppm | 0.0052 ppm | 0.0204 ppm | 0.0696 ppm | 0.0000 ppm | 53.7183 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0287 ppm | 0.0006 ppm | 0.0204 ppm | 0.0684 ppm | 0.0000 ppm | 52.9479 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0240 ppm | 0.0012 ppm | 0.0206 ppm | 0.0682 ppm | -0.0001 ppm | 52.9005 ppm |
| Concentration RSD | 41.8 % | 10.0 % | 107.6 % | 0.7 % | 1.1 % | 115.0 % | 0.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0028 ppm | 0.0011 ppm | 0.0046 ppm | 0.0354 ppm | 6.9652 ppm | 0.0034 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0029 ppm | 0.0008 ppm | 0.0047 ppm | 0.0356 ppm | 7.0171 ppm | 0.0032 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0027 ppm | 0.0014 ppm | 0.0044 ppm | 0.0341 ppm | 6.9697 ppm | 0.0031 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0028 ppm | 0.0010 ppm | 0.0047 ppm | 0.0365 ppm | 6.9086 ppm | 0.0039 ppm |
| Concentration RSD | 5.3 % | 2.7 % | 26.3 % | 3.3 % | 3.5 % | 0.8 % | 13.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.8678 ppm | 1.0375 ppm | 0.0010 ppm | 220.5002 ppm | 0.0051 ppm | 0.0016 ppm | -0.0029 ppm |
| Concentration per Run 1 | 5.8752 ppm | 1.0464 ppm | 0.0010 ppm | 223.8709 ppm | 0.0050 ppm | 0.0015 ppm | -0.0013 ppm |
| Concentration per Run 2 | 5.8674 ppm | 1.0338 ppm | 0.0010 ppm | 219.9558 ppm | 0.0053 ppm | 0.0021 ppm | -0.0037 ppm |
| Concentration per Run 3 | 5.8607 ppm | 1.0322 ppm | 0.0009 ppm | 217.6739 ppm | 0.0050 ppm | 0.0012 ppm | -0.0035 ppm |
| Concentration RSD | 0.1 % | 0.7 % | 4.7 % | 1.4 % | 2.9 % | 26.5 % | 46.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0025 ppm | 3.0897 ppm | 0.0006 ppm | 0.2191 ppm | 0.0013 ppm | -0.0009 ppm | 0.0016 ppm |
| Concentration per Run 1 | -0.0042 ppm | 3.0959 ppm | 0.0008 ppm | 0.2207 ppm | 0.0014 ppm | -0.0003 ppm | 0.0017 ppm |
| Concentration per Run 2 | -0.0031 ppm | 3.0836 ppm | 0.0009 ppm | 0.2180 ppm | 0.0011 ppm | -0.0018 ppm | 0.0016 ppm |
| Concentration per Run 3 | -0.0002 ppm | 3.0896 ppm | 0.0002 ppm | 0.2186 ppm | 0.0013 ppm | -0.0007 ppm | 0.0016 ppm |
| Concentration RSD | 83.7 % | 0.2 % | 57.3 % | 0.7 % | 15.5 % | 84.7 % | 5.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0881 ppm | 106.2055 % | 95.9125 % | 92.7324 % | 103.7667 % | 91.6384 % | 96.4452 % |
| Concentration per Run 1 | 0.0882 ppm | 106.4256 % | 95.6160 % | 92.6273 % | 103.2246 % | 91.5776 % | 96.0373 % |
| Concentration per Run 2 | 0.0879 ppm | 106.0418 % | 96.0988 % | 92.7439 % | 103.8421 % | 91.6922 % | 96.7597 % |
| Concentration per Run 3 | 0.0881 ppm | 106.1491 % | 96.0227 % | 92.8260 % | 104.2334 % | 91.6455 % | 96.5387 % |
| Concentration RSD | 0.2 % | 0.2 % | 0.3 % | 0.1 % | 0.5 % | 0.1 % | 0.4 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512176-05 WG2039008
Analysis started at: 3/12/2025 11:12:21 AM
Comments <Comment>
Rack: 1
Vial: 23

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0142 ppm | -0.0004 ppm | 0.0106 ppm | 0.0488 ppm | -0.0001 ppm | 66.4728 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0060 ppm | 0.0006 ppm | 0.0106 ppm | 0.0500 ppm | -0.0001 ppm | 68.0814 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0175 ppm | -0.0005 ppm | 0.0104 ppm | 0.0481 ppm | -0.0001 ppm | 65.8055 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0189 ppm | -0.0012 ppm | 0.0107 ppm | 0.0481 ppm | -0.0001 ppm | 65.5317 ppm |
| Concentration RSD | 27.7 % | 49.9 % | 231.5 % | 1.8 % | 2.3 % | 13.8 % | 2.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0012 ppm | 0.0004 ppm | 0.0020 ppm | 0.0096 ppm | 4.3524 ppm | 0.0018 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0012 ppm | 0.0005 ppm | 0.0021 ppm | 0.0096 ppm | 4.4588 ppm | 0.0012 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0011 ppm | 0.0004 ppm | 0.0021 ppm | 0.0094 ppm | 4.2971 ppm | 0.0022 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0013 ppm | 0.0002 ppm | 0.0019 ppm | 0.0099 ppm | 4.3012 ppm | 0.0021 ppm |
| Concentration RSD | 14.1 % | 9.6 % | 40.3 % | 4.4 % | 2.5 % | 2.1 % | 27.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.7056 ppm | 1.4742 ppm | 0.0003 ppm | 315.0872 ppm | 0.0030 ppm | 0.0007 ppm | -0.0010 ppm |
| Concentration per Run 1 | 10.7000 ppm | 1.5123 ppm | 0.0003 ppm | 329.0603 ppm | 0.0029 ppm | 0.0015 ppm | -0.0002 ppm |
| Concentration per Run 2 | 10.7180 ppm | 1.4586 ppm | 0.0001 ppm | 311.0818 ppm | 0.0029 ppm | 0.0001 ppm | -0.0015 ppm |
| Concentration per Run 3 | 10.6989 ppm | 1.4515 ppm | 0.0004 ppm | 305.1195 ppm | 0.0032 ppm | 0.0006 ppm | -0.0013 ppm |
| Concentration RSD | 0.1 % | 2.3 % | 49.4 % | 4.0 % | 6.6 % | 101.9 % | 73.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0039 ppm | 7.3322 ppm | 0.0003 ppm | 0.4710 ppm | 0.0003 ppm | -0.0010 ppm | 0.0019 ppm |
| Concentration per Run 1 | -0.0035 ppm | 7.3314 ppm | 0.0001 ppm | 0.4823 ppm | 0.0005 ppm | -0.0009 ppm | 0.0021 ppm |
| Concentration per Run 2 | -0.0043 ppm | 7.3394 ppm | 0.0000 ppm | 0.4666 ppm | 0.0001 ppm | -0.0019 ppm | 0.0018 ppm |
| Concentration per Run 3 | -0.0039 ppm | 7.3257 ppm | 0.0007 ppm | 0.4641 ppm | 0.0002 ppm | -0.0002 ppm | 0.0020 ppm |
| Concentration RSD | 10.1 % | 0.1 % | 152.9 % | 2.1 % | 80.7 % | 87.3 % | 7.9 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0266 ppm | 103.7107 % | 94.4277 % | 91.4685 % | 100.9232 % | 89.4544 % | 94.4297 % |
| Concentration per Run 1 | 0.0265 ppm | 102.7461 % | 94.5407 % | 91.5400 % | 98.5833 % | 89.6503 % | 94.4792 % |
| Concentration per Run 2 | 0.0266 ppm | 104.0159 % | 94.3604 % | 91.5433 % | 101.9501 % | 89.3842 % | 94.3117 % |
| Concentration per Run 3 | 0.0266 ppm | 104.3701 % | 94.3820 % | 91.3223 % | 102.2361 % | 89.3287 % | 94.4981 % |
| Concentration RSD | 0.2 % | 0.8 % | 0.1 % | 0.1 % | 2.0 % | 0.2 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512176-06 WG2039008
Analysis started at: 3/12/2025 11:18:50 AM
Comments <Comment>
Rack: 1
Vial: 24

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0036 ppm | -0.0007 ppm | 0.0012 ppm | 0.0001 ppm | 0.0000 ppm | 0.1287 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0054 ppm | -0.0018 ppm | 0.0009 ppm | 0.0002 ppm | -0.0001 ppm | 0.1287 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0052 ppm | 0.0004 ppm | 0.0014 ppm | 0.0000 ppm | 0.0000 ppm | 0.1284 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0003 ppm | -0.0007 ppm | 0.0012 ppm | 0.0002 ppm | -0.0001 ppm | 0.1290 ppm |
| Concentration RSD | 31.7 % | 79.7 % | 167.1 % | 19.5 % | 123.1 % | 89.6 % | 0.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | 0.0001 ppm | 0.0006 ppm | 0.0048 ppm | 0.0843 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0002 ppm | 0.0002 ppm | 0.0007 ppm | 0.0047 ppm | 0.0712 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | 0.0001 ppm | 0.0008 ppm | 0.0052 ppm | 0.0804 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0001 ppm | 0.0001 ppm | 0.0005 ppm | 0.0044 ppm | 0.1013 ppm | 0.0011 ppm |
| Concentration RSD | 71.7 % | 31.1 % | 48.5 % | 21.3 % | 8.3 % | 18.3 % | 67.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0146 ppm | 0.0020 ppm | 0.0001 ppm | 0.6855 ppm | 0.0003 ppm | 0.0001 ppm | -0.0007 ppm |
| Concentration per Run 1 | 0.0160 ppm | 0.0020 ppm | 0.0002 ppm | 0.7011 ppm | 0.0004 ppm | 0.0002 ppm | -0.0009 ppm |
| Concentration per Run 2 | 0.0138 ppm | 0.0019 ppm | 0.0000 ppm | 0.6802 ppm | 0.0005 ppm | 0.0001 ppm | -0.0009 ppm |
| Concentration per Run 3 | 0.0142 ppm | 0.0022 ppm | 0.0002 ppm | 0.6751 ppm | 0.0002 ppm | 0.0000 ppm | -0.0004 ppm |
| Concentration RSD | 8.1 % | 8.2 % | 82.6 % | 2.0 % | 49.3 % | 84.8 % | 45.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 0.0129 ppm | 0.0002 ppm | 0.0006 ppm | 0.0001 ppm | 0.0004 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0007 ppm | 0.0127 ppm | -0.0003 ppm | 0.0006 ppm | -0.0001 ppm | 0.0011 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0013 ppm | 0.0133 ppm | 0.0000 ppm | 0.0005 ppm | 0.0003 ppm | -0.0008 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0128 ppm | 0.0010 ppm | 0.0006 ppm | 0.0002 ppm | 0.0010 ppm | 0.0003 ppm |
| Concentration RSD | 142.2 % | 2.4 % | 285.9 % | 7.9 % | 137.4 % | 265.7 % | 116.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 107.9221 % | 104.5812 % | 99.7900 % | 104.5965 % | 102.9488 % | 104.1307 % |
| Concentration per Run 1 | 0.0007 ppm | 106.9257 % | 104.7448 % | 99.8728 % | 102.7860 % | 103.0817 % | 104.1825 % |
| Concentration per Run 2 | 0.0009 ppm | 108.6610 % | 104.2162 % | 99.7627 % | 105.4493 % | 102.7238 % | 103.8296 % |
| Concentration per Run 3 | 0.0008 ppm | 108.1796 % | 104.7827 % | 99.7345 % | 105.5541 % | 103.0409 % | 104.3799 % |
| Concentration RSD | 8.3 % | 0.8 % | 0.3 % | 0.1 % | 1.5 % | 0.2 % | 0.3 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCV
Analysis started at: 3/12/2025 11:25:16 AM
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4984 ppm | 0.5084 ppm | 0.4913 ppm | 0.4813 ppm | 0.4947 ppm | 0.5332 ppm | 0.5259 ppm |
| Concentration per Run 1 | 0.4984 ppm | 0.5307 ppm | 0.4922 ppm | 0.4821 ppm | 0.5166 ppm | 0.5570 ppm | 0.5456 ppm |
| Concentration per Run 2 | 0.4987 ppm | 0.5122 ppm | 0.4913 ppm | 0.4810 ppm | 0.4972 ppm | 0.5352 ppm | 0.5319 ppm |
| Concentration per Run 3 | 0.4982 ppm | 0.4823 ppm | 0.4905 ppm | 0.4809 ppm | 0.4702 ppm | 0.5076 ppm | 0.5002 ppm |
| Recovery Percentage 1 | 99.686 % | 101.678 % | 98.269 % | 96.265 % | 98.933 % | 106.647 % | 105.176 % |
| Concentration RSD | 0.0 % | 4.8 % | 0.2 % | 0.1 % | 4.7 % | 4.6 % | 4.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4822 ppm | 0.4918 ppm | 0.4848 ppm | 0.4786 ppm | 0.5281 ppm | 5.4262 ppm | 0.5197 ppm |
| Concentration per Run 1 | 0.4827 ppm | 0.4925 ppm | 0.4845 ppm | 0.4780 ppm | 0.5505 ppm | 5.6887 ppm | 0.5429 ppm |
| Concentration per Run 2 | 0.4826 ppm | 0.4920 ppm | 0.4852 ppm | 0.4798 ppm | 0.5319 ppm | 5.4476 ppm | 0.5215 ppm |
| Concentration per Run 3 | 0.4813 ppm | 0.4909 ppm | 0.4846 ppm | 0.4779 ppm | 0.5020 ppm | 5.1423 ppm | 0.4946 ppm |
| Recovery Percentage 1 | 96.442 % | 98.364 % | 96.956 % | 95.715 % | 105.626 % | 108.524 % | 103.935 % |
| Concentration RSD | 0.2 % | 0.2 % | 0.1 % | 0.2 % | 4.6 % | 5.0 % | 4.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5200 ppm | 0.5161 ppm | 0.4692 ppm | 9.8423 ppm | 0.5063 ppm | 0.5116 ppm | 0.4993 ppm |
| Concentration per Run 1 | 0.5236 ppm | 0.5385 ppm | 0.4687 ppm | 10.3170 ppm | 0.5072 ppm | 0.5124 ppm | 0.5014 ppm |
| Concentration per Run 2 | 0.5181 ppm | 0.5185 ppm | 0.4699 ppm | 9.8699 ppm | 0.5063 ppm | 0.5124 ppm | 0.4991 ppm |
| Concentration per Run 3 | 0.5185 ppm | 0.4911 ppm | 0.4689 ppm | 9.3401 ppm | 0.5053 ppm | 0.5100 ppm | 0.4975 ppm |
| Recovery Percentage 1 | 104.010 % | 103.212 % | 93.835 % | 98.423 % | 101.254 % | 102.322 % | 99.865 % |
| Concentration RSD | 0.6 % | 4.6 % | 0.1 % | 5.0 % | 0.2 % | 0.3 % | 0.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4706 ppm | 5.8011 ppm | 0.5336 ppm | 0.5162 ppm | 0.5019 ppm | 0.4966 ppm | 0.4893 ppm |
| Concentration per Run 1 | 0.4707 ppm | 5.6305 ppm | 0.5342 ppm | 0.5392 ppm | 0.5021 ppm | 0.4989 ppm | 0.4891 ppm |
| Concentration per Run 2 | 0.4704 ppm | 5.6198 ppm | 0.5345 ppm | 0.5182 ppm | 0.5018 ppm | 0.4979 ppm | 0.4901 ppm |
| Concentration per Run 3 | 0.4707 ppm | 6.1531 ppm | 0.5322 ppm | 0.4913 ppm | 0.5017 ppm | 0.4931 ppm | 0.4889 ppm |
| Recovery Percentage 1 | 94.122 % | 110.498 % | 106.721 % | 103.249 % | 100.381 % | 99.326 % | 97.869 % |
| Concentration RSD | 0.0 % | 5.3 % | 0.2 % | 4.7 % | 0.0 % | 0.6 % | 0.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4960 ppm | 98.1337 % | 101.8342 % | 97.5102 % | 96.0383 % | 100.1691 % | 102.1874 % |
| Concentration per Run 1 | 0.4963 ppm | 94.8949 % | 101.4038 % | 97.4597 % | 91.7734 % | 100.0808 % | 101.8526 % |
| Concentration per Run 2 | 0.4962 ppm | 97.2203 % | 102.1068 % | 97.4294 % | 95.9405 % | 100.0669 % | 102.4113 % |
| Concentration per Run 3 | 0.4956 ppm | 102.2860 % | 101.9920 % | 97.6417 % | 100.4011 % | 100.3598 % | 102.2983 % |
| Recovery Percentage 1 | 99.207 % | | | | | | |
| Concentration RSD | 0.1 % | 3.9 % | 0.4 % | 0.1 % | 4.5 % | 0.2 % | 0.3 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCB
Analysis started at: 3/12/2025 11:31:22 AM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | -0.0074 ppm | -0.0003 ppm | 0.0013 ppm | 0.0001 ppm | 0.0000 ppm | 0.0035 ppm |
| Concentration per Run 1 | 0.0008 ppm | -0.0081 ppm | -0.0002 ppm | 0.0016 ppm | 0.0000 ppm | 0.0000 ppm | 0.0043 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0131 ppm | -0.0016 ppm | 0.0012 ppm | 0.0002 ppm | 0.0000 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0010 ppm | 0.0007 ppm | 0.0011 ppm | 0.0000 ppm | 0.0000 ppm | 0.0052 ppm |
| Recovery Percentage 1 | 4.826 % | -7.381 % | -6.808 % | 4.433 % | 0.730 % | -0.308 % | 3.468 % |
| Concentration RSD | 129.9 % | 81.9 % | 341.8 % | 20.3 % | 159.9 % | 170.3 % | 65.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | 0.0004 ppm | 0.0014 ppm | 0.0860 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0001 ppm | -0.0001 ppm | 0.0000 ppm | 0.0014 ppm | 0.0675 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | -0.0003 ppm | 0.0004 ppm | 0.0020 ppm | 0.0983 ppm | 0.0019 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0008 ppm | 0.0010 ppm | 0.0923 ppm | 0.0009 ppm |
| Recovery Percentage 1 | 0.419 % | -0.052 % | -1.054 % | 3.849 % | 2.895 % | 3.441 % | 8.289 % |
| Concentration RSD | 41.9 % | 1,046.6 % | 149.1 % | 101.8 % | 36.8 % | 19.0 % | 133.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 0.0000 ppm | 0.0010 ppm | 0.1357 ppm | 0.0002 ppm | 0.0005 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0001 ppm | 0.0011 ppm | 0.1433 ppm | 0.0001 ppm | 0.0007 ppm | -0.0004 ppm |
| Concentration per Run 2 | 0.0034 ppm | -0.0001 ppm | 0.0010 ppm | 0.1432 ppm | 0.0004 ppm | 0.0001 ppm | -0.0006 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0001 ppm | 0.0008 ppm | 0.1205 ppm | 0.0001 ppm | 0.0005 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 1.339 % | -0.329 % | 1.948 % | 6.785 % | 0.714 % | 4.719 % | -0.686 % |
| Concentration RSD | 134.1 % | 251.5 % | 15.4 % | 9.7 % | 86.2 % | 63.5 % | 92.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | 0.0000 ppm | 0.0006 ppm | 0.0000 ppm | 0.0001 ppm | -0.0007 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0024 ppm | -0.0001 ppm | 0.0004 ppm | 0.0001 ppm | 0.0001 ppm | 0.0006 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0018 ppm | 0.0003 ppm | 0.0006 ppm | -0.0001 ppm | 0.0000 ppm | -0.0009 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0020 ppm | -0.0002 ppm | 0.0009 ppm | 0.0001 ppm | 0.0003 ppm | -0.0018 ppm | 0.0002 ppm |
| Recovery Percentage 1 | -8.562 % | 0.002 % | 1.287 % | 0.321 % | 1.122 % | -3.521 % | 0.563 % |
| Concentration RSD | 267.3 % | 2,705.7 % | 41.6 % | 251.6 % | 172.1 % | 169.3 % | 296.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 101.1936 % | 102.5448 % | 97.7056 % | 97.4326 % | 100.5900 % | 101.0564 % |
| Concentration per Run 1 | 0.0006 ppm | 98.0235 % | 102.1688 % | 97.8298 % | 93.8957 % | 100.7137 % | 100.6283 % |
| Concentration per Run 2 | 0.0006 ppm | 101.7947 % | 102.4324 % | 97.8387 % | 98.1572 % | 100.4541 % | 100.9849 % |
| Concentration per Run 3 | 0.0007 ppm | 103.7627 % | 103.0332 % | 97.4483 % | 100.2448 % | 100.6023 % | 101.5561 % |
| Recovery Percentage 1 | 13.274 % | | | | | | |
| Concentration RSD | 6.5 % | 2.9 % | 0.4 % | 0.2 % | 3.3 % | 0.1 % | 0.5 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512350-01d2 WG2039008
Analysis started at: 3/12/2025 11:37:48 AM
Comments <Comment>
Rack: 1
Vial: 27

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0150 ppm | 0.0010 ppm | 17.5361 ppm | 0.0123 ppm | 0.0000 ppm | 4.0361 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0108 ppm | 0.0013 ppm | 17.5034 ppm | 0.0121 ppm | 0.0000 ppm | 4.0149 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0241 ppm | 0.0005 ppm | 17.5711 ppm | 0.0125 ppm | 0.0000 ppm | 4.0934 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.0102 ppm | 0.0013 ppm | 17.5338 ppm | 0.0123 ppm | 0.0000 ppm | 4.0000 ppm |
| Concentration RSD | 25.1 % | 52.0 % | 43.4 % | 0.2 % | 1.8 % | 113.7 % | 1.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0079 ppm | 0.1886 ppm | 0.1681 ppm | 0.7103 ppm | 35.4581 ppm | 0.0011 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0080 ppm | 0.1894 ppm | 0.1693 ppm | 0.7049 ppm | 35.3476 ppm | 0.0016 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0078 ppm | 0.1884 ppm | 0.1675 ppm | 0.7198 ppm | 35.8149 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0079 ppm | 0.1880 ppm | 0.1675 ppm | 0.7063 ppm | 35.2118 ppm | 0.0009 ppm |
| Concentration RSD | 12.6 % | 1.2 % | 0.4 % | 0.6 % | 1.2 % | 0.9 % | 41.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.8757 ppm | 0.0952 ppm | 0.0195 ppm | 70.1946 ppm | 0.2176 ppm | 0.0127 ppm | -0.0001 ppm |
| Concentration per Run 1 | 2.8869 ppm | 0.0946 ppm | 0.0195 ppm | 70.0906 ppm | 0.2178 ppm | 0.0130 ppm | -0.0001 ppm |
| Concentration per Run 2 | 2.8678 ppm | 0.0967 ppm | 0.0195 ppm | 70.9466 ppm | 0.2174 ppm | 0.0124 ppm | 0.0005 ppm |
| Concentration per Run 3 | 2.8725 ppm | 0.0943 ppm | 0.0195 ppm | 69.5465 ppm | 0.2175 ppm | 0.0126 ppm | -0.0008 ppm |
| Concentration RSD | 0.3 % | 1.4 % | 0.1 % | 1.0 % | 0.1 % | 2.4 % | 580.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0021 ppm | 2.2035 ppm | 0.0023 ppm | 0.0436 ppm | 0.0001 ppm | -0.0007 ppm | 0.0047 ppm |
| Concentration per Run 1 | 0.0003 ppm | 2.2001 ppm | 0.0023 ppm | 0.0433 ppm | 0.0003 ppm | -0.0001 ppm | 0.0048 ppm |
| Concentration per Run 2 | -0.0021 ppm | 2.2094 ppm | 0.0022 ppm | 0.0442 ppm | 0.0001 ppm | -0.0004 ppm | 0.0046 ppm |
| Concentration per Run 3 | -0.0045 ppm | 2.2010 ppm | 0.0023 ppm | 0.0434 ppm | 0.0001 ppm | -0.0016 ppm | 0.0046 ppm |
| Concentration RSD | 113.4 % | 0.2 % | 1.7 % | 1.2 % | 70.1 % | 121.1 % | 2.5 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6928 ppm | 101.8182 % | 98.7704 % | 93.9973 % | 98.3738 % | 94.2617 % | 98.0227 % |
| Concentration per Run 1 | 0.6926 ppm | 102.3078 % | 98.4157 % | 93.8876 % | 98.9336 % | 94.4220 % | 97.4356 % |
| Concentration per Run 2 | 0.6927 ppm | 100.3148 % | 99.1139 % | 94.1675 % | 97.1481 % | 94.1377 % | 98.4485 % |
| Concentration per Run 3 | 0.6931 ppm | 102.8319 % | 98.7816 % | 93.9368 % | 99.0397 % | 94.2255 % | 98.1839 % |
| Concentration RSD | 0.0 % | 1.3 % | 0.4 % | 0.2 % | 1.1 % | 0.2 % | 0.5 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCV
Analysis started at: 3/12/2025 11:44:00 AM
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5014 ppm | 0.4998 ppm | 0.4908 ppm | 0.5077 ppm | 0.4873 ppm | 0.5276 ppm | 0.5133 ppm |
| Concentration per Run 1 | 0.5010 ppm | 0.5173 ppm | 0.4926 ppm | 0.5099 ppm | 0.5103 ppm | 0.5525 ppm | 0.5415 ppm |
| Concentration per Run 2 | 0.5009 ppm | 0.5032 ppm | 0.4900 ppm | 0.5082 ppm | 0.4824 ppm | 0.5222 ppm | 0.5082 ppm |
| Concentration per Run 3 | 0.5022 ppm | 0.4789 ppm | 0.4900 ppm | 0.5051 ppm | 0.4693 ppm | 0.5080 ppm | 0.4901 ppm |
| Recovery Percentage 1 | 100.279 % | 99.958 % | 98.166 % | 101.545 % | 97.462 % | 105.514 % | 102.654 % |
| Concentration RSD | 0.1 % | 3.9 % | 0.3 % | 0.5 % | 4.3 % | 4.3 % | 5.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4810 ppm | 0.4924 ppm | 0.4855 ppm | 0.4827 ppm | 0.5187 ppm | 5.3322 ppm | 0.5142 ppm |
| Concentration per Run 1 | 0.4811 ppm | 0.4930 ppm | 0.4843 ppm | 0.4826 ppm | 0.5420 ppm | 5.5712 ppm | 0.5384 ppm |
| Concentration per Run 2 | 0.4806 ppm | 0.4917 ppm | 0.4869 ppm | 0.4834 ppm | 0.5130 ppm | 5.2737 ppm | 0.5095 ppm |
| Concentration per Run 3 | 0.4813 ppm | 0.4926 ppm | 0.4852 ppm | 0.4821 ppm | 0.5010 ppm | 5.1517 ppm | 0.4946 ppm |
| Recovery Percentage 1 | 96.197 % | 98.490 % | 97.095 % | 96.538 % | 103.732 % | 106.644 % | 102.835 % |
| Concentration RSD | 0.1 % | 0.1 % | 0.3 % | 0.1 % | 4.1 % | 4.0 % | 4.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5193 ppm | 0.5077 ppm | 0.4703 ppm | 9.7733 ppm | 0.5068 ppm | 0.5122 ppm | 0.5009 ppm |
| Concentration per Run 1 | 0.5224 ppm | 0.5325 ppm | 0.4700 ppm | 10.2528 ppm | 0.5083 ppm | 0.5123 ppm | 0.5014 ppm |
| Concentration per Run 2 | 0.5166 ppm | 0.5018 ppm | 0.4689 ppm | 9.6520 ppm | 0.5059 ppm | 0.5116 ppm | 0.4993 ppm |
| Concentration per Run 3 | 0.5189 ppm | 0.4889 ppm | 0.4720 ppm | 9.4149 ppm | 0.5063 ppm | 0.5126 ppm | 0.5019 ppm |
| Recovery Percentage 1 | 103.858 % | 101.545 % | 94.060 % | 97.733 % | 101.365 % | 102.433 % | 100.179 % |
| Concentration RSD | 0.6 % | 4.4 % | 0.3 % | 4.4 % | 0.3 % | 0.1 % | 0.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4682 ppm | 5.6430 ppm | 0.5358 ppm | 0.5108 ppm | 0.5031 ppm | 0.4986 ppm | 0.4904 ppm |
| Concentration per Run 1 | 0.4667 ppm | 5.6542 ppm | 0.5363 ppm | 0.5355 ppm | 0.5027 ppm | 0.4995 ppm | 0.4899 ppm |
| Concentration per Run 2 | 0.4694 ppm | 5.6316 ppm | 0.5338 ppm | 0.5058 ppm | 0.5040 ppm | 0.4972 ppm | 0.4908 ppm |
| Concentration per Run 3 | 0.4684 ppm | 5.6433 ppm | 0.5373 ppm | 0.4909 ppm | 0.5025 ppm | 0.4992 ppm | 0.4904 ppm |
| Recovery Percentage 1 | 93.638 % | 107.486 % | 107.164 % | 102.153 % | 100.613 % | 99.728 % | 98.076 % |
| Concentration RSD | 0.3 % | 0.2 % | 0.3 % | 4.4 % | 0.2 % | 0.2 % | 0.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4950 ppm | 101.9861 % | 102.2137 % | 97.6197 % | 99.2797 % | 100.1667 % | 102.3868 % |
| Concentration per Run 1 | 0.4953 ppm | 98.3514 % | 102.2821 % | 97.6398 % | 95.1482 % | 100.0816 % | 102.4606 % |
| Concentration per Run 2 | 0.4946 ppm | 102.7971 % | 101.9346 % | 97.5264 % | 100.4056 % | 100.2546 % | 102.0774 % |
| Concentration per Run 3 | 0.4950 ppm | 104.8098 % | 102.4243 % | 97.6927 % | 102.2854 % | 100.1639 % | 102.6223 % |
| Recovery Percentage 1 | 98.998 % | | | | | | |
| Concentration RSD | 0.1 % | 3.2 % | 0.2 % | 0.1 % | 3.7 % | 0.1 % | 0.3 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCB
Analysis started at: 3/12/2025 11:50:05 AM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | -0.0030 ppm | -0.0009 ppm | 0.0141 ppm | 0.0000 ppm | 0.0000 ppm | 0.0057 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0072 ppm | -0.0007 ppm | 0.0143 ppm | 0.0000 ppm | 0.0000 ppm | 0.0087 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0021 ppm | -0.0002 ppm | 0.0142 ppm | 0.0001 ppm | 0.0000 ppm | 0.0077 ppm |
| Concentration per Run 3 | 0.0003 ppm | -0.0038 ppm | -0.0019 ppm | 0.0136 ppm | 0.0000 ppm | 0.0000 ppm | 0.0006 ppm |
| Recovery Percentage 1 | 3.915 % | -2.972 % | -18.171 % | 46.870 % | 0.109 % | 0.049 % | 5.690 % |
| Concentration RSD | 38.8 % | 159.9 % | 95.8 % | 2.9 % | 828.3 % | 586.3 % | 78.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | -0.0001 ppm | 0.0005 ppm | 0.0035 ppm | 0.0445 ppm | 0.0011 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | -0.0002 ppm | 0.0006 ppm | 0.0029 ppm | 0.0405 ppm | 0.0016 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | -0.0002 ppm | 0.0004 ppm | 0.0039 ppm | 0.0444 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | 0.0004 ppm | 0.0037 ppm | 0.0487 ppm | 0.0011 ppm |
| Recovery Percentage 1 | 0.070 % | 0.539 % | -0.658 % | 4.690 % | 6.995 % | 1.781 % | 10.649 % |
| Concentration RSD | 581.3 % | 25.3 % | 252.5 % | 19.8 % | 15.4 % | 9.1 % | 47.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 0.0003 ppm | 0.0010 ppm | 0.0680 ppm | 0.0001 ppm | 0.0000 ppm | -0.0006 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0004 ppm | 0.0011 ppm | 0.0701 ppm | 0.0001 ppm | 0.0002 ppm | -0.0013 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0002 ppm | 0.0012 ppm | 0.0644 ppm | 0.0001 ppm | 0.0000 ppm | -0.0008 ppm |
| Concentration per Run 3 | 0.0013 ppm | 0.0003 ppm | 0.0008 ppm | 0.0694 ppm | 0.0002 ppm | 0.0000 ppm | 0.0004 ppm |
| Recovery Percentage 1 | 1.280 % | 2.867 % | 2.091 % | 3.398 % | 0.564 % | 0.493 % | -1.119 % |
| Concentration RSD | 6.0 % | 25.2 % | 16.5 % | 4.6 % | 36.3 % | 219.9 % | 148.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0017 ppm | -0.0001 ppm | 0.0008 ppm | 0.0000 ppm | 0.0001 ppm | 0.0004 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0034 ppm | 0.0002 ppm | 0.0013 ppm | 0.0000 ppm | -0.0002 ppm | -0.0006 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0011 ppm | -0.0004 ppm | 0.0013 ppm | 0.0000 ppm | 0.0000 ppm | 0.0016 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0007 ppm | -0.0001 ppm | -0.0001 ppm | 0.0000 ppm | 0.0006 ppm | 0.0002 ppm | 0.0004 ppm |
| Recovery Percentage 1 | -17.373 % | -0.019 % | 1.622 % | -0.102 % | 1.223 % | 1.872 % | 1.569 % |
| Concentration RSD | 81.3 % | 318.8 % | 99.8 % | 252.2 % | 324.6 % | 303.9 % | 111.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 103.2413 % | 102.4673 % | 97.7932 % | 99.2373 % | 100.4955 % | 100.7559 % |
| Concentration per Run 1 | 0.0009 ppm | 100.6511 % | 102.4036 % | 97.7664 % | 95.4894 % | 100.3178 % | 100.7029 % |
| Concentration per Run 2 | 0.0009 ppm | 103.7700 % | 102.4584 % | 97.8673 % | 100.3819 % | 100.5557 % | 100.7485 % |
| Concentration per Run 3 | 0.0007 ppm | 105.3027 % | 102.5398 % | 97.7459 % | 101.8405 % | 100.6130 % | 100.8162 % |
| Recovery Percentage 1 | 16.384 % | | | | | | |
| Concentration RSD | 8.0 % | 2.3 % | 0.1 % | 0.1 % | 3.4 % | 0.2 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2038617-1 WG2038617
Analysis started at: 3/12/2025 1:00:59 PM
Comments <Comment>
Rack: 1
Vial: 28

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0125 ppm | -0.0006 ppm | 0.0011 ppm | 0.0003 ppm | 0.0000 ppm | 0.0505 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0139 ppm | -0.0017 ppm | 0.0009 ppm | 0.0003 ppm | 0.0000 ppm | 0.0494 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0150 ppm | 0.0002 ppm | 0.0010 ppm | 0.0003 ppm | 0.0000 ppm | 0.0456 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0086 ppm | -0.0003 ppm | 0.0013 ppm | 0.0003 ppm | 0.0000 ppm | 0.0566 ppm |
| Recovery Percentage 1 | 6.423 % | 12.494 % | -11.409 % | 3.549 % | 3.121 % | -0.344 % | 50.523 % |
| Concentration RSD | 11.4 % | 27.2 % | 169.1 % | 18.3 % | 9.5 % | 126.4 % | 11.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0001 ppm | 0.0005 ppm | 0.0008 ppm | 0.0365 ppm | 0.0223 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0001 ppm | 0.0005 ppm | 0.0008 ppm | 0.0372 ppm | 0.0327 ppm | 0.0012 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0001 ppm | 0.0007 ppm | 0.0006 ppm | 0.0370 ppm | 0.0038 ppm | 0.0012 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0001 ppm | 0.0003 ppm | 0.0009 ppm | 0.0353 ppm | 0.0304 ppm | -0.0005 ppm |
| Recovery Percentage 1 | 2.539 % | 0.503 % | 5.022 % | 7.814 % | 72.937 % | 0.893 % | 6.161 % |
| Concentration RSD | 16.0 % | 16.3 % | 41.8 % | 16.0 % | 2.8 % | 71.9 % | 161.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0064 ppm | 0.0021 ppm | 0.0002 ppm | 0.0641 ppm | 0.0005 ppm | 0.1081 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0091 ppm | 0.0024 ppm | 0.0002 ppm | 0.0709 ppm | 0.0004 ppm | 0.1050 ppm | -0.0004 ppm |
| Concentration per Run 2 | 0.0054 ppm | 0.0019 ppm | 0.0001 ppm | 0.0630 ppm | 0.0004 ppm | 0.1096 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0046 ppm | 0.0018 ppm | 0.0002 ppm | 0.0586 ppm | 0.0006 ppm | 0.1097 ppm | -0.0005 ppm |
| Recovery Percentage 1 | 6.358 % | 20.567 % | 0.398 % | 3.207 % | 1.811 % | 1,081.159 % | -0.884 % |
| Concentration RSD | 38.0 % | 16.2 % | 32.0 % | 9.7 % | 20.1 % | 2.5 % | 16.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0029 ppm | 0.0174 ppm | 0.0064 ppm | 0.0002 ppm | 0.0013 ppm | -0.0008 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0016 ppm | 0.0167 ppm | 0.0061 ppm | 0.0001 ppm | 0.0015 ppm | -0.0005 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0037 ppm | 0.0177 ppm | 0.0070 ppm | 0.0002 ppm | 0.0014 ppm | -0.0007 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0035 ppm | 0.0177 ppm | 0.0061 ppm | 0.0002 ppm | 0.0011 ppm | -0.0010 ppm | 0.0002 ppm |
| Recovery Percentage 1 | -29.415 % | 3.473 % | 12.815 % | 2.014 % | 13.351 % | -3.777 % | 2.154 % |
| Concentration RSD | 39.1 % | 3.6 % | 7.6 % | 33.4 % | 16.3 % | 33.7 % | 26.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0084 ppm | 102.0328 % | 102.7449 % | 101.6182 % | 100.5508 % | 103.2924 % | 103.8986 % |
| Concentration per Run 1 | 0.0081 ppm | 99.0908 % | 102.6908 % | 104.4269 % | 96.9893 % | 106.2643 % | 103.8139 % |
| Concentration per Run 2 | 0.0085 ppm | 103.2392 % | 102.4273 % | 99.9858 % | 101.8356 % | 101.8404 % | 103.5347 % |
| Concentration per Run 3 | 0.0084 ppm | 103.7683 % | 103.1166 % | 100.4420 % | 102.8274 % | 101.7725 % | 104.3472 % |
| Recovery Percentage 1 | 167.085 % | | | | | | |
| Concentration RSD | 2.9 % | 2.5 % | 0.3 % | 2.4 % | 3.1 % | 2.5 % | 0.4 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2038617-2d2 WG2038617
Analysis started at: 3/12/2025 1:07:20 PM
Comments <Comment>
Rack: 1
Vial: 29

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3127 ppm | 15.0282 ppm | 1.1497 ppm | 0.8111 ppm | 1.1445 ppm | 0.6676 ppm | 19.7668 ppm |
| Concentration per Run 1 | 0.3148 ppm | 15.8626 ppm | 1.1663 ppm | 0.8234 ppm | 1.2063 ppm | 0.7046 ppm | 20.8627 ppm |
| Concentration per Run 2 | 0.3130 ppm | 14.8314 ppm | 1.1515 ppm | 0.8131 ppm | 1.1306 ppm | 0.6585 ppm | 19.4961 ppm |
| Concentration per Run 3 | 0.3102 ppm | 14.3905 ppm | 1.1313 ppm | 0.7968 ppm | 1.0965 ppm | 0.6398 ppm | 18.9415 ppm |
| Concentration RSD | 0.7 % | 5.0 % | 1.5 % | 1.7 % | 4.9 % | 5.0 % | 5.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7582 ppm | 0.3025 ppm | 0.6687 ppm | 0.7570 ppm | 19.7505 ppm | 3.9585 ppm | 0.5250 ppm |
| Concentration per Run 1 | 0.7689 ppm | 0.3068 ppm | 0.6730 ppm | 0.7611 ppm | 20.8266 ppm | 4.1703 ppm | 0.5546 ppm |
| Concentration per Run 2 | 0.7600 ppm | 0.3031 ppm | 0.6687 ppm | 0.7558 ppm | 19.4828 ppm | 3.9188 ppm | 0.5178 ppm |
| Concentration per Run 3 | 0.7456 ppm | 0.2975 ppm | 0.6645 ppm | 0.7541 ppm | 18.9421 ppm | 3.7865 ppm | 0.5027 ppm |
| Concentration RSD | 1.6 % | 1.6 % | 0.6 % | 0.5 % | 4.9 % | 4.9 % | 5.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.2088 ppm | 2.0793 ppm | 0.4691 ppm | 7.1706 ppm | 1.1627 ppm | 0.3512 ppm | 0.3208 ppm |
| Concentration per Run 1 | 5.2353 ppm | 2.1934 ppm | 0.4747 ppm | 7.5564 ppm | 1.1788 ppm | 0.3564 ppm | 0.3246 ppm |
| Concentration per Run 2 | 5.2137 ppm | 2.0515 ppm | 0.4701 ppm | 7.0760 ppm | 1.1660 ppm | 0.3511 ppm | 0.3222 ppm |
| Concentration per Run 3 | 5.1774 ppm | 1.9928 ppm | 0.4624 ppm | 6.8793 ppm | 1.1434 ppm | 0.3461 ppm | 0.3155 ppm |
| Concentration RSD | 0.6 % | 5.0 % | 1.3 % | 4.9 % | 1.5 % | 1.5 % | 1.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6047 ppm | 5.7268 ppm | 0.2901 ppm | 0.5479 ppm | 0.9337 ppm | 0.7412 ppm | 0.3733 ppm |
| Concentration per Run 1 | 0.6166 ppm | 5.8677 ppm | 0.2954 ppm | 0.5776 ppm | 0.9376 ppm | 0.7514 ppm | 0.3759 ppm |
| Concentration per Run 2 | 0.6051 ppm | 5.7474 ppm | 0.2903 ppm | 0.5405 ppm | 0.9334 ppm | 0.7421 ppm | 0.3732 ppm |
| Concentration per Run 3 | 0.5923 ppm | 5.5654 ppm | 0.2845 ppm | 0.5256 ppm | 0.9299 ppm | 0.7302 ppm | 0.3709 ppm |
| Concentration RSD | 2.0 % | 2.7 % | 1.9 % | 4.9 % | 0.4 % | 1.4 % | 0.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6194 ppm | 105.3487 % | 106.2235 % | 103.9709 % | 98.6474 % | 99.1330 % | 102.3291 % |
| Concentration per Run 1 | 0.6277 ppm | 100.6573 % | 106.1427 % | 104.0475 % | 93.9057 % | 99.2597 % | 102.2229 % |
| Concentration per Run 2 | 0.6209 ppm | 106.5946 % | 106.2905 % | 103.9177 % | 99.7435 % | 98.9816 % | 102.2909 % |
| Concentration per Run 3 | 0.6095 ppm | 108.7943 % | 106.2372 % | 103.9474 % | 102.2930 % | 99.1577 % | 102.4736 % |
| Concentration RSD | 1.5 % | 4.0 % | 0.1 % | 0.1 % | 4.4 % | 0.1 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2038617-3d2 WG2038617
Analysis started at: 3/12/2025 1:13:23 PM
Comments <Comment>
Rack: 1
Vial: 30

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3166 ppm | 14.8178 ppm | 1.1949 ppm | 0.8375 ppm | 1.1243 ppm | 0.6575 ppm | 19.4426 ppm |
| Concentration per Run 1 | 0.3174 ppm | 15.3689 ppm | 1.2009 ppm | 0.8405 ppm | 1.1652 ppm | 0.6809 ppm | 20.1364 ppm |
| Concentration per Run 2 | 0.3168 ppm | 14.6646 ppm | 1.1974 ppm | 0.8400 ppm | 1.1129 ppm | 0.6522 ppm | 19.2635 ppm |
| Concentration per Run 3 | 0.3156 ppm | 14.4197 ppm | 1.1864 ppm | 0.8321 ppm | 1.0947 ppm | 0.6393 ppm | 18.9279 ppm |
| Concentration RSD | 0.3 % | 3.3 % | 0.6 % | 0.6 % | 3.3 % | 3.2 % | 3.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.8025 ppm | 0.3150 ppm | 0.6770 ppm | 0.7747 ppm | 19.8912 ppm | 3.8610 ppm | 0.5160 ppm |
| Concentration per Run 1 | 0.8062 ppm | 0.3165 ppm | 0.6799 ppm | 0.7773 ppm | 20.6222 ppm | 4.0099 ppm | 0.5353 ppm |
| Concentration per Run 2 | 0.8044 ppm | 0.3158 ppm | 0.6758 ppm | 0.7731 ppm | 19.6870 ppm | 3.8240 ppm | 0.5120 ppm |
| Concentration per Run 3 | 0.7968 ppm | 0.3126 ppm | 0.6754 ppm | 0.7738 ppm | 19.3645 ppm | 3.7492 ppm | 0.5007 ppm |
| Concentration RSD | 0.6 % | 0.7 % | 0.4 % | 0.3 % | 3.3 % | 3.5 % | 3.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.3316 ppm | 2.2005 ppm | 0.4786 ppm | 6.8105 ppm | 1.2106 ppm | 0.3651 ppm | 0.3271 ppm |
| Concentration per Run 1 | 5.3309 ppm | 2.2801 ppm | 0.4806 ppm | 7.0626 ppm | 1.2162 ppm | 0.3668 ppm | 0.3303 ppm |
| Concentration per Run 2 | 5.3273 ppm | 2.1833 ppm | 0.4800 ppm | 6.7512 ppm | 1.2134 ppm | 0.3658 ppm | 0.3281 ppm |
| Concentration per Run 3 | 5.3365 ppm | 2.1382 ppm | 0.4751 ppm | 6.6176 ppm | 1.2022 ppm | 0.3628 ppm | 0.3231 ppm |
| Concentration RSD | 0.1 % | 3.3 % | 0.6 % | 3.4 % | 0.6 % | 0.6 % | 1.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6189 ppm | 4.9969 ppm | 0.3019 ppm | 0.5148 ppm | 0.9214 ppm | 0.7937 ppm | 0.3796 ppm |
| Concentration per Run 1 | 0.6168 ppm | 5.0938 ppm | 0.3043 ppm | 0.5336 ppm | 0.9238 ppm | 0.7974 ppm | 0.3805 ppm |
| Concentration per Run 2 | 0.6214 ppm | 5.0101 ppm | 0.3017 ppm | 0.5113 ppm | 0.9186 ppm | 0.7945 ppm | 0.3790 ppm |
| Concentration per Run 3 | 0.6186 ppm | 4.8869 ppm | 0.2996 ppm | 0.4996 ppm | 0.9217 ppm | 0.7891 ppm | 0.3794 ppm |
| Concentration RSD | 0.4 % | 2.1 % | 0.8 % | 3.4 % | 0.3 % | 0.5 % | 0.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6436 ppm | 104.6803 % | 105.9695 % | 103.9500 % | 98.2871 % | 98.8368 % | 101.3978 % |
| Concentration per Run 1 | 0.6460 ppm | 102.2270 % | 105.8894 % | 104.0977 % | 95.1844 % | 98.8559 % | 101.3698 % |
| Concentration per Run 2 | 0.6460 ppm | 105.2669 % | 106.0479 % | 103.9910 % | 99.0096 % | 98.6858 % | 101.5633 % |
| Concentration per Run 3 | 0.6389 ppm | 106.5470 % | 105.9710 % | 103.7613 % | 100.6672 % | 98.9687 % | 101.2605 % |
| Concentration RSD | 0.6 % | 2.1 % | 0.1 % | 0.2 % | 2.9 % | 0.1 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: eL2510636-02 WG2036123
Analysis started at: 3/12/2025 1:20:19 PM
Comments <Comment>
Rack: 1
Vial: 31

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.1354 ppm | 0.0022 ppm | 0.0276 ppm | 0.2040 ppm | 0.0003 ppm | 77.0553 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.1297 ppm | 0.0022 ppm | 0.0281 ppm | 0.2095 ppm | 0.0003 ppm | 79.3132 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.1378 ppm | 0.0025 ppm | 0.0279 ppm | 0.2029 ppm | 0.0003 ppm | 76.4632 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.1385 ppm | 0.0018 ppm | 0.0269 ppm | 0.1997 ppm | 0.0003 ppm | 75.3897 ppm |
| Concentration RSD | 98.0 % | 3.6 % | 15.9 % | 2.4 % | 2.4 % | 9.9 % | 2.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0025 ppm | 0.0048 ppm | 0.0008 ppm | 0.0046 ppm | 0.0240 ppm | 11.4725 ppm | 0.0065 ppm |
| Concentration per Run 1 | 0.0025 ppm | 0.0047 ppm | 0.0009 ppm | 0.0048 ppm | 0.0244 ppm | 11.8055 ppm | 0.0057 ppm |
| Concentration per Run 2 | 0.0025 ppm | 0.0049 ppm | 0.0009 ppm | 0.0046 ppm | 0.0244 ppm | 11.3879 ppm | 0.0059 ppm |
| Concentration per Run 3 | 0.0026 ppm | 0.0048 ppm | 0.0007 ppm | 0.0044 ppm | 0.0231 ppm | 11.2242 ppm | 0.0080 ppm |
| Concentration RSD | 0.8 % | 1.3 % | 15.4 % | 4.4 % | 3.1 % | 2.6 % | 19.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.9194 ppm | 0.8320 ppm | 0.0012 ppm | 844.4325 [SIC 500] | 0.0068 ppm | 0.0103 ppm | 0.0016 ppm |
| Concentration per Run 1 | 8.9182 ppm | 0.8565 ppm | 0.0013 ppm | 927.2748 ppm | 0.0070 ppm | 0.0101 ppm | 0.0023 ppm |
| Concentration per Run 2 | 8.9277 ppm | 0.8256 ppm | 0.0012 ppm | 828.0988 ppm | 0.0068 ppm | 0.0105 ppm | 0.0021 ppm |
| Concentration per Run 3 | 8.9124 ppm | 0.8140 ppm | 0.0010 ppm | 777.9238 ppm | 0.0067 ppm | 0.0103 ppm | 0.0006 ppm |
| Concentration RSD | 0.1 % | 2.6 % | 14.0 % | 9.0 % | 2.8 % | 2.1 % | 57.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0032 ppm | 7.1452 ppm | 0.0001 ppm | 0.4466 ppm | 0.0001 ppm | -0.0006 ppm | 0.0012 ppm |
| Concentration per Run 1 | -0.0040 ppm | 7.1533 ppm | 0.0003 ppm | 0.4600 ppm | 0.0001 ppm | -0.0005 ppm | 0.0010 ppm |
| Concentration per Run 2 | -0.0025 ppm | 7.1279 ppm | 0.0000 ppm | 0.4435 ppm | 0.0002 ppm | 0.0002 ppm | 0.0013 ppm |
| Concentration per Run 3 | -0.0032 ppm | 7.1544 ppm | 0.0000 ppm | 0.4362 ppm | 0.0001 ppm | -0.0016 ppm | 0.0014 ppm |
| Concentration RSD | 23.4 % | 0.2 % | 193.4 % | 2.7 % | 43.4 % | 134.7 % | 13.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0159 ppm | 99.0171 % | 89.0553 % | 87.9226 % | 96.2386 % | 83.0442 % | 88.6521 % |
| Concentration per Run 1 | 0.0159 ppm | 97.0463 % | 89.0572 % | 88.1940 % | 93.9095 % | 83.0573 % | 88.6132 % |
| Concentration per Run 2 | 0.0159 ppm | 99.6109 % | 88.8752 % | 87.9129 % | 96.7406 % | 83.2066 % | 88.4940 % |
| Concentration per Run 3 | 0.0158 ppm | 100.3943 % | 89.2334 % | 87.6608 % | 98.0657 % | 82.8687 % | 88.8490 % |
| Concentration RSD | 0.2 % | 1.8 % | 0.2 % | 0.3 % | 2.2 % | 0.2 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: eL2510636-03 WG2036123
Analysis started at: 3/12/2025 1:26:47 PM
Comments <Comment>
Rack: 1
Vial: 32

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.1346 ppm | 0.0002 ppm | 0.0274 ppm | 0.2075 ppm | 0.0002 ppm | 78.3393 ppm |
| Concentration per Run 1 | 0.0009 ppm | 0.1385 ppm | -0.0006 ppm | 0.0273 ppm | 0.2144 ppm | 0.0003 ppm | 80.8758 ppm |
| Concentration per Run 2 | 0.0011 ppm | 0.1359 ppm | -0.0013 ppm | 0.0276 ppm | 0.2064 ppm | 0.0002 ppm | 77.9427 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.1295 ppm | 0.0026 ppm | 0.0274 ppm | 0.2017 ppm | 0.0002 ppm | 76.1993 ppm |
| Concentration RSD | 23.9 % | 3.4 % | 925.3 % | 0.5 % | 3.1 % | 9.6 % | 3.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0026 ppm | 0.0047 ppm | 0.0005 ppm | 0.0051 ppm | 0.0176 ppm | 11.8005 ppm | 0.0082 ppm |
| Concentration per Run 1 | 0.0026 ppm | 0.0049 ppm | 0.0003 ppm | 0.0052 ppm | 0.0182 ppm | 12.1950 ppm | 0.0089 ppm |
| Concentration per Run 2 | 0.0026 ppm | 0.0047 ppm | 0.0005 ppm | 0.0050 ppm | 0.0172 ppm | 11.7261 ppm | 0.0082 ppm |
| Concentration per Run 3 | 0.0025 ppm | 0.0046 ppm | 0.0005 ppm | 0.0052 ppm | 0.0173 ppm | 11.4804 ppm | 0.0075 ppm |
| Concentration RSD | 1.0 % | 2.7 % | 23.9 % | 2.7 % | 3.1 % | 3.1 % | 8.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.9678 ppm | 0.8479 ppm | 0.0004 ppm | 679.0050 [SIC 500] | 0.0069 ppm | 0.0103 ppm | 0.0004 ppm |
| Concentration per Run 1 | 9.0088 ppm | 0.8773 ppm | 0.0005 ppm | 744.2614 ppm | 0.0070 ppm | 0.0104 ppm | -0.0009 ppm |
| Concentration per Run 2 | 8.9389 ppm | 0.8433 ppm | 0.0005 ppm | 672.4541 ppm | 0.0070 ppm | 0.0110 ppm | 0.0020 ppm |
| Concentration per Run 3 | 8.9558 ppm | 0.8230 ppm | 0.0003 ppm | 620.2996 ppm | 0.0069 ppm | 0.0095 ppm | 0.0002 ppm |
| Concentration RSD | 0.4 % | 3.2 % | 32.4 % | 9.2 % | 0.8 % | 7.4 % | 328.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0020 ppm | 7.1705 ppm | 0.0002 ppm | 0.4519 ppm | -0.0001 ppm | 0.0002 ppm | 0.0013 ppm |
| Concentration per Run 1 | -0.0029 ppm | 7.1729 ppm | -0.0004 ppm | 0.4676 ppm | 0.0002 ppm | 0.0005 ppm | 0.0013 ppm |
| Concentration per Run 2 | -0.0036 ppm | 7.1746 ppm | 0.0008 ppm | 0.4496 ppm | -0.0003 ppm | -0.0004 ppm | 0.0015 ppm |
| Concentration per Run 3 | 0.0005 ppm | 7.1640 ppm | 0.0003 ppm | 0.4384 ppm | -0.0001 ppm | 0.0005 ppm | 0.0011 ppm |
| Concentration RSD | 107.1 % | 0.1 % | 254.0 % | 3.3 % | 452.4 % | 253.3 % | 16.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0158 ppm | 98.6861 % | 89.0812 % | 87.5058 % | 95.1517 % | 82.9122 % | 88.4537 % |
| Concentration per Run 1 | 0.0157 ppm | 96.5693 % | 88.6789 % | 87.2257 % | 92.5868 % | 82.6838 % | 87.9157 % |
| Concentration per Run 2 | 0.0159 ppm | 98.9156 % | 89.3399 % | 87.5007 % | 95.3015 % | 82.8766 % | 88.7463 % |
| Concentration per Run 3 | 0.0158 ppm | 100.5734 % | 89.2248 % | 87.7911 % | 97.5667 % | 83.1761 % | 88.6991 % |
| Concentration RSD | 0.5 % | 2.0 % | 0.4 % | 0.3 % | 2.6 % | 0.3 % | 0.5 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512325-05 WG2039056
Analysis started at: 3/12/2025 1:33:14 PM
Comments <Comment>
Rack: 1
Vial: 43

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0039 ppm | 0.0003 ppm | 0.0190 ppm | 0.0446 ppm | -0.0001 ppm | 15.4011 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0064 ppm | -0.0011 ppm | 0.0193 ppm | 0.0464 ppm | -0.0001 ppm | 16.0500 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0063 ppm | 0.0010 ppm | 0.0188 ppm | 0.0440 ppm | -0.0001 ppm | 15.1907 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0012 ppm | 0.0010 ppm | 0.0187 ppm | 0.0434 ppm | 0.0000 ppm | 14.9627 ppm |
| Concentration RSD | 140.1 % | 112.6 % | 415.0 % | 1.7 % | 3.6 % | 12.5 % | 3.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0013 ppm | 0.0007 ppm | 0.0102 ppm | 1.3752 ppm | 0.0018 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0011 ppm | 0.0006 ppm | 0.0115 ppm | 1.4549 ppm | 0.0013 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | 0.0013 ppm | 0.0006 ppm | 0.0091 ppm | 1.3546 ppm | 0.0013 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0016 ppm | 0.0009 ppm | 0.0099 ppm | 1.3160 ppm | 0.0029 ppm |
| Concentration RSD | 224.7 % | 571.6 % | 16.1 % | 23.9 % | 12.0 % | 5.2 % | 50.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 7.1774 ppm | 0.0005 ppm | 0.0003 ppm | 16.4440 ppm | 0.0002 ppm | 0.0010 ppm | -0.0009 ppm |
| Concentration per Run 1 | 7.1911 ppm | 0.0008 ppm | 0.0004 ppm | 17.1835 ppm | 0.0001 ppm | 0.0009 ppm | -0.0013 ppm |
| Concentration per Run 2 | 7.1645 ppm | 0.0004 ppm | 0.0003 ppm | 16.2543 ppm | 0.0002 ppm | 0.0007 ppm | -0.0018 ppm |
| Concentration per Run 3 | 7.1765 ppm | 0.0002 ppm | 0.0003 ppm | 15.8944 ppm | 0.0003 ppm | 0.0014 ppm | 0.0003 ppm |
| Concentration RSD | 0.2 % | 73.0 % | 9.3 % | 4.0 % | 53.2 % | 34.6 % | 119.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0031 ppm | 9.8484 ppm | 0.0000 ppm | 0.0901 ppm | 0.0004 ppm | -0.0005 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0027 ppm | 9.8527 ppm | 0.0002 ppm | 0.0943 ppm | 0.0003 ppm | 0.0009 ppm | 0.0004 ppm |
| Concentration per Run 2 | -0.0047 ppm | 9.8300 ppm | -0.0001 ppm | 0.0888 ppm | 0.0003 ppm | -0.0007 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0020 ppm | 9.8625 ppm | -0.0002 ppm | 0.0872 ppm | 0.0006 ppm | -0.0017 ppm | 0.0003 ppm |
| Concentration RSD | 44.0 % | 0.2 % | 443.0 % | 4.1 % | 37.8 % | 262.2 % | 13.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 100.9221 % | 101.6342 % | 97.0579 % | 97.7081 % | 99.5294 % | 101.1597 % |
| Concentration per Run 1 | 0.0009 ppm | 97.9245 % | 101.5716 % | 97.1768 % | 93.8240 % | 99.5163 % | 100.9615 % |
| Concentration per Run 2 | 0.0009 ppm | 101.4716 % | 101.6504 % | 96.9734 % | 98.6232 % | 99.7022 % | 101.2425 % |
| Concentration per Run 3 | 0.0008 ppm | 103.3702 % | 101.6806 % | 97.0233 % | 100.6770 % | 99.3696 % | 101.2751 % |
| Concentration RSD | 8.3 % | 2.7 % | 0.1 % | 0.1 % | 3.6 % | 0.2 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512325-06 WG2039056
Analysis started at: 3/12/2025 1:39:34 PM
Comments <Comment>
Rack: 1
Vial: 44

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0040 ppm | -0.0009 ppm | 0.0135 ppm | 0.0106 ppm | -0.0001 ppm | 11.5706 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0034 ppm | -0.0013 ppm | 0.0135 ppm | 0.0111 ppm | -0.0001 ppm | 12.1496 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0080 ppm | -0.0012 ppm | 0.0134 ppm | 0.0105 ppm | 0.0000 ppm | 11.3902 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0006 ppm | -0.0001 ppm | 0.0136 ppm | 0.0102 ppm | 0.0000 ppm | 11.1720 ppm |
| Concentration RSD | 101.9 % | 92.8 % | 74.2 % | 0.8 % | 4.1 % | 28.6 % | 4.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0025 ppm | 0.0005 ppm | 0.0044 ppm | 1.1341 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0001 ppm | 0.0028 ppm | 0.0006 ppm | 0.0049 ppm | 1.2149 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0021 ppm | 0.0003 ppm | 0.0042 ppm | 1.1136 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0025 ppm | 0.0006 ppm | 0.0040 ppm | 1.0739 ppm | 0.0018 ppm |
| Concentration RSD | 405.6 % | 370.3 % | 12.9 % | 32.2 % | 10.5 % | 6.4 % | 116.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.5283 ppm | 0.0002 ppm | 0.0002 ppm | 17.1125 ppm | 0.0003 ppm | 0.0006 ppm | -0.0012 ppm |
| Concentration per Run 1 | 5.5155 ppm | 0.0000 ppm | 0.0002 ppm | 17.9993 ppm | 0.0003 ppm | 0.0010 ppm | -0.0007 ppm |
| Concentration per Run 2 | 5.5347 ppm | 0.0003 ppm | 0.0002 ppm | 16.8699 ppm | 0.0003 ppm | 0.0003 ppm | -0.0010 ppm |
| Concentration per Run 3 | 5.5346 ppm | 0.0004 ppm | 0.0002 ppm | 16.4682 ppm | 0.0003 ppm | 0.0005 ppm | -0.0019 ppm |
| Concentration RSD | 0.2 % | 105.3 % | 20.6 % | 4.6 % | 13.5 % | 68.4 % | 50.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0017 ppm | 7.5118 ppm | 0.0000 ppm | 0.0596 ppm | 0.0003 ppm | 0.0001 ppm | 0.0005 ppm |
| Concentration per Run 1 | -0.0039 ppm | 7.5156 ppm | 0.0004 ppm | 0.0626 ppm | 0.0003 ppm | -0.0005 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0015 ppm | 7.4871 ppm | -0.0001 ppm | 0.0588 ppm | 0.0004 ppm | -0.0003 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.0002 ppm | 7.5326 ppm | -0.0002 ppm | 0.0575 ppm | 0.0003 ppm | 0.0010 ppm | 0.0006 ppm |
| Concentration RSD | 120.4 % | 0.3 % | 1,237.9 % | 4.5 % | 22.8 % | 1,085.9 % | 49.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 101.3310 % | 102.4053 % | 97.1295 % | 97.6758 % | 99.9451 % | 101.6731 % |
| Concentration per Run 1 | 0.0010 ppm | 96.6896 % | 102.3803 % | 97.1077 % | 92.6912 % | 99.9140 % | 101.7357 % |
| Concentration per Run 2 | 0.0008 ppm | 103.0468 % | 102.2522 % | 97.1249 % | 99.5233 % | 100.2203 % | 101.5060 % |
| Concentration per Run 3 | 0.0009 ppm | 104.2566 % | 102.5835 % | 97.1560 % | 100.8131 % | 99.7011 % | 101.7777 % |
| Concentration RSD | 8.5 % | 4.0 % | 0.2 % | 0.0 % | 4.5 % | 0.3 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512325-07 WG2039056
Analysis started at: 3/12/2025 1:45:54 PM
Comments <Comment>
Rack: 1
Vial: 45

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0164 ppm | -0.0009 ppm | 0.0110 ppm | 0.0324 ppm | 0.0000 ppm | 12.0517 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0153 ppm | -0.0006 ppm | 0.0115 ppm | 0.0341 ppm | 0.0000 ppm | 12.6799 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0166 ppm | -0.0007 ppm | 0.0107 ppm | 0.0318 ppm | 0.0000 ppm | 11.8697 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0171 ppm | -0.0013 ppm | 0.0108 ppm | 0.0313 ppm | 0.0000 ppm | 11.6056 ppm |
| Concentration RSD | 59.1 % | 5.9 % | 42.3 % | 3.9 % | 4.7 % | 157.7 % | 4.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0007 ppm | 0.0014 ppm | 0.0054 ppm | 0.0511 ppm | 1.1227 ppm | -0.0009 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0008 ppm | 0.0014 ppm | 0.0053 ppm | 0.0533 ppm | 1.1982 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0007 ppm | 0.0013 ppm | 0.0057 ppm | 0.0505 ppm | 1.0812 ppm | -0.0014 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0006 ppm | 0.0014 ppm | 0.0053 ppm | 0.0495 ppm | 1.0886 ppm | -0.0011 ppm |
| Concentration RSD | 22.4 % | 9.8 % | 6.8 % | 3.7 % | 3.8 % | 5.8 % | 69.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.7599 ppm | 0.0905 ppm | 0.0011 ppm | 7.1466 ppm | 0.0066 ppm | 0.0005 ppm | -0.0014 ppm |
| Concentration per Run 1 | 5.7654 ppm | 0.0947 ppm | 0.0009 ppm | 7.5044 ppm | 0.0066 ppm | 0.0005 ppm | -0.0001 ppm |
| Concentration per Run 2 | 5.7598 ppm | 0.0891 ppm | 0.0012 ppm | 7.0363 ppm | 0.0065 ppm | 0.0003 ppm | -0.0013 ppm |
| Concentration per Run 3 | 5.7545 ppm | 0.0875 ppm | 0.0011 ppm | 6.8989 ppm | 0.0066 ppm | 0.0006 ppm | -0.0028 ppm |
| Concentration RSD | 0.1 % | 4.2 % | 13.3 % | 4.4 % | 0.8 % | 27.5 % | 94.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0022 ppm | 6.2194 ppm | 0.0000 ppm | 0.0670 ppm | 0.0005 ppm | 0.0003 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0030 ppm | 6.2257 ppm | 0.0002 ppm | 0.0704 ppm | 0.0008 ppm | -0.0008 ppm | 0.0005 ppm |
| Concentration per Run 2 | -0.0016 ppm | 6.2207 ppm | -0.0001 ppm | 0.0659 ppm | 0.0005 ppm | 0.0012 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0021 ppm | 6.2117 ppm | 0.0000 ppm | 0.0646 ppm | 0.0004 ppm | 0.0005 ppm | 0.0004 ppm |
| Concentration RSD | 31.7 % | 0.1 % | 558.1 % | 4.6 % | 37.3 % | 347.1 % | 55.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0121 ppm | 103.8263 % | 103.1239 % | 97.5647 % | 99.8233 % | 100.4594 % | 102.3552 % |
| Concentration per Run 1 | 0.0122 ppm | 100.0832 % | 102.5327 % | 97.6623 % | 95.5117 % | 100.2557 % | 101.8066 % |
| Concentration per Run 2 | 0.0121 ppm | 104.9597 % | 103.6398 % | 97.4669 % | 101.2942 % | 100.5278 % | 102.6758 % |
| Concentration per Run 3 | 0.0120 ppm | 106.4359 % | 103.1992 % | 97.5649 % | 102.6640 % | 100.5948 % | 102.5833 % |
| Concentration RSD | 0.6 % | 3.2 % | 0.5 % | 0.1 % | 3.8 % | 0.2 % | 0.5 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512325-08 WG2039056
Analysis started at: 3/12/2025 1:52:14 PM
Comments <Comment>
Rack: 1
Vial: 46

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0022 ppm | -0.0019 ppm | 0.0176 ppm | 0.0286 ppm | 0.0000 ppm | 12.3140 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0032 ppm | -0.0026 ppm | 0.0177 ppm | 0.0302 ppm | 0.0000 ppm | 12.9679 ppm |
| Concentration per Run 2 | 0.0003 ppm | -0.0041 ppm | -0.0014 ppm | 0.0174 ppm | 0.0281 ppm | -0.0001 ppm | 12.1844 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0074 ppm | -0.0016 ppm | 0.0178 ppm | 0.0275 ppm | 0.0000 ppm | 11.7896 ppm |
| Concentration RSD | 62.2 % | 267.3 % | 34.4 % | 1.0 % | 5.0 % | 101.4 % | 4.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0003 ppm | 0.0017 ppm | 0.0012 ppm | 0.0071 ppm | 1.2408 ppm | 0.0016 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0004 ppm | 0.0016 ppm | 0.0014 ppm | 0.0075 ppm | 1.3139 ppm | 0.0018 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0002 ppm | 0.0020 ppm | 0.0012 ppm | 0.0066 ppm | 1.2266 ppm | 0.0013 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0002 ppm | 0.0015 ppm | 0.0009 ppm | 0.0074 ppm | 1.1821 ppm | 0.0017 ppm |
| Concentration RSD | 139.4 % | 44.5 % | 15.9 % | 21.4 % | 6.9 % | 5.4 % | 13.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.7720 ppm | 0.0013 ppm | 0.0003 ppm | 16.0252 ppm | 0.0010 ppm | 0.0006 ppm | -0.0014 ppm |
| Concentration per Run 1 | 5.7544 ppm | 0.0011 ppm | 0.0003 ppm | 16.8674 ppm | 0.0009 ppm | 0.0008 ppm | -0.0016 ppm |
| Concentration per Run 2 | 5.7897 ppm | 0.0015 ppm | 0.0003 ppm | 15.8325 ppm | 0.0012 ppm | 0.0006 ppm | -0.0015 ppm |
| Concentration per Run 3 | 5.7719 ppm | 0.0012 ppm | 0.0003 ppm | 15.3756 ppm | 0.0009 ppm | 0.0005 ppm | -0.0012 ppm |
| Concentration RSD | 0.3 % | 14.4 % | 12.5 % | 4.8 % | 13.0 % | 30.0 % | 13.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0014 ppm | 8.4120 ppm | 0.0000 ppm | 0.0689 ppm | 0.0005 ppm | 0.0000 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0025 ppm | 8.4055 ppm | 0.0000 ppm | 0.0724 ppm | 0.0004 ppm | -0.0011 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0006 ppm | 8.4054 ppm | 0.0005 ppm | 0.0681 ppm | 0.0006 ppm | 0.0004 ppm | 0.0005 ppm |
| Concentration per Run 3 | -0.0012 ppm | 8.4250 ppm | -0.0004 ppm | 0.0663 ppm | 0.0003 ppm | 0.0007 ppm | 0.0001 ppm |
| Concentration RSD | 66.8 % | 0.1 % | 2,500.5 % | 4.5 % | 34.1 % | 3,292.0 % | 86.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0026 ppm | 101.4129 % | 101.9282 % | 96.8203 % | 97.7662 % | 99.7900 % | 101.2199 % |
| Concentration per Run 1 | 0.0026 ppm | 97.2663 % | 102.1934 % | 96.7910 % | 93.0127 % | 99.6903 % | 101.4588 % |
| Concentration per Run 2 | 0.0026 ppm | 102.3192 % | 101.8861 % | 96.6535 % | 98.7116 % | 99.9142 % | 101.1844 % |
| Concentration per Run 3 | 0.0027 ppm | 104.6532 % | 101.7049 % | 97.0165 % | 101.5743 % | 99.7654 % | 101.0165 % |
| Concentration RSD | 0.6 % | 3.7 % | 0.2 % | 0.2 % | 4.5 % | 0.1 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512325-09 WG2039056
Analysis started at: 3/12/2025 1:58:35 PM
Comments <Comment>
Rack: 1
Vial: 47

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0017 ppm | -0.0006 ppm | 0.0889 ppm | 0.0132 ppm | 0.0000 ppm | 18.0513 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0026 ppm | 0.0011 ppm | 0.0893 ppm | 0.0139 ppm | -0.0001 ppm | 18.8623 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0033 ppm | -0.0023 ppm | 0.0890 ppm | 0.0131 ppm | 0.0000 ppm | 17.8441 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0008 ppm | -0.0006 ppm | 0.0884 ppm | 0.0126 ppm | 0.0000 ppm | 17.4474 ppm |
| Concentration RSD | 34.7 % | 130.6 % | 299.4 % | 0.5 % | 4.6 % | 431.1 % | 4.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0002 ppm | 0.0016 ppm | 0.0011 ppm | 0.0154 ppm | 1.4194 ppm | 0.0007 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0002 ppm | 0.0016 ppm | 0.0012 ppm | 0.0152 ppm | 1.4944 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0005 ppm | 0.0016 ppm | 0.0010 ppm | 0.0153 ppm | 1.3868 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0001 ppm | 0.0016 ppm | 0.0009 ppm | 0.0158 ppm | 1.3769 ppm | 0.0011 ppm |
| Concentration RSD | 61.4 % | 83.4 % | 1.7 % | 13.9 % | 2.0 % | 4.6 % | 55.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.0094 ppm | 0.0035 ppm | 0.0003 ppm | 12.8081 ppm | 0.0016 ppm | 0.0000 ppm | -0.0016 ppm |
| Concentration per Run 1 | 9.0237 ppm | 0.0034 ppm | 0.0002 ppm | 13.3894 ppm | 0.0019 ppm | 0.0004 ppm | -0.0015 ppm |
| Concentration per Run 2 | 8.9986 ppm | 0.0035 ppm | 0.0005 ppm | 12.6623 ppm | 0.0015 ppm | -0.0004 ppm | -0.0010 ppm |
| Concentration per Run 3 | 9.0059 ppm | 0.0035 ppm | 0.0004 ppm | 12.3727 ppm | 0.0016 ppm | 0.0001 ppm | -0.0022 ppm |
| Concentration RSD | 0.1 % | 1.7 % | 47.3 % | 4.1 % | 13.2 % | 1,111.9 % | 36.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 10.2442 ppm | 0.0001 ppm | 0.0896 ppm | 0.0005 ppm | -0.0001 ppm | 0.0014 ppm |
| Concentration per Run 1 | 0.0005 ppm | 10.2770 ppm | 0.0001 ppm | 0.0935 ppm | 0.0004 ppm | 0.0005 ppm | 0.0014 ppm |
| Concentration per Run 2 | -0.0005 ppm | 10.2382 ppm | 0.0002 ppm | 0.0889 ppm | 0.0006 ppm | -0.0006 ppm | 0.0017 ppm |
| Concentration per Run 3 | -0.0020 ppm | 10.2174 ppm | -0.0001 ppm | 0.0864 ppm | 0.0005 ppm | -0.0003 ppm | 0.0011 ppm |
| Concentration RSD | 190.4 % | 0.3 % | 159.6 % | 4.0 % | 26.1 % | 381.2 % | 23.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0063 ppm | 101.6684 % | 101.6491 % | 96.8477 % | 98.0773 % | 99.3837 % | 101.4472 % |
| Concentration per Run 1 | 0.0063 ppm | 98.3046 % | 101.2993 % | 96.7730 % | 93.6706 % | 99.3427 % | 101.0350 % |
| Concentration per Run 2 | 0.0064 ppm | 102.5441 % | 101.8927 % | 96.9231 % | 99.3878 % | 99.3696 % | 101.6724 % |
| Concentration per Run 3 | 0.0062 ppm | 104.1565 % | 101.7552 % | 96.8469 % | 101.1734 % | 99.4388 % | 101.6342 % |
| Concentration RSD | 1.3 % | 3.0 % | 0.3 % | 0.1 % | 4.0 % | 0.0 % | 0.4 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCV
Analysis started at: 3/12/2025 2:10:42 PM
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4950 ppm | 0.5101 ppm | 0.4977 ppm | 0.4844 ppm | 0.4916 ppm | 0.5352 ppm | 0.5192 ppm |
| Concentration per Run 1 | 0.4954 ppm | 0.5368 ppm | 0.5003 ppm | 0.4863 ppm | 0.5138 ppm | 0.5608 ppm | 0.5455 ppm |
| Concentration per Run 2 | 0.4944 ppm | 0.5019 ppm | 0.4958 ppm | 0.4836 ppm | 0.4858 ppm | 0.5277 ppm | 0.5107 ppm |
| Concentration per Run 3 | 0.4951 ppm | 0.4915 ppm | 0.4970 ppm | 0.4835 ppm | 0.4753 ppm | 0.5173 ppm | 0.5014 ppm |
| Recovery Percentage 1 | 98.991 % | 102.012 % | 99.538 % | 96.890 % | 98.320 % | 107.048 % | 103.844 % |
| Concentration RSD | 0.1 % | 4.7 % | 0.5 % | 0.3 % | 4.0 % | 4.2 % | 4.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4880 ppm | 0.4966 ppm | 0.4942 ppm | 0.4865 ppm | 0.5280 ppm | 5.3907 ppm | 0.5088 ppm |
| Concentration per Run 1 | 0.4899 ppm | 0.4986 ppm | 0.4945 ppm | 0.4855 ppm | 0.5507 ppm | 5.6659 ppm | 0.5337 ppm |
| Concentration per Run 2 | 0.4870 ppm | 0.4956 ppm | 0.4946 ppm | 0.4871 ppm | 0.5252 ppm | 5.3156 ppm | 0.5013 ppm |
| Concentration per Run 3 | 0.4870 ppm | 0.4958 ppm | 0.4936 ppm | 0.4868 ppm | 0.5082 ppm | 5.1907 ppm | 0.4915 ppm |
| Recovery Percentage 1 | 97.598 % | 99.328 % | 98.842 % | 97.296 % | 105.607 % | 107.815 % | 101.769 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.1 % | 0.2 % | 4.1 % | 4.6 % | 4.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5344 ppm | 0.5156 ppm | 0.4709 ppm | 9.8357 ppm | 0.5136 ppm | 0.5193 ppm | 0.5023 ppm |
| Concentration per Run 1 | 0.5340 ppm | 0.5399 ppm | 0.4710 ppm | 10.3172 ppm | 0.5156 ppm | 0.5216 ppm | 0.5049 ppm |
| Concentration per Run 2 | 0.5329 ppm | 0.5087 ppm | 0.4695 ppm | 9.6989 ppm | 0.5125 ppm | 0.5172 ppm | 0.4993 ppm |
| Concentration per Run 3 | 0.5364 ppm | 0.4982 ppm | 0.4721 ppm | 9.4910 ppm | 0.5126 ppm | 0.5193 ppm | 0.5025 ppm |
| Recovery Percentage 1 | 106.883 % | 103.113 % | 94.171 % | 98.357 % | 102.717 % | 103.870 % | 100.453 % |
| Concentration RSD | 0.3 % | 4.2 % | 0.3 % | 4.4 % | 0.3 % | 0.4 % | 0.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4707 ppm | 5.6655 ppm | 0.5185 ppm | 0.5102 ppm | 0.5137 ppm | 0.5015 ppm | 0.5005 ppm |
| Concentration per Run 1 | 0.4724 ppm | 5.6968 ppm | 0.5208 ppm | 0.5346 ppm | 0.5136 ppm | 0.5032 ppm | 0.4999 ppm |
| Concentration per Run 2 | 0.4706 ppm | 5.6477 ppm | 0.5174 ppm | 0.5037 ppm | 0.5139 ppm | 0.4998 ppm | 0.5007 ppm |
| Concentration per Run 3 | 0.4691 ppm | 5.6520 ppm | 0.5173 ppm | 0.4924 ppm | 0.5138 ppm | 0.5016 ppm | 0.5010 ppm |
| Recovery Percentage 1 | 94.143 % | 107.914 % | 103.697 % | 102.047 % | 102.748 % | 100.304 % | 100.110 % |
| Concentration RSD | 0.3 % | 0.5 % | 0.4 % | 4.3 % | 0.0 % | 0.3 % | 0.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5031 ppm | 99.5848 % | 102.0959 % | 96.7412 % | 96.8380 % | 99.6712 % | 101.3316 % |
| Concentration per Run 1 | 0.5046 ppm | 95.2369 % | 102.0837 % | 96.6466 % | 92.1581 % | 99.3809 % | 101.3766 % |
| Concentration per Run 2 | 0.5021 ppm | 101.2259 % | 101.9852 % | 96.8133 % | 98.4722 % | 99.8681 % | 101.1796 % |
| Concentration per Run 3 | 0.5027 ppm | 102.2918 % | 102.2188 % | 96.7638 % | 99.8836 % | 99.7646 % | 101.4387 % |
| Recovery Percentage 1 | 100.622 % | | | | | | |
| Concentration RSD | 0.3 % | 3.8 % | 0.1 % | 0.1 % | 4.2 % | 0.3 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCB
Analysis started at: 3/12/2025 2:16:47 PM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0018 ppm | -0.0014 ppm | 0.0012 ppm | 0.0000 ppm | 0.0000 ppm | 0.0036 ppm |
| Concentration per Run 1 | -0.0003 ppm | -0.0042 ppm | -0.0004 ppm | 0.0013 ppm | 0.0000 ppm | 0.0000 ppm | 0.0031 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0031 ppm | -0.0007 ppm | 0.0011 ppm | 0.0000 ppm | 0.0000 ppm | 0.0069 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0043 ppm | -0.0032 ppm | 0.0011 ppm | 0.0002 ppm | 0.0000 ppm | 0.0008 ppm |
| Recovery Percentage 1 | -0.608 % | -1.791 % | -28.284 % | 3.854 % | 0.276 % | -0.451 % | 3.628 % |
| Concentration RSD | 563.6 % | 238.1 % | 110.3 % | 11.3 % | 408.2 % | 110.0 % | 84.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | 0.0002 ppm | 0.0025 ppm | 0.0587 ppm | -0.0007 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0003 ppm | 0.0031 ppm | 0.0703 ppm | -0.0008 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0002 ppm | 0.0020 ppm | 0.0796 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0002 ppm | 0.0000 ppm | 0.0002 ppm | 0.0025 ppm | 0.0262 ppm | -0.0012 ppm |
| Recovery Percentage 1 | 0.552 % | 0.295 % | 0.950 % | 2.266 % | 5.071 % | 2.347 % | -6.915 % |
| Concentration RSD | 34.9 % | 159.2 % | 77.9 % | 13.7 % | 21.3 % | 48.6 % | 89.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | -0.0001 ppm | 0.0012 ppm | 0.0981 ppm | 0.0002 ppm | 0.0000 ppm | -0.0005 ppm |
| Concentration per Run 1 | 0.0010 ppm | 0.0000 ppm | 0.0014 ppm | 0.1041 ppm | 0.0002 ppm | 0.0006 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0016 ppm | -0.0002 ppm | 0.0011 ppm | 0.1011 ppm | 0.0003 ppm | -0.0002 ppm | -0.0017 ppm |
| Concentration per Run 3 | 0.0020 ppm | -0.0001 ppm | 0.0010 ppm | 0.0889 ppm | 0.0002 ppm | -0.0004 ppm | 0.0001 ppm |
| Recovery Percentage 1 | 1.545 % | -0.790 % | 2.403 % | 4.903 % | 0.909 % | -0.163 % | -1.063 % |
| Concentration RSD | 32.4 % | 106.1 % | 17.2 % | 8.2 % | 16.2 % | 3,424.1 % | 191.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0011 ppm | 0.0003 ppm | 0.0003 ppm | -0.0001 ppm | 0.0002 ppm | -0.0003 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0000 ppm | 0.0009 ppm | -0.0002 ppm | 0.0004 ppm | 0.0012 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0026 ppm | 0.0010 ppm | -0.0001 ppm | 0.0000 ppm | -0.0001 ppm | -0.0013 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0000 ppm | 0.0002 ppm | 0.0000 ppm | 0.0004 ppm | -0.0009 ppm | 0.0001 ppm |
| Recovery Percentage 1 | -11.309 % | 0.064 % | 0.649 % | -0.731 % | 2.109 % | -1.546 % | 1.664 % |
| Concentration RSD | 115.1 % | 174.8 % | 152.2 % | 157.3 % | 134.4 % | 430.5 % | 137.9 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 104.6749 % | 102.2314 % | 97.6015 % | 101.0664 % | 99.9458 % | 100.8878 % |
| Concentration per Run 1 | 0.0009 ppm | 103.5235 % | 102.4888 % | 97.6446 % | 99.0284 % | 100.0624 % | 101.1671 % |
| Concentration per Run 2 | 0.0008 ppm | 104.8981 % | 102.1477 % | 97.5073 % | 101.5352 % | 99.7599 % | 100.7924 % |
| Concentration per Run 3 | 0.0009 ppm | 105.6031 % | 102.0576 % | 97.6527 % | 102.6357 % | 100.0152 % | 100.7041 % |
| Recovery Percentage 1 | 17.277 % | | | | | | |
| Concentration RSD | 4.8 % | 1.0 % | 0.2 % | 0.1 % | 1.8 % | 0.2 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039056-1 WG2039056
Analysis started at: 3/12/2025 2:23:14 PM
Comments <Comment>
Rack: 1
Vial: 33

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | -0.0012 ppm | -0.0007 ppm | 0.0008 ppm | 0.0000 ppm | -0.0001 ppm | 0.0156 ppm |
| Concentration per Run 1 | 0.0008 ppm | -0.0035 ppm | 0.0003 ppm | 0.0007 ppm | 0.0000 ppm | -0.0001 ppm | 0.0118 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0039 ppm | -0.0006 ppm | 0.0009 ppm | -0.0002 ppm | -0.0001 ppm | 0.0167 ppm |
| Concentration per Run 3 | 0.0007 ppm | -0.0038 ppm | -0.0018 ppm | 0.0006 ppm | 0.0000 ppm | 0.0000 ppm | 0.0183 ppm |
| Recovery Percentage 1 | 7.409 % | -1.163 % | -13.839 % | 2.547 % | -0.409 % | -1.301 % | 15.596 % |
| Concentration RSD | 68.3 % | 374.6 % | 148.3 % | 21.5 % | 305.9 % | 36.1 % | 21.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0003 ppm | 0.0005 ppm | -0.0088 ppm | -0.0018 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0000 ppm | -0.0002 ppm | -0.0305 ppm | -0.0015 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0005 ppm | 0.0007 ppm | 0.0009 ppm | -0.0014 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0004 ppm | 0.0010 ppm | 0.0032 ppm | -0.0025 ppm |
| Recovery Percentage 1 | 0.348 % | -0.323 % | 0.376 % | 3.158 % | 1.007 % | -0.352 % | -18.120 % |
| Concentration RSD | 97.3 % | 96.0 % | 97.1 % | 74.7 % | 126.1 % | 214.2 % | 30.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0026 ppm | -0.0001 ppm | 0.0002 ppm | 0.0183 ppm | 0.0004 ppm | 0.0003 ppm | -0.0007 ppm |
| Concentration per Run 1 | 0.0036 ppm | 0.0003 ppm | 0.0002 ppm | 0.0154 ppm | 0.0001 ppm | 0.0001 ppm | -0.0005 ppm |
| Concentration per Run 2 | 0.0020 ppm | -0.0003 ppm | 0.0003 ppm | 0.0214 ppm | 0.0006 ppm | 0.0002 ppm | -0.0008 ppm |
| Concentration per Run 3 | 0.0023 ppm | -0.0003 ppm | 0.0002 ppm | 0.0179 ppm | 0.0005 ppm | 0.0005 ppm | -0.0008 ppm |
| Recovery Percentage 1 | 2.634 % | -0.907 % | 0.498 % | 0.913 % | 1.553 % | 3.007 % | -1.376 % |
| Concentration RSD | 30.8 % | 415.6 % | 21.6 % | 16.6 % | 70.8 % | 63.3 % | 28.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0050 ppm | 0.0002 ppm | 0.0000 ppm | 0.0001 ppm | -0.0003 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0020 ppm | 0.0047 ppm | -0.0001 ppm | 0.0001 ppm | 0.0001 ppm | 0.0006 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0025 ppm | 0.0051 ppm | 0.0004 ppm | 0.0000 ppm | 0.0002 ppm | -0.0001 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0018 ppm | 0.0051 ppm | 0.0003 ppm | -0.0001 ppm | 0.0001 ppm | -0.0012 ppm | 0.0002 ppm |
| Recovery Percentage 1 | 8.846 % | 0.990 % | 0.378 % | 0.048 % | 1.361 % | -1.256 % | 0.654 % |
| Concentration RSD | 267.8 % | 5.3 % | 148.1 % | 2,557.8 % | 49.9 % | 364.1 % | 208.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 101.6262 % | 102.6246 % | 99.5950 % | 97.9872 % | 101.5966 % | 102.2578 % |
| Concentration per Run 1 | 0.0004 ppm | 98.4022 % | 102.5896 % | 99.5068 % | 94.0513 % | 101.4525 % | 102.1615 % |
| Concentration per Run 2 | 0.0003 ppm | 102.5549 % | 102.7488 % | 99.6222 % | 98.7956 % | 101.5416 % | 102.3223 % |
| Concentration per Run 3 | 0.0003 ppm | 103.9215 % | 102.5354 % | 99.6559 % | 101.1147 % | 101.7958 % | 102.2895 % |
| Recovery Percentage 1 | 6.475 % | | | | | | |
| Concentration RSD | 14.5 % | 2.8 % | 0.1 % | 0.1 % | 3.7 % | 0.2 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039056-2 WG2039056
Analysis started at: 3/12/2025 2:29:38 PM
Comments <Comment>
Rack: 1
Vial: 34

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0517 ppm | 2.0923 ppm | 0.1122 ppm | 0.9300 ppm | 2.0078 ppm | 0.0538 ppm | 10.0422 ppm |
| Concentration per Run 1 | 0.0515 ppm | 2.1716 ppm | 0.1120 ppm | 0.9294 ppm | 2.0866 ppm | 0.0560 ppm | 10.4592 ppm |
| Concentration per Run 2 | 0.0520 ppm | 2.0826 ppm | 0.1119 ppm | 0.9307 ppm | 1.9925 ppm | 0.0534 ppm | 9.9664 ppm |
| Concentration per Run 3 | 0.0518 ppm | 2.0228 ppm | 0.1128 ppm | 0.9300 ppm | 1.9444 ppm | 0.0521 ppm | 9.7012 ppm |
| Concentration RSD | 0.4 % | 3.6 % | 0.4 % | 0.1 % | 3.6 % | 3.7 % | 3.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0533 ppm | 0.4996 ppm | 0.2016 ppm | 0.2522 ppm | 1.0641 ppm | 10.4864 ppm | -0.0007 ppm |
| Concentration per Run 1 | 0.0532 ppm | 0.4996 ppm | 0.2023 ppm | 0.2526 ppm | 1.1029 ppm | 10.9101 ppm | -0.0023 ppm |
| Concentration per Run 2 | 0.0533 ppm | 0.4997 ppm | 0.2010 ppm | 0.2515 ppm | 1.0605 ppm | 10.4231 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0534 ppm | 0.4996 ppm | 0.2015 ppm | 0.2524 ppm | 1.0290 ppm | 10.1261 ppm | -0.0003 ppm |
| Concentration RSD | 0.1 % | 0.0 % | 0.3 % | 0.2 % | 3.5 % | 3.8 % | 181.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.1774 ppm | 0.5277 ppm | 0.9153 ppm | 10.0619 ppm | 0.5126 ppm | 0.5319 ppm | 0.4848 ppm |
| Concentration per Run 1 | 10.2172 ppm | 0.5483 ppm | 0.9081 ppm | 10.4581 ppm | 0.5129 ppm | 0.5316 ppm | 0.4810 ppm |
| Concentration per Run 2 | 10.1606 ppm | 0.5247 ppm | 0.9157 ppm | 10.0046 ppm | 0.5124 ppm | 0.5317 ppm | 0.4850 ppm |
| Concentration per Run 3 | 10.1542 ppm | 0.5100 ppm | 0.9222 ppm | 9.7231 ppm | 0.5125 ppm | 0.5325 ppm | 0.4885 ppm |
| Concentration RSD | 0.3 % | 3.7 % | 0.8 % | 3.7 % | 0.0 % | 0.1 % | 0.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1060 ppm | 1.1062 ppm | 0.9949 ppm | 0.9971 ppm | 0.9848 ppm | 0.1114 ppm | 0.5095 ppm |
| Concentration per Run 1 | 0.1046 ppm | 1.1074 ppm | 0.9934 ppm | 1.0354 ppm | 0.9879 ppm | 0.1109 ppm | 0.5110 ppm |
| Concentration per Run 2 | 0.1058 ppm | 1.1048 ppm | 0.9936 ppm | 0.9905 ppm | 0.9830 ppm | 0.1108 ppm | 0.5083 ppm |
| Concentration per Run 3 | 0.1076 ppm | 1.1063 ppm | 0.9978 ppm | 0.9654 ppm | 0.9837 ppm | 0.1123 ppm | 0.5090 ppm |
| Concentration RSD | 1.5 % | 0.1 % | 0.3 % | 3.6 % | 0.3 % | 0.8 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5119 ppm | 98.8107 % | 100.6192 % | 97.9788 % | 97.5488 % | 99.3832 % | 101.6946 % |
| Concentration per Run 1 | 0.5120 ppm | 95.6148 % | 100.0645 % | 97.9720 % | 93.9414 % | 99.4331 % | 101.1239 % |
| Concentration per Run 2 | 0.5117 ppm | 99.1034 % | 100.7477 % | 98.0548 % | 97.9629 % | 99.4895 % | 101.8903 % |
| Concentration per Run 3 | 0.5120 ppm | 101.7138 % | 101.0453 % | 97.9094 % | 100.7420 % | 99.2268 % | 102.0696 % |
| Concentration RSD | 0.0 % | 3.1 % | 0.5 % | 0.1 % | 3.5 % | 0.1 % | 0.5 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512325-01 WG2039056
Analysis started at: 3/12/2025 2:35:45 PM
Comments <Comment>
Rack: 1
Vial: 40

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0076 ppm | 0.0005 ppm | 0.0201 ppm | 0.0198 ppm | 0.0000 ppm | 24.4663 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.0178 ppm | -0.0005 ppm | 0.0203 ppm | 0.0207 ppm | 0.0000 ppm | 25.4421 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0054 ppm | 0.0005 ppm | 0.0204 ppm | 0.0198 ppm | 0.0000 ppm | 24.3149 ppm |
| Concentration per Run 3 | 0.0004 ppm | -0.0004 ppm | 0.0013 ppm | 0.0197 ppm | 0.0190 ppm | 0.0000 ppm | 23.6419 ppm |
| Concentration RSD | 58.1 % | 122.4 % | 194.5 % | 1.7 % | 4.3 % | 55.7 % | 3.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0001 ppm | 0.0002 ppm | 0.0008 ppm | 0.0069 ppm | 2.0127 ppm | -0.0007 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0001 ppm | 0.0007 ppm | 0.0008 ppm | 0.0068 ppm | 2.1082 ppm | -0.0017 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0002 ppm | 0.0000 ppm | 0.0011 ppm | 0.0071 ppm | 2.0111 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0000 ppm | -0.0001 ppm | 0.0006 ppm | 0.0067 ppm | 1.9188 ppm | -0.0005 ppm |
| Concentration RSD | 33.4 % | 124.6 % | 240.4 % | 30.4 % | 2.7 % | 4.7 % | 128.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.8705 ppm | 0.0008 ppm | 0.0043 ppm | 12.0202 ppm | 0.0006 ppm | 0.0005 ppm | 0.0029 ppm |
| Concentration per Run 1 | 6.8793 ppm | 0.0007 ppm | 0.0048 ppm | 12.5189 ppm | 0.0005 ppm | 0.0009 ppm | 0.0030 ppm |
| Concentration per Run 2 | 6.8743 ppm | 0.0009 ppm | 0.0042 ppm | 11.9041 ppm | 0.0008 ppm | -0.0002 ppm | 0.0032 ppm |
| Concentration per Run 3 | 6.8580 ppm | 0.0008 ppm | 0.0038 ppm | 11.6375 ppm | 0.0006 ppm | 0.0009 ppm | 0.0025 ppm |
| Concentration RSD | 0.2 % | 14.4 % | 12.0 % | 3.8 % | 23.5 % | 110.8 % | 12.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0018 ppm | 3.4042 ppm | 0.0021 ppm | 0.0927 ppm | 0.0013 ppm | 0.0000 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0011 ppm | 3.4061 ppm | 0.0025 ppm | 0.0964 ppm | 0.0012 ppm | 0.0002 ppm | 0.0005 ppm |
| Concentration per Run 2 | -0.0015 ppm | 3.4020 ppm | 0.0022 ppm | 0.0921 ppm | 0.0015 ppm | 0.0010 ppm | 0.0005 ppm |
| Concentration per Run 3 | -0.0027 ppm | 3.4047 ppm | 0.0016 ppm | 0.0897 ppm | 0.0011 ppm | -0.0011 ppm | 0.0008 ppm |
| Concentration RSD | 46.6 % | 0.1 % | 22.8 % | 3.7 % | 14.1 % | 9,148.8 % | 20.5 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | 98.4644 % | 99.8831 % | 98.8023 % | 97.2931 % | 99.7080 % | 101.5134 % |
| Concentration per Run 1 | 0.0016 ppm | 95.6523 % | 99.9626 % | 98.6121 % | 93.7621 % | 99.4782 % | 101.4645 % |
| Concentration per Run 2 | 0.0017 ppm | 98.9994 % | 99.7582 % | 98.8704 % | 97.9701 % | 99.8548 % | 101.5149 % |
| Concentration per Run 3 | 0.0017 ppm | 100.7416 % | 99.9285 % | 98.9246 % | 100.1473 % | 99.7911 % | 101.5608 % |
| Concentration RSD | 3.2 % | 2.6 % | 0.1 % | 0.2 % | 3.3 % | 0.2 % | 0.0 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512325-03 WG2039056
Analysis started at: 3/12/2025 2:42:04 PM
Comments <Comment>
Rack: 1
Vial: 41

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0109 ppm | 0.0000 ppm | 0.0195 ppm | 0.0195 ppm | 0.0000 ppm | 26.6752 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0109 ppm | -0.0002 ppm | 0.0198 ppm | 0.0205 ppm | 0.0000 ppm | 28.1678 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0126 ppm | -0.0022 ppm | 0.0197 ppm | 0.0193 ppm | 0.0000 ppm | 26.3664 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0092 ppm | 0.0026 ppm | 0.0190 ppm | 0.0188 ppm | -0.0001 ppm | 25.4915 ppm |
| Concentration RSD | 168.7 % | 15.6 % | 5,702.3 % | 2.2 % | 4.7 % | 60.1 % | 5.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0004 ppm | 0.0007 ppm | 0.0016 ppm | 0.0099 ppm | 0.9998 ppm | -0.0005 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0002 ppm | 0.0008 ppm | 0.0017 ppm | 0.0088 ppm | 1.0681 ppm | -0.0007 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0005 ppm | 0.0007 ppm | 0.0017 ppm | 0.0113 ppm | 0.9791 ppm | -0.0007 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0004 ppm | 0.0005 ppm | 0.0016 ppm | 0.0098 ppm | 0.9523 ppm | -0.0001 ppm |
| Concentration RSD | 16.4 % | 47.6 % | 21.5 % | 3.4 % | 12.6 % | 6.1 % | 65.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.7132 ppm | 0.0012 ppm | 0.0012 ppm | 2.5649 ppm | 0.0013 ppm | 0.0004 ppm | -0.0001 ppm |
| Concentration per Run 1 | 8.7188 ppm | 0.0010 ppm | 0.0012 ppm | 2.7022 ppm | 0.0011 ppm | 0.0011 ppm | 0.0002 ppm |
| Concentration per Run 2 | 8.7189 ppm | 0.0017 ppm | 0.0013 ppm | 2.5321 ppm | 0.0013 ppm | -0.0001 ppm | -0.0001 ppm |
| Concentration per Run 3 | 8.7019 ppm | 0.0009 ppm | 0.0010 ppm | 2.4605 ppm | 0.0015 ppm | 0.0001 ppm | -0.0004 ppm |
| Concentration RSD | 0.1 % | 35.3 % | 13.7 % | 4.8 % | 12.1 % | 182.5 % | 527.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0021 ppm | 3.2785 ppm | 0.0007 ppm | 0.1047 ppm | 0.0005 ppm | 0.0002 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0021 ppm | 3.2858 ppm | 0.0007 ppm | 0.1106 ppm | 0.0003 ppm | 0.0009 ppm | 0.0005 ppm |
| Concentration per Run 2 | -0.0033 ppm | 3.2814 ppm | 0.0006 ppm | 0.1032 ppm | 0.0006 ppm | -0.0001 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0009 ppm | 3.2684 ppm | 0.0009 ppm | 0.1002 ppm | 0.0005 ppm | -0.0002 ppm | 0.0004 ppm |
| Concentration RSD | 56.5 % | 0.3 % | 25.1 % | 5.1 % | 28.0 % | 292.6 % | 27.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0034 ppm | 98.0600 % | 101.3042 % | 100.0672 % | 97.3859 % | 100.2981 % | 102.7452 % |
| Concentration per Run 1 | 0.0035 ppm | 94.0884 % | 101.1882 % | 99.9892 % | 93.0544 % | 100.1738 % | 102.7119 % |
| Concentration per Run 2 | 0.0035 ppm | 98.2410 % | 101.2850 % | 99.9199 % | 97.8775 % | 100.1173 % | 102.6078 % |
| Concentration per Run 3 | 0.0034 ppm | 101.8506 % | 101.4393 % | 100.2926 % | 101.2257 % | 100.6033 % | 102.9160 % |
| Concentration RSD | 1.2 % | 4.0 % | 0.1 % | 0.2 % | 4.2 % | 0.3 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512325-04 WG2039056
Analysis started at: 3/12/2025 2:48:23 PM
Comments <Comment>
Rack: 1
Vial: 42

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0135 ppm | -0.0009 ppm | 0.0913 ppm | 0.0606 ppm | 0.0000 ppm | 60.5535 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0056 ppm | -0.0011 ppm | 0.0914 ppm | 0.0618 ppm | 0.0000 ppm | 61.7769 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0146 ppm | -0.0011 ppm | 0.0910 ppm | 0.0601 ppm | -0.0001 ppm | 60.0028 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0203 ppm | -0.0005 ppm | 0.0914 ppm | 0.0600 ppm | 0.0000 ppm | 59.8807 ppm |
| Concentration RSD | 35.1 % | 54.8 % | 35.5 % | 0.3 % | 1.7 % | 243.2 % | 1.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0002 ppm | 0.0002 ppm | 0.0023 ppm | 0.0022 ppm | 7.2823 ppm | -0.0015 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0002 ppm | 0.0003 ppm | 0.0020 ppm | 0.0036 ppm | 7.4377 ppm | -0.0020 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0001 ppm | 0.0002 ppm | 0.0024 ppm | 0.0015 ppm | 7.2122 ppm | -0.0011 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0002 ppm | 0.0002 ppm | 0.0026 ppm | 0.0015 ppm | 7.1969 ppm | -0.0014 ppm |
| Concentration RSD | 14.8 % | 57.8 % | 20.6 % | 11.0 % | 53.6 % | 1.9 % | 29.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.5751 ppm | 0.0512 ppm | 0.0021 ppm | 10.8656 ppm | 0.0000 ppm | 0.0008 ppm | 0.0006 ppm |
| Concentration per Run 1 | 10.5685 ppm | 0.0523 ppm | 0.0020 ppm | 11.0863 ppm | 0.0001 ppm | 0.0010 ppm | 0.0012 ppm |
| Concentration per Run 2 | 10.5841 ppm | 0.0510 ppm | 0.0023 ppm | 10.7559 ppm | 0.0000 ppm | 0.0008 ppm | 0.0009 ppm |
| Concentration per Run 3 | 10.5727 ppm | 0.0503 ppm | 0.0021 ppm | 10.7547 ppm | -0.0001 ppm | 0.0005 ppm | -0.0002 ppm |
| Concentration RSD | 0.1 % | 2.0 % | 6.2 % | 1.8 % | 594.2 % | 37.4 % | 125.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0020 ppm | 4.9301 ppm | 0.0010 ppm | 0.3512 ppm | 0.0004 ppm | 0.0004 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0013 ppm | 4.9307 ppm | 0.0013 ppm | 0.3576 ppm | 0.0002 ppm | 0.0009 ppm | 0.0006 ppm |
| Concentration per Run 2 | -0.0017 ppm | 4.9250 ppm | 0.0013 ppm | 0.3481 ppm | 0.0003 ppm | -0.0010 ppm | 0.0005 ppm |
| Concentration per Run 3 | -0.0031 ppm | 4.9347 ppm | 0.0004 ppm | 0.3478 ppm | 0.0006 ppm | 0.0011 ppm | 0.0006 ppm |
| Concentration RSD | 45.5 % | 0.1 % | 52.3 % | 1.6 % | 51.3 % | 317.6 % | 7.9 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 102.1839 % | 98.5253 % | 98.4431 % | 102.9366 % | 97.4115 % | 101.1634 % |
| Concentration per Run 1 | 0.0010 ppm | 101.0479 % | 98.4606 % | 98.4816 % | 100.9965 % | 97.5602 % | 101.2005 % |
| Concentration per Run 2 | 0.0008 ppm | 103.0475 % | 98.5016 % | 98.4621 % | 103.7060 % | 97.3958 % | 101.1155 % |
| Concentration per Run 3 | 0.0009 ppm | 102.4561 % | 98.6137 % | 98.3855 % | 104.1075 % | 97.2784 % | 101.1741 % |
| Concentration RSD | 8.0 % | 1.0 % | 0.1 % | 0.1 % | 1.6 % | 0.1 % | 0.0 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512325-02 WG2039056
Analysis started at: 3/12/2025 2:54:42 PM
Comments <Comment>
Rack: 1
Vial: 35

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0048 ppm | -0.0005 ppm | 0.0877 ppm | 0.0127 ppm | 0.0000 ppm | 17.2936 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0105 ppm | -0.0001 ppm | 0.0887 ppm | 0.0129 ppm | 0.0000 ppm | 17.8031 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0044 ppm | -0.0006 ppm | 0.0873 ppm | 0.0126 ppm | 0.0000 ppm | 17.1259 ppm |
| Concentration per Run 3 | 0.0003 ppm | -0.0006 ppm | -0.0008 ppm | 0.0872 ppm | 0.0126 ppm | 0.0000 ppm | 16.9518 ppm |
| Concentration RSD | 84.1 % | 117.1 % | 81.4 % | 0.9 % | 1.7 % | 110.7 % | 2.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0002 ppm | 0.0018 ppm | 0.0005 ppm | 0.0122 ppm | 1.3023 ppm | 0.0018 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0002 ppm | 0.0020 ppm | 0.0005 ppm | 0.0127 ppm | 1.3453 ppm | 0.0021 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0002 ppm | 0.0017 ppm | 0.0006 ppm | 0.0122 ppm | 1.2751 ppm | 0.0022 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | 0.0018 ppm | 0.0005 ppm | 0.0117 ppm | 1.2865 ppm | 0.0011 ppm |
| Concentration RSD | 43.8 % | 26.6 % | 10.4 % | 8.6 % | 4.3 % | 2.9 % | 35.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.6941 ppm | 0.0030 ppm | 0.0005 ppm | 12.6324 ppm | 0.0016 ppm | 0.0005 ppm | 0.0002 ppm |
| Concentration per Run 1 | 8.7013 ppm | 0.0031 ppm | 0.0005 ppm | 13.0168 ppm | 0.0016 ppm | 0.0004 ppm | 0.0006 ppm |
| Concentration per Run 2 | 8.6810 ppm | 0.0031 ppm | 0.0004 ppm | 12.5047 ppm | 0.0016 ppm | 0.0009 ppm | -0.0007 ppm |
| Concentration per Run 3 | 8.6999 ppm | 0.0028 ppm | 0.0005 ppm | 12.3756 ppm | 0.0017 ppm | 0.0002 ppm | 0.0005 ppm |
| Concentration RSD | 0.1 % | 6.6 % | 10.2 % | 2.7 % | 2.1 % | 70.3 % | 486.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0013 ppm | 10.0246 ppm | 0.0006 ppm | 0.0851 ppm | 0.0003 ppm | 0.0004 ppm | 0.0012 ppm |
| Concentration per Run 1 | -0.0015 ppm | 10.0457 ppm | 0.0001 ppm | 0.0876 ppm | 0.0005 ppm | 0.0005 ppm | 0.0011 ppm |
| Concentration per Run 2 | -0.0017 ppm | 10.0406 ppm | 0.0007 ppm | 0.0841 ppm | 0.0002 ppm | -0.0001 ppm | 0.0014 ppm |
| Concentration per Run 3 | -0.0008 ppm | 9.9876 ppm | 0.0008 ppm | 0.0837 ppm | 0.0002 ppm | 0.0007 ppm | 0.0012 ppm |
| Concentration RSD | 38.0 % | 0.3 % | 69.8 % | 2.5 % | 62.2 % | 112.1 % | 10.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0042 ppm | 101.4473 % | 99.7063 % | 100.2270 % | 102.1173 % | 99.6337 % | 102.1250 % |
| Concentration per Run 1 | 0.0042 ppm | 99.3660 % | 99.6769 % | 100.1980 % | 98.9883 % | 99.4583 % | 101.9812 % |
| Concentration per Run 2 | 0.0043 ppm | 101.9926 % | 100.1227 % | 100.2587 % | 102.8233 % | 99.6214 % | 102.6289 % |
| Concentration per Run 3 | 0.0042 ppm | 102.9832 % | 99.3192 % | 100.2244 % | 104.5404 % | 99.8213 % | 101.7649 % |
| Concentration RSD | 0.8 % | 1.8 % | 0.4 % | 0.0 % | 2.8 % | 0.2 % | 0.4 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039056-3 WG2039056
Analysis started at: 3/12/2025 3:01:02 PM
Comments <Comment>
Rack: 1
Vial: 36

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0509 ppm | 2.0705 ppm | 0.1112 ppm | 1.0279 ppm | 1.9982 ppm | 0.0522 ppm | 27.6477 ppm |
| Concentration per Run 1 | 0.0506 ppm | 2.1779 ppm | 0.1114 ppm | 1.0282 ppm | 2.0840 ppm | 0.0545 ppm | 28.8514 ppm |
| Concentration per Run 2 | 0.0513 ppm | 2.0397 ppm | 0.1118 ppm | 1.0293 ppm | 1.9774 ppm | 0.0517 ppm | 27.3281 ppm |
| Concentration per Run 3 | 0.0508 ppm | 1.9939 ppm | 0.1104 ppm | 1.0262 ppm | 1.9331 ppm | 0.0505 ppm | 26.7637 ppm |
| Concentration RSD | 0.6 % | 4.6 % | 0.6 % | 0.2 % | 3.9 % | 3.9 % | 3.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0534 ppm | 0.4995 ppm | 0.2048 ppm | 0.2550 ppm | 1.0696 ppm | 11.7860 ppm | 0.0016 ppm |
| Concentration per Run 1 | 0.0534 ppm | 0.4996 ppm | 0.2053 ppm | 0.2552 ppm | 1.1134 ppm | 12.2727 ppm | 0.0032 ppm |
| Concentration per Run 2 | 0.0535 ppm | 0.4999 ppm | 0.2051 ppm | 0.2552 ppm | 1.0589 ppm | 11.6834 ppm | 0.0010 ppm |
| Concentration per Run 3 | 0.0535 ppm | 0.4991 ppm | 0.2042 ppm | 0.2546 ppm | 1.0366 ppm | 11.4019 ppm | 0.0006 ppm |
| Concentration RSD | 0.1 % | 0.1 % | 0.3 % | 0.1 % | 3.7 % | 3.8 % | 86.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 18.4150 ppm | 0.5202 ppm | 0.9220 ppm | 23.2557 ppm | 0.5000 ppm | 0.5181 ppm | 0.4821 ppm |
| Concentration per Run 1 | 18.4416 ppm | 0.5430 ppm | 0.9124 ppm | 24.2449 ppm | 0.5000 ppm | 0.5192 ppm | 0.4782 ppm |
| Concentration per Run 2 | 18.4273 ppm | 0.5154 ppm | 0.9240 ppm | 23.0343 ppm | 0.5004 ppm | 0.5180 ppm | 0.4846 ppm |
| Concentration per Run 3 | 18.3762 ppm | 0.5022 ppm | 0.9295 ppm | 22.4880 ppm | 0.4997 ppm | 0.5171 ppm | 0.4836 ppm |
| Concentration RSD | 0.2 % | 4.0 % | 0.9 % | 3.9 % | 0.1 % | 0.2 % | 0.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1071 ppm | 11.0081 ppm | 0.9668 ppm | 1.0738 ppm | 0.9737 ppm | 0.1110 ppm | 0.5048 ppm |
| Concentration per Run 1 | 0.1046 ppm | 11.0215 ppm | 0.9652 ppm | 1.1193 ppm | 0.9743 ppm | 0.1101 ppm | 0.5057 ppm |
| Concentration per Run 2 | 0.1080 ppm | 11.0182 ppm | 0.9682 ppm | 1.0641 ppm | 0.9742 ppm | 0.1109 ppm | 0.5051 ppm |
| Concentration per Run 3 | 0.1087 ppm | 10.9846 ppm | 0.9669 ppm | 1.0381 ppm | 0.9727 ppm | 0.1119 ppm | 0.5035 ppm |
| Concentration RSD | 2.1 % | 0.2 % | 0.2 % | 3.9 % | 0.1 % | 0.8 % | 0.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5133 ppm | 95.7001 % | 98.4900 % | 99.9327 % | 98.0318 % | 98.8180 % | 101.5331 % |
| Concentration per Run 1 | 0.5128 ppm | 92.0606 % | 98.3730 % | 99.9682 % | 94.1393 % | 98.9057 % | 101.3389 % |
| Concentration per Run 2 | 0.5137 ppm | 96.8185 % | 98.4149 % | 99.8608 % | 98.9949 % | 98.7562 % | 101.4808 % |
| Concentration per Run 3 | 0.5133 ppm | 98.2214 % | 98.6822 % | 99.9690 % | 100.9613 % | 98.7921 % | 101.7796 % |
| Concentration RSD | 0.1 % | 3.4 % | 0.2 % | 0.1 % | 3.6 % | 0.1 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039056-4 WG2039056
Analysis started at: 3/12/2025 3:07:08 PM
Comments <Comment>
Rack: 1
Vial: 37

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0498 ppm | 1.9041 ppm | 0.1086 ppm | 1.0092 ppm | 1.8456 ppm | 0.0480 ppm | 25.7776 ppm |
| Concentration per Run 1 | 0.0500 ppm | 1.9203 ppm | 0.1093 ppm | 1.0097 ppm | 1.8524 ppm | 0.0482 ppm | 25.9141 ppm |
| Concentration per Run 2 | 0.0496 ppm | 1.8886 ppm | 0.1078 ppm | 1.0067 ppm | 1.8386 ppm | 0.0477 ppm | 25.6833 ppm |
| Concentration per Run 3 | 0.0499 ppm | 1.9035 ppm | 0.1087 ppm | 1.0112 ppm | 1.8458 ppm | 0.0480 ppm | 25.7352 ppm |
| Concentration RSD | 0.3 % | 0.8 % | 0.7 % | 0.2 % | 0.4 % | 0.5 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0525 ppm | 0.4907 ppm | 0.2023 ppm | 0.2512 ppm | 0.9879 ppm | 10.8376 ppm | 0.0019 ppm |
| Concentration per Run 1 | 0.0526 ppm | 0.4913 ppm | 0.2022 ppm | 0.2509 ppm | 0.9918 ppm | 10.9036 ppm | 0.0013 ppm |
| Concentration per Run 2 | 0.0523 ppm | 0.4894 ppm | 0.2023 ppm | 0.2513 ppm | 0.9853 ppm | 10.8162 ppm | 0.0019 ppm |
| Concentration per Run 3 | 0.0526 ppm | 0.4915 ppm | 0.2024 ppm | 0.2514 ppm | 0.9866 ppm | 10.7929 ppm | 0.0024 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 0.0 % | 0.1 % | 0.3 % | 0.5 % | 30.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 18.2135 ppm | 0.4795 ppm | 0.9086 ppm | 21.6108 ppm | 0.4904 ppm | 0.5076 ppm | 0.4843 ppm |
| Concentration per Run 1 | 18.1956 ppm | 0.4828 ppm | 0.9031 ppm | 21.7515 ppm | 0.4910 ppm | 0.5083 ppm | 0.4840 ppm |
| Concentration per Run 2 | 18.2275 ppm | 0.4776 ppm | 0.9059 ppm | 21.5276 ppm | 0.4895 ppm | 0.5062 ppm | 0.4816 ppm |
| Concentration per Run 3 | 18.2176 ppm | 0.4781 ppm | 0.9168 ppm | 21.5532 ppm | 0.4907 ppm | 0.5081 ppm | 0.4875 ppm |
| Concentration RSD | 0.1 % | 0.6 % | 0.8 % | 0.6 % | 0.2 % | 0.2 % | 0.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1085 ppm | 10.9496 ppm | 0.9530 ppm | 0.9865 ppm | 0.9573 ppm | 0.1090 ppm | 0.4985 ppm |
| Concentration per Run 1 | 0.1088 ppm | 10.9688 ppm | 0.9538 ppm | 0.9912 ppm | 0.9560 ppm | 0.1081 ppm | 0.4969 ppm |
| Concentration per Run 2 | 0.1087 ppm | 10.9195 ppm | 0.9511 ppm | 0.9830 ppm | 0.9581 ppm | 0.1095 ppm | 0.4999 ppm |
| Concentration per Run 3 | 0.1081 ppm | 10.9606 ppm | 0.9540 ppm | 0.9853 ppm | 0.9579 ppm | 0.1094 ppm | 0.4986 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 0.2 % | 0.4 % | 0.1 % | 0.7 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5030 ppm | 101.1921 % | 98.0622 % | 100.2627 % | 103.5120 % | 98.8775 % | 101.0202 % |
| Concentration per Run 1 | 0.5033 ppm | 101.0279 % | 98.0631 % | 100.3239 % | 102.1101 % | 98.7434 % | 100.9959 % |
| Concentration per Run 2 | 0.5020 ppm | 100.5158 % | 97.9791 % | 100.1685 % | 103.7244 % | 99.1536 % | 100.9274 % |
| Concentration per Run 3 | 0.5036 ppm | 102.0325 % | 98.1444 % | 100.2957 % | 104.7016 % | 98.7356 % | 101.1374 % |
| Concentration RSD | 0.2 % | 0.8 % | 0.1 % | 0.1 % | 1.3 % | 0.2 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039056-5 WG2039056
Analysis started at: 3/12/2025 3:13:12 PM
Comments <Comment>
Rack: 1
Vial: 38

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0415 ppm | 2.0177 ppm | 0.1200 ppm | 1.0309 ppm | 1.9432 ppm | 0.0508 ppm | 27.7185 ppm |
| Concentration per Run 1 | 0.0418 ppm | 2.0788 ppm | 0.1214 ppm | 1.0303 ppm | 2.0040 ppm | 0.0524 ppm | 28.6418 ppm |
| Concentration per Run 2 | 0.0412 ppm | 2.0167 ppm | 0.1198 ppm | 1.0307 ppm | 1.9383 ppm | 0.0506 ppm | 27.6542 ppm |
| Concentration per Run 3 | 0.0416 ppm | 1.9575 ppm | 0.1188 ppm | 1.0315 ppm | 1.8875 ppm | 0.0493 ppm | 26.8596 ppm |
| Concentration RSD | 0.8 % | 3.0 % | 1.1 % | 0.1 % | 3.0 % | 3.1 % | 3.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0526 ppm | 0.4884 ppm | 0.2007 ppm | 0.2484 ppm | 1.0482 ppm | 11.9223 ppm | 0.0016 ppm |
| Concentration per Run 1 | 0.0526 ppm | 0.4881 ppm | 0.2004 ppm | 0.2482 ppm | 1.0809 ppm | 12.3228 ppm | 0.0025 ppm |
| Concentration per Run 2 | 0.0526 ppm | 0.4882 ppm | 0.2012 ppm | 0.2483 ppm | 1.0486 ppm | 11.9025 ppm | 0.0016 ppm |
| Concentration per Run 3 | 0.0527 ppm | 0.4890 ppm | 0.2006 ppm | 0.2486 ppm | 1.0152 ppm | 11.5415 ppm | 0.0008 ppm |
| Concentration RSD | 0.1 % | 0.1 % | 0.2 % | 0.1 % | 3.1 % | 3.3 % | 54.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 18.3899 ppm | 0.5088 ppm | 0.9377 ppm | 23.3109 ppm | 0.4866 ppm | 0.5303 ppm | 0.4681 ppm |
| Concentration per Run 1 | 18.3966 ppm | 0.5253 ppm | 0.9288 ppm | 24.0712 ppm | 0.4872 ppm | 0.5302 ppm | 0.4655 ppm |
| Concentration per Run 2 | 18.4219 ppm | 0.5075 ppm | 0.9382 ppm | 23.2353 ppm | 0.4863 ppm | 0.5294 ppm | 0.4671 ppm |
| Concentration per Run 3 | 18.3512 ppm | 0.4936 ppm | 0.9459 ppm | 22.6260 ppm | 0.4864 ppm | 0.5313 ppm | 0.4717 ppm |
| Concentration RSD | 0.2 % | 3.1 % | 0.9 % | 3.1 % | 0.1 % | 0.2 % | 0.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1198 ppm | 10.5479 ppm | 0.9830 ppm | 1.0843 ppm | 0.9826 ppm | 0.1202 ppm | 0.4928 ppm |
| Concentration per Run 1 | 0.1210 ppm | 10.5405 ppm | 0.9821 ppm | 1.1186 ppm | 0.9834 ppm | 0.1204 ppm | 0.4928 ppm |
| Concentration per Run 2 | 0.1186 ppm | 10.5398 ppm | 0.9829 ppm | 1.0804 ppm | 0.9816 ppm | 0.1196 ppm | 0.4933 ppm |
| Concentration per Run 3 | 0.1198 ppm | 10.5634 ppm | 0.9840 ppm | 1.0539 ppm | 0.9827 ppm | 0.1207 ppm | 0.4921 ppm |
| Concentration RSD | 1.0 % | 0.1 % | 0.1 % | 3.0 % | 0.1 % | 0.5 % | 0.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5015 ppm | 95.0325 % | 97.6943 % | 100.3703 % | 96.8837 % | 98.6324 % | 101.0368 % |
| Concentration per Run 1 | 0.5017 ppm | 92.6030 % | 97.4677 % | 100.2664 % | 93.8292 % | 98.6787 % | 100.8306 % |
| Concentration per Run 2 | 0.5016 ppm | 94.7801 % | 97.8497 % | 100.5507 % | 96.7306 % | 98.7993 % | 101.1068 % |
| Concentration per Run 3 | 0.5013 ppm | 97.7143 % | 97.7656 % | 100.2940 % | 100.0913 % | 98.4190 % | 101.1729 % |
| Concentration RSD | 0.0 % | 2.7 % | 0.2 % | 0.2 % | 3.2 % | 0.2 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039056-6D5 WG2039056
Analysis started at: 3/12/2025 3:19:15 PM
Comments <Comment>
Rack: 1
Vial: 39

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0033 ppm | -0.0006 ppm | 0.0204 ppm | 0.0026 ppm | 0.0000 ppm | 3.4631 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0042 ppm | -0.0015 ppm | 0.0205 ppm | 0.0026 ppm | -0.0001 ppm | 3.4602 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0009 ppm | 0.0010 ppm | 0.0205 ppm | 0.0027 ppm | 0.0000 ppm | 3.4584 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0047 ppm | -0.0013 ppm | 0.0202 ppm | 0.0025 ppm | 0.0000 ppm | 3.4709 ppm |
| Concentration RSD | 76.2 % | 62.8 % | 223.7 % | 0.9 % | 4.3 % | 178.5 % | 0.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0003 ppm | -0.0003 ppm | 0.0049 ppm | 0.2766 ppm | 0.0011 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0001 ppm | 0.0003 ppm | -0.0003 ppm | 0.0045 ppm | 0.2984 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0002 ppm | 0.0002 ppm | -0.0006 ppm | 0.0054 ppm | 0.2611 ppm | 0.0017 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | 0.0005 ppm | 0.0000 ppm | 0.0047 ppm | 0.2704 ppm | 0.0012 ppm |
| Concentration RSD | 292.4 % | 223.8 % | 48.0 % | 90.0 % | 10.2 % | 7.0 % | 48.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.7552 ppm | 0.0011 ppm | 0.0069 ppm | 2.5186 ppm | 0.0002 ppm | 0.0009 ppm | 0.0090 ppm |
| Concentration per Run 1 | 1.7589 ppm | 0.0013 ppm | 0.0080 ppm | 2.5235 ppm | 0.0003 ppm | 0.0005 ppm | 0.0111 ppm |
| Concentration per Run 2 | 1.7497 ppm | 0.0011 ppm | 0.0068 ppm | 2.5208 ppm | 0.0001 ppm | 0.0016 ppm | 0.0088 ppm |
| Concentration per Run 3 | 1.7569 ppm | 0.0009 ppm | 0.0060 ppm | 2.5114 ppm | 0.0004 ppm | 0.0005 ppm | 0.0071 ppm |
| Concentration RSD | 0.3 % | 17.2 % | 15.2 % | 0.3 % | 58.0 % | 72.6 % | 21.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 1.9476 ppm | 0.0043 ppm | 0.0169 ppm | 0.0012 ppm | 0.0002 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0006 ppm | 1.9511 ppm | 0.0054 ppm | 0.0169 ppm | 0.0011 ppm | 0.0009 ppm | 0.0003 ppm |
| Concentration per Run 2 | -0.0010 ppm | 1.9487 ppm | 0.0040 ppm | 0.0170 ppm | 0.0015 ppm | -0.0005 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0002 ppm | 1.9431 ppm | 0.0035 ppm | 0.0169 ppm | 0.0010 ppm | 0.0001 ppm | 0.0002 ppm |
| Concentration RSD | 71.7 % | 0.2 % | 22.4 % | 0.4 % | 23.7 % | 426.8 % | 58.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 100.7786 % | 99.9168 % | 102.6120 % | 102.8426 % | 102.2683 % | 102.7239 % |
| Concentration per Run 1 | 0.0011 ppm | 100.2444 % | 99.7609 % | 102.7215 % | 102.2848 % | 102.2334 % | 102.5649 % |
| Concentration per Run 2 | 0.0010 ppm | 100.3749 % | 99.7388 % | 102.6174 % | 102.9957 % | 102.3037 % | 102.5081 % |
| Concentration per Run 3 | 0.0011 ppm | 101.7165 % | 100.2506 % | 102.4971 % | 103.2473 % | 102.2678 % | 103.0987 % |
| Concentration RSD | 3.8 % | 0.8 % | 0.3 % | 0.1 % | 0.5 % | 0.0 % | 0.3 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCV
Analysis started at: 3/12/2025 3:25:35 PM
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4818 ppm | 0.5010 ppm | 0.4784 ppm | 0.4744 ppm | 0.4805 ppm | 0.4958 ppm | 0.5108 ppm |
| Concentration per Run 1 | 0.4807 ppm | 0.5138 ppm | 0.4776 ppm | 0.4744 ppm | 0.4902 ppm | 0.5062 ppm | 0.5165 ppm |
| Concentration per Run 2 | 0.4827 ppm | 0.4977 ppm | 0.4793 ppm | 0.4743 ppm | 0.4790 ppm | 0.4945 ppm | 0.5134 ppm |
| Concentration per Run 3 | 0.4820 ppm | 0.4916 ppm | 0.4784 ppm | 0.4745 ppm | 0.4724 ppm | 0.4869 ppm | 0.5024 ppm |
| Recovery Percentage 1 | 96.362 % | 100.205 % | 95.689 % | 94.872 % | 96.108 % | 99.169 % | 102.151 % |
| Concentration RSD | 0.2 % | 2.3 % | 0.2 % | 0.0 % | 1.9 % | 2.0 % | 1.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4939 ppm | 0.5026 ppm | 0.5047 ppm | 0.4920 ppm | 0.5191 ppm | 5.0941 ppm | 0.4863 ppm |
| Concentration per Run 1 | 0.4941 ppm | 0.5033 ppm | 0.5034 ppm | 0.4915 ppm | 0.5275 ppm | 5.2165 ppm | 0.4955 ppm |
| Concentration per Run 2 | 0.4938 ppm | 0.5021 ppm | 0.5068 ppm | 0.4918 ppm | 0.5196 ppm | 5.0776 ppm | 0.4856 ppm |
| Concentration per Run 3 | 0.4938 ppm | 0.5024 ppm | 0.5040 ppm | 0.4928 ppm | 0.5102 ppm | 4.9882 ppm | 0.4778 ppm |
| Recovery Percentage 1 | 98.785 % | 100.524 % | 100.947 % | 98.405 % | 103.826 % | 101.883 % | 97.257 % |
| Concentration RSD | 0.0 % | 0.1 % | 0.4 % | 0.1 % | 1.7 % | 2.3 % | 1.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5033 ppm | 0.4953 ppm | 0.4847 ppm | 9.9522 ppm | 0.4959 ppm | 0.4972 ppm | 0.4971 ppm |
| Concentration per Run 1 | 0.4978 ppm | 0.5052 ppm | 0.4840 ppm | 10.1451 ppm | 0.4966 ppm | 0.4973 ppm | 0.4975 ppm |
| Concentration per Run 2 | 0.5081 ppm | 0.4942 ppm | 0.4846 ppm | 9.9284 ppm | 0.4953 ppm | 0.4971 ppm | 0.4972 ppm |
| Concentration per Run 3 | 0.5039 ppm | 0.4864 ppm | 0.4855 ppm | 9.7832 ppm | 0.4957 ppm | 0.4973 ppm | 0.4965 ppm |
| Recovery Percentage 1 | 100.652 % | 99.050 % | 96.940 % | 99.522 % | 99.175 % | 99.445 % | 99.412 % |
| Concentration RSD | 1.0 % | 1.9 % | 0.2 % | 1.8 % | 0.1 % | 0.0 % | 0.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4888 ppm | 5.4591 ppm | 0.4846 ppm | 0.4934 ppm | 0.4949 ppm | 0.5056 ppm | 0.4910 ppm |
| Concentration per Run 1 | 0.4876 ppm | 5.4617 ppm | 0.4864 ppm | 0.5033 ppm | 0.4941 ppm | 0.5066 ppm | 0.4895 ppm |
| Concentration per Run 2 | 0.4877 ppm | 5.4548 ppm | 0.4827 ppm | 0.4918 ppm | 0.4957 ppm | 0.5052 ppm | 0.4921 ppm |
| Concentration per Run 3 | 0.4910 ppm | 5.4606 ppm | 0.4846 ppm | 0.4852 ppm | 0.4950 ppm | 0.5050 ppm | 0.4915 ppm |
| Recovery Percentage 1 | 97.753 % | 103.982 % | 96.911 % | 98.687 % | 98.985 % | 101.121 % | 98.209 % |
| Concentration RSD | 0.4 % | 0.1 % | 0.4 % | 1.9 % | 0.2 % | 0.2 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4980 ppm | 94.7788 % | 98.5115 % | 101.7995 % | 97.5295 % | 100.6527 % | 101.5882 % |
| Concentration per Run 1 | 0.4986 ppm | 93.0180 % | 98.6650 % | 101.5951 % | 95.5798 % | 100.5699 % | 102.0330 % |
| Concentration per Run 2 | 0.4979 ppm | 94.9003 % | 97.9597 % | 101.8101 % | 97.6816 % | 100.6319 % | 101.0282 % |
| Concentration per Run 3 | 0.4977 ppm | 96.4182 % | 98.9097 % | 101.9933 % | 99.3272 % | 100.7563 % | 101.7035 % |
| Recovery Percentage 1 | 99.609 % | | | | | | |
| Concentration RSD | 0.1 % | 1.8 % | 0.5 % | 0.2 % | 1.9 % | 0.1 % | 0.5 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCB
Analysis started at: 3/12/2025 3:31:42 PM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0015 ppm | -0.0005 ppm | 0.0026 ppm | 0.0001 ppm | 0.0000 ppm | 0.0068 ppm |
| Concentration per Run 1 | -0.0003 ppm | -0.0034 ppm | 0.0004 ppm | 0.0028 ppm | 0.0001 ppm | 0.0000 ppm | 0.0074 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0024 ppm | 0.0005 ppm | 0.0021 ppm | 0.0001 ppm | 0.0000 ppm | 0.0060 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0055 ppm | -0.0024 ppm | 0.0028 ppm | 0.0001 ppm | 0.0000 ppm | 0.0072 ppm |
| Recovery Percentage 1 | 0.106 % | 1.511 % | -9.954 % | 8.554 % | 0.902 % | -0.134 % | 6.848 % |
| Concentration RSD | 5,909.5 % | 298.6 % | 323.7 % | 15.4 % | 24.5 % | 550.1 % | 11.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | -0.0001 ppm | 0.0023 ppm | 0.0027 ppm | 0.0007 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | 0.0003 ppm | 0.0009 ppm | 0.0171 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | -0.0001 ppm | -0.0004 ppm | 0.0026 ppm | -0.0245 ppm | -0.0006 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | -0.0003 ppm | -0.0002 ppm | 0.0033 ppm | 0.0154 ppm | 0.0017 ppm |
| Recovery Percentage 1 | 0.598 % | 0.040 % | -0.692 % | -1.172 % | 4.521 % | 0.107 % | 6.609 % |
| Concentration RSD | 87.3 % | 1,193.4 % | 289.9 % | 331.5 % | 56.0 % | 882.2 % | 174.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0011 ppm | 0.0003 ppm | 0.0018 ppm | 0.0387 ppm | 0.0000 ppm | 0.0002 ppm | 0.0016 ppm |
| Concentration per Run 1 | -0.0026 ppm | 0.0002 ppm | 0.0020 ppm | 0.0412 ppm | 0.0000 ppm | 0.0002 ppm | 0.0014 ppm |
| Concentration per Run 2 | -0.0008 ppm | 0.0002 ppm | 0.0020 ppm | 0.0406 ppm | -0.0002 ppm | 0.0000 ppm | 0.0022 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0005 ppm | 0.0015 ppm | 0.0343 ppm | 0.0001 ppm | 0.0003 ppm | 0.0012 ppm |
| Recovery Percentage 1 | -1.148 % | 2.785 % | 3.621 % | 1.936 % | -0.114 % | 1.973 % | 3.188 % |
| Concentration RSD | 117.2 % | 69.9 % | 16.4 % | 9.8 % | 457.0 % | 74.0 % | 33.0 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0003 ppm | 0.0014 ppm | 0.0001 ppm | 0.0003 ppm | 0.0011 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0027 ppm | 0.0003 ppm | 0.0016 ppm | 0.0001 ppm | 0.0003 ppm | -0.0003 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0004 ppm | 0.0010 ppm | 0.0000 ppm | 0.0003 ppm | 0.0019 ppm | -0.0003 ppm |
| Concentration per Run 3 | -0.0018 ppm | 0.0002 ppm | 0.0017 ppm | 0.0002 ppm | 0.0004 ppm | 0.0018 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 5.127 % | 0.052 % | 2.838 % | 0.948 % | 3.189 % | 5.546 % | -1.307 % |
| Concentration RSD | 445.2 % | 41.6 % | 27.5 % | 88.6 % | 19.5 % | 108.8 % | 113.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 95.5722 % | 100.0342 % | 103.0879 % | 96.7001 % | 102.1250 % | 101.4701 % |
| Concentration per Run 1 | 0.0010 ppm | 93.1261 % | 99.0406 % | 103.1699 % | 93.8881 % | 102.2107 % | 100.5603 % |
| Concentration per Run 2 | 0.0010 ppm | 96.3400 % | 100.8003 % | 103.1602 % | 97.6504 % | 102.2306 % | 102.2109 % |
| Concentration per Run 3 | 0.0010 ppm | 97.2503 % | 100.2616 % | 102.9336 % | 98.5619 % | 101.9336 % | 101.6390 % |
| Recovery Percentage 1 | 19.893 % | | | | | | |
| Concentration RSD | 1.3 % | 2.3 % | 0.9 % | 0.1 % | 2.6 % | 0.2 % | 0.8 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039065-1 WG2039065
Analysis started at: 3/12/2025 3:42:13 PM
Comments <Comment>
Rack: 1
Vial: 50

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0016 ppm | -0.0009 ppm | 0.0016 ppm | 0.0000 ppm | 0.0000 ppm | 0.1426 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0049 ppm | -0.0007 ppm | 0.0017 ppm | 0.0000 ppm | 0.0000 ppm | 0.1542 ppm |
| Concentration per Run 2 | -0.0003 ppm | -0.0002 ppm | -0.0010 ppm | 0.0012 ppm | 0.0001 ppm | 0.0000 ppm | 0.1404 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0000 ppm | -0.0011 ppm | 0.0018 ppm | 0.0000 ppm | 0.0000 ppm | 0.1333 ppm |
| Recovery Percentage 1 | -2.042 % | 1.582 % | -18.490 % | 5.267 % | 0.466 % | -0.080 % | 142.642 % |
| Concentration RSD | 92.4 % | 182.2 % | 26.5 % | 19.2 % | 178.0 % | 1,152.4 % | 7.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | -0.0004 ppm | 0.0009 ppm | -0.0118 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | -0.0001 ppm | -0.0003 ppm | 0.0002 ppm | 0.0112 ppm | -0.0006 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | -0.0005 ppm | 0.0013 ppm | -0.0242 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0003 ppm | -0.0004 ppm | 0.0012 ppm | -0.0224 ppm | 0.0003 ppm |
| Recovery Percentage 1 | 0.277 % | 0.231 % | 0.893 % | -3.831 % | 1.812 % | -0.471 % | 2.034 % |
| Concentration RSD | 184.5 % | 121.7 % | 228.3 % | 31.1 % | 64.5 % | 169.6 % | 356.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0007 ppm | 0.0005 ppm | -0.0152 ppm | -0.0001 ppm | 0.0004 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0007 ppm | 0.0005 ppm | -0.0166 ppm | -0.0001 ppm | 0.0001 ppm | -0.0010 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0006 ppm | 0.0005 ppm | -0.0139 ppm | -0.0003 ppm | 0.0002 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0008 ppm | 0.0003 ppm | -0.0152 ppm | 0.0000 ppm | 0.0008 ppm | 0.0002 ppm |
| Recovery Percentage 1 | 0.144 % | 7.227 % | 0.908 % | -0.760 % | -0.497 % | 3.697 % | -0.337 % |
| Concentration RSD | 94.8 % | 13.9 % | 20.2 % | 9.0 % | 131.5 % | 100.2 % | 423.0 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | 0.0041 ppm | 0.0006 ppm | 0.0000 ppm | 0.0000 ppm | 0.0004 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0037 ppm | 0.0007 ppm | 0.0000 ppm | 0.0003 ppm | 0.0002 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0047 ppm | 0.0004 ppm | 0.0000 ppm | 0.0002 ppm | 0.0003 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0032 ppm | 0.0040 ppm | 0.0008 ppm | 0.0000 ppm | -0.0004 ppm | 0.0008 ppm | -0.0002 ppm |
| Recovery Percentage 1 | -8.555 % | 0.821 % | 1.278 % | 0.190 % | 0.413 % | 2.094 % | -0.805 % |
| Concentration RSD | 244.2 % | 12.0 % | 30.7 % | 20.5 % | 898.3 % | 83.0 % | 120.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 97.1663 % | 102.3353 % | 105.0524 % | 97.5690 % | 104.4136 % | 103.6700 % |
| Concentration per Run 1 | 0.0004 ppm | 93.8131 % | 102.5218 % | 104.9911 % | 93.5502 % | 104.4249 % | 103.7914 % |
| Concentration per Run 2 | 0.0002 ppm | 97.8508 % | 102.2447 % | 104.9888 % | 98.2597 % | 104.0862 % | 103.6829 % |
| Concentration per Run 3 | 0.0003 ppm | 99.8351 % | 102.2396 % | 105.1773 % | 100.8972 % | 104.7297 % | 103.5356 % |
| Recovery Percentage 1 | 5.656 % | | | | | | |
| Concentration RSD | 30.6 % | 3.2 % | 0.2 % | 0.1 % | 3.8 % | 0.3 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039065-2 WG2039065
Analysis started at: 3/12/2025 3:48:37 PM
Comments <Comment>
Rack: 1
Vial: 51

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0505 ppm | 2.0513 ppm | 0.1087 ppm | 0.9140 ppm | 1.9824 ppm | 0.0506 ppm | 10.0944 ppm |
| Concentration per Run 1 | 0.0506 ppm | 2.0854 ppm | 0.1093 ppm | 0.9144 ppm | 2.0151 ppm | 0.0515 ppm | 10.2871 ppm |
| Concentration per Run 2 | 0.0507 ppm | 2.0487 ppm | 0.1088 ppm | 0.9157 ppm | 1.9818 ppm | 0.0506 ppm | 10.0651 ppm |
| Concentration per Run 3 | 0.0502 ppm | 2.0199 ppm | 0.1079 ppm | 0.9118 ppm | 1.9504 ppm | 0.0498 ppm | 9.9311 ppm |
| Concentration RSD | 0.5 % | 1.6 % | 0.7 % | 0.2 % | 1.6 % | 1.7 % | 1.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0533 ppm | 0.4985 ppm | 0.2062 ppm | 0.2556 ppm | 1.0551 ppm | 10.2026 ppm | 0.0007 ppm |
| Concentration per Run 1 | 0.0533 ppm | 0.4987 ppm | 0.2066 ppm | 0.2563 ppm | 1.0732 ppm | 10.3939 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0534 ppm | 0.4993 ppm | 0.2062 ppm | 0.2557 ppm | 1.0551 ppm | 10.1908 ppm | 0.0010 ppm |
| Concentration per Run 3 | 0.0533 ppm | 0.4974 ppm | 0.2058 ppm | 0.2548 ppm | 1.0371 ppm | 10.0231 ppm | 0.0007 ppm |
| Concentration RSD | 0.1 % | 0.2 % | 0.2 % | 0.3 % | 1.7 % | 1.8 % | 37.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.9355 ppm | 0.5111 ppm | 0.9317 ppm | 10.1917 ppm | 0.4937 ppm | 0.5166 ppm | 0.4714 ppm |
| Concentration per Run 1 | 9.9369 ppm | 0.5196 ppm | 0.9234 ppm | 10.3721 ppm | 0.4938 ppm | 0.5179 ppm | 0.4680 ppm |
| Concentration per Run 2 | 9.9352 ppm | 0.5103 ppm | 0.9354 ppm | 10.1953 ppm | 0.4943 ppm | 0.5171 ppm | 0.4726 ppm |
| Concentration per Run 3 | 9.9342 ppm | 0.5035 ppm | 0.9363 ppm | 10.0077 ppm | 0.4930 ppm | 0.5148 ppm | 0.4735 ppm |
| Concentration RSD | 0.0 % | 1.6 % | 0.8 % | 1.8 % | 0.1 % | 0.3 % | 0.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1110 ppm | 1.0759 ppm | 0.9496 ppm | 0.9766 ppm | 0.9744 ppm | 0.1124 ppm | 0.5045 ppm |
| Concentration per Run 1 | 0.1122 ppm | 1.0767 ppm | 0.9505 ppm | 0.9922 ppm | 0.9762 ppm | 0.1116 ppm | 0.5045 ppm |
| Concentration per Run 2 | 0.1094 ppm | 1.0773 ppm | 0.9495 ppm | 0.9775 ppm | 0.9748 ppm | 0.1132 ppm | 0.5058 ppm |
| Concentration per Run 3 | 0.1113 ppm | 1.0737 ppm | 0.9489 ppm | 0.9602 ppm | 0.9722 ppm | 0.1125 ppm | 0.5032 ppm |
| Concentration RSD | 1.3 % | 0.2 % | 0.1 % | 1.6 % | 0.2 % | 0.7 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5017 ppm | 95.2361 % | 99.1510 % | 102.8813 % | 98.0895 % | 101.2237 % | 102.3009 % |
| Concentration per Run 1 | 0.5018 ppm | 93.5172 % | 98.9759 % | 102.9503 % | 95.8433 % | 101.2343 % | 102.1599 % |
| Concentration per Run 2 | 0.5028 ppm | 95.3188 % | 99.3575 % | 102.7929 % | 98.5745 % | 101.0366 % | 102.3854 % |
| Concentration per Run 3 | 0.5004 ppm | 96.8721 % | 99.1195 % | 102.9007 % | 99.8506 % | 101.4003 % | 102.3573 % |
| Concentration RSD | 0.2 % | 1.8 % | 0.2 % | 0.1 % | 2.1 % | 0.2 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039065-3 WG2039065
Analysis started at: 3/12/2025 3:54:49 PM
Comments <Comment>
Rack: 1
Vial: 52

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0496 ppm | 2.0211 ppm | 0.1086 ppm | 0.9101 ppm | 1.9547 ppm | 0.0497 ppm | 9.9727 ppm |
| Concentration per Run 1 | 0.0501 ppm | 2.0615 ppm | 0.1071 ppm | 0.9097 ppm | 1.9920 ppm | 0.0506 ppm | 10.1599 ppm |
| Concentration per Run 2 | 0.0495 ppm | 2.0204 ppm | 0.1098 ppm | 0.9115 ppm | 1.9543 ppm | 0.0497 ppm | 9.9915 ppm |
| Concentration per Run 3 | 0.0493 ppm | 1.9815 ppm | 0.1089 ppm | 0.9090 ppm | 1.9178 ppm | 0.0487 ppm | 9.7669 ppm |
| Concentration RSD | 0.9 % | 2.0 % | 1.3 % | 0.1 % | 1.9 % | 1.9 % | 2.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0531 ppm | 0.4962 ppm | 0.2051 ppm | 0.2543 ppm | 1.0422 ppm | 9.9944 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0531 ppm | 0.4957 ppm | 0.2054 ppm | 0.2543 ppm | 1.0600 ppm | 10.1862 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0532 ppm | 0.4967 ppm | 0.2045 ppm | 0.2541 ppm | 1.0417 ppm | 10.0175 ppm | -0.0005 ppm |
| Concentration per Run 3 | 0.0530 ppm | 0.4961 ppm | 0.2054 ppm | 0.2544 ppm | 1.0249 ppm | 9.7795 ppm | -0.0003 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 0.3 % | 0.1 % | 1.7 % | 2.0 % | 1,125.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.8794 ppm | 0.5019 ppm | 0.9280 ppm | 10.0146 ppm | 0.4912 ppm | 0.5135 ppm | 0.4741 ppm |
| Concentration per Run 1 | 9.8704 ppm | 0.5118 ppm | 0.9210 ppm | 10.2097 ppm | 0.4914 ppm | 0.5133 ppm | 0.4709 ppm |
| Concentration per Run 2 | 9.8831 ppm | 0.5018 ppm | 0.9301 ppm | 10.0119 ppm | 0.4923 ppm | 0.5140 ppm | 0.4752 ppm |
| Concentration per Run 3 | 9.8848 ppm | 0.4922 ppm | 0.9329 ppm | 9.8223 ppm | 0.4898 ppm | 0.5132 ppm | 0.4763 ppm |
| Concentration RSD | 0.1 % | 2.0 % | 0.7 % | 1.9 % | 0.3 % | 0.1 % | 0.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1099 ppm | 1.0716 ppm | 0.9481 ppm | 0.9588 ppm | 0.9664 ppm | 0.1101 ppm | 0.5006 ppm |
| Concentration per Run 1 | 0.1111 ppm | 1.0724 ppm | 0.9471 ppm | 0.9780 ppm | 0.9666 ppm | 0.1109 ppm | 0.5006 ppm |
| Concentration per Run 2 | 0.1096 ppm | 1.0738 ppm | 0.9502 ppm | 0.9584 ppm | 0.9657 ppm | 0.1100 ppm | 0.5000 ppm |
| Concentration per Run 3 | 0.1091 ppm | 1.0685 ppm | 0.9469 ppm | 0.9400 ppm | 0.9671 ppm | 0.1093 ppm | 0.5011 ppm |
| Concentration RSD | 0.9 % | 0.3 % | 0.2 % | 2.0 % | 0.1 % | 0.7 % | 0.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5008 ppm | 95.8546 % | 99.5367 % | 103.3776 % | 98.9936 % | 101.4221 % | 102.6709 % |
| Concentration per Run 1 | 0.5004 ppm | 92.9529 % | 99.7443 % | 103.2962 % | 96.3604 % | 101.5405 % | 102.8705 % |
| Concentration per Run 2 | 0.5019 ppm | 96.4708 % | 99.3595 % | 103.2204 % | 99.1456 % | 101.2378 % | 102.5705 % |
| Concentration per Run 3 | 0.5002 ppm | 98.1402 % | 99.5064 % | 103.6163 % | 101.4748 % | 101.4879 % | 102.5716 % |
| Concentration RSD | 0.2 % | 2.8 % | 0.2 % | 0.2 % | 2.6 % | 0.2 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512018-01 WG2039065
Analysis started at: 3/12/2025 4:00:54 PM
Comments <Comment>
Rack: 1
Vial: 53

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.1245 ppm | 0.0122 ppm | 3.4511 ppm | 0.0370 ppm | 0.0000 ppm | 19.0335 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.1187 ppm | 0.0130 ppm | 3.4596 ppm | 0.0380 ppm | 0.0000 ppm | 19.4889 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.1342 ppm | 0.0114 ppm | 3.4469 ppm | 0.0367 ppm | 0.0000 ppm | 18.9529 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.1207 ppm | 0.0122 ppm | 3.4468 ppm | 0.0362 ppm | 0.0001 ppm | 18.6587 ppm |
| Concentration RSD | 100.6 % | 6.7 % | 6.9 % | 0.2 % | 2.5 % | 3,047.7 % | 2.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0159 ppm | 0.0695 ppm | 0.0026 ppm | 1.1565 ppm | 107.5733 ppm | 0.0198 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0160 ppm | 0.0697 ppm | 0.0026 ppm | 1.1783 ppm | 110.3383 ppm | 0.0192 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0160 ppm | 0.0695 ppm | 0.0028 ppm | 1.1491 ppm | 107.0562 ppm | 0.0199 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0157 ppm | 0.0692 ppm | 0.0026 ppm | 1.1419 ppm | 105.3255 ppm | 0.0203 ppm |
| Concentration RSD | 28.1 % | 0.9 % | 0.4 % | 3.9 % | 1.7 % | 2.4 % | 2.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 19.6651 ppm | 0.0713 ppm | 0.0062 ppm | 416.4549 ppm | 0.0630 ppm | 0.0012 ppm | 0.0061 ppm |
| Concentration per Run 1 | 19.6659 ppm | 0.0730 ppm | 0.0068 ppm | 432.1036 ppm | 0.0632 ppm | 0.0011 ppm | 0.0058 ppm |
| Concentration per Run 2 | 19.6691 ppm | 0.0706 ppm | 0.0061 ppm | 413.9468 ppm | 0.0629 ppm | 0.0010 ppm | 0.0062 ppm |
| Concentration per Run 3 | 19.6604 ppm | 0.0702 ppm | 0.0056 ppm | 403.3142 ppm | 0.0628 ppm | 0.0015 ppm | 0.0062 ppm |
| Concentration RSD | 0.0 % | 2.2 % | 10.4 % | 3.5 % | 0.3 % | 24.0 % | 3.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0027 ppm | 4.4848 ppm | 0.0208 ppm | 0.1578 ppm | 0.1371 ppm | -0.0008 ppm | 0.0344 ppm |
| Concentration per Run 1 | -0.0047 ppm | 4.4979 ppm | 0.0209 ppm | 0.1613 ppm | 0.1372 ppm | -0.0006 ppm | 0.0347 ppm |
| Concentration per Run 2 | -0.0007 ppm | 4.4759 ppm | 0.0209 ppm | 0.1572 ppm | 0.1370 ppm | -0.0009 ppm | 0.0344 ppm |
| Concentration per Run 3 | -0.0027 ppm | 4.4806 ppm | 0.0205 ppm | 0.1550 ppm | 0.1372 ppm | -0.0009 ppm | 0.0343 ppm |
| Concentration RSD | 75.0 % | 0.3 % | 1.0 % | 2.0 % | 0.1 % | 18.5 % | 0.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0096 ppm | 95.0502 % | 90.8418 % | 96.2565 % | 97.8459 % | 89.4516 % | 94.0053 % |
| Concentration per Run 1 | 0.0097 ppm | 94.0855 % | 90.7416 % | 96.1835 % | 95.8831 % | 89.2972 % | 93.9184 % |
| Concentration per Run 2 | 0.0097 ppm | 95.0160 % | 90.9124 % | 96.2380 % | 98.0054 % | 89.4787 % | 93.9539 % |
| Concentration per Run 3 | 0.0096 ppm | 96.0491 % | 90.8712 % | 96.3481 % | 99.6492 % | 89.5790 % | 94.1438 % |
| Concentration RSD | 0.8 % | 1.0 % | 0.1 % | 0.1 % | 1.9 % | 0.2 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2510636-02D5 WG2036123
Analysis started at: 3/12/2025 4:07:16 PM
Comments <Comment>
Rack: 1
Vial: 48

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0252 ppm | 0.0009 ppm | 0.0112 ppm | 0.0413 ppm | 0.0000 ppm | 15.4948 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0240 ppm | -0.0006 ppm | 0.0117 ppm | 0.0422 ppm | 0.0000 ppm | 15.8844 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0262 ppm | 0.0023 ppm | 0.0111 ppm | 0.0412 ppm | 0.0001 ppm | 15.4492 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0256 ppm | 0.0009 ppm | 0.0109 ppm | 0.0405 ppm | 0.0001 ppm | 15.1509 ppm |
| Concentration RSD | 30.0 % | 4.5 % | 167.0 % | 3.6 % | 2.2 % | 92.7 % | 2.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0011 ppm | 0.0001 ppm | 0.0005 ppm | 0.0063 ppm | 2.1625 ppm | 0.0043 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0012 ppm | 0.0000 ppm | 0.0006 ppm | 0.0058 ppm | 2.2053 ppm | 0.0047 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0011 ppm | 0.0001 ppm | 0.0005 ppm | 0.0080 ppm | 2.1678 ppm | 0.0053 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0011 ppm | 0.0002 ppm | 0.0006 ppm | 0.0052 ppm | 2.1145 ppm | 0.0031 ppm |
| Concentration RSD | 6.9 % | 4.9 % | 104.3 % | 6.2 % | 23.3 % | 2.1 % | 26.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.7654 ppm | 0.1661 ppm | 0.0018 ppm | 225.9475 ppm | 0.0012 ppm | 0.0027 ppm | 0.0033 ppm |
| Concentration per Run 1 | 1.7675 ppm | 0.1695 ppm | 0.0020 ppm | 234.9806 ppm | 0.0011 ppm | 0.0025 ppm | 0.0049 ppm |
| Concentration per Run 2 | 1.7580 ppm | 0.1655 ppm | 0.0018 ppm | 226.1450 ppm | 0.0010 ppm | 0.0030 ppm | 0.0027 ppm |
| Concentration per Run 3 | 1.7707 ppm | 0.1633 ppm | 0.0016 ppm | 216.7168 ppm | 0.0016 ppm | 0.0027 ppm | 0.0024 ppm |
| Concentration RSD | 0.4 % | 1.9 % | 10.6 % | 4.0 % | 26.0 % | 9.4 % | 40.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0024 ppm | 1.3052 ppm | 0.0013 ppm | 0.0883 ppm | 0.0006 ppm | 0.0009 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0006 ppm | 1.3068 ppm | 0.0021 ppm | 0.0904 ppm | 0.0008 ppm | 0.0014 ppm | 0.0004 ppm |
| Concentration per Run 2 | -0.0011 ppm | 1.3034 ppm | 0.0013 ppm | 0.0879 ppm | 0.0004 ppm | 0.0011 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0053 ppm | 1.3052 ppm | 0.0006 ppm | 0.0865 ppm | 0.0005 ppm | 0.0003 ppm | 0.0000 ppm |
| Concentration RSD | 110.8 % | 0.1 % | 56.2 % | 2.3 % | 29.7 % | 64.4 % | 148.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0032 ppm | 94.9741 % | 93.7170 % | 99.0840 % | 98.1371 % | 94.4751 % | 97.2570 % |
| Concentration per Run 1 | 0.0033 ppm | 93.3253 % | 93.6700 % | 99.2823 % | 96.2080 % | 94.7052 % | 97.2906 % |
| Concentration per Run 2 | 0.0032 ppm | 95.2041 % | 93.8814 % | 98.9521 % | 98.3328 % | 94.3905 % | 97.3836 % |
| Concentration per Run 3 | 0.0031 ppm | 96.3927 % | 93.5995 % | 99.0175 % | 99.8705 % | 94.3296 % | 97.0967 % |
| Concentration RSD | 3.8 % | 1.6 % | 0.2 % | 0.2 % | 1.9 % | 0.2 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2510636-03D5 WG2036123
Analysis started at: 3/12/2025 4:13:46 PM
Comments <Comment>
Rack: 1
Vial: 49

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0284 ppm | 0.0002 ppm | 0.0089 ppm | 0.0412 ppm | 0.0001 ppm | 15.5318 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0311 ppm | 0.0009 ppm | 0.0091 ppm | 0.0419 ppm | 0.0000 ppm | 15.7927 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0245 ppm | 0.0001 ppm | 0.0090 ppm | 0.0411 ppm | 0.0001 ppm | 15.5276 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0295 ppm | -0.0003 ppm | 0.0087 ppm | 0.0406 ppm | 0.0001 ppm | 15.2752 ppm |
| Concentration RSD | 99.4 % | 12.2 % | 252.6 % | 2.7 % | 1.7 % | 35.5 % | 1.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 0.0010 ppm | 0.0001 ppm | 0.0006 ppm | 0.0045 ppm | 2.0876 ppm | 0.0043 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0011 ppm | 0.0001 ppm | 0.0006 ppm | 0.0043 ppm | 2.1254 ppm | 0.0039 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0010 ppm | -0.0001 ppm | 0.0006 ppm | 0.0051 ppm | 2.0644 ppm | 0.0048 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0009 ppm | 0.0002 ppm | 0.0007 ppm | 0.0040 ppm | 2.0729 ppm | 0.0042 ppm |
| Concentration RSD | 1.6 % | 9.1 % | 243.0 % | 8.0 % | 13.2 % | 1.6 % | 10.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.7688 ppm | 0.1670 ppm | 0.0008 ppm | 225.3666 ppm | 0.0012 ppm | 0.0022 ppm | 0.0016 ppm |
| Concentration per Run 1 | 1.7800 ppm | 0.1696 ppm | 0.0007 ppm | 231.8580 ppm | 0.0012 ppm | 0.0028 ppm | 0.0012 ppm |
| Concentration per Run 2 | 1.7637 ppm | 0.1666 ppm | 0.0009 ppm | 224.5871 ppm | 0.0013 ppm | 0.0026 ppm | 0.0012 ppm |
| Concentration per Run 3 | 1.7627 ppm | 0.1647 ppm | 0.0008 ppm | 219.6545 ppm | 0.0012 ppm | 0.0012 ppm | 0.0025 ppm |
| Concentration RSD | 0.5 % | 1.5 % | 9.8 % | 2.7 % | 6.6 % | 38.9 % | 47.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0021 ppm | 1.2780 ppm | 0.0006 ppm | 0.0883 ppm | 0.0003 ppm | -0.0005 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0016 ppm | 1.2856 ppm | 0.0009 ppm | 0.0898 ppm | 0.0006 ppm | -0.0013 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0020 ppm | 1.2766 ppm | 0.0005 ppm | 0.0880 ppm | 0.0003 ppm | -0.0001 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0028 ppm | 1.2717 ppm | 0.0003 ppm | 0.0869 ppm | 0.0001 ppm | -0.0002 ppm | 0.0001 ppm |
| Concentration RSD | 27.8 % | 0.5 % | 51.2 % | 1.7 % | 83.8 % | 127.6 % | 14.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0032 ppm | 95.0231 % | 93.2750 % | 99.2035 % | 98.5690 % | 94.5611 % | 96.6626 % |
| Concentration per Run 1 | 0.0032 ppm | 93.9106 % | 93.0547 % | 99.1138 % | 97.2747 % | 94.4783 % | 96.5000 % |
| Concentration per Run 2 | 0.0032 ppm | 94.9075 % | 93.5227 % | 99.3421 % | 98.5963 % | 94.7468 % | 96.8702 % |
| Concentration per Run 3 | 0.0032 ppm | 96.2511 % | 93.2477 % | 99.1546 % | 99.8359 % | 94.4582 % | 96.6175 % |
| Concentration RSD | 0.5 % | 1.2 % | 0.3 % | 0.1 % | 1.3 % | 0.2 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512069-04d2 WG2037739
Analysis started at: 3/12/2025 4:24:11 PM
Comments <Comment>
Rack: 1
Vial: 57

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | 87.0495 ppm | 0.0632 ppm | 0.0092 ppm | 0.6315 ppm | 0.0055 ppm | 9.6222 ppm |
| Concentration per Run 1 | 0.0021 ppm | 86.8721 ppm | 0.0630 ppm | 0.0092 ppm | 0.6295 ppm | 0.0055 ppm | 9.6301 ppm |
| Concentration per Run 2 | 0.0023 ppm | 87.4304 ppm | 0.0645 ppm | 0.0097 ppm | 0.6346 ppm | 0.0055 ppm | 9.6558 ppm |
| Concentration per Run 3 | 0.0021 ppm | 86.8459 ppm | 0.0621 ppm | 0.0087 ppm | 0.6305 ppm | 0.0055 ppm | 9.5807 ppm |
| Concentration RSD | 5.0 % | 0.4 % | 2.0 % | 5.1 % | 0.4 % | 0.4 % | 0.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0017 ppm | 0.0324 ppm | 0.1229 ppm | 0.0672 ppm | 131.7158 ppm | 4.3076 ppm | 0.0485 ppm |
| Concentration per Run 1 | -0.0016 ppm | 0.0329 ppm | 0.1240 ppm | 0.0676 ppm | 131.2177 ppm | 4.3195 ppm | 0.0487 ppm |
| Concentration per Run 2 | -0.0017 ppm | 0.0322 ppm | 0.1230 ppm | 0.0675 ppm | 132.1042 ppm | 4.3300 ppm | 0.0484 ppm |
| Concentration per Run 3 | -0.0018 ppm | 0.0321 ppm | 0.1218 ppm | 0.0665 ppm | 131.8253 ppm | 4.2732 ppm | 0.0485 ppm |
| Concentration RSD | 5.6 % | 1.3 % | 0.9 % | 0.9 % | 0.3 % | 0.7 % | 0.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.4532 ppm | 2.2524 ppm | 0.0035 ppm | 0.3470 ppm | 0.0508 ppm | 0.1561 ppm | 0.0053 ppm |
| Concentration per Run 1 | 8.5333 ppm | 2.2488 ppm | 0.0036 ppm | 0.3590 ppm | 0.0517 ppm | 0.1587 ppm | 0.0052 ppm |
| Concentration per Run 2 | 8.4588 ppm | 2.2598 ppm | 0.0036 ppm | 0.3439 ppm | 0.0508 ppm | 0.1552 ppm | 0.0058 ppm |
| Concentration per Run 3 | 8.3675 ppm | 2.2487 ppm | 0.0032 ppm | 0.3382 ppm | 0.0500 ppm | 0.1543 ppm | 0.0050 ppm |
| Concentration RSD | 1.0 % | 0.3 % | 5.5 % | 3.1 % | 1.6 % | 1.5 % | 7.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0093 ppm | 4.9847 ppm | 0.0099 ppm | 0.0281 ppm | 1.0264 ppm | 0.0128 ppm | 0.1985 ppm |
| Concentration per Run 1 | 0.0100 ppm | 5.0554 ppm | 0.0104 ppm | 0.0281 ppm | 1.0356 ppm | 0.0129 ppm | 0.2003 ppm |
| Concentration per Run 2 | 0.0103 ppm | 4.9646 ppm | 0.0101 ppm | 0.0283 ppm | 1.0279 ppm | 0.0121 ppm | 0.1984 ppm |
| Concentration per Run 3 | 0.0075 ppm | 4.9340 ppm | 0.0093 ppm | 0.0280 ppm | 1.0157 ppm | 0.0134 ppm | 0.1967 ppm |
| Concentration RSD | 16.4 % | 1.3 % | 5.6 % | 0.5 % | 1.0 % | 5.3 % | 0.9 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2205 ppm | **163.4032 %** | **159.8155 %** | **165.1184 %** | 104.8410 % | 99.8859 % | 103.2123 % |
| Concentration per Run 1 | 0.2238 ppm | **163.1792 %** | **159.6319 %** | **165.8107 %** | 105.1497 % | 99.6920 % | 102.6731 % |
| Concentration per Run 2 | 0.2192 ppm | **162.6463 %** | **159.8508 %** | **164.6935 %** | 104.3418 % | 100.0059 % | 103.1656 % |
| Concentration per Run 3 | 0.2186 ppm | **164.3841 %** | **159.9638 %** | **164.8509 %** | 105.0315 % | 99.9597 % | 103.7984 % |
| Concentration RSD | 1.3 % | **0.5 %** | **0.1 %** | **0.4 %** | 0.4 % | 0.2 % | 0.5 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512166-01d2 WG2037739
Analysis started at: 3/12/2025 4:30:28 PM
Comments <Comment>
Rack: 1
Vial: 58

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0028 ppm | 54.2823 ppm | 0.0432 ppm | 0.0590 ppm | 0.6559 ppm | 0.0024 ppm | 72.9926 ppm |
| Concentration per Run 1 | 0.0028 ppm | 54.7932 ppm | 0.0448 ppm | 0.0600 ppm | 0.6619 ppm | 0.0024 ppm | 73.7714 ppm |
| Concentration per Run 2 | 0.0029 ppm | 54.3770 ppm | 0.0435 ppm | 0.0589 ppm | 0.6570 ppm | 0.0024 ppm | 73.0974 ppm |
| Concentration per Run 3 | 0.0027 ppm | 53.6765 ppm | 0.0413 ppm | 0.0580 ppm | 0.6488 ppm | 0.0024 ppm | 72.1090 ppm |
| Concentration RSD | 3.5 % | 1.0 % | 4.1 % | 1.7 % | 1.0 % | 0.5 % | 1.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0496 ppm | 0.1669 ppm | 0.3767 ppm | 118.5506 ppm | 6.7110 ppm | 0.0600 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0505 ppm | 0.1678 ppm | 0.3782 ppm | 119.2352 ppm | 6.7553 ppm | 0.0608 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0496 ppm | 0.1672 ppm | 0.3764 ppm | 118.4649 ppm | 6.7019 ppm | 0.0598 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0488 ppm | 0.1656 ppm | 0.3754 ppm | 117.9515 ppm | 6.6757 ppm | 0.0594 ppm |
| Concentration RSD | 32.4 % | 1.8 % | 0.7 % | 0.4 % | 0.5 % | 0.6 % | 1.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 25.3444 ppm | 3.6525 ppm | 0.0050 ppm | 3.3428 ppm | 0.1014 ppm | 0.4730 ppm | 0.0043 ppm |
| Concentration per Run 1 | 25.4799 ppm | 3.6793 ppm | 0.0052 ppm | 3.3738 ppm | 0.1026 ppm | 0.4809 ppm | 0.0054 ppm |
| Concentration per Run 2 | 25.3866 ppm | 3.6582 ppm | 0.0050 ppm | 3.3486 ppm | 0.1011 ppm | 0.4712 ppm | 0.0041 ppm |
| Concentration per Run 3 | 25.1668 ppm | 3.6200 ppm | 0.0047 ppm | 3.3059 ppm | 0.1006 ppm | 0.4670 ppm | 0.0035 ppm |
| Concentration RSD | 0.6 % | 0.8 % | 4.7 % | 1.0 % | 1.0 % | 1.5 % | 22.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0025 ppm | 4.7641 ppm | 0.0227 ppm | 0.2964 ppm | 2.2928 ppm | 0.0016 ppm | 0.1966 ppm |
| Concentration per Run 1 | 0.0040 ppm | 4.8366 ppm | 0.0221 ppm | 0.2987 ppm | 2.3064 ppm | 0.0007 ppm | 0.1975 ppm |
| Concentration per Run 2 | 0.0005 ppm | 4.7517 ppm | 0.0228 ppm | 0.2967 ppm | 2.2919 ppm | 0.0024 ppm | 0.1965 ppm |
| Concentration per Run 3 | 0.0032 ppm | 4.7040 ppm | 0.0230 ppm | 0.2940 ppm | 2.2803 ppm | 0.0017 ppm | 0.1959 ppm |
| Concentration RSD | 70.9 % | 1.4 % | 2.0 % | 0.8 % | 0.6 % | 52.2 % | 0.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7874 ppm | 115.1420 % | 113.0750 % | 117.0035 % | 104.7186 % | 97.4722 % | 102.7383 % |
| Concentration per Run 1 | 0.7990 ppm | 114.7558 % | 113.3978 % | 117.1047 % | 103.9782 % | 97.4287 % | 103.0323 % |
| Concentration per Run 2 | 0.7856 ppm | 115.5500 % | 113.0854 % | 116.9304 % | 104.7755 % | 97.4179 % | 102.7872 % |
| Concentration per Run 3 | 0.7777 ppm | 115.1201 % | 112.7418 % | 116.9755 % | 105.4020 % | 97.5702 % | 102.3952 % |
| Concentration RSD | 1.4 % | 0.3 % | 0.3 % | 0.1 % | 0.7 % | 0.1 % | 0.3 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCV
Analysis started at: 3/12/2025 4:36:41 PM
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4839 ppm | 0.4951 ppm | 0.4742 ppm | 0.4700 ppm | 0.4758 ppm | 0.4830 ppm | 0.5134 ppm |
| Concentration per Run 1 | 0.4824 ppm | 0.4996 ppm | 0.4754 ppm | 0.4682 ppm | 0.4788 ppm | 0.4857 ppm | 0.5159 ppm |
| Concentration per Run 2 | 0.4808 ppm | 0.4918 ppm | 0.4700 ppm | 0.4688 ppm | 0.4745 ppm | 0.4816 ppm | 0.5121 ppm |
| Concentration per Run 3 | 0.4885 ppm | 0.4939 ppm | 0.4771 ppm | 0.4731 ppm | 0.4741 ppm | 0.4817 ppm | 0.5121 ppm |
| Recovery Percentage 1 | 96.778 % | 99.012 % | 94.834 % | 94.006 % | 95.164 % | 96.598 % | 102.673 % |
| Concentration RSD | 0.8 % | 0.8 % | 0.8 % | 0.6 % | 0.5 % | 0.5 % | 0.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4950 ppm | 0.5032 ppm | 0.5179 ppm | 0.5025 ppm | 0.5391 ppm | 5.0074 ppm | 0.4774 ppm |
| Concentration per Run 1 | 0.4928 ppm | 0.5008 ppm | 0.5153 ppm | 0.4991 ppm | 0.5420 ppm | 5.0758 ppm | 0.4814 ppm |
| Concentration per Run 2 | 0.4954 ppm | 0.5030 ppm | 0.5147 ppm | 0.5000 ppm | 0.5380 ppm | 4.9676 ppm | 0.4756 ppm |
| Concentration per Run 3 | 0.4969 ppm | 0.5057 ppm | 0.5236 ppm | 0.5083 ppm | 0.5372 ppm | 4.9788 ppm | 0.4752 ppm |
| Recovery Percentage 1 | 99.008 % | 100.634 % | 103.576 % | 100.492 % | 107.810 % | 100.148 % | 95.479 % |
| Concentration RSD | 0.4 % | 0.5 % | 1.0 % | 1.0 % | 0.5 % | 1.2 % | 0.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5106 ppm | 0.4900 ppm | 0.4834 ppm | 9.7775 ppm | 0.4912 ppm | 0.4917 ppm | 0.4895 ppm |
| Concentration per Run 1 | 0.5098 ppm | 0.4937 ppm | 0.4798 ppm | 9.8919 ppm | 0.4893 ppm | 0.4906 ppm | 0.4882 ppm |
| Concentration per Run 2 | 0.5080 ppm | 0.4878 ppm | 0.4836 ppm | 9.7449 ppm | 0.4920 ppm | 0.4922 ppm | 0.4903 ppm |
| Concentration per Run 3 | 0.5140 ppm | 0.4887 ppm | 0.4868 ppm | 9.6957 ppm | 0.4924 ppm | 0.4925 ppm | 0.4900 ppm |
| Recovery Percentage 1 | 102.117 % | 98.010 % | 96.681 % | 97.775 % | 98.246 % | 98.346 % | 97.897 % |
| Concentration RSD | 0.6 % | 0.7 % | 0.7 % | 1.0 % | 0.3 % | 0.2 % | 0.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4915 ppm | 5.4147 ppm | 0.4750 ppm | 0.4868 ppm | 0.4997 ppm | 0.5039 ppm | 0.4989 ppm |
| Concentration per Run 1 | 0.4923 ppm | 5.3958 ppm | 0.4722 ppm | 0.4919 ppm | 0.4968 ppm | 0.5015 ppm | 0.4956 ppm |
| Concentration per Run 2 | 0.4899 ppm | 5.4136 ppm | 0.4766 ppm | 0.4850 ppm | 0.4978 ppm | 0.5038 ppm | 0.4964 ppm |
| Concentration per Run 3 | 0.4923 ppm | 5.4348 ppm | 0.4761 ppm | 0.4836 ppm | 0.5044 ppm | 0.5065 ppm | 0.5048 ppm |
| Recovery Percentage 1 | 98.303 % | 103.138 % | 94.995 % | 97.366 % | 99.937 % | 100.784 % | 99.789 % |
| Concentration RSD | 0.3 % | 0.4 % | 0.5 % | 0.9 % | 0.8 % | 0.5 % | 1.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4970 ppm | 95.0546 % | 98.4397 % | 104.3049 % | 99.4110 % | 102.3370 % | 101.6107 % |
| Concentration per Run 1 | 0.4949 ppm | 93.6897 % | 98.5465 % | 104.6875 % | 98.3700 % | 102.7997 % | 101.9952 % |
| Concentration per Run 2 | 0.4979 ppm | 95.6581 % | 98.8345 % | 103.9876 % | 99.8095 % | 102.2575 % | 102.0847 % |
| Concentration per Run 3 | 0.4982 ppm | 95.8159 % | 97.9382 % | 104.2395 % | 100.0534 % | 101.9538 % | 100.7523 % |
| Recovery Percentage 1 | 99.401 % | | | | | | |
| Concentration RSD | 0.4 % | 1.2 % | 0.5 % | 0.3 % | 0.9 % | 0.4 % | 0.7 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCB
Analysis started at: 3/12/2025 4:53:42 PM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | -0.0030 ppm | -0.0003 ppm | 0.0015 ppm | 0.0001 ppm | 0.0000 ppm | 0.0090 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0006 ppm | 0.0015 ppm | 0.0002 ppm | 0.0000 ppm | 0.0103 ppm |
| Concentration per Run 2 | 0.0004 ppm | -0.0011 ppm | -0.0010 ppm | 0.0018 ppm | 0.0001 ppm | 0.0001 ppm | 0.0089 ppm |
| Concentration per Run 3 | 0.0003 ppm | -0.0078 ppm | -0.0006 ppm | 0.0012 ppm | 0.0000 ppm | 0.0000 ppm | 0.0077 ppm |
| Recovery Percentage 1 | 3.481 % | -2.983 % | -6.991 % | 4.974 % | 1.148 % | 0.004 % | 8.989 % |
| Concentration RSD | 78.2 % | 140.4 % | 245.4 % | 19.7 % | 100.3 % | 24,905.1 % | 14.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | -0.0004 ppm | 0.0029 ppm | -0.0025 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | -0.0006 ppm | 0.0016 ppm | 0.0053 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | -0.0002 ppm | 0.0037 ppm | 0.0314 ppm | 0.0017 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | -0.0002 ppm | -0.0004 ppm | 0.0035 ppm | -0.0442 ppm | 0.0012 ppm |
| Recovery Percentage 1 | 0.203 % | 0.137 % | -0.571 % | -3.879 % | 5.846 % | -0.101 % | 10.178 % |
| Concentration RSD | 87.3 % | 115.7 % | 301.5 % | 48.5 % | 40.2 % | 1,528.3 % | 76.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0018 ppm | -0.0001 ppm | 0.0004 ppm | 0.0417 ppm | 0.0000 ppm | 0.0005 ppm | -0.0009 ppm |
| Concentration per Run 1 | -0.0017 ppm | 0.0000 ppm | 0.0004 ppm | 0.0431 ppm | 0.0001 ppm | 0.0001 ppm | -0.0020 ppm |
| Concentration per Run 2 | -0.0025 ppm | -0.0001 ppm | 0.0003 ppm | 0.0432 ppm | -0.0002 ppm | 0.0011 ppm | -0.0009 ppm |
| Concentration per Run 3 | -0.0012 ppm | -0.0003 ppm | 0.0003 ppm | 0.0388 ppm | 0.0001 ppm | 0.0004 ppm | 0.0002 ppm |
| Recovery Percentage 1 | -1.782 % | -1.260 % | 0.708 % | 2.087 % | -0.023 % | 5.409 % | -1.788 % |
| Concentration RSD | 37.1 % | 129.8 % | 13.3 % | 6.0 % | 2,776.8 % | 96.8 % | 124.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | -0.0006 ppm | 0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0013 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0010 ppm | -0.0002 ppm | 0.0005 ppm | 0.0000 ppm | 0.0001 ppm | 0.0004 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0007 ppm | -0.0017 ppm | 0.0006 ppm | 0.0001 ppm | 0.0000 ppm | 0.0014 ppm | -0.0002 ppm |
| Concentration per Run 3 | -0.0021 ppm | 0.0000 ppm | 0.0002 ppm | 0.0000 ppm | -0.0001 ppm | 0.0020 ppm | 0.0002 ppm |
| Recovery Percentage 1 | -5.727 % | -0.127 % | 0.819 % | -0.032 % | 0.224 % | 6.480 % | 0.415 % |
| Concentration RSD | 269.5 % | 139.5 % | 48.1 % | 1,536.4 % | 368.1 % | 61.4 % | 536.5 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 94.9103 % | 100.2978 % | 104.4886 % | 96.5608 % | 103.2461 % | 101.3357 % |
| Concentration per Run 1 | 0.0007 ppm | 92.7923 % | 100.1997 % | 104.5607 % | 94.8896 % | 103.1353 % | 101.3739 % |
| Concentration per Run 2 | 0.0008 ppm | 95.3718 % | 100.4686 % | 104.4822 % | 96.4230 % | 103.3021 % | 101.4077 % |
| Concentration per Run 3 | 0.0008 ppm | 96.5669 % | 100.2250 % | 104.4228 % | 98.3698 % | 103.3007 % | 101.2254 % |
| Recovery Percentage 1 | 15.492 % | | | | | | |
| Concentration RSD | 4.6 % | 2.0 % | 0.1 % | 0.1 % | 1.8 % | 0.1 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: zWG2038617-1 WG2038617
Analysis started at: 3/12/2025 5:11:52 PM
Comments <Comment>
Rack: 1
Vial: 54

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.0129 ppm | -0.0013 ppm | 0.0012 ppm | 0.0005 ppm | 0.0000 ppm | 0.0534 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0173 ppm | -0.0020 ppm | 0.0011 ppm | 0.0005 ppm | 0.0000 ppm | 0.0518 ppm |
| Concentration per Run 2 | 0.0007 ppm | 0.0125 ppm | -0.0015 ppm | 0.0014 ppm | 0.0005 ppm | 0.0000 ppm | 0.0555 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0089 ppm | -0.0006 ppm | 0.0011 ppm | 0.0005 ppm | -0.0001 ppm | 0.0528 ppm |
| Recovery Percentage 1 | 8.296 % | 12.927 % | -26.820 % | 3.906 % | 4.885 % | -0.541 % | 53.368 % |
| Concentration RSD | 23.8 % | 32.6 % | 51.2 % | 14.2 % | 10.3 % | 226.3 % | 3.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0000 ppm | 0.0007 ppm | 0.0002 ppm | 0.0380 ppm | 0.0112 ppm | 0.0016 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0001 ppm | 0.0006 ppm | 0.0003 ppm | 0.0378 ppm | 0.0211 ppm | 0.0013 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0000 ppm | 0.0007 ppm | 0.0001 ppm | 0.0380 ppm | 0.0178 ppm | 0.0020 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0000 ppm | 0.0009 ppm | 0.0002 ppm | 0.0383 ppm | -0.0052 ppm | 0.0015 ppm |
| Recovery Percentage 1 | 2.304 % | 0.107 % | 7.177 % | 2.070 % | 76.074 % | 0.449 % | 15.682 % |
| Concentration RSD | 16.3 % | 189.8 % | 21.1 % | 48.5 % | 0.7 % | 127.5 % | 23.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0072 ppm | 0.0019 ppm | 0.0004 ppm | 0.0438 ppm | 0.0003 ppm | 0.1059 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0073 ppm | 0.0019 ppm | 0.0005 ppm | 0.0473 ppm | 0.0005 ppm | 0.1056 ppm | -0.0008 ppm |
| Concentration per Run 2 | 0.0072 ppm | 0.0020 ppm | 0.0003 ppm | 0.0414 ppm | 0.0001 ppm | 0.1061 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0072 ppm | 0.0019 ppm | 0.0004 ppm | 0.0427 ppm | 0.0004 ppm | 0.1060 ppm | 0.0004 ppm |
| Recovery Percentage 1 | 7.214 % | 19.356 % | 0.795 % | 2.189 % | 1.279 % | 1,059.128 % | -0.398 % |
| Concentration RSD | 0.7 % | 5.0 % | 33.1 % | 7.0 % | 60.8 % | 0.3 % | 291.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 0.0175 ppm | 0.0063 ppm | 0.0002 ppm | 0.0015 ppm | -0.0007 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0012 ppm | 0.0171 ppm | 0.0066 ppm | 0.0002 ppm | 0.0016 ppm | -0.0011 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0183 ppm | 0.0064 ppm | 0.0002 ppm | 0.0015 ppm | -0.0009 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0025 ppm | 0.0170 ppm | 0.0060 ppm | 0.0001 ppm | 0.0015 ppm | 0.0000 ppm | -0.0003 ppm |
| Recovery Percentage 1 | -4.746 % | 3.496 % | 12.656 % | 1.505 % | 15.225 % | -3.333 % | -0.839 % |
| Concentration RSD | 390.4 % | 4.0 % | 4.8 % | 16.3 % | 4.1 % | 85.4 % | 283.9 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0086 ppm | 98.8693 % | 101.8317 % | 104.9832 % | 101.2434 % | 103.5969 % | 103.7700 % |
| Concentration per Run 1 | 0.0086 ppm | 99.6140 % | 101.6878 % | 105.0192 % | 102.3335 % | 103.5417 % | 103.4814 % |
| Concentration per Run 2 | 0.0086 ppm | 98.3720 % | 101.8089 % | 104.9726 % | 100.5646 % | 103.7103 % | 103.8568 % |
| Concentration per Run 3 | 0.0086 ppm | 98.6220 % | 101.9985 % | 104.9578 % | 100.8320 % | 103.5386 % | 103.9717 % |
| Recovery Percentage 1 | 171.433 % | | | | | | |
| Concentration RSD | 0.1 % | 0.7 % | 0.2 % | 0.0 % | 0.9 % | 0.1 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: OB SCAN 2325-06 DIS
Analysis started at: 3/12/2025 5:18:32 PM
Comments <Comment>
Rack: 1
Vial: 56

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0044 ppm | -0.0003 ppm | 0.0119 ppm | 0.0105 ppm | 0.0000 ppm | 11.4960 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0061 ppm | -0.0012 ppm | 0.0121 ppm | 0.0108 ppm | 0.0000 ppm | 11.8363 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0052 ppm | -0.0001 ppm | 0.0118 ppm | 0.0105 ppm | -0.0001 ppm | 11.4919 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0018 ppm | 0.0004 ppm | 0.0119 ppm | 0.0102 ppm | 0.0000 ppm | 11.1596 ppm |
| Concentration RSD | 123.5 % | 51.9 % | 279.2 % | 1.2 % | 2.8 % | 74.2 % | 2.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0024 ppm | -0.0004 ppm | 0.0049 ppm | 1.0283 ppm | 0.0024 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0024 ppm | -0.0004 ppm | 0.0047 ppm | 1.0611 ppm | 0.0027 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0023 ppm | -0.0004 ppm | 0.0043 ppm | 1.0442 ppm | 0.0012 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | 0.0025 ppm | -0.0003 ppm | 0.0056 ppm | 0.9795 ppm | 0.0034 ppm |
| Concentration RSD | 134.3 % | 97.7 % | 4.0 % | 15.7 % | 13.4 % | 4.2 % | 47.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.1276 ppm | 0.0002 ppm | 0.0001 ppm | 17.7560 ppm | 0.0002 ppm | 0.0008 ppm | -0.0004 ppm |
| Concentration per Run 1 | 5.1519 ppm | 0.0002 ppm | 0.0002 ppm | 18.3271 ppm | 0.0002 ppm | 0.0005 ppm | -0.0002 ppm |
| Concentration per Run 2 | 5.1132 ppm | 0.0004 ppm | 0.0001 ppm | 17.7105 ppm | 0.0001 ppm | 0.0013 ppm | -0.0005 ppm |
| Concentration per Run 3 | 5.1176 ppm | 0.0000 ppm | 0.0001 ppm | 17.2302 ppm | 0.0002 ppm | 0.0007 ppm | -0.0004 ppm |
| Concentration RSD | 0.4 % | 103.2 % | 42.9 % | 3.1 % | 39.0 % | 50.8 % | 37.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 6.8928 ppm | -0.0001 ppm | 0.0571 ppm | 0.0003 ppm | -0.0003 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0011 ppm | 6.8959 ppm | -0.0003 ppm | 0.0591 ppm | 0.0003 ppm | -0.0005 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0000 ppm | 6.8927 ppm | 0.0002 ppm | 0.0568 ppm | 0.0004 ppm | -0.0008 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0006 ppm | 6.8899 ppm | -0.0002 ppm | 0.0554 ppm | 0.0002 ppm | 0.0004 ppm | 0.0001 ppm |
| Concentration RSD | 98.3 % | 0.0 % | 265.5 % | 3.2 % | 41.9 % | 192.2 % | 103.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 96.1742 % | 100.8061 % | 106.3412 % | 96.4376 % | 104.7340 % | 103.6315 % |
| Concentration per Run 1 | 0.0006 ppm | 94.2408 % | 100.5470 % | 106.0913 % | 93.4873 % | 104.6975 % | 103.1271 % |
| Concentration per Run 2 | 0.0007 ppm | 96.1204 % | 100.9714 % | 106.3173 % | 96.7014 % | 104.7197 % | 103.7790 % |
| Concentration per Run 3 | 0.0009 ppm | 98.1615 % | 100.8998 % | 106.6152 % | 99.1240 % | 104.7849 % | 103.9883 % |
| Concentration RSD | 15.8 % | 2.0 % | 0.2 % | 0.2 % | 2.9 % | 0.0 % | 0.4 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: xwrong spot
Analysis started at: 3/12/2025 5:24:53 PM
Comments <Comment>
Rack: 1
Vial: 57

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 78.8422 ppm | -0.0008 ppm | -0.0009 ppm | 0.5737 ppm | 0.0043 ppm | 8.8633 ppm |
| Concentration per Run 1 | 0.0019 ppm | 79.7324 ppm | -0.0009 ppm | -0.0008 ppm | 0.5796 ppm | 0.0043 ppm | 8.9450 ppm |
| Concentration per Run 2 | 0.0011 ppm | 79.0501 ppm | -0.0009 ppm | -0.0009 ppm | 0.5749 ppm | 0.0042 ppm | 8.8812 ppm |
| Concentration per Run 3 | 0.0013 ppm | 77.7442 ppm | -0.0006 ppm | -0.0009 ppm | 0.5667 ppm | 0.0043 ppm | 8.7636 ppm |
| Concentration RSD | 27.1 % | 1.3 % | 19.9 % | 5.7 % | 1.1 % | 1.4 % | 1.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0013 ppm | -0.0003 ppm | 0.0021 ppm | 0.0005 ppm | 120.2698 ppm | 3.8744 ppm | 0.0431 ppm |
| Concentration per Run 1 | -0.0012 ppm | -0.0002 ppm | 0.0038 ppm | 0.0032 ppm | 121.5208 ppm | 3.9457 ppm | 0.0431 ppm |
| Concentration per Run 2 | -0.0013 ppm | -0.0004 ppm | 0.0012 ppm | -0.0017 ppm | 120.5791 ppm | 3.8788 ppm | 0.0437 ppm |
| Concentration per Run 3 | -0.0014 ppm | -0.0003 ppm | 0.0013 ppm | -0.0001 ppm | 118.7093 ppm | 3.7988 ppm | 0.0426 ppm |
| Concentration RSD | 6.0 % | 29.6 % | 70.0 % | 552.1 % | 1.2 % | 1.9 % | 1.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0736 ppm | 2.0419 ppm | 0.0000 ppm | 0.3259 ppm | 0.0023 ppm | 0.0027 ppm | -0.0021 ppm |
| Concentration per Run 1 | 0.1900 ppm | 2.0622 ppm | 0.0000 ppm | 0.2909 ppm | 0.0023 ppm | 0.0033 ppm | -0.0022 ppm |
| Concentration per Run 2 | 0.0138 ppm | 2.0471 ppm | 0.0000 ppm | 0.3288 ppm | 0.0022 ppm | 0.0022 ppm | -0.0024 ppm |
| Concentration per Run 3 | 0.0170 ppm | 2.0164 ppm | 0.0001 ppm | 0.3579 ppm | 0.0023 ppm | 0.0026 ppm | -0.0018 ppm |
| Concentration RSD | 136.9 % | 1.1 % | 155.3 % | 10.3 % | 2.0 % | 21.3 % | 13.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0059 ppm | 0.0112 ppm | -0.0004 ppm | 0.0258 ppm | 0.0097 ppm | 0.0034 ppm | 0.0027 ppm |
| Concentration per Run 1 | 0.0062 ppm | 0.0256 ppm | -0.0003 ppm | 0.0259 ppm | 0.0228 ppm | 0.0033 ppm | 0.0054 ppm |
| Concentration per Run 2 | 0.0061 ppm | -0.0010 ppm | -0.0004 ppm | 0.0258 ppm | 0.0032 ppm | 0.0035 ppm | 0.0013 ppm |
| Concentration per Run 3 | 0.0055 ppm | 0.0090 ppm | -0.0004 ppm | 0.0256 ppm | 0.0032 ppm | 0.0034 ppm | 0.0013 ppm |
| Concentration RSD | 5.8 % | 120.5 % | 9.9 % | 0.7 % | 116.1 % | 2.9 % | 86.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | **156.0021 %** | **456.5418 %** | **474.4883 %** | 104.0977 % | **465.9545 %** | **393.3156 %** |
| Concentration per Run 1 | 0.0013 ppm | **154.9192 %** | **N/A** | **491.7722 %** | 102.9230 % | **482.4263 %** | **260.8922 %** |
| Concentration per Run 2 | -0.0002 ppm | **155.4906 %** | **N/A** | **482.0230 %** | 103.6327 % | **472.8448 %** | **500.5623 %** |
| Concentration per Run 3 | 0.0003 ppm | **157.5963 %** | **456.5418 %** | **449.6699 %** | 105.7374 % | **442.5925 %** | **418.4923 %** |
| Concentration RSD | 171.2 % | **0.9 %** | **N/A** | **4.6 %** | 1.4 % | **4.5 %** | **31.0 %** |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCV
Analysis started at: 3/12/2025 5:31:26 PM
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4731 ppm | 0.4769 ppm | 0.4671 ppm | 0.4626 ppm | 0.4595 ppm | 0.4646 ppm | 0.4915 ppm |
| Concentration per Run 1 | 0.4727 ppm | 0.4597 ppm | 0.4663 ppm | 0.4625 ppm | 0.4516 ppm | 0.4576 ppm | 0.4849 ppm |
| Concentration per Run 2 | 0.4730 ppm | 0.4895 ppm | 0.4692 ppm | 0.4638 ppm | 0.4627 ppm | 0.4672 ppm | 0.4977 ppm |
| Concentration per Run 3 | 0.4738 ppm | 0.4815 ppm | 0.4658 ppm | 0.4615 ppm | 0.4643 ppm | 0.4689 ppm | 0.4918 ppm |
| Recovery Percentage 1 | 94.628 % | 95.378 % | 93.428 % | 92.524 % | 91.907 % | 92.912 % | 98.294 % |
| Concentration RSD | 0.1 % | 3.2 % | 0.4 % | 0.2 % | 1.5 % | 1.3 % | 1.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4897 ppm | 0.4970 ppm | 0.5101 ppm | 0.4949 ppm | 0.5072 ppm | 4.7861 ppm | 0.4562 ppm |
| Concentration per Run 1 | 0.4907 ppm | 0.4982 ppm | 0.5092 ppm | 0.4945 ppm | 0.5001 ppm | 4.7101 ppm | 0.4503 ppm |
| Concentration per Run 2 | 0.4901 ppm | 0.4977 ppm | 0.5098 ppm | 0.4957 ppm | 0.5100 ppm | 4.8293 ppm | 0.4602 ppm |
| Concentration per Run 3 | 0.4883 ppm | 0.4951 ppm | 0.5114 ppm | 0.4946 ppm | 0.5115 ppm | 4.8187 ppm | 0.4583 ppm |
| Recovery Percentage 1 | 97.941 % | 99.401 % | 102.022 % | 98.982 % | 101.445 % | 95.721 % | 91.247 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.2 % | 0.1 % | 1.2 % | 1.4 % | 1.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5007 ppm | 0.4690 ppm | 0.4764 ppm | 9.4077 ppm | 0.4858 ppm | 0.4876 ppm | 0.4823 ppm |
| Concentration per Run 1 | 0.4968 ppm | 0.4626 ppm | 0.4765 ppm | 9.2771 ppm | 0.4867 ppm | 0.4870 ppm | 0.4823 ppm |
| Concentration per Run 2 | 0.5031 ppm | 0.4714 ppm | 0.4770 ppm | 9.4738 ppm | 0.4864 ppm | 0.4894 ppm | 0.4837 ppm |
| Concentration per Run 3 | 0.5023 ppm | 0.4730 ppm | 0.4756 ppm | 9.4721 ppm | 0.4842 ppm | 0.4863 ppm | 0.4810 ppm |
| Recovery Percentage 1 | 100.140 % | 93.802 % | 95.273 % | 94.077 % | 97.150 % | 97.511 % | 96.460 % |
| Concentration RSD | 0.7 % | 1.2 % | 0.2 % | 1.2 % | 0.3 % | 0.3 % | 0.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4878 ppm | 5.3492 ppm | 0.4713 ppm | 0.4618 ppm | 0.4903 ppm | 0.4973 ppm | 0.4910 ppm |
| Concentration per Run 1 | 0.4881 ppm | 5.3600 ppm | 0.4719 ppm | 0.4550 ppm | 0.4907 ppm | 0.4977 ppm | 0.4910 ppm |
| Concentration per Run 2 | 0.4862 ppm | 5.3600 ppm | 0.4715 ppm | 0.4647 ppm | 0.4891 ppm | 0.4982 ppm | 0.4913 ppm |
| Concentration per Run 3 | 0.4893 ppm | 5.3275 ppm | 0.4706 ppm | 0.4658 ppm | 0.4910 ppm | 0.4960 ppm | 0.4908 ppm |
| Recovery Percentage 1 | 97.569 % | 101.889 % | 94.264 % | 92.362 % | 98.054 % | 99.457 % | 98.200 % |
| Concentration RSD | 0.3 % | 0.4 % | 0.1 % | 1.3 % | 0.2 % | 0.2 % | 0.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4915 ppm | 97.7284 % | 99.7786 % | 104.7406 % | 101.9584 % | 102.8087 % | 102.5595 % |
| Concentration per Run 1 | 0.4924 ppm | 98.2583 % | 99.7230 % | 104.8908 % | 102.5193 % | 102.7240 % | 102.3920 % |
| Concentration per Run 2 | 0.4916 ppm | 97.3893 % | 100.1163 % | 104.7610 % | 101.7155 % | 102.6993 % | 102.8352 % |
| Concentration per Run 3 | 0.4905 ppm | 97.5375 % | 99.4966 % | 104.5701 % | 101.6404 % | 103.0028 % | 102.4513 % |
| Recovery Percentage 1 | 98.300 % | | | | | | |
| Concentration RSD | 0.2 % | 0.5 % | 0.3 % | 0.2 % | 0.5 % | 0.2 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCB
Analysis started at: 3/12/2025 5:37:34 PM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0033 ppm | 0.0001 ppm | 0.0010 ppm | 0.0002 ppm | 0.0000 ppm | 0.0041 ppm |
| Concentration per Run 1 | -0.0003 ppm | -0.0081 ppm | 0.0005 ppm | 0.0011 ppm | 0.0001 ppm | 0.0000 ppm | 0.0038 ppm |
| Concentration per Run 2 | 0.0004 ppm | -0.0018 ppm | 0.0002 ppm | 0.0009 ppm | 0.0000 ppm | 0.0000 ppm | 0.0052 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0001 ppm | -0.0004 ppm | 0.0011 ppm | 0.0004 ppm | 0.0000 ppm | 0.0033 ppm |
| Recovery Percentage 1 | -0.211 % | -3.281 % | 2.236 % | 3.492 % | 1.602 % | 0.123 % | 4.108 % |
| Concentration RSD | 2,437.3 % | 130.4 % | 447.1 % | 10.9 % | 115.7 % | 435.7 % | 23.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0002 ppm | -0.0006 ppm | 0.0019 ppm | -0.0297 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0002 ppm | -0.0007 ppm | 0.0027 ppm | -0.0395 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0002 ppm | -0.0007 ppm | 0.0019 ppm | 0.0067 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | 0.0002 ppm | -0.0004 ppm | 0.0011 ppm | -0.0563 ppm | -0.0001 ppm |
| Recovery Percentage 1 | 0.861 % | 0.403 % | 1.974 % | -6.007 % | 3.805 % | -1.188 % | 1.225 % |
| Concentration RSD | 29.3 % | 31.5 % | 8.2 % | 29.2 % | 42.7 % | 109.9 % | 167.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | -0.0001 ppm | 0.0011 ppm | 0.0066 ppm | 0.0000 ppm | 0.0002 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0003 ppm | -0.0001 ppm | 0.0013 ppm | 0.0095 ppm | 0.0001 ppm | 0.0004 ppm | 0.0010 ppm |
| Concentration per Run 2 | 0.0033 ppm | -0.0001 ppm | 0.0011 ppm | 0.0073 ppm | 0.0000 ppm | 0.0004 ppm | -0.0013 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0000 ppm | 0.0010 ppm | 0.0031 ppm | 0.0000 ppm | -0.0002 ppm | 0.0003 ppm |
| Recovery Percentage 1 | 0.907 % | -0.611 % | 2.284 % | 0.332 % | 0.107 % | 1.949 % | -0.026 % |
| Concentration RSD | 230.9 % | 77.5 % | 15.8 % | 48.6 % | 112.9 % | 183.4 % | 8,905.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 0.0001 ppm | 0.0002 ppm | 0.0001 ppm | 0.0001 ppm | 0.0009 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0038 ppm | 0.0004 ppm | 0.0003 ppm | 0.0001 ppm | 0.0001 ppm | 0.0007 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0016 ppm | -0.0001 ppm | 0.0004 ppm | 0.0000 ppm | 0.0000 ppm | -0.0002 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0021 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | 0.0021 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 14.485 % | 0.025 % | 0.474 % | 0.612 % | 0.936 % | 4.407 % | 0.272 % |
| Concentration RSD | 189.8 % | 216.2 % | 81.1 % | 72.6 % | 145.7 % | 132.9 % | 275.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 99.4760 % | 99.9437 % | 105.0859 % | 101.9963 % | 103.2910 % | 101.3841 % |
| Concentration per Run 1 | 0.0009 ppm | 100.7184 % | 99.9827 % | 105.1349 % | 102.5989 % | 102.9876 % | 101.5498 % |
| Concentration per Run 2 | 0.0008 ppm | 98.8650 % | 100.0363 % | 105.0822 % | 101.3056 % | 103.4274 % | 101.3451 % |
| Concentration per Run 3 | 0.0008 ppm | 98.8446 % | 99.8120 % | 105.0408 % | 102.0844 % | 103.4582 % | 101.2573 % |
| Recovery Percentage 1 | 16.591 % | | | | | | |
| Concentration RSD | 4.3 % | 1.1 % | 0.1 % | 0.0 % | 0.6 % | 0.3 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: OB SCAN 2325-06 TOT
Analysis started at: 3/12/2025 5:43:59 PM
Comments <Comment>
Rack: 1
Vial: 55

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.1518 ppm | -0.0009 ppm | 0.0140 ppm | 0.0116 ppm | 0.0000 ppm | 13.6147 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.1524 ppm | -0.0012 ppm | 0.0139 ppm | 0.0117 ppm | 0.0000 ppm | 13.8528 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.1561 ppm | -0.0004 ppm | 0.0139 ppm | 0.0116 ppm | 0.0000 ppm | 13.4567 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.1469 ppm | -0.0010 ppm | 0.0141 ppm | 0.0114 ppm | 0.0000 ppm | 13.5345 ppm |
| Concentration RSD | 391.4 % | 3.1 % | 48.4 % | 0.8 % | 1.5 % | 188.1 % | 1.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0002 ppm | 0.0026 ppm | -0.0004 ppm | 0.1053 ppm | 0.9973 ppm | 0.0013 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0027 ppm | -0.0003 ppm | 0.1065 ppm | 1.0186 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0002 ppm | 0.0023 ppm | -0.0003 ppm | 0.1018 ppm | 0.9920 ppm | 0.0021 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | 0.0026 ppm | -0.0005 ppm | 0.1076 ppm | 0.9813 ppm | 0.0016 ppm |
| Concentration RSD | 27.6 % | 40.4 % | 8.5 % | 35.4 % | 2.9 % | 1.9 % | 68.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.7985 ppm | 0.0070 ppm | 0.0003 ppm | 10.7757 ppm | 0.0005 ppm | 0.0010 ppm | 0.0000 ppm |
| Concentration per Run 1 | 6.8069 ppm | 0.0070 ppm | 0.0004 ppm | 10.9628 ppm | 0.0005 ppm | 0.0011 ppm | -0.0003 ppm |
| Concentration per Run 2 | 6.8043 ppm | 0.0071 ppm | 0.0001 ppm | 10.6651 ppm | 0.0006 ppm | 0.0013 ppm | 0.0006 ppm |
| Concentration per Run 3 | 6.7843 ppm | 0.0069 ppm | 0.0004 ppm | 10.6991 ppm | 0.0005 ppm | 0.0006 ppm | -0.0003 ppm |
| Concentration RSD | 0.2 % | 1.4 % | 56.3 % | 1.5 % | 11.7 % | 37.6 % | 3,327.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 6.6755 ppm | -0.0002 ppm | 0.0617 ppm | 0.0030 ppm | 0.0011 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0014 ppm | 6.6926 ppm | 0.0000 ppm | 0.0627 ppm | 0.0028 ppm | 0.0007 ppm | 0.0006 ppm |
| Concentration per Run 2 | -0.0003 ppm | 6.6564 ppm | 0.0001 ppm | 0.0609 ppm | 0.0030 ppm | 0.0009 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0004 ppm | 6.6776 ppm | -0.0006 ppm | 0.0616 ppm | 0.0032 ppm | 0.0016 ppm | 0.0008 ppm |
| Concentration RSD | 198.6 % | 0.3 % | 241.3 % | 1.5 % | 7.7 % | 44.4 % | 20.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0014 ppm | 102.1317 % | 101.2077 % | 106.3296 % | 102.2058 % | 104.8071 % | 103.5896 % |
| Concentration per Run 1 | 0.0014 ppm | 101.9607 % | 101.2359 % | 106.5211 % | 100.7829 % | 104.9810 % | 103.5160 % |
| Concentration per Run 2 | 0.0015 ppm | 103.4452 % | 101.4960 % | 106.2078 % | 103.3128 % | 104.7602 % | 103.8515 % |
| Concentration per Run 3 | 0.0014 ppm | 100.9892 % | 100.8912 % | 106.2600 % | 102.5216 % | 104.6800 % | 103.4014 % |
| Concentration RSD | 4.7 % | 1.2 % | 0.3 % | 0.2 % | 1.3 % | 0.1 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039428-1 WG2039428
Analysis started at: 3/12/2025 6:21:23 PM
Comments <Comment>
Rack: 1
Vial: 59

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | -0.0024 ppm | -0.0001 ppm | 0.0003 ppm | 0.0001 ppm | 0.0000 ppm | 0.0124 ppm |
| Concentration per Run 1 | 0.0003 ppm | -0.0066 ppm | 0.0008 ppm | 0.0001 ppm | 0.0001 ppm | -0.0001 ppm | 0.0107 ppm |
| Concentration per Run 2 | 0.0004 ppm | -0.0041 ppm | -0.0003 ppm | 0.0005 ppm | 0.0002 ppm | 0.0000 ppm | 0.0166 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0036 ppm | -0.0007 ppm | 0.0002 ppm | 0.0001 ppm | 0.0000 ppm | 0.0099 ppm |
| Concentration RSD | 108.1 % | 222.1 % | 1,019.3 % | 84.2 % | 16.8 % | 200.1 % | 29.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | -0.0002 ppm | 0.0019 ppm | -0.0419 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0003 ppm | -0.0002 ppm | 0.0019 ppm | -0.0414 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0022 ppm | -0.0264 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | -0.0003 ppm | 0.0015 ppm | -0.0578 ppm | -0.0014 ppm |
| Concentration RSD | 1,770.3 % | 495.7 % | 101.0 % | 69.6 % | 17.8 % | 37.5 % | 282.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | -0.0002 ppm | 0.0001 ppm | -0.0318 ppm | 0.0003 ppm | 0.0005 ppm | -0.0007 ppm |
| Concentration per Run 1 | 0.0033 ppm | -0.0001 ppm | 0.0003 ppm | -0.0301 ppm | 0.0003 ppm | 0.0009 ppm | -0.0006 ppm |
| Concentration per Run 2 | 0.0023 ppm | -0.0003 ppm | 0.0003 ppm | -0.0312 ppm | 0.0001 ppm | 0.0001 ppm | -0.0009 ppm |
| Concentration per Run 3 | 0.0010 ppm | -0.0001 ppm | -0.0001 ppm | -0.0342 ppm | 0.0004 ppm | 0.0004 ppm | -0.0006 ppm |
| Concentration RSD | 51.5 % | 72.5 % | 136.5 % | 6.7 % | 54.6 % | 89.6 % | 24.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | -0.0005 ppm | 0.0002 ppm | 0.0000 ppm | -0.0001 ppm | 0.0007 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0019 ppm | -0.0004 ppm | 0.0000 ppm | -0.0001 ppm | -0.0002 ppm | 0.0012 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0007 ppm | -0.0005 ppm | 0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0014 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0024 ppm | -0.0006 ppm | 0.0004 ppm | 0.0000 ppm | -0.0001 ppm | -0.0006 ppm | 0.0000 ppm |
| Concentration RSD | 511.5 % | 25.5 % | 131.5 % | 276.0 % | 142.9 % | 165.9 % | 23.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 105.2672 % | 103.3692 % | 107.1513 % | 104.9244 % | 106.3058 % | 104.1203 % |
| Concentration per Run 1 | 0.0008 ppm | 109.4201 % | 103.5819 % | 107.1154 % | 107.6203 % | 106.4090 % | 104.4452 % |
| Concentration per Run 2 | 0.0006 ppm | 103.9001 % | 103.5714 % | 107.1484 % | 104.2656 % | 106.3226 % | 104.2368 % |
| Concentration per Run 3 | 0.0007 ppm | 102.4813 % | 102.9541 % | 107.1901 % | 102.8872 % | 106.1858 % | 103.6791 % |
| Concentration RSD | 9.8 % | 3.5 % | 0.3 % | 0.0 % | 2.3 % | 0.1 % | 0.4 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039428-2 WG2039428
Analysis started at: 3/12/2025 6:27:49 PM
Comments <Comment>
Rack: 1
Vial: 60

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0493 ppm | 1.9992 ppm | 0.1079 ppm | 0.9092 ppm | 1.9391 ppm | 0.0492 ppm | 10.2380 ppm |
| Concentration per Run 1 | 0.0492 ppm | 1.9988 ppm | 0.1095 ppm | 0.9051 ppm | 1.9366 ppm | 0.0489 ppm | 10.2270 ppm |
| Concentration per Run 2 | 0.0488 ppm | 2.0013 ppm | 0.1070 ppm | 0.9146 ppm | 1.9446 ppm | 0.0494 ppm | 10.2514 ppm |
| Concentration per Run 3 | 0.0498 ppm | 1.9976 ppm | 0.1073 ppm | 0.9078 ppm | 1.9362 ppm | 0.0492 ppm | 10.2355 ppm |
| Concentration RSD | 1.0 % | 0.1 % | 1.3 % | 0.5 % | 0.2 % | 0.5 % | 0.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0523 ppm | 0.4862 ppm | 0.2046 ppm | 0.2527 ppm | 1.0348 ppm | 10.1708 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0522 ppm | 0.4849 ppm | 0.2048 ppm | 0.2534 ppm | 1.0328 ppm | 10.1399 ppm | 0.0010 ppm |
| Concentration per Run 2 | 0.0524 ppm | 0.4887 ppm | 0.2043 ppm | 0.2525 ppm | 1.0372 ppm | 10.1790 ppm | -0.0013 ppm |
| Concentration per Run 3 | 0.0522 ppm | 0.4851 ppm | 0.2046 ppm | 0.2522 ppm | 1.0344 ppm | 10.1934 ppm | 0.0015 ppm |
| Concentration RSD | 0.2 % | 0.4 % | 0.1 % | 0.2 % | 0.2 % | 0.3 % | 366.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.0367 ppm | 0.4985 ppm | 0.9241 ppm | 10.1381 ppm | 0.4803 ppm | 0.5157 ppm | 0.4589 ppm |
| Concentration per Run 1 | 10.0581 ppm | 0.4974 ppm | 0.9127 ppm | 10.1275 ppm | 0.4788 ppm | 0.5142 ppm | 0.4546 ppm |
| Concentration per Run 2 | 10.0226 ppm | 0.4999 ppm | 0.9298 ppm | 10.1704 ppm | 0.4826 ppm | 0.5175 ppm | 0.4601 ppm |
| Concentration per Run 3 | 10.0295 ppm | 0.4982 ppm | 0.9299 ppm | 10.1164 ppm | 0.4794 ppm | 0.5156 ppm | 0.4619 ppm |
| Concentration RSD | 0.2 % | 0.3 % | 1.1 % | 0.3 % | 0.4 % | 0.3 % | 0.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1105 ppm | 0.8629 ppm | 0.9473 ppm | 0.9630 ppm | 0.9787 ppm | 0.1116 ppm | 0.4983 ppm |
| Concentration per Run 1 | 0.1108 ppm | 0.8607 ppm | 0.9423 ppm | 0.9607 ppm | 0.9809 ppm | 0.1105 ppm | 0.4989 ppm |
| Concentration per Run 2 | 0.1084 ppm | 0.8669 ppm | 0.9527 ppm | 0.9659 ppm | 0.9766 ppm | 0.1112 ppm | 0.4970 ppm |
| Concentration per Run 3 | 0.1124 ppm | 0.8612 ppm | 0.9467 ppm | 0.9623 ppm | 0.9786 ppm | 0.1131 ppm | 0.4991 ppm |
| Concentration RSD | 1.8 % | 0.4 % | 0.6 % | 0.3 % | 0.2 % | 1.2 % | 0.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4926 ppm | 95.6365 % | 100.3138 % | 104.9641 % | 98.6985 % | 102.9019 % | 102.7381 % |
| Concentration per Run 1 | 0.4920 ppm | 95.4633 % | 100.0925 % | 105.1642 % | 98.5621 % | 103.0701 % | 102.5527 % |
| Concentration per Run 2 | 0.4945 ppm | 95.6437 % | 100.3928 % | 104.6160 % | 98.6318 % | 102.4793 % | 102.9071 % |
| Concentration per Run 3 | 0.4913 ppm | 95.8024 % | 100.4560 % | 105.1123 % | 98.9018 % | 103.1564 % | 102.7546 % |
| Concentration RSD | 0.3 % | 0.2 % | 0.2 % | 0.3 % | 0.2 % | 0.4 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512189-01 WG2039428
Analysis started at: 3/12/2025 6:33:56 PM
Comments <Comment>
Rack: 2
Vial: 1

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0102 ppm | -0.0006 ppm | 0.0174 ppm | 0.0421 ppm | -0.0001 ppm | 32.8126 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0094 ppm | -0.0002 ppm | 0.0173 ppm | 0.0414 ppm | 0.0000 ppm | 32.4088 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0121 ppm | -0.0012 ppm | 0.0176 ppm | 0.0423 ppm | -0.0001 ppm | 32.8316 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0092 ppm | -0.0003 ppm | 0.0174 ppm | 0.0426 ppm | -0.0001 ppm | 33.1972 ppm |
| Concentration RSD | 34.1 % | 15.8 % | 95.3 % | 0.9 % | 1.4 % | 47.4 % | 1.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0009 ppm | 0.0012 ppm | -0.0001 ppm | 0.0400 ppm | 2.9552 ppm | 0.0005 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0008 ppm | 0.0011 ppm | -0.0002 ppm | 0.0390 ppm | 2.9206 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0007 ppm | 0.0010 ppm | 0.0000 ppm | 0.0414 ppm | 2.9624 ppm | 0.0018 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0010 ppm | 0.0016 ppm | -0.0002 ppm | 0.0398 ppm | 2.9826 ppm | -0.0002 ppm |
| Concentration RSD | 5.3 % | 19.5 % | 27.4 % | 110.8 % | 3.0 % | 1.1 % | 204.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.4979 ppm | 0.0583 ppm | 0.0048 ppm | 41.4065 ppm | 0.0009 ppm | 0.0006 ppm | 0.0041 ppm |
| Concentration per Run 1 | 6.5038 ppm | 0.0574 ppm | 0.0055 ppm | 40.8195 ppm | 0.0009 ppm | 0.0008 ppm | 0.0044 ppm |
| Concentration per Run 2 | 6.4711 ppm | 0.0584 ppm | 0.0048 ppm | 41.5013 ppm | 0.0013 ppm | 0.0009 ppm | 0.0046 ppm |
| Concentration per Run 3 | 6.5189 ppm | 0.0589 ppm | 0.0040 ppm | 41.8988 ppm | 0.0006 ppm | 0.0001 ppm | 0.0033 ppm |
| Concentration RSD | 0.4 % | 1.3 % | 15.3 % | 1.3 % | 41.9 % | 68.0 % | 17.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 2.4940 ppm | 0.0023 ppm | 0.1398 ppm | 0.0009 ppm | 0.0005 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0009 ppm | 2.4969 ppm | 0.0024 ppm | 0.1374 ppm | 0.0010 ppm | 0.0008 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0013 ppm | 2.4901 ppm | 0.0020 ppm | 0.1404 ppm | 0.0007 ppm | 0.0003 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0003 ppm | 2.4950 ppm | 0.0025 ppm | 0.1416 ppm | 0.0009 ppm | 0.0003 ppm | -0.0001 ppm |
| Concentration RSD | 495.7 % | 0.1 % | 13.0 % | 1.6 % | 12.9 % | 68.1 % | 495.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0018 ppm | 101.1413 % | 98.8419 % | 102.8386 % | 103.9016 % | 100.2781 % | 101.4266 % |
| Concentration per Run 1 | 0.0018 ppm | 103.0979 % | 98.8941 % | 102.9845 % | 104.8572 % | 100.2147 % | 101.1594 % |
| Concentration per Run 2 | 0.0018 ppm | 100.9165 % | 99.1442 % | 102.7166 % | 104.1680 % | 100.5631 % | 101.9060 % |
| Concentration per Run 3 | 0.0019 ppm | 99.4093 % | 98.4874 % | 102.8148 % | 102.6797 % | 100.0564 % | 101.2143 % |
| Concentration RSD | 2.7 % | 1.8 % | 0.3 % | 0.1 % | 1.1 % | 0.3 % | 0.4 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039428-3 WG2039428
Analysis started at: 3/12/2025 6:40:17 PM
Comments <Comment>
Rack: 2
Vial: 2

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0486 ppm | 1.9038 ppm | 0.1123 ppm | 0.9431 ppm | 1.8748 ppm | 0.0468 ppm | 42.7537 ppm |
| Concentration per Run 1 | 0.0491 ppm | 1.8806 ppm | 0.1117 ppm | 0.9429 ppm | 1.8523 ppm | 0.0461 ppm | 42.2510 ppm |
| Concentration per Run 2 | 0.0483 ppm | 1.9081 ppm | 0.1117 ppm | 0.9419 ppm | 1.8809 ppm | 0.0470 ppm | 42.8973 ppm |
| Concentration per Run 3 | 0.0483 ppm | 1.9226 ppm | 0.1135 ppm | 0.9444 ppm | 1.8913 ppm | 0.0473 ppm | 43.1129 ppm |
| Concentration RSD | 0.9 % | 1.1 % | 0.9 % | 0.1 % | 1.1 % | 1.4 % | 1.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0522 ppm | 0.4855 ppm | 0.2040 ppm | 0.2523 ppm | 1.0154 ppm | 12.8318 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0523 ppm | 0.4863 ppm | 0.2040 ppm | 0.2532 ppm | 1.0036 ppm | 12.6773 ppm | -0.0004 ppm |
| Concentration per Run 2 | 0.0520 ppm | 0.4849 ppm | 0.2028 ppm | 0.2513 ppm | 1.0176 ppm | 12.8837 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0522 ppm | 0.4854 ppm | 0.2052 ppm | 0.2524 ppm | 1.0251 ppm | 12.9345 ppm | -0.0004 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 0.6 % | 0.4 % | 1.1 % | 1.1 % | 115.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 16.2966 ppm | 0.5266 ppm | 0.9347 ppm | 51.3891 ppm | 0.4759 ppm | 0.5080 ppm | 0.4848 ppm |
| Concentration per Run 1 | 16.2912 ppm | 0.5198 ppm | 0.9270 ppm | 50.8695 ppm | 0.4760 ppm | 0.5087 ppm | 0.4820 ppm |
| Concentration per Run 2 | 16.2562 ppm | 0.5285 ppm | 0.9338 ppm | 51.5467 ppm | 0.4753 ppm | 0.5075 ppm | 0.4860 ppm |
| Concentration per Run 3 | 16.3425 ppm | 0.5316 ppm | 0.9434 ppm | 51.7509 ppm | 0.4765 ppm | 0.5078 ppm | 0.4864 ppm |
| Concentration RSD | 0.3 % | 1.2 % | 0.9 % | 0.9 % | 0.1 % | 0.1 % | 0.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1139 ppm | 3.3962 ppm | 0.9479 ppm | 1.0462 ppm | 0.9770 ppm | 0.1090 ppm | 0.5004 ppm |
| Concentration per Run 1 | 0.1167 ppm | 3.3997 ppm | 0.9482 ppm | 1.0347 ppm | 0.9787 ppm | 0.1084 ppm | 0.5012 ppm |
| Concentration per Run 2 | 0.1125 ppm | 3.3976 ppm | 0.9488 ppm | 1.0497 ppm | 0.9724 ppm | 0.1087 ppm | 0.4988 ppm |
| Concentration per Run 3 | 0.1124 ppm | 3.3912 ppm | 0.9468 ppm | 1.0543 ppm | 0.9798 ppm | 0.1098 ppm | 0.5012 ppm |
| Concentration RSD | 2.2 % | 0.1 % | 0.1 % | 1.0 % | 0.4 % | 0.7 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4953 ppm | 98.6768 % | 97.2628 % | 102.5601 % | 102.4947 % | 99.2484 % | 99.8826 % |
| Concentration per Run 1 | 0.4961 ppm | 99.5490 % | 97.0867 % | 102.3618 % | 103.3054 % | 99.0736 % | 99.6673 % |
| Concentration per Run 2 | 0.4938 ppm | 98.5219 % | 97.6327 % | 102.8516 % | 102.8022 % | 99.5240 % | 100.2755 % |
| Concentration per Run 3 | 0.4961 ppm | 97.9593 % | 97.0689 % | 102.4668 % | 101.3765 % | 99.1477 % | 99.7050 % |
| Concentration RSD | 0.3 % | 0.8 % | 0.3 % | 0.3 % | 1.0 % | 0.2 % | 0.3 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039428-4 WG2039428
Analysis started at: 3/12/2025 6:46:21 PM
Comments <Comment>
Rack: 2
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0126 ppm | -0.0003 ppm | 0.0178 ppm | 0.0429 ppm | 0.0000 ppm | 33.2498 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0130 ppm | -0.0015 ppm | 0.0178 ppm | 0.0426 ppm | 0.0000 ppm | 33.0630 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0115 ppm | -0.0002 ppm | 0.0179 ppm | 0.0430 ppm | 0.0000 ppm | 33.2930 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0134 ppm | 0.0008 ppm | 0.0178 ppm | 0.0431 ppm | 0.0000 ppm | 33.3935 ppm |
| Concentration RSD | 76.2 % | 7.8 % | 357.9 % | 0.2 % | 0.6 % | 394.3 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0009 ppm | 0.0003 ppm | 0.0000 ppm | 0.0444 ppm | 2.9899 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0011 ppm | 0.0002 ppm | 0.0000 ppm | 0.0425 ppm | 2.9627 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0010 ppm | 0.0005 ppm | 0.0003 ppm | 0.0428 ppm | 3.0039 ppm | 0.0009 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0008 ppm | 0.0001 ppm | -0.0003 ppm | 0.0478 ppm | 3.0032 ppm | -0.0003 ppm |
| Concentration RSD | 9.2 % | 15.0 % | 78.3 % | 10,774.6 % | 6.6 % | 0.8 % | 209.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.5478 ppm | 0.0586 ppm | 0.0051 ppm | 41.7966 ppm | 0.0009 ppm | 0.0010 ppm | 0.0021 ppm |
| Concentration per Run 1 | 6.5103 ppm | 0.0584 ppm | 0.0058 ppm | 41.6261 ppm | 0.0008 ppm | 0.0016 ppm | 0.0023 ppm |
| Concentration per Run 2 | 6.5822 ppm | 0.0586 ppm | 0.0051 ppm | 41.8027 ppm | 0.0010 ppm | 0.0008 ppm | 0.0016 ppm |
| Concentration per Run 3 | 6.5510 ppm | 0.0588 ppm | 0.0044 ppm | 41.9609 ppm | 0.0010 ppm | 0.0004 ppm | 0.0024 ppm |
| Concentration RSD | 0.6 % | 0.3 % | 14.4 % | 0.4 % | 11.6 % | 63.8 % | 22.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 2.5052 ppm | 0.0028 ppm | 0.1411 ppm | 0.0008 ppm | 0.0004 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0019 ppm | 2.4969 ppm | 0.0028 ppm | 0.1403 ppm | 0.0010 ppm | -0.0001 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0015 ppm | 2.5126 ppm | 0.0026 ppm | 0.1409 ppm | 0.0007 ppm | 0.0008 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0016 ppm | 2.5063 ppm | 0.0029 ppm | 0.1420 ppm | 0.0007 ppm | 0.0006 ppm | 0.0002 ppm |
| Concentration RSD | 316.8 % | 0.3 % | 5.1 % | 0.6 % | 22.9 % | 106.9 % | 37.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0027 ppm | 99.5956 % | 98.4389 % | 102.8314 % | 102.6830 % | 100.2682 % | 100.7050 % |
| Concentration per Run 1 | 0.0027 ppm | 100.4748 % | 98.7894 % | 103.1078 % | 102.7294 % | 100.7426 % | 101.1070 % |
| Concentration per Run 2 | 0.0028 ppm | 99.2230 % | 97.9300 % | 102.7032 % | 102.3364 % | 99.8748 % | 100.1376 % |
| Concentration per Run 3 | 0.0025 ppm | 99.0890 % | 98.5973 % | 102.6831 % | 102.9831 % | 100.1871 % | 100.8704 % |
| Concentration RSD | 4.7 % | 0.8 % | 0.5 % | 0.2 % | 0.3 % | 0.4 % | 0.5 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039428-5 WG2039428
Analysis started at: 3/12/2025 6:52:41 PM
Comments <Comment>
Rack: 2
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0230 ppm | 1.9919 ppm | 0.1178 ppm | 0.9267 ppm | 1.9482 ppm | 0.0492 ppm | 42.0627 ppm |
| Concentration per Run 1 | 0.0225 ppm | 1.9723 ppm | 0.1175 ppm | 0.9325 ppm | 1.9318 ppm | 0.0488 ppm | 41.5819 ppm |
| Concentration per Run 2 | 0.0183 ppm | 1.9873 ppm | 0.1208 ppm | 0.9258 ppm | 1.9467 ppm | 0.0493 ppm | 41.9734 ppm |
| Concentration per Run 3 | 0.0283 ppm | 2.0160 ppm | 0.1152 ppm | 0.9216 ppm | 1.9661 ppm | 0.0496 ppm | 42.6329 ppm |
| Concentration RSD | 21.8 % | 1.1 % | 2.4 % | 0.6 % | 0.9 % | 0.9 % | 1.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0515 ppm | 0.4767 ppm | 0.2019 ppm | 0.2488 ppm | 1.0624 ppm | 13.2696 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0519 ppm | 0.4800 ppm | 0.2032 ppm | 0.2501 ppm | 1.0529 ppm | 13.1209 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0514 ppm | 0.4759 ppm | 0.2011 ppm | 0.2474 ppm | 1.0607 ppm | 13.2822 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0512 ppm | 0.4740 ppm | 0.2013 ppm | 0.2489 ppm | 1.0737 ppm | 13.4056 ppm | 0.0001 ppm |
| Concentration RSD | 0.7 % | 0.6 % | 0.6 % | 0.6 % | 1.0 % | 1.1 % | 77.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 16.1562 ppm | 0.5489 ppm | 0.9186 ppm | 50.3600 ppm | 0.4695 ppm | 0.5109 ppm | 0.4482 ppm |
| Concentration per Run 1 | 16.2407 ppm | 0.5428 ppm | 0.9167 ppm | 49.7717 ppm | 0.4725 ppm | 0.5150 ppm | 0.4461 ppm |
| Concentration per Run 2 | 16.0657 ppm | 0.5488 ppm | 0.9178 ppm | 50.3586 ppm | 0.4689 ppm | 0.5098 ppm | 0.4471 ppm |
| Concentration per Run 3 | 16.1622 ppm | 0.5550 ppm | 0.9212 ppm | 50.9497 ppm | 0.4671 ppm | 0.5079 ppm | 0.4513 ppm |
| Concentration RSD | 0.5 % | 1.1 % | 0.3 % | 1.2 % | 0.6 % | 0.7 % | 0.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1191 ppm | 3.2604 ppm | 0.9487 ppm | 1.0887 ppm | 0.9716 ppm | 0.1153 ppm | 0.4951 ppm |
| Concentration per Run 1 | 0.1206 ppm | 3.2646 ppm | 0.9535 ppm | 1.0774 ppm | 0.9770 ppm | 0.1163 ppm | 0.4971 ppm |
| Concentration per Run 2 | 0.1189 ppm | 3.2564 ppm | 0.9475 ppm | 1.0906 ppm | 0.9669 ppm | 0.1141 ppm | 0.4939 ppm |
| Concentration per Run 3 | 0.1178 ppm | 3.2600 ppm | 0.9451 ppm | 1.0982 ppm | 0.9710 ppm | 0.1156 ppm | 0.4944 ppm |
| Concentration RSD | 1.2 % | 0.1 % | 0.5 % | 1.0 % | 0.5 % | 1.0 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4890 ppm | 100.0025 % | 97.9958 % | 102.5314 % | 103.0758 % | 99.5721 % | 100.7262 % |
| Concentration per Run 1 | 0.4926 ppm | 101.2477 % | 97.6750 % | 102.7408 % | 104.0219 % | 99.5935 % | 100.3556 % |
| Concentration per Run 2 | 0.4886 ppm | 100.2989 % | 98.5851 % | 102.5289 % | 103.4928 % | 99.6898 % | 101.2999 % |
| Concentration per Run 3 | 0.4857 ppm | 98.4609 % | 97.7274 % | 102.3244 % | 101.7128 % | 99.4329 % | 100.5233 % |
| Concentration RSD | 0.7 % | 1.4 % | 0.5 % | 0.2 % | 1.2 % | 0.1 % | 0.5 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039428-6d5 WG2039428
Analysis started at: 3/12/2025 6:58:46 PM
Comments <Comment>
Rack: 2
Vial: 5

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0047 ppm | 0.0001 ppm | 0.0052 ppm | 0.0105 ppm | 0.0000 ppm | 7.3257 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0093 ppm | 0.0010 ppm | 0.0055 ppm | 0.0108 ppm | 0.0000 ppm | 7.4145 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0061 ppm | 0.0002 ppm | 0.0049 ppm | 0.0106 ppm | 0.0000 ppm | 7.3569 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0015 ppm | -0.0010 ppm | 0.0051 ppm | 0.0100 ppm | -0.0001 ppm | 7.2057 ppm |
| Concentration RSD | 36.1 % | 118.7 % | 1,306.2 % | 5.9 % | 3.8 % | 151.8 % | 1.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0002 ppm | 0.0001 ppm | -0.0005 ppm | 0.0108 ppm | 0.6302 ppm | 0.0015 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0002 ppm | 0.0002 ppm | -0.0003 ppm | 0.0113 ppm | 0.6426 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0003 ppm | 0.0004 ppm | -0.0006 ppm | 0.0105 ppm | 0.6336 ppm | 0.0026 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0003 ppm | -0.0001 ppm | -0.0004 ppm | 0.0106 ppm | 0.6145 ppm | 0.0013 ppm |
| Concentration RSD | 283.7 % | 19.9 % | 183.6 % | 36.7 % | 4.1 % | 2.3 % | 74.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.3505 ppm | 0.0134 ppm | 0.0052 ppm | 9.0511 ppm | 0.0002 ppm | 0.0004 ppm | 0.0083 ppm |
| Concentration per Run 1 | 1.3535 ppm | 0.0136 ppm | 0.0061 ppm | 9.1530 ppm | 0.0001 ppm | 0.0008 ppm | 0.0101 ppm |
| Concentration per Run 2 | 1.3528 ppm | 0.0135 ppm | 0.0051 ppm | 9.0769 ppm | 0.0002 ppm | -0.0002 ppm | 0.0076 ppm |
| Concentration per Run 3 | 1.3451 ppm | 0.0130 ppm | 0.0044 ppm | 8.9235 ppm | 0.0004 ppm | 0.0006 ppm | 0.0073 ppm |
| Concentration RSD | 0.3 % | 2.1 % | 16.7 % | 1.3 % | 64.9 % | 145.3 % | 18.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0020 ppm | 0.4783 ppm | 0.0027 ppm | 0.0318 ppm | 0.0008 ppm | 0.0011 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0022 ppm | 0.4807 ppm | 0.0024 ppm | 0.0325 ppm | 0.0007 ppm | 0.0003 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0010 ppm | 0.4771 ppm | 0.0030 ppm | 0.0318 ppm | 0.0008 ppm | 0.0010 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0026 ppm | 0.4772 ppm | 0.0027 ppm | 0.0312 ppm | 0.0009 ppm | 0.0019 ppm | 0.0003 ppm |
| Concentration RSD | 42.1 % | 0.4 % | 9.4 % | 2.0 % | 8.8 % | 75.5 % | 138.5 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 95.1298 % | 100.6137 % | 105.5295 % | 97.4130 % | 105.2287 % | 102.5680 % |
| Concentration per Run 1 | 0.0007 ppm | 94.4924 % | 100.7375 % | 105.4972 % | 96.5961 % | 105.1257 % | 102.6100 % |
| Concentration per Run 2 | 0.0005 ppm | 94.5550 % | 100.3152 % | 105.5261 % | 96.9669 % | 105.1911 % | 102.2878 % |
| Concentration per Run 3 | 0.0005 ppm | 96.3420 % | 100.7885 % | 105.5652 % | 98.6759 % | 105.3693 % | 102.8063 % |
| Concentration RSD | 14.3 % | 1.1 % | 0.3 % | 0.0 % | 1.1 % | 0.1 % | 0.3 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512189-02 WG2039428
Analysis started at: 3/12/2025 7:05:06 PM
Comments <Comment>
Rack: 2
Vial: 6

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.9783 ppm | 0.0005 ppm | 0.0614 ppm | 0.0477 ppm | 0.0000 ppm | 53.7710 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.9702 ppm | 0.0016 ppm | 0.0616 ppm | 0.0470 ppm | 0.0000 ppm | 52.9698 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.9792 ppm | 0.0012 ppm | 0.0612 ppm | 0.0478 ppm | 0.0000 ppm | 54.0325 ppm |
| Concentration per Run 3 | 0.0009 ppm | 0.9856 ppm | -0.0012 ppm | 0.0615 ppm | 0.0484 ppm | 0.0000 ppm | 54.3106 ppm |
| Concentration RSD | 46.0 % | 0.8 % | 297.7 % | 0.4 % | 1.4 % | 342.1 % | 1.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0008 ppm | 0.0024 ppm | 0.0018 ppm | 3.9505 ppm | 3.7467 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0008 ppm | 0.0023 ppm | 0.0019 ppm | 3.8961 ppm | 3.6771 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0008 ppm | 0.0023 ppm | 0.0020 ppm | 3.9649 ppm | 3.7606 ppm | 0.0009 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0008 ppm | 0.0025 ppm | 0.0015 ppm | 3.9903 ppm | 3.8023 ppm | 0.0010 ppm |
| Concentration RSD | 7.5 % | 3.7 % | 4.3 % | 13.4 % | 1.2 % | 1.7 % | 83.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 15.6640 ppm | 0.0835 ppm | 0.0013 ppm | 62.3326 ppm | 0.0011 ppm | 0.0077 ppm | 0.0013 ppm |
| Concentration per Run 1 | 15.6343 ppm | 0.0819 ppm | 0.0013 ppm | 61.3718 ppm | 0.0009 ppm | 0.0082 ppm | 0.0016 ppm |
| Concentration per Run 2 | 15.6533 ppm | 0.0843 ppm | 0.0012 ppm | 62.6312 ppm | 0.0011 ppm | 0.0076 ppm | 0.0014 ppm |
| Concentration per Run 3 | 15.7044 ppm | 0.0843 ppm | 0.0013 ppm | 62.9948 ppm | 0.0012 ppm | 0.0074 ppm | 0.0008 ppm |
| Concentration RSD | 0.2 % | 1.7 % | 6.6 % | 1.4 % | 14.3 % | 5.3 % | 34.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0015 ppm | 5.7708 ppm | 0.0010 ppm | 0.2629 ppm | 0.0203 ppm | 0.0009 ppm | 0.0022 ppm |
| Concentration per Run 1 | -0.0017 ppm | 5.7666 ppm | 0.0018 ppm | 0.2584 ppm | 0.0201 ppm | 0.0028 ppm | 0.0022 ppm |
| Concentration per Run 2 | -0.0031 ppm | 5.7626 ppm | 0.0010 ppm | 0.2645 ppm | 0.0205 ppm | -0.0001 ppm | 0.0023 ppm |
| Concentration per Run 3 | 0.0003 ppm | 5.7832 ppm | 0.0002 ppm | 0.2658 ppm | 0.0203 ppm | 0.0001 ppm | 0.0022 ppm |
| Concentration RSD | 113.0 % | 0.2 % | 83.1 % | 1.5 % | 0.9 % | 178.4 % | 2.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | 101.3932 % | 97.7739 % | 102.5516 % | 104.2723 % | 98.6783 % | 100.3896 % |
| Concentration per Run 1 | 0.0022 ppm | 102.7714 % | 98.0910 % | 102.7185 % | 105.5990 % | 98.6360 % | 100.6282 % |
| Concentration per Run 2 | 0.0022 ppm | 101.3970 % | 98.1536 % | 102.5322 % | 104.2391 % | 98.9515 % | 100.6264 % |
| Concentration per Run 3 | 0.0022 ppm | 100.0113 % | 97.0772 % | 102.4042 % | 102.9788 % | 98.4474 % | 99.9140 % |
| Concentration RSD | 2.4 % | 1.4 % | 0.6 % | 0.2 % | 1.3 % | 0.3 % | 0.4 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512189-03 WG2039428
Analysis started at: 3/12/2025 7:11:25 PM
Comments <Comment>
Rack: 2
Vial: 7

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0075 ppm | -0.0010 ppm | 0.1696 ppm | 0.0739 ppm | 0.0000 ppm | 21.0276 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0047 ppm | 0.0000 ppm | 0.1696 ppm | 0.0739 ppm | 0.0000 ppm | 20.9828 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0130 ppm | -0.0010 ppm | 0.1697 ppm | 0.0750 ppm | 0.0000 ppm | 21.3720 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0048 ppm | -0.0021 ppm | 0.1694 ppm | 0.0729 ppm | 0.0000 ppm | 20.7279 ppm |
| Concentration RSD | 94.6 % | 63.5 % | 104.2 % | 0.1 % | 1.4 % | 211.9 % | 1.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0055 ppm | 0.0002 ppm | 0.0000 ppm | 12.9374 ppm | 2.9583 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0053 ppm | 0.0003 ppm | -0.0002 ppm | 12.9115 ppm | 2.9624 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0057 ppm | 0.0002 ppm | 0.0002 ppm | 13.1269 ppm | 2.9946 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0055 ppm | 0.0002 ppm | 0.0001 ppm | 12.7738 ppm | 2.9179 ppm | 0.0013 ppm |
| Concentration RSD | 4.3 % | 3.5 % | 23.1 % | 1,833.8 % | 1.4 % | 1.3 % | 101.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 7.5029 ppm | 0.3748 ppm | 0.0004 ppm | 77.5758 ppm | 0.0026 ppm | 0.0007 ppm | 0.0003 ppm |
| Concentration per Run 1 | 7.4790 ppm | 0.3749 ppm | 0.0002 ppm | 77.6309 ppm | 0.0024 ppm | 0.0004 ppm | 0.0008 ppm |
| Concentration per Run 2 | 7.5262 ppm | 0.3795 ppm | 0.0005 ppm | 78.6301 ppm | 0.0024 ppm | 0.0009 ppm | 0.0014 ppm |
| Concentration per Run 3 | 7.5033 ppm | 0.3698 ppm | 0.0004 ppm | 76.4664 ppm | 0.0030 ppm | 0.0009 ppm | -0.0014 ppm |
| Concentration RSD | 0.3 % | 1.3 % | 48.4 % | 1.4 % | 12.7 % | 40.0 % | 579.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 3.6195 ppm | 0.0013 ppm | 0.0834 ppm | 0.0001 ppm | 0.0008 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0003 ppm | 3.6220 ppm | 0.0011 ppm | 0.0835 ppm | 0.0000 ppm | 0.0014 ppm | 0.0005 ppm |
| Concentration per Run 2 | -0.0032 ppm | 3.6124 ppm | 0.0014 ppm | 0.0844 ppm | -0.0002 ppm | -0.0009 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0007 ppm | 3.6241 ppm | 0.0014 ppm | 0.0822 ppm | 0.0005 ppm | 0.0018 ppm | 0.0001 ppm |
| Concentration RSD | 310.2 % | 0.2 % | 12.3 % | 1.3 % | 369.3 % | 197.0 % | 64.9 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0029 ppm | 95.3557 % | 98.6876 % | 103.3036 % | 98.6261 % | 99.8675 % | 101.4600 % |
| Concentration per Run 1 | 0.0028 ppm | 95.5839 % | 98.5823 % | 103.2027 % | 98.9174 % | 99.6933 % | 101.4700 % |
| Concentration per Run 2 | 0.0029 ppm | 93.9001 % | 98.6281 % | 103.4113 % | 96.9040 % | 99.9577 % | 101.3061 % |
| Concentration per Run 3 | 0.0028 ppm | 96.5832 % | 98.8524 % | 103.2969 % | 100.0571 % | 99.9515 % | 101.6038 % |
| Concentration RSD | 2.6 % | 1.4 % | 0.1 % | 0.1 % | 1.6 % | 0.2 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCV
Analysis started at: 3/12/2025 7:17:41 PM
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4747 ppm | 0.4947 ppm | 0.4682 ppm | 0.4610 ppm | 0.4758 ppm | 0.4848 ppm | 0.5095 ppm |
| Concentration per Run 1 | 0.4750 ppm | 0.4932 ppm | 0.4686 ppm | 0.4616 ppm | 0.4752 ppm | 0.4838 ppm | 0.5088 ppm |
| Concentration per Run 2 | 0.4747 ppm | 0.4994 ppm | 0.4677 ppm | 0.4611 ppm | 0.4792 ppm | 0.4879 ppm | 0.5096 ppm |
| Concentration per Run 3 | 0.4744 ppm | 0.4916 ppm | 0.4685 ppm | 0.4605 ppm | 0.4731 ppm | 0.4828 ppm | 0.5101 ppm |
| Recovery Percentage 1 | 94.939 % | 98.947 % | 93.647 % | 92.209 % | 95.162 % | 96.966 % | 101.895 % |
| Concentration RSD | 0.1 % | 0.8 % | 0.1 % | 0.1 % | 0.6 % | 0.6 % | 0.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4872 ppm | 0.4933 ppm | 0.5113 ppm | 0.4939 ppm | 0.5229 ppm | 4.9733 ppm | 0.4739 ppm |
| Concentration per Run 1 | 0.4879 ppm | 0.4944 ppm | 0.5111 ppm | 0.4935 ppm | 0.5215 ppm | 4.9838 ppm | 0.4733 ppm |
| Concentration per Run 2 | 0.4864 ppm | 0.4925 ppm | 0.5112 ppm | 0.4951 ppm | 0.5246 ppm | 4.9939 ppm | 0.4760 ppm |
| Concentration per Run 3 | 0.4872 ppm | 0.4931 ppm | 0.5118 ppm | 0.4932 ppm | 0.5226 ppm | 4.9420 ppm | 0.4726 ppm |
| Recovery Percentage 1 | 97.436 % | 98.666 % | 102.269 % | 98.783 % | 104.580 % | 99.465 % | 94.788 % |
| Concentration RSD | 0.2 % | 0.2 % | 0.1 % | 0.2 % | 0.3 % | 0.6 % | 0.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5070 ppm | 0.4880 ppm | 0.4714 ppm | 9.7005 ppm | 0.4844 ppm | 0.4877 ppm | 0.4798 ppm |
| Concentration per Run 1 | 0.5011 ppm | 0.4865 ppm | 0.4708 ppm | 9.7214 ppm | 0.4851 ppm | 0.4897 ppm | 0.4805 ppm |
| Concentration per Run 2 | 0.5111 ppm | 0.4909 ppm | 0.4707 ppm | 9.7348 ppm | 0.4835 ppm | 0.4867 ppm | 0.4808 ppm |
| Concentration per Run 3 | 0.5089 ppm | 0.4865 ppm | 0.4728 ppm | 9.6454 ppm | 0.4846 ppm | 0.4868 ppm | 0.4781 ppm |
| Recovery Percentage 1 | 101.407 % | 97.596 % | 94.285 % | 97.005 % | 96.877 % | 97.549 % | 95.954 % |
| Concentration RSD | 1.0 % | 0.5 % | 0.2 % | 0.5 % | 0.2 % | 0.3 % | 0.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4806 ppm | 5.3273 ppm | 0.4733 ppm | 0.4785 ppm | 0.4913 ppm | 0.4926 ppm | 0.4925 ppm |
| Concentration per Run 1 | 0.4789 ppm | 5.3339 ppm | 0.4756 ppm | 0.4790 ppm | 0.4909 ppm | 0.4947 ppm | 0.4922 ppm |
| Concentration per Run 2 | 0.4831 ppm | 5.3154 ppm | 0.4716 ppm | 0.4805 ppm | 0.4920 ppm | 0.4915 ppm | 0.4932 ppm |
| Concentration per Run 3 | 0.4797 ppm | 5.3325 ppm | 0.4726 ppm | 0.4760 ppm | 0.4911 ppm | 0.4916 ppm | 0.4922 ppm |
| Recovery Percentage 1 | 96.114 % | 101.472 % | 94.656 % | 95.697 % | 98.264 % | 98.518 % | 98.504 % |
| Concentration RSD | 0.5 % | 0.2 % | 0.4 % | 0.5 % | 0.1 % | 0.4 % | 0.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4908 ppm | 96.0819 % | 100.2619 % | 105.1822 % | 98.7807 % | 103.7609 % | 102.5339 % |
| Concentration per Run 1 | 0.4912 ppm | 95.9173 % | 100.2175 % | 104.9068 % | 98.9464 % | 103.5854 % | 102.4815 % |
| Concentration per Run 2 | 0.4905 ppm | 96.3432 % | 100.1565 % | 105.4230 % | 98.7929 % | 103.9438 % | 102.4160 % |
| Concentration per Run 3 | 0.4908 ppm | 95.9851 % | 100.4117 % | 105.2167 % | 98.6028 % | 103.7536 % | 102.7042 % |
| Recovery Percentage 1 | 98.164 % | | | | | | |
| Concentration RSD | 0.1 % | 0.2 % | 0.1 % | 0.2 % | 0.2 % | 0.2 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCB
Analysis started at: 3/12/2025 7:23:49 PM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0003 ppm | 0.0004 ppm | 0.0016 ppm | 0.0002 ppm | 0.0000 ppm | 0.0101 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0039 ppm | 0.0011 ppm | 0.0017 ppm | 0.0003 ppm | 0.0000 ppm | 0.0090 ppm |
| Concentration per Run 2 | 0.0009 ppm | 0.0014 ppm | -0.0009 ppm | 0.0014 ppm | 0.0000 ppm | -0.0001 ppm | 0.0131 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0033 ppm | 0.0008 ppm | 0.0016 ppm | 0.0002 ppm | 0.0000 ppm | 0.0083 ppm |
| Recovery Percentage 1 | 5.495 % | 0.272 % | 7.429 % | 5.203 % | 1.833 % | -0.467 % | 10.100 % |
| Concentration RSD | 108.4 % | 1,382.6 % | 293.6 % | 10.6 % | 69.2 % | 132.3 % | 25.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | -0.0004 ppm | 0.0017 ppm | -0.0118 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | -0.0004 ppm | 0.0008 ppm | -0.0122 ppm | 0.0015 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | -0.0004 ppm | 0.0024 ppm | 0.0058 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0002 ppm | 0.0001 ppm | -0.0004 ppm | 0.0019 ppm | -0.0292 ppm | 0.0004 ppm |
| Recovery Percentage 1 | 0.471 % | 0.565 % | 0.517 % | -4.145 % | 3.471 % | -0.474 % | 8.323 % |
| Concentration RSD | 169.7 % | 51.4 % | 77.1 % | 1.9 % | 46.7 % | 148.0 % | 69.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0000 ppm | 0.0016 ppm | 0.0196 ppm | 0.0003 ppm | 0.0004 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0020 ppm | 0.0002 ppm | 0.0018 ppm | 0.0220 ppm | 0.0005 ppm | -0.0001 ppm | 0.0007 ppm |
| Concentration per Run 2 | -0.0007 ppm | -0.0001 ppm | 0.0016 ppm | 0.0183 ppm | 0.0002 ppm | 0.0005 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | 0.0014 ppm | 0.0186 ppm | 0.0002 ppm | 0.0009 ppm | -0.0003 ppm |
| Recovery Percentage 1 | 0.418 % | 0.369 % | 3.189 % | 0.982 % | 1.212 % | 4.350 % | 0.785 % |
| Concentration RSD | 331.3 % | 365.0 % | 14.1 % | 10.4 % | 47.3 % | 121.2 % | 149.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | -0.0003 ppm | 0.0006 ppm | 0.0000 ppm | 0.0002 ppm | 0.0011 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | 0.0004 ppm | 0.0002 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0016 ppm | -0.0004 ppm | 0.0008 ppm | 0.0000 ppm | 0.0000 ppm | 0.0020 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0022 ppm | -0.0006 ppm | 0.0009 ppm | -0.0001 ppm | 0.0002 ppm | 0.0010 ppm | 0.0001 ppm |
| Recovery Percentage 1 | 2.929 % | -0.068 % | 1.137 % | -0.265 % | 2.009 % | 5.407 % | 0.344 % |
| Concentration RSD | 644.9 % | 87.7 % | 78.6 % | 304.3 % | 112.5 % | 79.3 % | 441.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 100.9458 % | 101.6690 % | 105.6732 % | 102.8073 % | 104.5570 % | 102.1129 % |
| Concentration per Run 1 | 0.0008 ppm | 103.1567 % | 101.4012 % | 105.7038 % | 104.4266 % | 104.5751 % | 101.9075 % |
| Concentration per Run 2 | 0.0008 ppm | 100.5647 % | 101.9170 % | 105.4023 % | 102.6142 % | 104.4502 % | 102.4349 % |
| Concentration per Run 3 | 0.0008 ppm | 99.1160 % | 101.6888 % | 105.9134 % | 101.3811 % | 104.6456 % | 101.9964 % |
| Recovery Percentage 1 | 16.287 % | | | | | | |
| Concentration RSD | 4.7 % | 2.0 % | 0.3 % | 0.2 % | 1.5 % | 0.1 % | 0.3 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039054-1 WG2039054
Analysis started at: 3/12/2025 7:37:31 PM
Comments <Comment>
Rack: 2
Vial: 8

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | -0.0007 ppm | -0.0024 ppm | 0.0008 ppm | 0.0001 ppm | -0.0001 ppm | 0.0122 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0026 ppm | -0.0020 ppm | 0.0007 ppm | 0.0002 ppm | -0.0001 ppm | 0.0082 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0004 ppm | -0.0037 ppm | 0.0008 ppm | 0.0000 ppm | -0.0001 ppm | 0.0148 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0002 ppm | -0.0014 ppm | 0.0008 ppm | 0.0001 ppm | 0.0000 ppm | 0.0135 ppm |
| Concentration RSD | 170.4 % | 247.9 % | 51.3 % | 4.5 % | 112.4 % | 29.2 % | 28.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | -0.0002 ppm | 0.0013 ppm | -0.0267 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | -0.0002 ppm | 0.0008 ppm | -0.0277 ppm | -0.0005 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | -0.0002 ppm | 0.0020 ppm | -0.0540 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0002 ppm | 0.0003 ppm | -0.0002 ppm | 0.0011 ppm | 0.0017 ppm | 0.0000 ppm |
| Concentration RSD | 105.8 % | 400.1 % | 118.0 % | 14.5 % | 47.6 % | 104.7 % | 406.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0034 ppm | 0.0002 ppm | -0.0168 ppm | 0.0001 ppm | 0.0007 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0037 ppm | 0.0002 ppm | -0.0140 ppm | 0.0000 ppm | 0.0012 ppm | -0.0010 ppm |
| Concentration per Run 2 | -0.0005 ppm | 0.0031 ppm | 0.0002 ppm | -0.0249 ppm | 0.0001 ppm | 0.0002 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0033 ppm | 0.0001 ppm | -0.0115 ppm | 0.0001 ppm | 0.0007 ppm | 0.0002 ppm |
| Concentration RSD | 394.7 % | 9.3 % | 29.4 % | 42.5 % | 87.4 % | 73.8 % | 558.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 0.0035 ppm | 0.0003 ppm | 0.0001 ppm | 0.0001 ppm | 0.0006 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0016 ppm | 0.0027 ppm | 0.0001 ppm | -0.0001 ppm | 0.0004 ppm | 0.0019 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0043 ppm | 0.0008 ppm | 0.0003 ppm | 0.0002 ppm | 0.0003 ppm | -0.0002 ppm |
| Concentration per Run 3 | -0.0012 ppm | 0.0037 ppm | -0.0001 ppm | 0.0001 ppm | -0.0002 ppm | -0.0003 ppm | -0.0001 ppm |
| Concentration RSD | 201.7 % | 22.5 % | 159.2 % | 151.1 % | 286.8 % | 179.0 % | 61.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 96.0884 % | 103.9023 % | 106.9711 % | 95.5117 % | 106.8244 % | 103.8845 % |
| Concentration per Run 1 | 0.0003 ppm | 94.8333 % | 103.7647 % | 106.7550 % | 93.6512 % | 106.7746 % | 103.6161 % |
| Concentration per Run 2 | 0.0003 ppm | 95.6592 % | 104.0238 % | 107.2570 % | 95.2795 % | 106.9190 % | 103.9624 % |
| Concentration per Run 3 | 0.0004 ppm | 97.7727 % | 103.9185 % | 106.9013 % | 97.6043 % | 106.7794 % | 104.0751 % |
| Concentration RSD | 14.2 % | 1.6 % | 0.1 % | 0.2 % | 2.1 % | 0.1 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039054-2 WG2039054
Analysis started at: 3/12/2025 7:43:57 PM
Comments <Comment>
Rack: 2
Vial: 9

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0496 ppm | 1.9295 ppm | 0.1089 ppm | 0.9041 ppm | 1.8636 ppm | 0.0477 ppm | 9.6539 ppm |
| Concentration per Run 1 | 0.0494 ppm | 1.9229 ppm | 0.1089 ppm | 0.9031 ppm | 1.8583 ppm | 0.0475 ppm | 9.6050 ppm |
| Concentration per Run 2 | 0.0501 ppm | 1.9352 ppm | 0.1089 ppm | 0.9049 ppm | 1.8648 ppm | 0.0478 ppm | 9.6921 ppm |
| Concentration per Run 3 | 0.0495 ppm | 1.9305 ppm | 0.1089 ppm | 0.9043 ppm | 1.8676 ppm | 0.0479 ppm | 9.6645 ppm |
| Concentration RSD | 0.7 % | 0.3 % | 0.0 % | 0.1 % | 0.3 % | 0.4 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0525 ppm | 0.4877 ppm | 0.2071 ppm | 0.2552 ppm | 0.9976 ppm | 9.6046 ppm | -0.0007 ppm |
| Concentration per Run 1 | 0.0524 ppm | 0.4877 ppm | 0.2067 ppm | 0.2544 ppm | 0.9928 ppm | 9.5723 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0525 ppm | 0.4882 ppm | 0.2069 ppm | 0.2553 ppm | 1.0007 ppm | 9.5802 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0525 ppm | 0.4873 ppm | 0.2077 ppm | 0.2560 ppm | 0.9992 ppm | 9.6613 ppm | -0.0017 ppm |
| Concentration RSD | 0.0 % | 0.1 % | 0.3 % | 0.3 % | 0.4 % | 0.5 % | 122.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.0685 ppm | 0.4812 ppm | 0.9050 ppm | 9.5480 ppm | 0.4866 ppm | 0.5154 ppm | 0.4586 ppm |
| Concentration per Run 1 | 10.0746 ppm | 0.4798 ppm | 0.8962 ppm | 9.5508 ppm | 0.4875 ppm | 0.5163 ppm | 0.4540 ppm |
| Concentration per Run 2 | 10.0664 ppm | 0.4823 ppm | 0.9069 ppm | 9.5384 ppm | 0.4856 ppm | 0.5143 ppm | 0.4596 ppm |
| Concentration per Run 3 | 10.0645 ppm | 0.4815 ppm | 0.9118 ppm | 9.5547 ppm | 0.4866 ppm | 0.5157 ppm | 0.4622 ppm |
| Concentration RSD | 0.1 % | 0.3 % | 0.9 % | 0.1 % | 0.2 % | 0.2 % | 0.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1084 ppm | 1.0738 ppm | 0.9562 ppm | 0.9101 ppm | 0.9764 ppm | 0.1102 ppm | 0.5059 ppm |
| Concentration per Run 1 | 0.1070 ppm | 1.0738 ppm | 0.9573 ppm | 0.9094 ppm | 0.9744 ppm | 0.1113 ppm | 0.5052 ppm |
| Concentration per Run 2 | 0.1081 ppm | 1.0728 ppm | 0.9537 ppm | 0.9089 ppm | 0.9771 ppm | 0.1108 ppm | 0.5056 ppm |
| Concentration per Run 3 | 0.1100 ppm | 1.0748 ppm | 0.9576 ppm | 0.9120 ppm | 0.9776 ppm | 0.1083 ppm | 0.5068 ppm |
| Concentration RSD | 1.4 % | 0.1 % | 0.2 % | 0.2 % | 0.2 % | 1.4 % | 0.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4981 ppm | 101.3284 % | 101.6177 % | 104.5811 % | 103.5696 % | 103.9645 % | 103.3071 % |
| Concentration per Run 1 | 0.4982 ppm | 101.6112 % | 101.2856 % | 104.6057 % | 103.9396 % | 103.9590 % | 103.1698 % |
| Concentration per Run 2 | 0.4981 ppm | 100.7252 % | 102.0001 % | 104.7664 % | 102.8584 % | 104.0345 % | 103.5500 % |
| Concentration per Run 3 | 0.4981 ppm | 101.6489 % | 101.5675 % | 104.3712 % | 103.9108 % | 103.8999 % | 103.2014 % |
| Concentration RSD | 0.0 % | 0.5 % | 0.4 % | 0.2 % | 0.6 % | 0.1 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512368-10 WG2039054
Analysis started at: 3/12/2025 7:50:04 PM
Comments <Comment>
Rack: 2
Vial: 10

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0010 ppm | -0.0003 ppm | 0.0172 ppm | 0.0304 ppm | -0.0001 ppm | 13.1034 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0002 ppm | -0.0002 ppm | 0.0172 ppm | 0.0307 ppm | -0.0001 ppm | 13.1811 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0036 ppm | -0.0006 ppm | 0.0172 ppm | 0.0305 ppm | 0.0000 ppm | 13.1002 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0062 ppm | -0.0002 ppm | 0.0173 ppm | 0.0301 ppm | -0.0001 ppm | 13.0288 ppm |
| Concentration RSD | 558.1 % | 519.0 % | 72.0 % | 0.3 % | 1.0 % | 35.6 % | 0.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0011 ppm | 0.0004 ppm | 0.0055 ppm | 2.0162 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0010 ppm | 0.0007 ppm | 0.0052 ppm | 2.0221 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0008 ppm | 0.0001 ppm | 0.0057 ppm | 1.9973 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0015 ppm | 0.0003 ppm | 0.0055 ppm | 2.0291 ppm | 0.0007 ppm |
| Concentration RSD | 185.0 % | 39.8 % | 34.4 % | 74.8 % | 4.6 % | 0.8 % | 34.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.6714 ppm | 0.0006 ppm | 0.0046 ppm | 11.1351 ppm | 0.0002 ppm | 0.0009 ppm | 0.0024 ppm |
| Concentration per Run 1 | 2.6757 ppm | 0.0008 ppm | 0.0052 ppm | 11.1849 ppm | 0.0003 ppm | 0.0012 ppm | 0.0040 ppm |
| Concentration per Run 2 | 2.6678 ppm | 0.0002 ppm | 0.0044 ppm | 11.1167 ppm | 0.0004 ppm | 0.0012 ppm | 0.0021 ppm |
| Concentration per Run 3 | 2.6706 ppm | 0.0008 ppm | 0.0042 ppm | 11.1037 ppm | 0.0000 ppm | 0.0004 ppm | 0.0011 ppm |
| Concentration RSD | 0.2 % | 54.5 % | 11.6 % | 0.4 % | 78.7 % | 53.1 % | 60.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 4.2638 ppm | 0.0014 ppm | 0.0558 ppm | 0.0009 ppm | 0.0002 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0022 ppm | 4.2643 ppm | 0.0011 ppm | 0.0560 ppm | 0.0010 ppm | 0.0018 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0014 ppm | 4.2694 ppm | 0.0014 ppm | 0.0556 ppm | 0.0012 ppm | -0.0009 ppm | 0.0002 ppm |
| Concentration per Run 3 | -0.0006 ppm | 4.2577 ppm | 0.0016 ppm | 0.0557 ppm | 0.0004 ppm | -0.0003 ppm | 0.0001 ppm |
| Concentration RSD | 403.0 % | 0.1 % | 17.2 % | 0.4 % | 45.2 % | 649.8 % | 58.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0173 ppm | 102.1361 % | 102.3974 % | 105.3046 % | 103.0445 % | 104.9823 % | 103.5286 % |
| Concentration per Run 1 | 0.0172 ppm | 101.9675 % | 102.0597 % | 105.3740 % | 102.1834 % | 105.1459 % | 103.1646 % |
| Concentration per Run 2 | 0.0174 ppm | 101.7155 % | 102.2839 % | 105.2050 % | 102.9303 % | 104.7303 % | 103.5734 % |
| Concentration per Run 3 | 0.0174 ppm | 102.7252 % | 102.8487 % | 105.3349 % | 104.0199 % | 105.0708 % | 103.8479 % |
| Concentration RSD | 0.5 % | 0.5 % | 0.4 % | 0.1 % | 0.9 % | 0.2 % | 0.3 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039054-3 WG2039054
Analysis started at: 3/12/2025 7:56:25 PM
Comments <Comment>
Rack: 2
Vial: 11

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0491 ppm | 1.8737 ppm | 0.1109 ppm | 0.9344 ppm | 1.8376 ppm | 0.0466 ppm | 21.8510 ppm |
| Concentration per Run 1 | 0.0493 ppm | 1.8225 ppm | 0.1109 ppm | 0.9332 ppm | 1.7895 ppm | 0.0453 ppm | 21.2845 ppm |
| Concentration per Run 2 | 0.0493 ppm | 1.8834 ppm | 0.1099 ppm | 0.9335 ppm | 1.8456 ppm | 0.0469 ppm | 21.9272 ppm |
| Concentration per Run 3 | 0.0486 ppm | 1.9153 ppm | 0.1119 ppm | 0.9365 ppm | 1.8775 ppm | 0.0475 ppm | 22.3414 ppm |
| Concentration RSD | 0.9 % | 2.5 % | 0.9 % | 0.2 % | 2.4 % | 2.4 % | 2.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0523 ppm | 0.4837 ppm | 0.2066 ppm | 0.2547 ppm | 0.9683 ppm | 11.3962 ppm | -0.0009 ppm |
| Concentration per Run 1 | 0.0523 ppm | 0.4841 ppm | 0.2080 ppm | 0.2552 ppm | 0.9418 ppm | 11.0646 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0523 ppm | 0.4837 ppm | 0.2065 ppm | 0.2545 ppm | 0.9715 ppm | 11.4841 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0522 ppm | 0.4833 ppm | 0.2054 ppm | 0.2543 ppm | 0.9917 ppm | 11.6399 ppm | -0.0020 ppm |
| Concentration RSD | 0.1 % | 0.1 % | 0.6 % | 0.2 % | 2.6 % | 2.6 % | 104.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 12.6532 ppm | 0.4667 ppm | 0.8949 ppm | 20.0684 ppm | 0.4818 ppm | 0.5120 ppm | 0.4656 ppm |
| Concentration per Run 1 | 12.7305 ppm | 0.4540 ppm | 0.8853 ppm | 19.5196 ppm | 0.4824 ppm | 0.5115 ppm | 0.4609 ppm |
| Concentration per Run 2 | 12.6165 ppm | 0.4689 ppm | 0.8941 ppm | 20.1583 ppm | 0.4817 ppm | 0.5126 ppm | 0.4664 ppm |
| Concentration per Run 3 | 12.6125 ppm | 0.4774 ppm | 0.9054 ppm | 20.5272 ppm | 0.4811 ppm | 0.5119 ppm | 0.4694 ppm |
| Concentration RSD | 0.5 % | 2.5 % | 1.1 % | 2.5 % | 0.1 % | 0.1 % | 0.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1108 ppm | 5.4057 ppm | 0.9568 ppm | 0.9355 ppm | 0.9772 ppm | 0.1103 ppm | 0.5049 ppm |
| Concentration per Run 1 | 0.1107 ppm | 5.4016 ppm | 0.9555 ppm | 0.9094 ppm | 0.9805 ppm | 0.1101 ppm | 0.5073 ppm |
| Concentration per Run 2 | 0.1093 ppm | 5.4091 ppm | 0.9577 ppm | 0.9400 ppm | 0.9759 ppm | 0.1115 ppm | 0.5045 ppm |
| Concentration per Run 3 | 0.1122 ppm | 5.4065 ppm | 0.9571 ppm | 0.9572 ppm | 0.9752 ppm | 0.1095 ppm | 0.5028 ppm |
| Concentration RSD | 1.3 % | 0.1 % | 0.1 % | 2.6 % | 0.3 % | 0.9 % | 0.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5122 ppm | 103.6311 % | 100.7103 % | 104.2578 % | 105.2707 % | 102.9450 % | 102.2856 % |
| Concentration per Run 1 | 0.5126 ppm | 107.2098 % | 100.2154 % | 104.2848 % | 107.7031 % | 102.8258 % | 101.6231 % |
| Concentration per Run 2 | 0.5120 ppm | 102.8270 % | 101.0582 % | 103.9203 % | 104.8740 % | 102.9129 % | 102.5925 % |
| Concentration per Run 3 | 0.5121 ppm | 100.8566 % | 100.8575 % | 104.5681 % | 103.2349 % | 103.0963 % | 102.6413 % |
| Concentration RSD | 0.1 % | 3.1 % | 0.4 % | 0.3 % | 2.1 % | 0.1 % | 0.6 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039054-4 WG2039054
Analysis started at: 3/12/2025 8:02:31 PM
Comments <Comment>
Rack: 2
Vial: 12

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0499 ppm | 1.9590 ppm | 0.1124 ppm | 0.9440 ppm | 1.9179 ppm | 0.0487 ppm | 23.0248 ppm |
| Concentration per Run 1 | 0.0501 ppm | 1.9570 ppm | 0.1131 ppm | 0.9437 ppm | 1.9213 ppm | 0.0487 ppm | 23.0763 ppm |
| Concentration per Run 2 | 0.0501 ppm | 1.9564 ppm | 0.1117 ppm | 0.9450 ppm | 1.9131 ppm | 0.0486 ppm | 22.9749 ppm |
| Concentration per Run 3 | 0.0496 ppm | 1.9636 ppm | 0.1123 ppm | 0.9434 ppm | 1.9193 ppm | 0.0487 ppm | 23.0231 ppm |
| Concentration RSD | 0.6 % | 0.2 % | 0.6 % | 0.1 % | 0.2 % | 0.2 % | 0.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0528 ppm | 0.4884 ppm | 0.2090 ppm | 0.2565 ppm | 1.0117 ppm | 11.9391 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0529 ppm | 0.4883 ppm | 0.2098 ppm | 0.2572 ppm | 1.0125 ppm | 11.9557 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0527 ppm | 0.4892 ppm | 0.2089 ppm | 0.2569 ppm | 1.0103 ppm | 11.9094 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0528 ppm | 0.4877 ppm | 0.2083 ppm | 0.2554 ppm | 1.0122 ppm | 11.9521 ppm | -0.0004 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 0.4 % | 0.4 % | 0.1 % | 0.2 % | 825.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 12.8492 ppm | 0.4864 ppm | 0.9063 ppm | 21.0694 ppm | 0.4862 ppm | 0.5170 ppm | 0.4734 ppm |
| Concentration per Run 1 | 12.8541 ppm | 0.4866 ppm | 0.8954 ppm | 21.0891 ppm | 0.4862 ppm | 0.5171 ppm | 0.4726 ppm |
| Concentration per Run 2 | 12.8602 ppm | 0.4855 ppm | 0.9085 ppm | 21.0232 ppm | 0.4865 ppm | 0.5172 ppm | 0.4721 ppm |
| Concentration per Run 3 | 12.8333 ppm | 0.4872 ppm | 0.9151 ppm | 21.0959 ppm | 0.4858 ppm | 0.5167 ppm | 0.4754 ppm |
| Concentration RSD | 0.1 % | 0.2 % | 1.1 % | 0.2 % | 0.1 % | 0.1 % | 0.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1112 ppm | 5.5039 ppm | 0.9722 ppm | 0.9790 ppm | 0.9892 ppm | 0.1110 ppm | 0.5101 ppm |
| Concentration per Run 1 | 0.1131 ppm | 5.5061 ppm | 0.9711 ppm | 0.9793 ppm | 0.9895 ppm | 0.1110 ppm | 0.5105 ppm |
| Concentration per Run 2 | 0.1073 ppm | 5.5083 ppm | 0.9714 ppm | 0.9769 ppm | 0.9895 ppm | 0.1119 ppm | 0.5106 ppm |
| Concentration per Run 3 | 0.1133 ppm | 5.4974 ppm | 0.9740 ppm | 0.9807 ppm | 0.9884 ppm | 0.1101 ppm | 0.5092 ppm |
| Concentration RSD | 3.1 % | 0.1 % | 0.2 % | 0.2 % | 0.1 % | 0.8 % | 0.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5180 ppm | 100.9394 % | 100.4013 % | 103.9050 % | 102.8929 % | 103.1420 % | 102.1709 % |
| Concentration per Run 1 | 0.5182 ppm | 101.4811 % | 100.4208 % | 104.0707 % | 102.9517 % | 103.1082 % | 102.0605 % |
| Concentration per Run 2 | 0.5181 ppm | 100.7658 % | 100.4109 % | 103.6249 % | 102.8138 % | 102.9998 % | 102.0728 % |
| Concentration per Run 3 | 0.5178 ppm | 100.5712 % | 100.3724 % | 104.0195 % | 102.9133 % | 103.3180 % | 102.3794 % |
| Concentration RSD | 0.0 % | 0.5 % | 0.0 % | 0.2 % | 0.1 % | 0.2 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039054-5 WG2039054
Analysis started at: 3/12/2025 8:08:37 PM
Comments <Comment>
Rack: 2
Vial: 13

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0243 ppm | 2.1553 ppm | 0.1275 ppm | 1.0205 ppm | 2.0999 ppm | 0.0538 ppm | 23.5481 ppm |
| Concentration per Run 1 | 0.0258 ppm | 2.1777 ppm | 0.1278 ppm | 1.0210 ppm | 2.1174 ppm | 0.0543 ppm | 23.7362 ppm |
| Concentration per Run 2 | 0.0230 ppm | 2.1518 ppm | 0.1278 ppm | 1.0210 ppm | 2.1008 ppm | 0.0539 ppm | 23.5372 ppm |
| Concentration per Run 3 | 0.0243 ppm | 2.1364 ppm | 0.1269 ppm | 1.0195 ppm | 2.0815 ppm | 0.0531 ppm | 23.3708 ppm |
| Concentration RSD | 5.7 % | 1.0 % | 0.4 % | 0.1 % | 0.9 % | 1.1 % | 0.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0567 ppm | 0.5215 ppm | 0.2243 ppm | 0.2757 ppm | 1.1190 ppm | 13.0682 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0567 ppm | 0.5215 ppm | 0.2232 ppm | 0.2755 ppm | 1.1270 ppm | 13.2071 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0567 ppm | 0.5217 ppm | 0.2249 ppm | 0.2760 ppm | 1.1209 ppm | 13.0135 ppm | 0.0013 ppm |
| Concentration per Run 3 | 0.0565 ppm | 0.5214 ppm | 0.2247 ppm | 0.2756 ppm | 1.1090 ppm | 12.9839 ppm | -0.0013 ppm |
| Concentration RSD | 0.2 % | 0.0 % | 0.4 % | 0.1 % | 0.8 % | 0.9 % | 519.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 13.6461 ppm | 0.5385 ppm | 0.9878 ppm | 21.7623 ppm | 0.5190 ppm | 0.5694 ppm | 0.4936 ppm |
| Concentration per Run 1 | 13.6540 ppm | 0.5456 ppm | 0.9768 ppm | 21.9901 ppm | 0.5198 ppm | 0.5705 ppm | 0.4917 ppm |
| Concentration per Run 2 | 13.6277 ppm | 0.5384 ppm | 0.9900 ppm | 21.7044 ppm | 0.5190 ppm | 0.5705 ppm | 0.4936 ppm |
| Concentration per Run 3 | 13.6565 ppm | 0.5316 ppm | 0.9967 ppm | 21.5924 ppm | 0.5183 ppm | 0.5674 ppm | 0.4955 ppm |
| Concentration RSD | 0.1 % | 1.3 % | 1.0 % | 0.9 % | 0.1 % | 0.3 % | 0.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1274 ppm | 5.1026 ppm | 1.0565 ppm | 1.0884 ppm | 1.0792 ppm | 0.1283 ppm | 0.5489 ppm |
| Concentration per Run 1 | 0.1274 ppm | 5.1063 ppm | 1.0562 ppm | 1.1006 ppm | 1.0787 ppm | 0.1274 ppm | 0.5475 ppm |
| Concentration per Run 2 | 0.1267 ppm | 5.1015 ppm | 1.0600 ppm | 1.0865 ppm | 1.0786 ppm | 0.1284 ppm | 0.5492 ppm |
| Concentration per Run 3 | 0.1280 ppm | 5.1001 ppm | 1.0532 ppm | 1.0781 ppm | 1.0802 ppm | 0.1291 ppm | 0.5501 ppm |
| Concentration RSD | 0.5 % | 0.1 % | 0.3 % | 1.0 % | 0.1 % | 0.7 % | 0.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5518 ppm | 100.3457 % | 100.3936 % | 104.0121 % | 102.3661 % | 102.8655 % | 101.9198 % |
| Concentration per Run 1 | 0.5511 ppm | 99.5047 % | 100.3592 % | 104.0218 % | 101.1945 % | 102.9977 % | 102.0060 % |
| Concentration per Run 2 | 0.5530 ppm | 100.6749 % | 100.2971 % | 103.8760 % | 102.5218 % | 102.8197 % | 101.9261 % |
| Concentration per Run 3 | 0.5512 ppm | 100.8575 % | 100.5244 % | 104.1384 % | 103.3820 % | 102.7792 % | 101.8275 % |
| Concentration RSD | 0.2 % | 0.7 % | 0.1 % | 0.1 % | 1.1 % | 0.1 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039054-6d5 WG2039054
Analysis started at: 3/12/2025 8:14:42 PM
Comments <Comment>
Rack: 2
Vial: 14

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0032 ppm | 0.0001 ppm | 0.0062 ppm | 0.0074 ppm | 0.0000 ppm | 2.8139 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0041 ppm | 0.0000 ppm | 0.0061 ppm | 0.0080 ppm | 0.0000 ppm | 2.8752 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0018 ppm | 0.0004 ppm | 0.0062 ppm | 0.0072 ppm | 0.0000 ppm | 2.8046 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0036 ppm | -0.0001 ppm | 0.0063 ppm | 0.0069 ppm | 0.0000 ppm | 2.7619 ppm |
| Concentration RSD | 69.8 % | 37.1 % | 419.8 % | 1.5 % | 7.2 % | 161.1 % | 2.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0003 ppm | -0.0003 ppm | 0.0034 ppm | 0.4137 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0006 ppm | -0.0004 ppm | 0.0039 ppm | 0.4376 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | -0.0001 ppm | 0.0040 ppm | 0.4205 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0002 ppm | 0.0005 ppm | -0.0003 ppm | 0.0022 ppm | 0.3830 ppm | 0.0003 ppm |
| Concentration RSD | 1,068.9 % | 58.4 % | 96.0 % | 55.3 % | 31.2 % | 6.8 % | 45.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5481 ppm | 0.0005 ppm | 0.0072 ppm | 2.3587 ppm | 0.0003 ppm | 0.0004 ppm | 0.0099 ppm |
| Concentration per Run 1 | 0.5484 ppm | 0.0005 ppm | 0.0082 ppm | 2.4092 ppm | 0.0004 ppm | 0.0004 ppm | 0.0106 ppm |
| Concentration per Run 2 | 0.5478 ppm | 0.0003 ppm | 0.0072 ppm | 2.3505 ppm | 0.0002 ppm | 0.0007 ppm | 0.0103 ppm |
| Concentration per Run 3 | 0.5482 ppm | 0.0006 ppm | 0.0063 ppm | 2.3165 ppm | 0.0003 ppm | 0.0002 ppm | 0.0086 ppm |
| Concentration RSD | 0.1 % | 33.9 % | 13.2 % | 2.0 % | 34.3 % | 60.3 % | 10.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0010 ppm | 0.8498 ppm | 0.0041 ppm | 0.0123 ppm | 0.0008 ppm | 0.0010 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0040 ppm | 0.8525 ppm | 0.0045 ppm | 0.0127 ppm | 0.0010 ppm | 0.0006 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.8484 ppm | 0.0045 ppm | 0.0123 ppm | 0.0009 ppm | 0.0005 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0010 ppm | 0.8487 ppm | 0.0033 ppm | 0.0120 ppm | 0.0006 ppm | 0.0020 ppm | 0.0004 ppm |
| Concentration RSD | 280.1 % | 0.3 % | 16.6 % | 2.8 % | 28.0 % | 80.9 % | 113.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0034 ppm | 96.4993 % | 102.2388 % | 106.0364 % | 97.7656 % | 106.6101 % | 103.4125 % |
| Concentration per Run 1 | 0.0034 ppm | 94.5630 % | 101.9557 % | 106.0177 % | 95.3767 % | 106.6830 % | 103.0951 % |
| Concentration per Run 2 | 0.0035 ppm | 96.5621 % | 102.3190 % | 106.2055 % | 98.1817 % | 106.7199 % | 103.5049 % |
| Concentration per Run 3 | 0.0034 ppm | 98.3729 % | 102.4416 % | 105.8860 % | 99.7385 % | 106.4273 % | 103.6374 % |
| Concentration RSD | 1.0 % | 2.0 % | 0.2 % | 0.2 % | 2.3 % | 0.1 % | 0.3 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512368-01 WG2039054
Analysis started at: 3/12/2025 8:21:03 PM
Comments <Comment>
Rack: 2
Vial: 15

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0062 ppm | -0.0003 ppm | 0.0144 ppm | 0.0145 ppm | -0.0001 ppm | 22.7624 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0003 ppm | -0.0015 ppm | 0.0142 ppm | 0.0147 ppm | 0.0000 ppm | 22.9610 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0101 ppm | 0.0011 ppm | 0.0145 ppm | 0.0142 ppm | -0.0001 ppm | 22.5501 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0081 ppm | -0.0004 ppm | 0.0145 ppm | 0.0146 ppm | 0.0000 ppm | 22.7759 ppm |
| Concentration RSD | 79.1 % | 83.7 % | 483.5 % | 1.4 % | 2.0 % | 35.9 % | 0.9 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0000 ppm | 0.0004 ppm | 0.0061 ppm | 0.0034 ppm | 1.6607 ppm | -0.0012 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0000 ppm | 0.0006 ppm | 0.0059 ppm | 0.0036 ppm | 1.6630 ppm | -0.0019 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0001 ppm | 0.0003 ppm | 0.0064 ppm | 0.0022 ppm | 1.6601 ppm | -0.0005 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0001 ppm | 0.0004 ppm | 0.0061 ppm | 0.0046 ppm | 1.6589 ppm | -0.0012 ppm |
| Concentration RSD | 27.5 % | 487.9 % | 32.9 % | 3.8 % | 35.1 % | 0.1 % | 58.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.7111 ppm | 0.0011 ppm | 0.0023 ppm | 8.7124 ppm | 0.0007 ppm | 0.0012 ppm | 0.0009 ppm |
| Concentration per Run 1 | 4.7088 ppm | 0.0012 ppm | 0.0025 ppm | 8.8035 ppm | 0.0005 ppm | 0.0014 ppm | 0.0004 ppm |
| Concentration per Run 2 | 4.7180 ppm | 0.0011 ppm | 0.0023 ppm | 8.6410 ppm | 0.0007 ppm | 0.0014 ppm | 0.0015 ppm |
| Concentration per Run 3 | 4.7063 ppm | 0.0010 ppm | 0.0023 ppm | 8.6928 ppm | 0.0009 ppm | 0.0009 ppm | 0.0008 ppm |
| Concentration RSD | 0.1 % | 7.9 % | 5.1 % | 1.0 % | 24.3 % | 23.0 % | 62.5 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | 1.7453 ppm | 0.0016 ppm | 0.0746 ppm | 0.0005 ppm | 0.0018 ppm | 0.0007 ppm |
| Concentration per Run 1 | -0.0001 ppm | 1.7452 ppm | 0.0019 ppm | 0.0753 ppm | 0.0007 ppm | 0.0013 ppm | 0.0006 ppm |
| Concentration per Run 2 | -0.0015 ppm | 1.7460 ppm | 0.0018 ppm | 0.0737 ppm | 0.0003 ppm | 0.0005 ppm | 0.0009 ppm |
| Concentration per Run 3 | -0.0013 ppm | 1.7445 ppm | 0.0012 ppm | 0.0746 ppm | 0.0005 ppm | 0.0036 ppm | 0.0004 ppm |
| Concentration RSD | 81.3 % | 0.0 % | 23.2 % | 1.1 % | 48.7 % | 89.6 % | 36.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0272 ppm | 100.8866 % | 101.0241 % | 104.5763 % | 102.5791 % | 104.0609 % | 102.9622 % |
| Concentration per Run 1 | 0.0271 ppm | 100.1672 % | 100.4998 % | 104.7818 % | 101.3705 % | 104.2587 % | 102.5952 % |
| Concentration per Run 2 | 0.0272 ppm | 101.1044 % | 101.3450 % | 104.4082 % | 103.1335 % | 104.0364 % | 103.3115 % |
| Concentration per Run 3 | 0.0273 ppm | 101.3880 % | 101.2275 % | 104.5389 % | 103.2333 % | 103.8874 % | 102.9800 % |
| Concentration RSD | 0.3 % | 0.6 % | 0.5 % | 0.2 % | 1.0 % | 0.2 % | 0.3 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039054-7 WG2039054
Analysis started at: 3/12/2025 8:27:23 PM
Comments <Comment>
Rack: 2
Vial: 16

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0501 ppm | 1.9945 ppm | 0.1124 ppm | 0.9437 ppm | 1.9433 ppm | 0.0500 ppm | 33.3475 ppm |
| Concentration per Run 1 | 0.0500 ppm | 2.0333 ppm | 0.1115 ppm | 0.9442 ppm | 1.9824 ppm | 0.0512 ppm | 34.0816 ppm |
| Concentration per Run 2 | 0.0497 ppm | 1.9846 ppm | 0.1123 ppm | 0.9445 ppm | 1.9338 ppm | 0.0498 ppm | 33.1652 ppm |
| Concentration per Run 3 | 0.0507 ppm | 1.9655 ppm | 0.1135 ppm | 0.9425 ppm | 1.9138 ppm | 0.0491 ppm | 32.7955 ppm |
| Concentration RSD | 1.0 % | 1.8 % | 0.9 % | 0.1 % | 1.8 % | 2.1 % | 2.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0530 ppm | 0.4899 ppm | 0.2069 ppm | 0.2621 ppm | 1.0307 ppm | 11.8682 ppm | -0.0008 ppm |
| Concentration per Run 1 | 0.0531 ppm | 0.4899 ppm | 0.2068 ppm | 0.2617 ppm | 1.0543 ppm | 12.1224 ppm | -0.0022 ppm |
| Concentration per Run 2 | 0.0530 ppm | 0.4899 ppm | 0.2063 ppm | 0.2627 ppm | 1.0203 ppm | 11.7945 ppm | 0.0010 ppm |
| Concentration per Run 3 | 0.0529 ppm | 0.4898 ppm | 0.2077 ppm | 0.2617 ppm | 1.0175 ppm | 11.6876 ppm | -0.0011 ppm |
| Concentration RSD | 0.1 % | 0.0 % | 0.3 % | 0.2 % | 2.0 % | 1.9 % | 205.3 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 14.9267 ppm | 0.4992 ppm | 0.9103 ppm | 19.0233 ppm | 0.4880 ppm | 0.5181 ppm | 0.4709 ppm |
| Concentration per Run 1 | 14.8767 ppm | 0.5110 ppm | 0.8992 ppm | 19.4733 ppm | 0.4887 ppm | 0.5198 ppm | 0.4667 ppm |
| Concentration per Run 2 | 14.9558 ppm | 0.4961 ppm | 0.9119 ppm | 18.8925 ppm | 0.4881 ppm | 0.5166 ppm | 0.4708 ppm |
| Concentration per Run 3 | 14.9475 ppm | 0.4905 ppm | 0.9198 ppm | 18.7040 ppm | 0.4871 ppm | 0.5178 ppm | 0.4752 ppm |
| Concentration RSD | 0.3 % | 2.1 % | 1.1 % | 2.1 % | 0.2 % | 0.3 % | 0.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1123 ppm | 2.8967 ppm | 0.9726 ppm | 1.0240 ppm | 0.9882 ppm | 0.1105 ppm | 0.5096 ppm |
| Concentration per Run 1 | 0.1105 ppm | 2.9053 ppm | 0.9706 ppm | 1.0467 ppm | 0.9867 ppm | 0.1099 ppm | 0.5084 ppm |
| Concentration per Run 2 | 0.1133 ppm | 2.8940 ppm | 0.9731 ppm | 1.0175 ppm | 0.9887 ppm | 0.1109 ppm | 0.5101 ppm |
| Concentration per Run 3 | 0.1132 ppm | 2.8908 ppm | 0.9742 ppm | 1.0076 ppm | 0.9893 ppm | 0.1106 ppm | 0.5103 ppm |
| Concentration RSD | 1.4 % | 0.3 % | 0.2 % | 2.0 % | 0.1 % | 0.5 % | 0.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5299 ppm | 99.9222 % | 100.6242 % | 103.5214 % | 101.0596 % | 102.4118 % | 102.5461 % |
| Concentration per Run 1 | 0.5299 ppm | 98.1608 % | 100.9919 % | 103.6848 % | 98.5253 % | 102.4873 % | 102.8435 % |
| Concentration per Run 2 | 0.5303 ppm | 100.2156 % | 100.5998 % | 103.5631 % | 101.7565 % | 102.3849 % | 102.4559 % |
| Concentration per Run 3 | 0.5297 ppm | 101.3903 % | 100.2807 % | 103.3161 % | 102.8970 % | 102.3632 % | 102.3388 % |
| Concentration RSD | 0.1 % | 1.6 % | 0.4 % | 0.2 % | 2.2 % | 0.1 % | 0.3 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039054-8 WG2039054
Analysis started at: 3/12/2025 8:33:28 PM
Comments <Comment>
Rack: 2
Vial: 17

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0104 ppm | -0.0004 ppm | 0.0150 ppm | 0.0156 ppm | 0.0000 ppm | 23.7890 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0157 ppm | -0.0005 ppm | 0.0150 ppm | 0.0159 ppm | 0.0000 ppm | 24.2743 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0063 ppm | 0.0007 ppm | 0.0150 ppm | 0.0155 ppm | 0.0000 ppm | 23.6475 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0092 ppm | -0.0013 ppm | 0.0151 ppm | 0.0153 ppm | 0.0000 ppm | 23.4454 ppm |
| Concentration RSD | 2,232.6 % | 46.2 % | 293.1 % | 0.3 % | 1.9 % | 67.8 % | 1.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0001 ppm | 0.0002 ppm | 0.0062 ppm | 0.0036 ppm | 1.7611 ppm | -0.0010 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0063 ppm | 0.0040 ppm | 1.7963 ppm | -0.0009 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0001 ppm | 0.0002 ppm | 0.0063 ppm | 0.0019 ppm | 1.7568 ppm | -0.0009 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0002 ppm | 0.0005 ppm | 0.0059 ppm | 0.0049 ppm | 1.7303 ppm | -0.0012 ppm |
| Concentration RSD | 32.6 % | 60.7 % | 110.8 % | 4.2 % | 42.7 % | 1.9 % | 19.0 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.8477 ppm | 0.0003 ppm | 0.0058 ppm | 9.0864 ppm | 0.0006 ppm | 0.0009 ppm | 0.0035 ppm |
| Concentration per Run 1 | 4.8359 ppm | 0.0003 ppm | 0.0068 ppm | 9.2689 ppm | 0.0009 ppm | 0.0007 ppm | 0.0036 ppm |
| Concentration per Run 2 | 4.8599 ppm | 0.0003 ppm | 0.0057 ppm | 9.0280 ppm | 0.0004 ppm | 0.0008 ppm | 0.0032 ppm |
| Concentration per Run 3 | 4.8474 ppm | 0.0004 ppm | 0.0050 ppm | 8.9623 ppm | 0.0005 ppm | 0.0011 ppm | 0.0039 ppm |
| Concentration RSD | 0.2 % | 16.7 % | 15.7 % | 1.8 % | 48.5 % | 23.1 % | 10.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 1.7805 ppm | 0.0021 ppm | 0.0779 ppm | 0.0006 ppm | 0.0007 ppm | 0.0007 ppm |
| Concentration per Run 1 | 0.0009 ppm | 1.7787 ppm | 0.0020 ppm | 0.0796 ppm | 0.0005 ppm | 0.0006 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0012 ppm | 1.7810 ppm | 0.0021 ppm | 0.0773 ppm | 0.0008 ppm | 0.0006 ppm | 0.0006 ppm |
| Concentration per Run 3 | -0.0002 ppm | 1.7819 ppm | 0.0021 ppm | 0.0768 ppm | 0.0005 ppm | 0.0010 ppm | 0.0009 ppm |
| Concentration RSD | 111.7 % | 0.1 % | 4.1 % | 1.9 % | 24.7 % | 36.0 % | 26.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0278 ppm | 100.2278 % | 101.4890 % | 104.4914 % | 100.7603 % | 104.0408 % | 102.8982 % |
| Concentration per Run 1 | 0.0279 ppm | 98.7936 % | 101.5978 % | 104.6635 % | 98.5666 % | 104.1159 % | 103.0120 % |
| Concentration per Run 2 | 0.0279 ppm | 100.9768 % | 101.5117 % | 104.4450 % | 101.7386 % | 103.9648 % | 102.8050 % |
| Concentration per Run 3 | 0.0278 ppm | 100.9130 % | 101.3575 % | 104.3658 % | 101.9758 % | 104.0418 % | 102.8777 % |
| Concentration RSD | 0.2 % | 1.2 % | 0.1 % | 0.1 % | 1.9 % | 0.1 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCV
Analysis started at: 3/12/2025 8:39:48 PM
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4768 ppm | 0.4920 ppm | 0.4704 ppm | 0.4621 ppm | 0.4815 ppm | 0.4924 ppm | 0.5171 ppm |
| Concentration per Run 1 | 0.4770 ppm | 0.4966 ppm | 0.4736 ppm | 0.4634 ppm | 0.4872 ppm | 0.4982 ppm | 0.5186 ppm |
| Concentration per Run 2 | 0.4773 ppm | 0.4944 ppm | 0.4702 ppm | 0.4614 ppm | 0.4798 ppm | 0.4915 ppm | 0.5205 ppm |
| Concentration per Run 3 | 0.4761 ppm | 0.4851 ppm | 0.4674 ppm | 0.4616 ppm | 0.4774 ppm | 0.4875 ppm | 0.5121 ppm |
| Recovery Percentage 1 | 95.356 % | 98.409 % | 94.077 % | 92.427 % | 96.292 % | 98.475 % | 103.414 % |
| Concentration RSD | 0.1 % | 1.2 % | 0.7 % | 0.2 % | 1.1 % | 1.1 % | 0.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4865 ppm | 0.4916 ppm | 0.5082 ppm | 0.4924 ppm | 0.5220 ppm | 5.0311 ppm | 0.4784 ppm |
| Concentration per Run 1 | 0.4872 ppm | 0.4930 ppm | 0.5097 ppm | 0.4937 ppm | 0.5240 ppm | 5.0978 ppm | 0.4839 ppm |
| Concentration per Run 2 | 0.4858 ppm | 0.4906 ppm | 0.5068 ppm | 0.4917 ppm | 0.5215 ppm | 4.9892 ppm | 0.4784 ppm |
| Concentration per Run 3 | 0.4865 ppm | 0.4913 ppm | 0.5080 ppm | 0.4919 ppm | 0.5204 ppm | 5.0064 ppm | 0.4729 ppm |
| Recovery Percentage 1 | 97.297 % | 98.327 % | 101.633 % | 98.485 % | 104.396 % | 100.622 % | 95.676 % |
| Concentration RSD | 0.1 % | 0.2 % | 0.3 % | 0.2 % | 0.4 % | 1.2 % | 1.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5087 ppm | 0.4927 ppm | 0.4695 ppm | 9.7858 ppm | 0.4866 ppm | 0.4896 ppm | 0.4846 ppm |
| Concentration per Run 1 | 0.5089 ppm | 0.4975 ppm | 0.4696 ppm | 9.9244 ppm | 0.4879 ppm | 0.4908 ppm | 0.4865 ppm |
| Concentration per Run 2 | 0.5095 ppm | 0.4916 ppm | 0.4691 ppm | 9.7426 ppm | 0.4858 ppm | 0.4890 ppm | 0.4826 ppm |
| Concentration per Run 3 | 0.5076 ppm | 0.4889 ppm | 0.4698 ppm | 9.6903 ppm | 0.4862 ppm | 0.4890 ppm | 0.4847 ppm |
| Recovery Percentage 1 | 101.733 % | 98.532 % | 93.897 % | 97.858 % | 97.330 % | 97.919 % | 96.919 % |
| Concentration RSD | 0.2 % | 0.9 % | 0.1 % | 1.3 % | 0.2 % | 0.2 % | 0.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4798 ppm | 5.3458 ppm | 0.4788 ppm | 0.4814 ppm | 0.4939 ppm | 0.4925 ppm | 0.4922 ppm |
| Concentration per Run 1 | 0.4815 ppm | 5.3588 ppm | 0.4807 ppm | 0.4869 ppm | 0.4951 ppm | 0.4936 ppm | 0.4929 ppm |
| Concentration per Run 2 | 0.4811 ppm | 5.3404 ppm | 0.4774 ppm | 0.4801 ppm | 0.4919 ppm | 0.4906 ppm | 0.4904 ppm |
| Concentration per Run 3 | 0.4769 ppm | 5.3384 ppm | 0.4782 ppm | 0.4773 ppm | 0.4947 ppm | 0.4932 ppm | 0.4932 ppm |
| Recovery Percentage 1 | 95.967 % | 101.826 % | 95.753 % | 96.281 % | 98.778 % | 98.496 % | 98.431 % |
| Concentration RSD | 0.5 % | 0.2 % | 0.4 % | 1.0 % | 0.3 % | 0.3 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4914 ppm | 96.0261 % | 101.2679 % | 104.7666 % | 98.3469 % | 104.1327 % | 103.2056 % |
| Concentration per Run 1 | 0.4923 ppm | 94.3662 % | 101.3010 % | 104.8128 % | 96.8504 % | 104.0002 % | 103.1308 % |
| Concentration per Run 2 | 0.4905 ppm | 96.5193 % | 101.2547 % | 104.6415 % | 98.6581 % | 104.3002 % | 103.3591 % |
| Concentration per Run 3 | 0.4914 ppm | 97.1929 % | 101.2481 % | 104.8455 % | 99.5323 % | 104.0977 % | 103.1268 % |
| Recovery Percentage 1 | 98.278 % | | | | | | |
| Concentration RSD | 0.2 % | 1.5 % | 0.0 % | 0.1 % | 1.4 % | 0.1 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCB
Analysis started at: 3/12/2025 8:45:55 PM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0016 ppm | -0.0018 ppm | 0.0020 ppm | 0.0002 ppm | 0.0000 ppm | 0.0051 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0041 ppm | -0.0024 ppm | 0.0020 ppm | 0.0001 ppm | 0.0000 ppm | 0.0039 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0012 ppm | -0.0023 ppm | 0.0020 ppm | 0.0002 ppm | 0.0000 ppm | 0.0031 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0004 ppm | -0.0007 ppm | 0.0020 ppm | 0.0003 ppm | 0.0000 ppm | 0.0084 ppm |
| Recovery Percentage 1 | 4.459 % | 1.634 % | -35.994 % | 6.687 % | 1.865 % | 0.019 % | 5.125 % |
| Concentration RSD | 140.5 % | 137.7 % | 51.3 % | 2.2 % | 40.0 % | 1,567.9 % | 55.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | -0.0005 ppm | 0.0006 ppm | -0.0143 ppm | 0.0009 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | -0.0005 ppm | 0.0010 ppm | 0.0054 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | -0.0005 ppm | 0.0002 ppm | -0.0249 ppm | 0.0013 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | -0.0006 ppm | 0.0006 ppm | -0.0233 ppm | 0.0008 ppm |
| Recovery Percentage 1 | 0.190 % | 0.433 % | 0.612 % | -5.260 % | 1.204 % | -0.571 % | 9.069 % |
| Concentration RSD | 137.8 % | 58.9 % | 97.4 % | 14.3 % | 63.0 % | 119.3 % | 42.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | 0.0002 ppm | 0.0019 ppm | -0.0065 ppm | 0.0002 ppm | 0.0006 ppm | 0.0020 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0001 ppm | 0.0023 ppm | -0.0091 ppm | 0.0003 ppm | 0.0005 ppm | 0.0021 ppm |
| Concentration per Run 2 | -0.0022 ppm | 0.0003 ppm | 0.0018 ppm | -0.0096 ppm | 0.0000 ppm | 0.0003 ppm | 0.0024 ppm |
| Concentration per Run 3 | -0.0013 ppm | 0.0001 ppm | 0.0016 ppm | -0.0008 ppm | 0.0003 ppm | 0.0011 ppm | 0.0013 ppm |
| Recovery Percentage 1 | -0.938 % | 1.816 % | 3.758 % | -0.325 % | 0.765 % | 6.297 % | 3.915 % |
| Concentration RSD | 159.3 % | 70.5 % | 19.0 % | 76.7 % | 106.0 % | 72.7 % | 29.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | -0.0009 ppm | 0.0011 ppm | 0.0001 ppm | 0.0002 ppm | 0.0020 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0013 ppm | -0.0009 ppm | 0.0012 ppm | 0.0000 ppm | 0.0004 ppm | 0.0025 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0019 ppm | -0.0005 ppm | 0.0013 ppm | 0.0001 ppm | 0.0003 ppm | 0.0027 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0018 ppm | -0.0012 ppm | 0.0007 ppm | 0.0002 ppm | -0.0001 ppm | 0.0007 ppm | 0.0001 ppm |
| Recovery Percentage 1 | -4.701 % | -0.172 % | 2.105 % | 0.980 % | 2.066 % | 9.752 % | 0.833 % |
| Concentration RSD | 418.6 % | 42.2 % | 33.9 % | 67.0 % | 124.9 % | 57.6 % | 145.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 102.1625 % | 102.0053 % | 105.3240 % | 102.5810 % | 104.8095 % | 102.5571 % |
| Concentration per Run 1 | 0.0008 ppm | 104.8667 % | 102.0313 % | 105.4407 % | 104.7551 % | 104.6653 % | 102.7987 % |
| Concentration per Run 2 | 0.0007 ppm | 100.9080 % | 101.6712 % | 105.1989 % | 101.6498 % | 104.7240 % | 102.3235 % |
| Concentration per Run 3 | 0.0008 ppm | 100.7127 % | 102.3135 % | 105.3324 % | 101.3380 % | 105.0391 % | 102.5489 % |
| Recovery Percentage 1 | 15.518 % | | | | | | |
| Concentration RSD | 8.0 % | 2.3 % | 0.3 % | 0.1 % | 1.8 % | 0.2 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039054-9 WG2039054
Analysis started at: 3/12/2025 8:53:06 PM
Comments <Comment>
Rack: 2
Vial: 18

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0238 ppm | 1.8899 ppm | 0.1174 ppm | 0.9182 ppm | 1.8256 ppm | 0.0472 ppm | 31.3065 ppm |
| Concentration per Run 1 | 0.0237 ppm | 1.8864 ppm | 0.1173 ppm | 0.9161 ppm | 1.8286 ppm | 0.0471 ppm | 31.2844 ppm |
| Concentration per Run 2 | 0.0239 ppm | 1.8952 ppm | 0.1182 ppm | 0.9167 ppm | 1.8257 ppm | 0.0472 ppm | 31.3266 ppm |
| Concentration per Run 3 | 0.0239 ppm | 1.8881 ppm | 0.1166 ppm | 0.9219 ppm | 1.8224 ppm | 0.0472 ppm | 31.3086 ppm |
| Concentration RSD | 0.6 % | 0.2 % | 0.7 % | 0.3 % | 0.2 % | 0.1 % | 0.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0511 ppm | 0.4699 ppm | 0.2000 ppm | 0.2525 ppm | 0.9755 ppm | 11.3673 ppm | -0.0007 ppm |
| Concentration per Run 1 | 0.0511 ppm | 0.4694 ppm | 0.2000 ppm | 0.2534 ppm | 0.9750 ppm | 11.3715 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0510 ppm | 0.4690 ppm | 0.2000 ppm | 0.2528 ppm | 0.9759 ppm | 11.3433 ppm | -0.0005 ppm |
| Concentration per Run 3 | 0.0513 ppm | 0.4711 ppm | 0.2001 ppm | 0.2513 ppm | 0.9755 ppm | 11.3871 ppm | -0.0015 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 0.0 % | 0.4 % | 0.0 % | 0.2 % | 91.7 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 14.5597 ppm | 0.4725 ppm | 0.8861 ppm | 18.0048 ppm | 0.4695 ppm | 0.5177 ppm | 0.4377 ppm |
| Concentration per Run 1 | 14.5897 ppm | 0.4720 ppm | 0.8745 ppm | 18.0119 ppm | 0.4693 ppm | 0.5174 ppm | 0.4322 ppm |
| Concentration per Run 2 | 14.5471 ppm | 0.4732 ppm | 0.8849 ppm | 18.0120 ppm | 0.4680 ppm | 0.5175 ppm | 0.4367 ppm |
| Concentration per Run 3 | 14.5423 ppm | 0.4723 ppm | 0.8988 ppm | 17.9904 ppm | 0.4713 ppm | 0.5183 ppm | 0.4442 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 1.4 % | 0.1 % | 0.3 % | 0.1 % | 1.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1153 ppm | 2.5084 ppm | 0.9580 ppm | 0.9804 ppm | 0.9689 ppm | 0.1162 ppm | 0.4923 ppm |
| Concentration per Run 1 | 0.1138 ppm | 2.5035 ppm | 0.9570 ppm | 0.9815 ppm | 0.9698 ppm | 0.1152 ppm | 0.4925 ppm |
| Concentration per Run 2 | 0.1132 ppm | 2.5043 ppm | 0.9550 ppm | 0.9811 ppm | 0.9695 ppm | 0.1162 ppm | 0.4925 ppm |
| Concentration per Run 3 | 0.1189 ppm | 2.5174 ppm | 0.9621 ppm | 0.9787 ppm | 0.9674 ppm | 0.1172 ppm | 0.4920 ppm |
| Concentration RSD | 2.7 % | 0.3 % | 0.4 % | 0.2 % | 0.1 % | 0.9 % | 0.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5099 ppm | 102.2549 % | 100.5818 % | 103.7672 % | 104.0380 % | 103.1145 % | 102.3806 % |
| Concentration per Run 1 | 0.5092 ppm | 102.2876 % | 100.3049 % | 103.9993 % | 103.9138 % | 103.4409 % | 102.1594 % |
| Concentration per Run 2 | 0.5088 ppm | 102.5552 % | 100.8599 % | 103.6446 % | 104.2189 % | 103.2245 % | 102.5314 % |
| Concentration per Run 3 | 0.5116 ppm | 101.9221 % | 100.5806 % | 103.6577 % | 103.9812 % | 102.6782 % | 102.4511 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.3 % | 0.2 % | 0.2 % | 0.4 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: WG2039054-10d5 WG2039054
Analysis started at: 3/12/2025 8:59:10 PM
Comments <Comment>
Rack: 2
Vial: 19

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0070 ppm | -0.0007 ppm | 0.0048 ppm | 0.0036 ppm | -0.0001 ppm | 4.8438 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0053 ppm | -0.0004 ppm | 0.0051 ppm | 0.0037 ppm | 0.0000 ppm | 4.9336 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0074 ppm | -0.0006 ppm | 0.0050 ppm | 0.0036 ppm | -0.0001 ppm | 4.8197 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0083 ppm | -0.0011 ppm | 0.0044 ppm | 0.0035 ppm | -0.0001 ppm | 4.7781 ppm |
| Concentration RSD | 64.2 % | 22.5 % | 60.5 % | 8.2 % | 2.8 % | 77.2 % | 1.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0002 ppm | 0.0001 ppm | 0.0010 ppm | 0.0035 ppm | 0.3342 ppm | 0.0011 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0003 ppm | 0.0002 ppm | 0.0010 ppm | 0.0021 ppm | 0.3323 ppm | 0.0012 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0003 ppm | 0.0011 ppm | 0.0055 ppm | 0.3467 ppm | 0.0020 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | -0.0002 ppm | 0.0008 ppm | 0.0031 ppm | 0.3236 ppm | 0.0002 ppm |
| Concentration RSD | 2,014.8 % | 58.9 % | 289.8 % | 18.0 % | 49.2 % | 3.5 % | 79.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.9630 ppm | 0.0005 ppm | 0.0054 ppm | 1.8037 ppm | 0.0002 ppm | 0.0007 ppm | 0.0082 ppm |
| Concentration per Run 1 | 0.9639 ppm | 0.0007 ppm | 0.0063 ppm | 1.8259 ppm | 0.0002 ppm | 0.0010 ppm | 0.0097 ppm |
| Concentration per Run 2 | 0.9665 ppm | 0.0004 ppm | 0.0052 ppm | 1.8143 ppm | 0.0003 ppm | 0.0007 ppm | 0.0079 ppm |
| Concentration per Run 3 | 0.9585 ppm | 0.0004 ppm | 0.0047 ppm | 1.7709 ppm | 0.0001 ppm | 0.0005 ppm | 0.0068 ppm |
| Concentration RSD | 0.4 % | 35.4 % | 15.0 % | 1.6 % | 61.4 % | 35.6 % | 18.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.3428 ppm | 0.0030 ppm | 0.0161 ppm | 0.0007 ppm | 0.0017 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0008 ppm | 0.3421 ppm | 0.0031 ppm | 0.0164 ppm | 0.0006 ppm | 0.0010 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.3431 ppm | 0.0035 ppm | 0.0160 ppm | 0.0008 ppm | 0.0012 ppm | 0.0005 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.3432 ppm | 0.0022 ppm | 0.0159 ppm | 0.0007 ppm | 0.0029 ppm | 0.0002 ppm |
| Concentration RSD | 179.4 % | 0.2 % | 22.6 % | 1.4 % | 16.4 % | 60.2 % | 45.1 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0056 ppm | 98.0370 % | 102.5449 % | 106.2221 % | 98.5895 % | 106.7536 % | 104.1510 % |
| Concentration per Run 1 | 0.0057 ppm | 96.4161 % | 102.1944 % | 106.0572 % | 96.8688 % | 106.5505 % | 103.4835 % |
| Concentration per Run 2 | 0.0056 ppm | 98.2360 % | 102.3536 % | 106.3077 % | 98.6466 % | 106.8220 % | 104.1194 % |
| Concentration per Run 3 | 0.0056 ppm | 99.4590 % | 103.0868 % | 106.3013 % | 100.2531 % | 106.8883 % | 104.8500 % |
| Concentration RSD | 1.3 % | 1.6 % | 0.5 % | 0.1 % | 1.7 % | 0.2 % | 0.7 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512368-02 WG2039054
Analysis started at: 3/12/2025 9:05:31 PM
Comments <Comment>
Rack: 2
Vial: 20

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | -0.0004 ppm | -0.0004 ppm | 0.0142 ppm | 0.0680 ppm | 0.0000 ppm | 16.5640 ppm |
| Concentration per Run 1 | 0.0004 ppm | -0.0096 ppm | -0.0006 ppm | 0.0142 ppm | 0.0678 ppm | 0.0000 ppm | 16.6088 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0093 ppm | 0.0014 ppm | 0.0141 ppm | 0.0679 ppm | 0.0000 ppm | 16.5513 ppm |
| Concentration per Run 3 | 0.0010 ppm | -0.0009 ppm | -0.0019 ppm | 0.0141 ppm | 0.0683 ppm | 0.0000 ppm | 16.5319 ppm |
| Concentration RSD | 71.8 % | 2,309.9 % | 457.1 % | 0.5 % | 0.4 % | 89.9 % | 0.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0019 ppm | 0.0040 ppm | 0.0026 ppm | 1.0442 ppm | 0.0007 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0001 ppm | 0.0019 ppm | 0.0039 ppm | 0.0039 ppm | 1.0497 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0018 ppm | 0.0041 ppm | 0.0019 ppm | 1.0259 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0020 ppm | 0.0040 ppm | 0.0021 ppm | 1.0570 ppm | 0.0001 ppm |
| Concentration RSD | 196.5 % | 175.0 % | 4.3 % | 2.1 % | 41.5 % | 1.6 % | 80.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 7.6124 ppm | 0.0003 ppm | 0.0012 ppm | 12.0732 ppm | 0.0016 ppm | 0.0009 ppm | 0.0007 ppm |
| Concentration per Run 1 | 7.6053 ppm | 0.0005 ppm | 0.0014 ppm | 12.0861 ppm | 0.0016 ppm | 0.0005 ppm | 0.0006 ppm |
| Concentration per Run 2 | 7.6251 ppm | 0.0002 ppm | 0.0011 ppm | 12.0881 ppm | 0.0017 ppm | 0.0010 ppm | -0.0003 ppm |
| Concentration per Run 3 | 7.6067 ppm | 0.0004 ppm | 0.0011 ppm | 12.0453 ppm | 0.0017 ppm | 0.0011 ppm | 0.0018 ppm |
| Concentration RSD | 0.1 % | 39.5 % | 16.9 % | 0.2 % | 1.8 % | 38.0 % | 148.6 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0026 ppm | 5.6118 ppm | 0.0013 ppm | 0.0789 ppm | 0.0005 ppm | 0.0008 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0026 ppm | 5.6072 ppm | 0.0013 ppm | 0.0789 ppm | 0.0004 ppm | 0.0000 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0021 ppm | 5.6079 ppm | 0.0015 ppm | 0.0790 ppm | 0.0007 ppm | 0.0009 ppm | 0.0002 ppm |
| Concentration per Run 3 | -0.0031 ppm | 5.6202 ppm | 0.0011 ppm | 0.0787 ppm | 0.0004 ppm | 0.0014 ppm | 0.0003 ppm |
| Concentration RSD | 19.1 % | 0.1 % | 15.7 % | 0.2 % | 35.9 % | 90.8 % | 26.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0233 ppm | 103.0407 % | 101.5920 % | 105.3571 % | 104.4807 % | 104.5088 % | 104.0443 % |
| Concentration per Run 1 | 0.0234 ppm | 103.4819 % | 101.4880 % | 105.2977 % | 104.2612 % | 104.3990 % | 103.8844 % |
| Concentration per Run 2 | 0.0232 ppm | 102.5331 % | 101.4101 % | 105.4152 % | 104.0886 % | 104.7416 % | 103.9717 % |
| Concentration per Run 3 | 0.0234 ppm | 103.1071 % | 101.8779 % | 105.3583 % | 105.0923 % | 104.3858 % | 104.2767 % |
| Concentration RSD | 0.4 % | 0.5 % | 0.2 % | 0.1 % | 0.5 % | 0.2 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512368-04 WG2039054
Analysis started at: 3/12/2025 9:11:52 PM
Comments <Comment>
Rack: 2
Vial: 21

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0060 ppm | -0.0003 ppm | 0.0178 ppm | 0.0173 ppm | -0.0001 ppm | 25.0453 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0008 ppm | -0.0012 ppm | 0.0175 ppm | 0.0171 ppm | -0.0001 ppm | 24.7345 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0124 ppm | -0.0005 ppm | 0.0178 ppm | 0.0172 ppm | -0.0001 ppm | 25.0227 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0063 ppm | 0.0008 ppm | 0.0181 ppm | 0.0176 ppm | 0.0000 ppm | 25.3788 ppm |
| Concentration RSD | 169.1 % | 111.4 % | 316.4 % | 1.5 % | 1.4 % | 28.4 % | 1.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0001 ppm | 0.0007 ppm | 0.0080 ppm | 0.0043 ppm | 1.0339 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0001 ppm | 0.0010 ppm | 0.0081 ppm | 0.0052 ppm | 1.0148 ppm | -0.0007 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0001 ppm | 0.0004 ppm | 0.0078 ppm | 0.0033 ppm | 1.0434 ppm | 0.0010 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0002 ppm | 0.0007 ppm | 0.0082 ppm | 0.0043 ppm | 1.0437 ppm | 0.0006 ppm |
| Concentration RSD | 19.0 % | 51.0 % | 41.7 % | 2.2 % | 23.0 % | 1.6 % | 285.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.5614 ppm | 0.0026 ppm | 0.0005 ppm | 8.7993 ppm | 0.0162 ppm | 0.0010 ppm | 0.0004 ppm |
| Concentration per Run 1 | 5.5634 ppm | 0.0024 ppm | 0.0005 ppm | 8.6820 ppm | 0.0161 ppm | 0.0008 ppm | 0.0003 ppm |
| Concentration per Run 2 | 5.5631 ppm | 0.0026 ppm | 0.0005 ppm | 8.7995 ppm | 0.0164 ppm | 0.0017 ppm | 0.0008 ppm |
| Concentration per Run 3 | 5.5578 ppm | 0.0029 ppm | 0.0004 ppm | 8.9163 ppm | 0.0162 ppm | 0.0006 ppm | 0.0001 ppm |
| Concentration RSD | 0.1 % | 9.4 % | 13.3 % | 1.3 % | 1.1 % | 59.4 % | 89.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0022 ppm | 3.6709 ppm | 0.0004 ppm | 0.0830 ppm | 0.0003 ppm | 0.0006 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0015 ppm | 3.6833 ppm | 0.0003 ppm | 0.0817 ppm | 0.0005 ppm | 0.0003 ppm | 0.0006 ppm |
| Concentration per Run 2 | -0.0029 ppm | 3.6683 ppm | 0.0004 ppm | 0.0829 ppm | 0.0002 ppm | 0.0018 ppm | 0.0005 ppm |
| Concentration per Run 3 | -0.0022 ppm | 3.6610 ppm | 0.0005 ppm | 0.0843 ppm | 0.0003 ppm | -0.0004 ppm | 0.0001 ppm |
| Concentration RSD | 33.0 % | 0.3 % | 25.0 % | 1.6 % | 60.6 % | 207.7 % | 68.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0308 ppm | 104.2227 % | 101.9545 % | 104.8089 % | 104.4773 % | 104.2556 % | 103.8242 % |
| Concentration per Run 1 | 0.0309 ppm | 106.1490 % | 101.8675 % | 104.7493 % | 105.3365 % | 104.1665 % | 103.8140 % |
| Concentration per Run 2 | 0.0307 ppm | 104.2215 % | 101.7396 % | 104.6758 % | 105.1160 % | 104.2147 % | 103.5940 % |
| Concentration per Run 3 | 0.0307 ppm | 102.2975 % | 102.2563 % | 105.0016 % | 102.9795 % | 104.3854 % | 104.0644 % |
| Concentration RSD | 0.2 % | 1.8 % | 0.3 % | 0.2 % | 1.2 % | 0.1 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512368-05 WG2039054
Analysis started at: 3/12/2025 9:18:10 PM
Comments <Comment>
Rack: 2
Vial: 22

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0039 ppm | -0.0010 ppm | 0.0150 ppm | 0.0406 ppm | -0.0001 ppm | 23.1241 ppm |
| Concentration per Run 1 | 0.0004 ppm | -0.0060 ppm | -0.0015 ppm | 0.0150 ppm | 0.0418 ppm | -0.0001 ppm | 23.7489 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0106 ppm | -0.0012 ppm | 0.0150 ppm | 0.0405 ppm | -0.0001 ppm | 23.1266 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0073 ppm | -0.0004 ppm | 0.0150 ppm | 0.0395 ppm | -0.0001 ppm | 22.4968 ppm |
| Concentration RSD | 29.8 % | 223.0 % | 52.2 % | 0.3 % | 2.9 % | 26.0 % | 2.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0001 ppm | 0.0010 ppm | 0.0122 ppm | 0.0085 ppm | 1.1798 ppm | 0.0011 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0001 ppm | 0.0008 ppm | 0.0120 ppm | 0.0081 ppm | 1.2106 ppm | 0.0007 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0001 ppm | 0.0009 ppm | 0.0123 ppm | 0.0097 ppm | 1.1824 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | 0.0013 ppm | 0.0124 ppm | 0.0078 ppm | 1.1464 ppm | 0.0023 ppm |
| Concentration RSD | 25.8 % | 35.6 % | 23.1 % | 1.6 % | 11.9 % | 2.7 % | 88.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.9583 ppm | 0.0047 ppm | 0.0004 ppm | 10.7171 ppm | 0.0094 ppm | 0.0014 ppm | 0.0009 ppm |
| Concentration per Run 1 | 4.9458 ppm | 0.0049 ppm | 0.0004 ppm | 10.9940 ppm | 0.0092 ppm | 0.0014 ppm | 0.0009 ppm |
| Concentration per Run 2 | 4.9675 ppm | 0.0050 ppm | 0.0005 ppm | 10.7384 ppm | 0.0094 ppm | 0.0012 ppm | 0.0010 ppm |
| Concentration per Run 3 | 4.9616 ppm | 0.0042 ppm | 0.0004 ppm | 10.4188 ppm | 0.0096 ppm | 0.0017 ppm | 0.0007 ppm |
| Concentration RSD | 0.2 % | 9.0 % | 21.9 % | 2.7 % | 2.0 % | 15.0 % | 19.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0020 ppm | 5.9715 ppm | 0.0007 ppm | 0.0958 ppm | 0.0002 ppm | 0.0012 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0009 ppm | 5.9708 ppm | 0.0005 ppm | 0.0982 ppm | 0.0000 ppm | -0.0001 ppm | 0.0004 ppm |
| Concentration per Run 2 | -0.0018 ppm | 5.9768 ppm | 0.0010 ppm | 0.0959 ppm | 0.0002 ppm | 0.0030 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0032 ppm | 5.9667 ppm | 0.0006 ppm | 0.0932 ppm | 0.0003 ppm | 0.0006 ppm | 0.0001 ppm |
| Concentration RSD | 58.3 % | 0.1 % | 40.4 % | 2.6 % | 80.5 % | 138.6 % | 138.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0310 ppm | 96.0632 % | 102.2031 % | 104.9407 % | 96.5630 % | 104.7324 % | 103.8928 % |
| Concentration per Run 1 | 0.0311 ppm | 94.7681 % | 101.9656 % | 105.0587 % | 94.4823 % | 104.7286 % | 103.8114 % |
| Concentration per Run 2 | 0.0311 ppm | 95.8503 % | 102.6926 % | 105.0310 % | 96.4369 % | 104.6022 % | 104.1579 % |
| Concentration per Run 3 | 0.0308 ppm | 97.5712 % | 101.9510 % | 104.7323 % | 98.7698 % | 104.8665 % | 103.7091 % |
| Concentration RSD | 0.5 % | 1.5 % | 0.4 % | 0.2 % | 2.2 % | 0.1 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512368-07 WG2039054
Analysis started at: 3/12/2025 9:24:29 PM
Comments <Comment>
Rack: 2
Vial: 23

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0152 ppm | -0.0001 ppm | 0.0507 ppm | 0.1054 ppm | -0.0001 ppm | 77.0564 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0153 ppm | 0.0011 ppm | 0.0505 ppm | 0.1068 ppm | -0.0001 ppm | 78.2985 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0191 ppm | -0.0022 ppm | 0.0510 ppm | 0.1058 ppm | -0.0001 ppm | 77.3353 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0111 ppm | 0.0009 ppm | 0.0506 ppm | 0.1036 ppm | 0.0000 ppm | 75.5355 ppm |
| Concentration RSD | 505.6 % | 26.4 % | 2,125.0 % | 0.6 % | 1.6 % | 62.5 % | 1.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0004 ppm | 0.0010 ppm | 0.0068 ppm | 0.0016 ppm | 10.9921 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0005 ppm | 0.0008 ppm | 0.0069 ppm | 0.0017 ppm | 11.1702 ppm | 0.0008 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0004 ppm | 0.0011 ppm | 0.0066 ppm | 0.0022 ppm | 11.0342 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0004 ppm | 0.0011 ppm | 0.0068 ppm | 0.0009 ppm | 10.7718 ppm | -0.0002 ppm |
| Concentration RSD | 9.4 % | 12.1 % | 15.2 % | 2.0 % | 42.6 % | 1.8 % | 159.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 14.0243 ppm | 2.9849 ppm | 0.0006 ppm | 13.2484 ppm | 0.0017 ppm | 0.0019 ppm | -0.0005 ppm |
| Concentration per Run 1 | 14.0141 ppm | 3.0330 ppm | 0.0006 ppm | 13.4584 ppm | 0.0012 ppm | 0.0018 ppm | 0.0000 ppm |
| Concentration per Run 2 | 14.0443 ppm | 2.9912 ppm | 0.0006 ppm | 13.2814 ppm | 0.0021 ppm | 0.0021 ppm | -0.0014 ppm |
| Concentration per Run 3 | 14.0146 ppm | 2.9306 ppm | 0.0006 ppm | 13.0053 ppm | 0.0018 ppm | 0.0019 ppm | -0.0001 ppm |
| Concentration RSD | 0.1 % | 1.7 % | 1.2 % | 1.7 % | 24.4 % | 6.8 % | 149.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0029 ppm | 4.8146 ppm | -0.0001 ppm | 0.2960 ppm | 0.0001 ppm | 0.0005 ppm | 0.0034 ppm |
| Concentration per Run 1 | -0.0007 ppm | 4.8204 ppm | -0.0004 ppm | 0.3003 ppm | 0.0005 ppm | -0.0001 ppm | 0.0032 ppm |
| Concentration per Run 2 | -0.0033 ppm | 4.8048 ppm | -0.0004 ppm | 0.2966 ppm | -0.0004 ppm | 0.0011 ppm | 0.0037 ppm |
| Concentration per Run 3 | -0.0047 ppm | 4.8186 ppm | 0.0006 ppm | 0.2910 ppm | 0.0002 ppm | 0.0006 ppm | 0.0032 ppm |
| Concentration RSD | 70.8 % | 0.2 % | 1,137.2 % | 1.6 % | 382.0 % | 112.8 % | 7.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0216 ppm | 97.5556 % | 100.4532 % | 102.5026 % | 97.6112 % | 100.9733 % | 101.4254 % |
| Concentration per Run 1 | 0.0217 ppm | 96.6822 % | 100.3428 % | 102.4684 % | 96.1010 % | 100.9505 % | 101.3473 % |
| Concentration per Run 2 | 0.0216 ppm | 97.1323 % | 100.3846 % | 102.6621 % | 97.2381 % | 101.1434 % | 101.3276 % |
| Concentration per Run 3 | 0.0217 ppm | 98.8523 % | 100.6323 % | 102.3772 % | 99.4945 % | 100.8261 % | 101.6013 % |
| Concentration RSD | 0.1 % | 1.2 % | 0.2 % | 0.1 % | 1.8 % | 0.2 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512368-08 WG2039054
Analysis started at: 3/12/2025 9:30:50 PM
Comments <Comment>
Rack: 2
Vial: 24

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0062 ppm | -0.0010 ppm | 0.0175 ppm | 0.0321 ppm | 0.0000 ppm | 31.9099 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0019 ppm | -0.0010 ppm | 0.0177 ppm | 0.0325 ppm | -0.0001 ppm | 32.2001 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0023 ppm | -0.0007 ppm | 0.0172 ppm | 0.0321 ppm | 0.0000 ppm | 31.9383 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0144 ppm | -0.0012 ppm | 0.0175 ppm | 0.0319 ppm | 0.0000 ppm | 31.5913 ppm |
| Concentration RSD | 35.2 % | 114.9 % | 24.7 % | 1.6 % | 1.0 % | 87.1 % | 1.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0002 ppm | 0.0012 ppm | 0.0007 ppm | 0.0500 ppm | 1.5300 ppm | 0.0008 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0003 ppm | 0.0012 ppm | 0.0006 ppm | 0.0513 ppm | 1.5347 ppm | 0.0008 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0000 ppm | 0.0011 ppm | 0.0010 ppm | 0.0485 ppm | 1.5395 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0002 ppm | 0.0014 ppm | 0.0005 ppm | 0.0501 ppm | 1.5158 ppm | 0.0016 ppm |
| Concentration RSD | 21.7 % | 109.6 % | 12.1 % | 32.9 % | 2.8 % | 0.8 % | 103.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.9204 ppm | 0.0115 ppm | 0.0002 ppm | 12.6099 ppm | 0.0042 ppm | 0.0008 ppm | -0.0007 ppm |
| Concentration per Run 1 | 5.9181 ppm | 0.0117 ppm | 0.0004 ppm | 12.7359 ppm | 0.0043 ppm | 0.0008 ppm | -0.0008 ppm |
| Concentration per Run 2 | 5.9090 ppm | 0.0116 ppm | 0.0002 ppm | 12.6317 ppm | 0.0042 ppm | 0.0009 ppm | -0.0012 ppm |
| Concentration per Run 3 | 5.9343 ppm | 0.0112 ppm | 0.0002 ppm | 12.4620 ppm | 0.0041 ppm | 0.0008 ppm | -0.0001 ppm |
| Concentration RSD | 0.2 % | 2.2 % | 51.2 % | 1.1 % | 3.0 % | 6.6 % | 76.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0033 ppm | 5.3000 ppm | 0.0003 ppm | 0.1087 ppm | 0.0002 ppm | 0.0016 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0035 ppm | 5.3079 ppm | 0.0001 ppm | 0.1100 ppm | 0.0003 ppm | 0.0029 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0042 ppm | 5.2912 ppm | 0.0003 ppm | 0.1088 ppm | 0.0001 ppm | 0.0004 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0021 ppm | 5.3008 ppm | 0.0004 ppm | 0.1072 ppm | 0.0002 ppm | 0.0013 ppm | 0.0004 ppm |
| Concentration RSD | 31.9 % | 0.2 % | 55.9 % | 1.3 % | 35.0 % | 80.1 % | 34.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0185 ppm | 99.3040 % | 101.5890 % | 104.2822 % | 99.8342 % | 103.7677 % | 102.8797 % |
| Concentration per Run 1 | 0.0184 ppm | 98.3705 % | 101.5737 % | 104.2506 % | 98.6172 % | 103.7527 % | 102.9829 % |
| Concentration per Run 2 | 0.0185 ppm | 99.8060 % | 101.6164 % | 104.4056 % | 100.1521 % | 103.8136 % | 102.7341 % |
| Concentration per Run 3 | 0.0185 ppm | 99.7354 % | 101.5769 % | 104.1904 % | 100.7334 % | 103.7367 % | 102.9219 % |
| Concentration RSD | 0.2 % | 0.8 % | 0.0 % | 0.1 % | 1.1 % | 0.0 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512368-11 WG2039054
Analysis started at: 3/12/2025 9:37:12 PM
Comments <Comment>
Rack: 2
Vial: 25

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0010 ppm | -0.0002 ppm | 0.0077 ppm | 0.0026 ppm | -0.0001 ppm | 8.5089 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0018 ppm | 0.0006 ppm | 0.0076 ppm | 0.0026 ppm | -0.0001 ppm | 8.6716 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0013 ppm | -0.0004 ppm | 0.0080 ppm | 0.0027 ppm | -0.0001 ppm | 8.4160 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0026 ppm | -0.0010 ppm | 0.0076 ppm | 0.0026 ppm | -0.0001 ppm | 8.4391 ppm |
| Concentration RSD | 217.8 % | 199.6 % | 312.6 % | 2.9 % | 1.3 % | 18.6 % | 1.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0004 ppm | 0.0144 ppm | 0.9858 ppm | 0.9407 ppm | 0.0018 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0003 ppm | 0.0146 ppm | 1.0002 ppm | 0.9697 ppm | 0.0014 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0006 ppm | 0.0144 ppm | 0.9791 ppm | 0.9213 ppm | 0.0020 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0002 ppm | 0.0004 ppm | 0.0142 ppm | 0.9781 ppm | 0.9312 ppm | 0.0018 ppm |
| Concentration RSD | 480.4 % | 84.1 % | 37.2 % | 1.5 % | 1.3 % | 2.7 % | 18.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.3241 ppm | 0.0328 ppm | 0.0004 ppm | 6.0008 ppm | 0.0006 ppm | 0.0020 ppm | -0.0011 ppm |
| Concentration per Run 1 | 3.3226 ppm | 0.0333 ppm | 0.0004 ppm | 6.1404 ppm | 0.0006 ppm | 0.0020 ppm | -0.0019 ppm |
| Concentration per Run 2 | 3.3212 ppm | 0.0323 ppm | 0.0005 ppm | 5.9083 ppm | 0.0005 ppm | 0.0021 ppm | -0.0007 ppm |
| Concentration per Run 3 | 3.3285 ppm | 0.0329 ppm | 0.0004 ppm | 5.9538 ppm | 0.0006 ppm | 0.0019 ppm | -0.0009 ppm |
| Concentration RSD | 0.1 % | 1.5 % | 14.2 % | 2.0 % | 9.9 % | 5.0 % | 55.1 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0015 ppm | 13.0903 ppm | 0.0006 ppm | 0.0371 ppm | 0.0002 ppm | 0.0010 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0012 ppm | 13.1046 ppm | 0.0007 ppm | 0.0378 ppm | 0.0002 ppm | 0.0009 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0000 ppm | 13.0738 ppm | 0.0001 ppm | 0.0368 ppm | 0.0001 ppm | 0.0022 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0032 ppm | 13.0926 ppm | 0.0010 ppm | 0.0369 ppm | 0.0004 ppm | -0.0002 ppm | 0.0002 ppm |
| Concentration RSD | 107.8 % | 0.1 % | 77.8 % | 1.5 % | 49.5 % | 122.1 % | 55.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0319 ppm | 98.8436 % | 103.2869 % | 105.4993 % | 98.8649 % | 106.3351 % | 103.9371 % |
| Concentration per Run 1 | 0.0320 ppm | 97.5166 % | 103.1762 % | 105.6706 % | 96.9819 % | 106.2562 % | 103.6335 % |
| Concentration per Run 2 | 0.0318 ppm | 100.0374 % | 103.2498 % | 105.5119 % | 99.8978 % | 106.6363 % | 104.0038 % |
| Concentration per Run 3 | 0.0319 ppm | 98.9769 % | 103.4347 % | 105.3153 % | 99.7149 % | 106.1129 % | 104.1740 % |
| Concentration RSD | 0.3 % | 1.3 % | 0.1 % | 0.2 % | 1.7 % | 0.3 % | 0.3 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512368-13 WG2039054
Analysis started at: 3/12/2025 9:43:30 PM
Comments <Comment>
Rack: 2
Vial: 26

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0121 ppm | -0.0006 ppm | 0.0173 ppm | 0.0427 ppm | 0.0000 ppm | 14.9541 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0096 ppm | 0.0001 ppm | 0.0174 ppm | 0.0435 ppm | -0.0001 ppm | 15.2113 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0144 ppm | -0.0010 ppm | 0.0174 ppm | 0.0427 ppm | 0.0000 ppm | 14.9695 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0122 ppm | -0.0008 ppm | 0.0172 ppm | 0.0419 ppm | 0.0000 ppm | 14.6815 ppm |
| Concentration RSD | 56.7 % | 19.9 % | 100.2 % | 0.6 % | 1.8 % | 75.9 % | 1.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | 0.0006 ppm | 0.0002 ppm | 0.0022 ppm | 2.0312 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0002 ppm | 0.0004 ppm | 0.0002 ppm | 0.0036 ppm | 2.0598 ppm | -0.0002 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0000 ppm | 0.0005 ppm | 0.0004 ppm | 0.0013 ppm | 2.0477 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0009 ppm | 0.0000 ppm | 0.0017 ppm | 1.9860 ppm | -0.0003 ppm |
| Concentration RSD | 72.0 % | 142.2 % | 44.0 % | 108.9 % | 55.7 % | 1.9 % | 454.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.7366 ppm | 0.0026 ppm | 0.0002 ppm | 11.8038 ppm | 0.0005 ppm | 0.0011 ppm | -0.0005 ppm |
| Concentration per Run 1 | 4.7290 ppm | 0.0028 ppm | 0.0005 ppm | 12.0299 ppm | 0.0008 ppm | 0.0013 ppm | 0.0006 ppm |
| Concentration per Run 2 | 4.7537 ppm | 0.0025 ppm | 0.0001 ppm | 11.7976 ppm | 0.0004 ppm | 0.0006 ppm | -0.0020 ppm |
| Concentration per Run 3 | 4.7272 ppm | 0.0025 ppm | 0.0002 ppm | 11.5840 ppm | 0.0004 ppm | 0.0013 ppm | 0.0001 ppm |
| Concentration RSD | 0.3 % | 6.8 % | 74.5 % | 1.9 % | 44.0 % | 35.0 % | 311.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0018 ppm | 6.7504 ppm | 0.0000 ppm | 0.0753 ppm | 0.0003 ppm | 0.0010 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0004 ppm | 6.7354 ppm | 0.0004 ppm | 0.0767 ppm | 0.0003 ppm | 0.0010 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0020 ppm | 6.7709 ppm | -0.0002 ppm | 0.0755 ppm | 0.0002 ppm | 0.0002 ppm | -0.0002 ppm |
| Concentration per Run 3 | -0.0030 ppm | 6.7449 ppm | -0.0001 ppm | 0.0739 ppm | 0.0002 ppm | 0.0018 ppm | 0.0001 ppm |
| Concentration RSD | 71.6 % | 0.3 % | 984.2 % | 1.9 % | 15.1 % | 78.7 % | 809.8 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0139 ppm | 97.6373 % | 102.3889 % | 105.1931 % | 98.0108 % | 104.9343 % | 103.6325 % |
| Concentration per Run 1 | 0.0139 ppm | 96.3604 % | 102.4661 % | 105.3031 % | 96.1628 % | 105.1101 % | 103.7260 % |
| Concentration per Run 2 | 0.0139 ppm | 97.9388 % | 102.2855 % | 105.1057 % | 98.1958 % | 104.7617 % | 103.3431 % |
| Concentration per Run 3 | 0.0138 ppm | 98.6127 % | 102.4152 % | 105.1703 % | 99.6739 % | 104.9311 % | 103.8284 % |
| Concentration RSD | 0.3 % | 1.2 % | 0.1 % | 0.1 % | 1.8 % | 0.2 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512368-14 WG2039054
Analysis started at: 3/12/2025 9:49:51 PM
Comments <Comment>
Rack: 2
Vial: 27

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0096 ppm | -0.0005 ppm | 0.0126 ppm | 0.0011 ppm | -0.0001 ppm | 30.9701 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0083 ppm | -0.0012 ppm | 0.0125 ppm | 0.0011 ppm | -0.0001 ppm | 30.8018 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0108 ppm | 0.0008 ppm | 0.0128 ppm | 0.0011 ppm | 0.0000 ppm | 30.9982 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0095 ppm | -0.0011 ppm | 0.0125 ppm | 0.0010 ppm | -0.0001 ppm | 31.1104 ppm |
| Concentration RSD | 43.2 % | 12.8 % | 221.5 % | 1.2 % | 3.3 % | 36.5 % | 0.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0001 ppm | 0.0004 ppm | -0.0003 ppm | 0.0291 ppm | 1.4892 ppm | 0.0028 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0000 ppm | 0.0004 ppm | -0.0002 ppm | 0.0275 ppm | 1.4799 ppm | 0.0022 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0003 ppm | 0.0002 ppm | -0.0003 ppm | 0.0299 ppm | 1.4946 ppm | 0.0029 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0001 ppm | 0.0006 ppm | -0.0003 ppm | 0.0300 ppm | 1.4931 ppm | 0.0033 ppm |
| Concentration RSD | 39.0 % | 88.1 % | 41.3 % | 29.3 % | 4.9 % | 0.5 % | 20.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.9724 ppm | 0.0526 ppm | 0.0002 ppm | 7.5374 ppm | -0.0001 ppm | 0.0010 ppm | 0.0002 ppm |
| Concentration per Run 1 | 3.9744 ppm | 0.0524 ppm | 0.0003 ppm | 7.4830 ppm | -0.0002 ppm | 0.0013 ppm | 0.0005 ppm |
| Concentration per Run 2 | 3.9795 ppm | 0.0530 ppm | 0.0001 ppm | 7.5566 ppm | -0.0002 ppm | 0.0010 ppm | 0.0000 ppm |
| Concentration per Run 3 | 3.9633 ppm | 0.0524 ppm | 0.0003 ppm | 7.5725 ppm | 0.0000 ppm | 0.0007 ppm | 0.0002 ppm |
| Concentration RSD | 0.2 % | 0.7 % | 62.4 % | 0.6 % | 124.0 % | 28.7 % | 102.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | **22.1897 [SIC 100]** | 0.0001 ppm | 0.1478 ppm | 0.0004 ppm | 0.0010 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0007 ppm | 22.1682 ppm | 0.0007 ppm | 0.1472 ppm | 0.0005 ppm | 0.0001 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0026 ppm | 22.1815 ppm | -0.0004 ppm | 0.1481 ppm | 0.0000 ppm | 0.0021 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0031 ppm | 22.2193 ppm | 0.0000 ppm | 0.1479 ppm | 0.0006 ppm | 0.0008 ppm | 0.0002 ppm |
| Concentration RSD | 728.8 % | 0.1 % | 559.0 % | 0.3 % | 75.6 % | 101.7 % | 200.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0147 ppm | 103.3785 % | 102.3401 % | 104.8826 % | 104.6209 % | 104.2840 % | 103.7449 % |
| Concentration per Run 1 | 0.0146 ppm | 104.0770 % | 102.6894 % | 104.8343 % | 104.9465 % | 104.1693 % | 103.9383 % |
| Concentration per Run 2 | 0.0147 ppm | 103.0620 % | 101.8760 % | 105.1270 % | 104.5104 % | 104.5164 % | 103.3328 % |
| Concentration per Run 3 | 0.0148 ppm | 102.9966 % | 102.4548 % | 104.6865 % | 104.4058 % | 104.1664 % | 103.9635 % |
| Concentration RSD | 0.6 % | 0.6 % | 0.4 % | 0.2 % | 0.3 % | 0.2 % | 0.3 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCV
Analysis started at: 3/12/2025 9:56:12 PM
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4750 ppm | 0.4683 ppm | 0.4730 ppm | 0.4612 ppm | 0.4533 ppm | 0.4653 ppm | 0.4972 ppm |
| Concentration per Run 1 | 0.4754 ppm | 0.4579 ppm | 0.4730 ppm | 0.4606 ppm | 0.4387 ppm | 0.4506 ppm | 0.4871 ppm |
| Concentration per Run 2 | 0.4746 ppm | 0.4678 ppm | 0.4723 ppm | 0.4615 ppm | 0.4582 ppm | 0.4718 ppm | 0.5040 ppm |
| Concentration per Run 3 | 0.4750 ppm | 0.4792 ppm | 0.4738 ppm | 0.4614 ppm | 0.4629 ppm | 0.4736 ppm | 0.5004 ppm |
| Recovery Percentage 1 | 95.005 % | 93.658 % | 94.608 % | 92.239 % | 90.652 % | 93.065 % | 99.433 % |
| Concentration RSD | 0.1 % | 2.3 % | 0.2 % | 0.1 % | 2.8 % | 2.8 % | 1.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4849 ppm | 0.4905 ppm | 0.5086 ppm | 0.4919 ppm | 0.4906 ppm | 4.7247 ppm | 0.4520 ppm |
| Concentration per Run 1 | 0.4855 ppm | 0.4907 ppm | 0.5079 ppm | 0.4919 ppm | 0.4751 ppm | 4.5715 ppm | 0.4373 ppm |
| Concentration per Run 2 | 0.4848 ppm | 0.4908 ppm | 0.5096 ppm | 0.4932 ppm | 0.4968 ppm | 4.7870 ppm | 0.4571 ppm |
| Concentration per Run 3 | 0.4843 ppm | 0.4899 ppm | 0.5082 ppm | 0.4906 ppm | 0.4999 ppm | 4.8158 ppm | 0.4616 ppm |
| Recovery Percentage 1 | 96.973 % | 98.097 % | 101.720 % | 98.380 % | 98.124 % | 94.495 % | 90.397 % |
| Concentration RSD | 0.1 % | 0.1 % | 0.2 % | 0.3 % | 2.8 % | 2.8 % | 2.9 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5106 ppm | 0.4646 ppm | 0.4672 ppm | 9.1940 ppm | 0.4870 ppm | 0.4914 ppm | 0.4794 ppm |
| Concentration per Run 1 | 0.5104 ppm | 0.4497 ppm | 0.4661 ppm | 8.9261 ppm | 0.4869 ppm | 0.4906 ppm | 0.4788 ppm |
| Concentration per Run 2 | 0.5122 ppm | 0.4702 ppm | 0.4675 ppm | 9.2951 ppm | 0.4864 ppm | 0.4913 ppm | 0.4781 ppm |
| Concentration per Run 3 | 0.5091 ppm | 0.4738 ppm | 0.4680 ppm | 9.3607 ppm | 0.4876 ppm | 0.4923 ppm | 0.4812 ppm |
| Recovery Percentage 1 | 102.119 % | 92.916 % | 93.445 % | 91.940 % | 97.394 % | 98.279 % | 95.875 % |
| Concentration RSD | 0.3 % | 2.8 % | 0.2 % | 2.5 % | 0.1 % | 0.2 % | 0.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4754 ppm | 5.3553 ppm | 0.4802 ppm | 0.4524 ppm | 0.4941 ppm | 0.4904 ppm | 0.4937 ppm |
| Concentration per Run 1 | 0.4765 ppm | 5.3569 ppm | 0.4787 ppm | 0.4391 ppm | 0.4936 ppm | 0.4914 ppm | 0.4934 ppm |
| Concentration per Run 2 | 0.4779 ppm | 5.3475 ppm | 0.4794 ppm | 0.4568 ppm | 0.4956 ppm | 0.4908 ppm | 0.4951 ppm |
| Concentration per Run 3 | 0.4717 ppm | 5.3614 ppm | 0.4825 ppm | 0.4613 ppm | 0.4929 ppm | 0.4891 ppm | 0.4925 ppm |
| Recovery Percentage 1 | 95.076 % | 102.005 % | 96.039 % | 90.472 % | 98.812 % | 98.086 % | 98.731 % |
| Concentration RSD | 0.7 % | 0.1 % | 0.4 % | 2.6 % | 0.3 % | 0.2 % | 0.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4907 ppm | 101.8876 % | 101.8429 % | 104.7076 % | 104.1152 % | 104.5654 % | 103.2495 % |
| Concentration per Run 1 | 0.4912 ppm | 104.5825 % | 101.5705 % | 104.5412 % | 106.3964 % | 104.3967 % | 103.0943 % |
| Concentration per Run 2 | 0.4904 ppm | 100.7792 % | 102.1205 % | 104.9385 % | 103.0815 % | 104.7162 % | 103.3588 % |
| Concentration per Run 3 | 0.4905 ppm | 100.3010 % | 101.8377 % | 104.6431 % | 102.8678 % | 104.5833 % | 103.2955 % |
| Recovery Percentage 1 | 98.143 % | | | | | | |
| Concentration RSD | 0.1 % | 2.3 % | 0.3 % | 0.2 % | 1.9 % | 0.2 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCB
Analysis started at: 3/12/2025 10:02:20 PM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | -0.0046 ppm | -0.0006 ppm | 0.0012 ppm | 0.0002 ppm | 0.0000 ppm | 0.0066 ppm |
| Concentration per Run 1 | 0.0004 ppm | -0.0003 ppm | -0.0011 ppm | 0.0013 ppm | 0.0001 ppm | 0.0001 ppm | 0.0052 ppm |
| Concentration per Run 2 | 0.0003 ppm | -0.0134 ppm | -0.0009 ppm | 0.0013 ppm | 0.0002 ppm | 0.0000 ppm | 0.0040 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0000 ppm | 0.0001 ppm | 0.0010 ppm | 0.0003 ppm | 0.0000 ppm | 0.0106 ppm |
| Recovery Percentage 1 | 4.056 % | -4.576 % | -12.417 % | 3.950 % | 1.856 % | 0.357 % | 6.601 % |
| Concentration RSD | 38.5 % | 167.4 % | 97.6 % | 12.5 % | 62.0 % | 193.0 % | 53.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0004 ppm | -0.0004 ppm | 0.0018 ppm | -0.0456 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0003 ppm | -0.0005 ppm | 0.0019 ppm | -0.0510 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0001 ppm | 0.0005 ppm | -0.0003 ppm | 0.0020 ppm | -0.0362 ppm | 0.0012 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0001 ppm | 0.0003 ppm | -0.0003 ppm | 0.0014 ppm | -0.0495 ppm | 0.0012 ppm |
| Recovery Percentage 1 | 1.155 % | 0.092 % | 3.794 % | -3.586 % | 3.564 % | -1.823 % | 10.026 % |
| Concentration RSD | 37.4 % | 475.7 % | 27.9 % | 27.2 % | 18.1 % | 17.8 % | 31.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 0.0000 ppm | 0.0013 ppm | -0.0123 ppm | 0.0000 ppm | -0.0001 ppm | -0.0003 ppm |
| Concentration per Run 1 | -0.0006 ppm | 0.0001 ppm | 0.0015 ppm | -0.0169 ppm | -0.0004 ppm | -0.0002 ppm | -0.0008 ppm |
| Concentration per Run 2 | 0.0012 ppm | 0.0000 ppm | 0.0015 ppm | -0.0086 ppm | 0.0003 ppm | -0.0001 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0014 ppm | 0.0000 ppm | 0.0010 ppm | -0.0114 ppm | 0.0000 ppm | 0.0001 ppm | 0.0002 ppm |
| Recovery Percentage 1 | 0.677 % | 0.408 % | 2.665 % | -0.614 % | -0.120 % | -0.572 % | -0.502 % |
| Concentration RSD | 159.3 % | 93.5 % | 19.6 % | 34.6 % | 1,041.5 % | 318.9 % | 198.8 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | 0.0004 ppm | 0.0009 ppm | 0.0000 ppm | 0.0002 ppm | 0.0008 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0015 ppm | 0.0006 ppm | 0.0007 ppm | 0.0000 ppm | 0.0001 ppm | 0.0007 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0004 ppm | -0.0002 ppm | 0.0014 ppm | -0.0002 ppm | 0.0004 ppm | 0.0006 ppm | 0.0001 ppm |
| Concentration per Run 3 | -0.0006 ppm | 0.0007 ppm | 0.0006 ppm | 0.0001 ppm | 0.0002 ppm | 0.0010 ppm | 0.0002 ppm |
| Recovery Percentage 1 | -7.862 % | 0.075 % | 1.797 % | -0.032 % | 2.059 % | 3.906 % | 0.969 % |
| Concentration RSD | 74.6 % | 142.0 % | 47.9 % | 4,310.0 % | 72.2 % | 31.2 % | 102.5 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 102.3256 % | 102.9441 % | 105.2720 % | 102.4831 % | 105.5929 % | 102.8362 % |
| Concentration per Run 1 | 0.0007 ppm | 104.1013 % | 102.8545 % | 105.1615 % | 103.7205 % | 105.5792 % | 102.6221 % |
| Concentration per Run 2 | 0.0008 ppm | 101.8830 % | 102.9361 % | 105.4244 % | 102.2728 % | 105.4822 % | 102.9372 % |
| Concentration per Run 3 | 0.0007 ppm | 100.9925 % | 103.0419 % | 105.2302 % | 101.4559 % | 105.7174 % | 102.9492 % |
| Recovery Percentage 1 | 14.708 % | | | | | | |
| Concentration RSD | 7.4 % | 1.6 % | 0.1 % | 0.1 % | 1.1 % | 0.1 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512368-16 WG2039054
Analysis started at: 3/12/2025 10:08:46 PM
Comments <Comment>
Rack: 2
Vial: 28

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0067 ppm | -0.0003 ppm | 0.0157 ppm | 0.0446 ppm | 0.0000 ppm | 21.4937 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0156 ppm | 0.0009 ppm | 0.0155 ppm | 0.0454 ppm | 0.0000 ppm | 21.8379 ppm |
| Concentration per Run 2 | 0.0006 ppm | -0.0001 ppm | -0.0029 ppm | 0.0157 ppm | 0.0443 ppm | -0.0001 ppm | 21.4977 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0045 ppm | 0.0012 ppm | 0.0159 ppm | 0.0441 ppm | 0.0000 ppm | 21.1454 ppm |
| Concentration RSD | 128.7 % | 121.1 % | 871.7 % | 1.4 % | 1.6 % | 218.2 % | 1.6 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0007 ppm | 0.0113 ppm | 0.0018 ppm | 2.0144 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0008 ppm | 0.0112 ppm | 0.0021 ppm | 2.0803 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | 0.0006 ppm | 0.0112 ppm | 0.0013 ppm | 2.0056 ppm | -0.0003 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0000 ppm | 0.0006 ppm | 0.0115 ppm | 0.0020 ppm | 1.9573 ppm | 0.0000 ppm |
| Concentration RSD | 121.5 % | 2,514.0 % | 17.1 % | 1.5 % | 26.5 % | 3.1 % | 91.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.2669 ppm | 0.0032 ppm | 0.0001 ppm | 11.2339 ppm | 0.0009 ppm | 0.0016 ppm | -0.0010 ppm |
| Concentration per Run 1 | 6.2882 ppm | 0.0035 ppm | 0.0002 ppm | 11.4260 ppm | 0.0009 ppm | 0.0021 ppm | -0.0024 ppm |
| Concentration per Run 2 | 6.2601 ppm | 0.0032 ppm | 0.0002 ppm | 11.2288 ppm | 0.0008 ppm | 0.0013 ppm | -0.0008 ppm |
| Concentration per Run 3 | 6.2522 ppm | 0.0031 ppm | 0.0000 ppm | 11.0469 ppm | 0.0010 ppm | 0.0013 ppm | 0.0003 ppm |
| Concentration RSD | 0.3 % | 7.1 % | 62.2 % | 1.7 % | 8.0 % | 29.1 % | 137.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 8.0504 ppm | 0.0005 ppm | 0.0951 ppm | 0.0003 ppm | -0.0001 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0017 ppm | 8.0667 ppm | 0.0009 ppm | 0.0969 ppm | 0.0002 ppm | -0.0012 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0010 ppm | 8.0484 ppm | 0.0003 ppm | 0.0949 ppm | 0.0003 ppm | 0.0003 ppm | 0.0002 ppm |
| Concentration per Run 3 | -0.0003 ppm | 8.0360 ppm | 0.0003 ppm | 0.0934 ppm | 0.0004 ppm | 0.0007 ppm | 0.0003 ppm |
| Concentration RSD | 415.0 % | 0.2 % | 73.6 % | 1.8 % | 18.8 % | 1,781.5 % | 39.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0354 ppm | 96.5729 % | 102.2442 % | 105.2005 % | 97.0241 % | 104.6539 % | 103.2688 % |
| Concentration per Run 1 | 0.0355 ppm | 95.4038 % | 101.8648 % | 105.3415 % | 95.6104 % | 104.5002 % | 102.8601 % |
| Concentration per Run 2 | 0.0352 ppm | 96.3509 % | 102.4648 % | 105.0437 % | 96.9512 % | 104.7207 % | 103.4110 % |
| Concentration per Run 3 | 0.0354 ppm | 97.9640 % | 102.4030 % | 105.2163 % | 98.5108 % | 104.7407 % | 103.5354 % |
| Concentration RSD | 0.5 % | 1.3 % | 0.3 % | 0.1 % | 1.5 % | 0.1 % | 0.3 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512368-17 WG2039054
Analysis started at: 3/12/2025 10:15:05 PM
Comments <Comment>
Rack: 2
Vial: 29

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0028 ppm | -0.0009 ppm | 0.0132 ppm | 0.0227 ppm | 0.0000 ppm | 13.9469 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0073 ppm | -0.0018 ppm | 0.0133 ppm | 0.0226 ppm | 0.0000 ppm | 13.8209 ppm |
| Concentration per Run 2 | 0.0008 ppm | 0.0002 ppm | 0.0004 ppm | 0.0133 ppm | 0.0227 ppm | 0.0000 ppm | 13.9862 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0009 ppm | -0.0012 ppm | 0.0131 ppm | 0.0229 ppm | 0.0000 ppm | 14.0336 ppm |
| Concentration RSD | 63.2 % | 141.4 % | 129.4 % | 0.8 % | 0.7 % | 320.6 % | 0.8 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0034 ppm | 0.0011 ppm | 0.0104 ppm | 0.3252 ppm | 1.1105 ppm | 0.0034 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0035 ppm | 0.0011 ppm | 0.0105 ppm | 0.3226 ppm | 1.0797 ppm | 0.0025 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0034 ppm | 0.0009 ppm | 0.0105 ppm | 0.3251 ppm | 1.1239 ppm | 0.0044 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0033 ppm | 0.0013 ppm | 0.0103 ppm | 0.3280 ppm | 1.1279 ppm | 0.0035 ppm |
| Concentration RSD | 35.8 % | 2.1 % | 19.2 % | 1.0 % | 0.8 % | 2.4 % | 28.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.4170 ppm | 0.0262 ppm | 0.0001 ppm | 13.2718 ppm | 0.0054 ppm | 0.0013 ppm | -0.0003 ppm |
| Concentration per Run 1 | 6.4185 ppm | 0.0264 ppm | 0.0000 ppm | 13.1375 ppm | 0.0057 ppm | 0.0009 ppm | 0.0006 ppm |
| Concentration per Run 2 | 6.4209 ppm | 0.0260 ppm | 0.0003 ppm | 13.3138 ppm | 0.0054 ppm | 0.0022 ppm | -0.0008 ppm |
| Concentration per Run 3 | 6.4117 ppm | 0.0263 ppm | 0.0001 ppm | 13.3642 ppm | 0.0052 ppm | 0.0008 ppm | -0.0007 ppm |
| Concentration RSD | 0.1 % | 0.6 % | 78.9 % | 0.9 % | 4.4 % | 58.8 % | 265.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0037 ppm | 11.0517 ppm | 0.0003 ppm | 0.0701 ppm | 0.0002 ppm | 0.0005 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0048 ppm | 11.0812 ppm | 0.0004 ppm | 0.0694 ppm | 0.0001 ppm | 0.0003 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0004 ppm | 11.0346 ppm | 0.0000 ppm | 0.0702 ppm | 0.0002 ppm | 0.0005 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0067 ppm | 11.0394 ppm | 0.0005 ppm | 0.0706 ppm | 0.0004 ppm | 0.0007 ppm | 0.0001 ppm |
| Concentration RSD | 100.5 % | 0.2 % | 82.6 % | 0.9 % | 64.9 % | 41.0 % | 437.5 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0403 ppm | 104.7326 % | 102.7847 % | 104.8707 % | 104.8463 % | 104.9905 % | 104.2076 % |
| Concentration per Run 1 | 0.0402 ppm | 105.9607 % | 102.6958 % | 105.0760 % | 105.3994 % | 104.9225 % | 104.1388 % |
| Concentration per Run 2 | 0.0403 ppm | 104.2277 % | 102.6582 % | 104.6630 % | 104.7175 % | 105.1688 % | 104.1210 % |
| Concentration per Run 3 | 0.0403 ppm | 104.0094 % | 103.0002 % | 104.8730 % | 104.4220 % | 104.8801 % | 104.3629 % |
| Concentration RSD | 0.1 % | 1.0 % | 0.2 % | 0.2 % | 0.5 % | 0.1 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512368-19 WG2039054
Analysis started at: 3/12/2025 10:21:25 PM
Comments <Comment>
Rack: 2
Vial: 30

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0077 ppm | -0.0002 ppm | 0.0150 ppm | 0.0409 ppm | 0.0000 ppm | 19.9240 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0111 ppm | -0.0008 ppm | 0.0148 ppm | 0.0402 ppm | -0.0001 ppm | 19.6094 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0061 ppm | 0.0000 ppm | 0.0154 ppm | 0.0410 ppm | 0.0000 ppm | 20.0383 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0060 ppm | 0.0001 ppm | 0.0148 ppm | 0.0415 ppm | 0.0000 ppm | 20.1243 ppm |
| Concentration RSD | 66.9 % | 37.7 % | 213.4 % | 2.2 % | 1.6 % | 107.8 % | 1.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0008 ppm | 0.0002 ppm | 0.0012 ppm | 1.8419 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0008 ppm | 0.0002 ppm | 0.0015 ppm | 1.8047 ppm | 0.0012 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | 0.0005 ppm | 0.0000 ppm | 0.0011 ppm | 1.8562 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0000 ppm | 0.0010 ppm | 0.0004 ppm | 0.0011 ppm | 1.8649 ppm | 0.0007 ppm |
| Concentration RSD | 24.8 % | 71.6 % | 27.9 % | 88.7 % | 19.1 % | 1.8 % | 103.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.2873 ppm | 0.0025 ppm | 0.0001 ppm | 10.4808 ppm | 0.0006 ppm | 0.0011 ppm | -0.0001 ppm |
| Concentration per Run 1 | 6.2822 ppm | 0.0025 ppm | 0.0004 ppm | 10.3333 ppm | 0.0008 ppm | 0.0012 ppm | -0.0007 ppm |
| Concentration per Run 2 | 6.3030 ppm | 0.0025 ppm | 0.0000 ppm | 10.5045 ppm | 0.0007 ppm | 0.0009 ppm | 0.0007 ppm |
| Concentration per Run 3 | 6.2767 ppm | 0.0026 ppm | 0.0000 ppm | 10.6045 ppm | 0.0004 ppm | 0.0012 ppm | -0.0002 ppm |
| Concentration RSD | 0.2 % | 1.5 % | 172.7 % | 1.3 % | 29.4 % | 16.3 % | 1,383.0 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | 8.0708 ppm | -0.0001 ppm | 0.0881 ppm | 0.0003 ppm | 0.0007 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0016 ppm | 8.0791 ppm | -0.0001 ppm | 0.0874 ppm | 0.0003 ppm | 0.0017 ppm | 0.0004 ppm |
| Concentration per Run 2 | -0.0006 ppm | 8.0636 ppm | -0.0003 ppm | 0.0881 ppm | 0.0007 ppm | 0.0014 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0015 ppm | 8.0697 ppm | 0.0003 ppm | 0.0889 ppm | 0.0001 ppm | -0.0010 ppm | 0.0004 ppm |
| Concentration RSD | 41.1 % | 0.1 % | 521.5 % | 0.9 % | 91.7 % | 210.2 % | 108.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0157 ppm | 104.5824 % | 102.9643 % | 104.9880 % | 104.8471 % | 104.9397 % | 103.9395 % |
| Concentration per Run 1 | 0.0157 ppm | 107.3102 % | 102.9640 % | 105.0763 % | 106.8916 % | 105.0063 % | 104.0342 % |
| Concentration per Run 2 | 0.0157 ppm | 103.5058 % | 102.8688 % | 104.9802 % | 103.9971 % | 104.9602 % | 103.7476 % |
| Concentration per Run 3 | 0.0157 ppm | 102.9311 % | 103.0601 % | 104.9077 % | 103.6527 % | 104.8525 % | 104.0366 % |
| Concentration RSD | 0.2 % | 2.3 % | 0.1 % | 0.1 % | 1.7 % | 0.1 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512607-01 WG2039054
Analysis started at: 3/12/2025 10:27:45 PM
Comments <Comment>
Rack: 2
Vial: 31

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0023 ppm | -0.0011 ppm | 0.0409 ppm | 0.0502 ppm | 0.0000 ppm | 15.4639 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0030 ppm | -0.0011 ppm | 0.0408 ppm | 0.0513 ppm | 0.0000 ppm | 15.7875 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0046 ppm | -0.0013 ppm | 0.0409 ppm | 0.0505 ppm | -0.0001 ppm | 15.5031 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0007 ppm | -0.0009 ppm | 0.0409 ppm | 0.0488 ppm | 0.0000 ppm | 15.1013 ppm |
| Concentration RSD | 55.3 % | 119.6 % | 19.3 % | 0.2 % | 2.5 % | 92.5 % | 2.2 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0006 ppm | 0.0007 ppm | 0.0001 ppm | 0.0057 ppm | 1.6539 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0007 ppm | 0.0009 ppm | 0.0002 ppm | 0.0068 ppm | 1.6915 ppm | 0.0020 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0005 ppm | 0.0007 ppm | 0.0000 ppm | 0.0043 ppm | 1.6627 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0006 ppm | 0.0004 ppm | 0.0000 ppm | 0.0062 ppm | 1.6076 ppm | -0.0013 ppm |
| Concentration RSD | 12.5 % | 21.8 % | 40.7 % | 194.1 % | 22.7 % | 2.6 % | 464.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.9280 ppm | 0.0024 ppm | 0.0002 ppm | 55.7557 ppm | 0.0000 ppm | 0.0005 ppm | -0.0007 ppm |
| Concentration per Run 1 | 4.9254 ppm | 0.0024 ppm | 0.0003 ppm | 56.9491 ppm | 0.0000 ppm | 0.0006 ppm | -0.0008 ppm |
| Concentration per Run 2 | 4.9367 ppm | 0.0023 ppm | 0.0002 ppm | 55.9831 ppm | -0.0001 ppm | 0.0004 ppm | -0.0006 ppm |
| Concentration per Run 3 | 4.9219 ppm | 0.0026 ppm | 0.0001 ppm | 54.3348 ppm | 0.0001 ppm | 0.0006 ppm | -0.0009 ppm |
| Concentration RSD | 0.2 % | 5.2 % | 35.8 % | 2.4 % | 404.1 % | 25.4 % | 21.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 3.4794 ppm | 0.0001 ppm | 0.0644 ppm | 0.0002 ppm | 0.0006 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0003 ppm | 3.4741 ppm | 0.0008 ppm | 0.0659 ppm | 0.0000 ppm | 0.0014 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0002 ppm | 3.4825 ppm | -0.0004 ppm | 0.0644 ppm | 0.0004 ppm | 0.0000 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0011 ppm | 3.4816 ppm | 0.0000 ppm | 0.0629 ppm | 0.0001 ppm | 0.0004 ppm | 0.0003 ppm |
| Concentration RSD | 97.8 % | 0.1 % | 485.7 % | 2.3 % | 139.1 % | 119.2 % | 14.9 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0021 ppm | 97.6151 % | 101.4567 % | 103.3285 % | 97.7645 % | 102.8891 % | 103.0548 % |
| Concentration per Run 1 | 0.0022 ppm | 96.1693 % | 101.5882 % | 103.2079 % | 95.8944 % | 103.0232 % | 103.0362 % |
| Concentration per Run 2 | 0.0020 ppm | 97.2330 % | 101.0812 % | 103.3122 % | 97.5129 % | 102.8392 % | 102.7562 % |
| Concentration per Run 3 | 0.0021 ppm | 99.4429 % | 101.7007 % | 103.4654 % | 99.8861 % | 102.8048 % | 103.3719 % |
| Concentration RSD | 5.9 % | 1.7 % | 0.3 % | 0.1 % | 2.1 % | 0.1 % | 0.3 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512607-02 WG2039054
Analysis started at: 3/12/2025 10:34:06 PM
Comments <Comment>
Rack: 2
Vial: 32

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0079 ppm | -0.0017 ppm | 0.0065 ppm | 0.0137 ppm | 0.0000 ppm | 11.3732 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0086 ppm | -0.0014 ppm | 0.0066 ppm | 0.0139 ppm | 0.0000 ppm | 11.5395 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0099 ppm | -0.0029 ppm | 0.0065 ppm | 0.0138 ppm | 0.0000 ppm | 11.4652 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0053 ppm | -0.0007 ppm | 0.0064 ppm | 0.0135 ppm | 0.0000 ppm | 11.1147 ppm |
| Concentration RSD | 19.4 % | 30.1 % | 68.0 % | 1.2 % | 1.5 % | 139.8 % | 2.0 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0002 ppm | 0.0032 ppm | 0.0006 ppm | 0.0103 ppm | 0.8597 ppm | 0.0031 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0002 ppm | 0.0032 ppm | 0.0008 ppm | 0.0116 ppm | 0.8625 ppm | 0.0039 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0002 ppm | 0.0031 ppm | 0.0005 ppm | 0.0102 ppm | 0.8813 ppm | 0.0031 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0002 ppm | 0.0033 ppm | 0.0006 ppm | 0.0092 ppm | 0.8354 ppm | 0.0023 ppm |
| Concentration RSD | 14.0 % | 12.6 % | 2.8 % | 27.4 % | 11.6 % | 2.7 % | 25.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.2216 ppm | 0.0008 ppm | 0.0003 ppm | 7.4688 ppm | 0.0012 ppm | 0.0006 ppm | -0.0006 ppm |
| Concentration per Run 1 | 5.2068 ppm | 0.0010 ppm | 0.0003 ppm | 7.5685 ppm | 0.0013 ppm | 0.0005 ppm | -0.0008 ppm |
| Concentration per Run 2 | 5.2161 ppm | 0.0006 ppm | 0.0003 ppm | 7.5100 ppm | 0.0013 ppm | 0.0004 ppm | -0.0007 ppm |
| Concentration per Run 3 | 5.2419 ppm | 0.0007 ppm | 0.0004 ppm | 7.3278 ppm | 0.0011 ppm | 0.0010 ppm | -0.0004 ppm |
| Concentration RSD | 0.3 % | 30.1 % | 9.7 % | 1.7 % | 9.1 % | 51.5 % | 35.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0020 ppm | 9.6786 ppm | 0.0001 ppm | 0.0510 ppm | 0.0001 ppm | 0.0001 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0033 ppm | 9.6827 ppm | -0.0002 ppm | 0.0516 ppm | 0.0000 ppm | -0.0005 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0008 ppm | 9.6732 ppm | 0.0001 ppm | 0.0515 ppm | 0.0004 ppm | -0.0004 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0021 ppm | 9.6799 ppm | 0.0005 ppm | 0.0500 ppm | -0.0001 ppm | 0.0013 ppm | 0.0002 ppm |
| Concentration RSD | 62.8 % | 0.1 % | 226.9 % | 1.8 % | 225.9 % | 773.3 % | 24.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0046 ppm | 98.8603 % | 103.3826 % | 105.2651 % | 98.8552 % | 105.6277 % | 104.5233 % |
| Concentration per Run 1 | 0.0047 ppm | 98.0383 % | 103.6362 % | 105.2975 % | 97.4165 % | 105.6369 % | 104.9391 % |
| Concentration per Run 2 | 0.0046 ppm | 97.9883 % | 103.2145 % | 105.3540 % | 98.0645 % | 105.7593 % | 104.3586 % |
| Concentration per Run 3 | 0.0045 ppm | 100.5543 % | 103.2970 % | 105.1438 % | 101.0845 % | 105.4869 % | 104.2722 % |
| Concentration RSD | 1.5 % | 1.5 % | 0.2 % | 0.1 % | 2.0 % | 0.1 % | 0.3 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512607-03 WG2039054
Analysis started at: 3/12/2025 10:40:27 PM
Comments <Comment>
Rack: 2
Vial: 33

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | 0.0034 ppm | -0.0008 ppm | 0.0178 ppm | 0.0562 ppm | -0.0001 ppm | 5.5241 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0002 ppm | -0.0015 ppm | 0.0178 ppm | 0.0544 ppm | -0.0001 ppm | 5.3334 ppm |
| Concentration per Run 2 | 0.0005 ppm | 0.0127 ppm | 0.0011 ppm | 0.0177 ppm | 0.0566 ppm | -0.0001 ppm | 5.5825 ppm |
| Concentration per Run 3 | 0.0002 ppm | -0.0025 ppm | -0.0019 ppm | 0.0179 ppm | 0.0576 ppm | 0.0000 ppm | 5.6563 ppm |
| Concentration RSD | 43.7 % | 235.6 % | 207.3 % | 0.4 % | 3.0 % | 42.7 % | 3.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0001 ppm | 0.0007 ppm | 0.0001 ppm | 0.0067 ppm | 1.1263 ppm | 0.0007 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0007 ppm | 0.0001 ppm | 0.0073 ppm | 1.0702 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0001 ppm | 0.0008 ppm | 0.0000 ppm | 0.0072 ppm | 1.1451 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | 0.0005 ppm | 0.0001 ppm | 0.0055 ppm | 1.1636 ppm | 0.0009 ppm |
| Concentration RSD | 28.4 % | 31.4 % | 22.1 % | 105.2 % | 15.2 % | 4.4 % | 58.4 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.0576 ppm | 0.0166 ppm | 0.0002 ppm | 69.2256 ppm | -0.0001 ppm | 0.0001 ppm | -0.0007 ppm |
| Concentration per Run 1 | 2.0553 ppm | 0.0159 ppm | 0.0002 ppm | 67.0497 ppm | 0.0001 ppm | -0.0001 ppm | -0.0014 ppm |
| Concentration per Run 2 | 2.0553 ppm | 0.0170 ppm | 0.0003 ppm | 69.9371 ppm | -0.0001 ppm | 0.0001 ppm | -0.0007 ppm |
| Concentration per Run 3 | 2.0624 ppm | 0.0170 ppm | 0.0003 ppm | 70.6900 ppm | -0.0003 ppm | 0.0003 ppm | 0.0000 ppm |
| Concentration RSD | 0.2 % | 3.7 % | 23.8 % | 2.8 % | 165.9 % | 156.5 % | 101.7 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 4.8450 ppm | 0.0003 ppm | 0.0287 ppm | 0.0000 ppm | 0.0011 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0001 ppm | 4.8408 ppm | 0.0002 ppm | 0.0278 ppm | 0.0002 ppm | 0.0011 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0013 ppm | 4.8421 ppm | 0.0003 ppm | 0.0291 ppm | 0.0000 ppm | 0.0018 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0012 ppm | 4.8521 ppm | 0.0003 ppm | 0.0293 ppm | -0.0001 ppm | 0.0004 ppm | 0.0003 ppm |
| Concentration RSD | 4,556.1 % | 0.1 % | 28.3 % | 2.8 % | 496.9 % | 66.4 % | 90.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 105.6506 % | 100.9063 % | 103.3040 % | 105.7958 % | 102.2865 % | 102.6330 % |
| Concentration per Run 1 | 0.0008 ppm | 109.0728 % | 101.2136 % | 103.3029 % | 108.4194 % | 102.5775 % | 102.8450 % |
| Concentration per Run 2 | 0.0008 ppm | 104.5677 % | 100.6459 % | 103.3174 % | 104.6921 % | 102.0647 % | 102.4830 % |
| Concentration per Run 3 | 0.0009 ppm | 103.3112 % | 100.8595 % | 103.2916 % | 104.2759 % | 102.2174 % | 102.5709 % |
| Concentration RSD | 3.8 % | 2.9 % | 0.3 % | 0.0 % | 2.2 % | 0.3 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512607-04 WG2039054
Analysis started at: 3/12/2025 10:46:48 PM
Comments <Comment>
Rack: 2
Vial: 34

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0057 ppm | 0.0005 ppm | 0.0133 ppm | 0.0351 ppm | 0.0000 ppm | 13.3615 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0032 ppm | 0.0004 ppm | 0.0133 ppm | 0.0354 ppm | 0.0000 ppm | 13.5751 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0086 ppm | 0.0002 ppm | 0.0132 ppm | 0.0351 ppm | 0.0000 ppm | 13.3153 ppm |
| Concentration per Run 3 | 0.0007 ppm | 0.0054 ppm | 0.0011 ppm | 0.0134 ppm | 0.0347 ppm | 0.0000 ppm | 13.1940 ppm |
| Concentration RSD | 104.7 % | 46.9 % | 93.6 % | 0.6 % | 1.1 % | 34.3 % | 1.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0003 ppm | 0.0038 ppm | 0.0012 ppm | 0.0081 ppm | 1.0297 ppm | 0.0031 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0004 ppm | 0.0039 ppm | 0.0014 ppm | 0.0076 ppm | 1.0529 ppm | 0.0027 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0003 ppm | 0.0038 ppm | 0.0012 ppm | 0.0085 ppm | 1.0170 ppm | 0.0035 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0004 ppm | 0.0037 ppm | 0.0011 ppm | 0.0082 ppm | 1.0192 ppm | 0.0030 ppm |
| Concentration RSD | 22.0 % | 11.8 % | 1.7 % | 12.4 % | 5.3 % | 2.0 % | 11.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.3684 ppm | 0.0011 ppm | 0.0003 ppm | 13.2368 ppm | 0.0039 ppm | 0.0008 ppm | -0.0005 ppm |
| Concentration per Run 1 | 5.3675 ppm | 0.0012 ppm | 0.0004 ppm | 13.4314 ppm | 0.0041 ppm | 0.0014 ppm | -0.0011 ppm |
| Concentration per Run 2 | 5.3584 ppm | 0.0011 ppm | 0.0003 ppm | 13.2307 ppm | 0.0038 ppm | 0.0006 ppm | -0.0005 ppm |
| Concentration per Run 3 | 5.3793 ppm | 0.0010 ppm | 0.0003 ppm | 13.0484 ppm | 0.0039 ppm | 0.0004 ppm | 0.0000 ppm |
| Concentration RSD | 0.2 % | 10.6 % | 12.5 % | 1.4 % | 3.9 % | 64.9 % | 104.9 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0011 ppm | 9.4661 ppm | -0.0001 ppm | 0.0765 ppm | 0.0001 ppm | 0.0007 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0022 ppm | 9.4651 ppm | -0.0002 ppm | 0.0774 ppm | 0.0002 ppm | 0.0011 ppm | 0.0004 ppm |
| Concentration per Run 2 | -0.0022 ppm | 9.4624 ppm | 0.0000 ppm | 0.0767 ppm | 0.0002 ppm | 0.0008 ppm | 0.0005 ppm |
| Concentration per Run 3 | -0.0032 ppm | 9.4709 ppm | -0.0002 ppm | 0.0755 ppm | -0.0001 ppm | 0.0001 ppm | 0.0002 ppm |
| Concentration RSD | 270.4 % | 0.0 % | 134.6 % | 1.3 % | 166.9 % | 76.7 % | 43.2 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0118 ppm | 99.3156 % | 102.8704 % | 104.9233 % | 99.5261 % | 104.9628 % | 104.1762 % |
| Concentration per Run 1 | 0.0119 ppm | 98.2378 % | 103.0395 % | 104.9249 % | 97.9968 % | 105.0790 % | 104.5630 % |
| Concentration per Run 2 | 0.0118 ppm | 99.3543 % | 102.7922 % | 104.9115 % | 99.9780 % | 104.8396 % | 104.1653 % |
| Concentration per Run 3 | 0.0118 ppm | 100.3548 % | 102.7795 % | 104.9336 % | 100.6034 % | 104.9700 % | 103.8003 % |
| Concentration RSD | 0.4 % | 1.1 % | 0.1 % | 0.0 % | 1.4 % | 0.1 % | 0.4 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512607-05 WG2039054
Analysis started at: 3/12/2025 10:53:10 PM
Comments <Comment>
Rack: 2
Vial: 35

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0054 ppm | -0.0010 ppm | 0.0242 ppm | 0.0147 ppm | 0.0000 ppm | 13.4622 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0054 ppm | -0.0018 ppm | 0.0240 ppm | 0.0156 ppm | 0.0000 ppm | 14.4340 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0074 ppm | -0.0012 ppm | 0.0244 ppm | 0.0154 ppm | -0.0001 ppm | 14.1137 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0033 ppm | 0.0000 ppm | 0.0240 ppm | 0.0130 ppm | 0.0000 ppm | 11.8388 ppm |
| Concentration RSD | 46.9 % | 38.4 % | 90.4 % | 0.9 % | 10.1 % | 159.1 % | 10.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0024 ppm | 0.0000 ppm | 0.0096 ppm | 1.3451 ppm | 0.0016 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0024 ppm | 0.0001 ppm | 0.0099 ppm | 1.4499 ppm | 0.0017 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0025 ppm | -0.0002 ppm | 0.0101 ppm | 1.4179 ppm | 0.0025 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0002 ppm | 0.0022 ppm | 0.0001 ppm | 0.0088 ppm | 1.1674 ppm | 0.0007 ppm |
| Concentration RSD | 39.5 % | 110.6 % | 6.6 % | 1,058.3 % | 7.2 % | 11.5 % | 57.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.1431 ppm | 0.0005 ppm | 0.0003 ppm | 20.4260 ppm | 0.0008 ppm | 0.0004 ppm | -0.0006 ppm |
| Concentration per Run 1 | 6.1458 ppm | 0.0007 ppm | 0.0003 ppm | 21.8982 ppm | 0.0007 ppm | 0.0005 ppm | -0.0004 ppm |
| Concentration per Run 2 | 6.1521 ppm | 0.0004 ppm | 0.0002 ppm | 21.3966 ppm | 0.0008 ppm | 0.0006 ppm | -0.0006 ppm |
| Concentration per Run 3 | 6.1313 ppm | 0.0005 ppm | 0.0003 ppm | 17.9833 ppm | 0.0007 ppm | 0.0002 ppm | -0.0007 ppm |
| Concentration RSD | 0.2 % | 28.5 % | 17.8 % | 10.4 % | 5.0 % | 47.5 % | 32.3 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 8.2680 ppm | 0.0005 ppm | 0.0718 ppm | 0.0003 ppm | 0.0003 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0007 ppm | 8.2606 ppm | 0.0006 ppm | 0.0769 ppm | 0.0002 ppm | -0.0001 ppm | -0.0002 ppm |
| Concentration per Run 2 | -0.0016 ppm | 8.2805 ppm | 0.0005 ppm | 0.0753 ppm | 0.0005 ppm | 0.0005 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0002 ppm | 8.2629 ppm | 0.0004 ppm | 0.0634 ppm | 0.0003 ppm | 0.0007 ppm | 0.0002 ppm |
| Concentration RSD | 123.0 % | 0.1 % | 27.8 % | 10.2 % | 49.0 % | 116.3 % | 391.7 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 104.2980 % | 102.6687 % | 104.5134 % | 105.0539 % | 104.5533 % | 103.8763 % |
| Concentration per Run 1 | 0.0013 ppm | 97.0691 % | 102.5633 % | 104.4531 % | 97.6934 % | 104.6766 % | 103.7433 % |
| Concentration per Run 2 | 0.0013 ppm | 99.1690 % | 102.6356 % | 104.6653 % | 100.3637 % | 104.3811 % | 103.8571 % |
| Concentration per Run 3 | 0.0013 ppm | 116.6559 % | 102.8073 % | 104.4219 % | 117.1045 % | 104.6023 % | 104.0286 % |
| Concentration RSD | 0.7 % | 10.3 % | 0.1 % | 0.1 % | 10.0 % | 0.1 % | 0.1 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: L2512607-06 WG2039054
Analysis started at: 3/12/2025 10:59:31 PM
Comments <Comment>
Rack: 2
Vial: 36

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.2198 ppm | -0.0009 ppm | 0.0012 ppm | 0.0026 ppm | 0.0000 ppm | 0.1020 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.2253 ppm | -0.0009 ppm | 0.0009 ppm | 0.0027 ppm | 0.0000 ppm | 0.1023 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.2156 ppm | -0.0009 ppm | 0.0014 ppm | 0.0025 ppm | 0.0000 ppm | 0.1019 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.2186 ppm | -0.0011 ppm | 0.0012 ppm | 0.0025 ppm | 0.0000 ppm | 0.1018 ppm |
| Concentration RSD | 110.5 % | 2.3 % | 11.8 % | 20.2 % | 3.4 % | 81.5 % | 0.3 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0002 ppm | 0.0004 ppm | 0.0042 ppm | 0.2743 ppm | 0.0159 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0002 ppm | 0.0001 ppm | 0.0043 ppm | 0.2766 ppm | 0.0098 ppm | -0.0002 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0002 ppm | 0.0004 ppm | 0.0040 ppm | 0.2754 ppm | 0.0305 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | 0.0008 ppm | 0.0042 ppm | 0.2708 ppm | 0.0073 ppm | -0.0002 ppm |
| Concentration RSD | 64.0 % | 30.0 % | 88.7 % | 3.0 % | 1.1 % | 80.0 % | 48.1 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0643 ppm | 0.0126 ppm | 0.0003 ppm | 0.0043 ppm | 0.0003 ppm | 0.0020 ppm | -0.0017 ppm |
| Concentration per Run 1 | 0.0635 ppm | 0.0126 ppm | 0.0001 ppm | 0.0034 ppm | 0.0002 ppm | 0.0022 ppm | -0.0026 ppm |
| Concentration per Run 2 | 0.0646 ppm | 0.0124 ppm | 0.0002 ppm | 0.0035 ppm | 0.0006 ppm | 0.0015 ppm | -0.0010 ppm |
| Concentration per Run 3 | 0.0647 ppm | 0.0127 ppm | 0.0004 ppm | 0.0060 ppm | 0.0001 ppm | 0.0023 ppm | -0.0015 ppm |
| Concentration RSD | 1.1 % | 1.2 % | 56.1 % | 33.8 % | 92.9 % | 21.1 % | 49.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0013 ppm | 0.2125 ppm | 0.0004 ppm | 0.0008 ppm | 0.0113 ppm | 0.0006 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0015 ppm | 0.2128 ppm | 0.0001 ppm | 0.0008 ppm | 0.0114 ppm | 0.0006 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0022 ppm | 0.2126 ppm | 0.0008 ppm | 0.0009 ppm | 0.0113 ppm | 0.0009 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.2122 ppm | 0.0002 ppm | 0.0007 ppm | 0.0113 ppm | 0.0001 ppm | 0.0005 ppm |
| Concentration RSD | 70.2 % | 0.1 % | 112.3 % | 10.0 % | 0.4 % | 73.6 % | 50.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0040 ppm | 100.9953 % | 104.7371 % | 106.7298 % | 100.8248 % | 107.3349 % | 105.3889 % |
| Concentration per Run 1 | 0.0040 ppm | 100.0648 % | 104.8619 % | 106.8165 % | 99.1147 % | 107.4738 % | 105.3253 % |
| Concentration per Run 2 | 0.0041 ppm | 101.1690 % | 104.9528 % | 106.7017 % | 101.0003 % | 107.4164 % | 105.6296 % |
| Concentration per Run 3 | 0.0041 ppm | 101.7520 % | 104.3967 % | 106.6713 % | 102.3595 % | 107.1144 % | 105.2118 % |
| Concentration RSD | 0.8 % | 0.8 % | 0.3 % | 0.1 % | 1.6 % | 0.2 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCV
Analysis started at: 3/12/2025 11:05:56 PM
Comments <Comment>
Rack: 0
Vial: 3

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4708 ppm | 0.4599 ppm | 0.4673 ppm | 0.4582 ppm | 0.4479 ppm | 0.4624 ppm | 0.4796 ppm |
| Concentration per Run 1 | 0.4708 ppm | 0.4537 ppm | 0.4685 ppm | 0.4590 ppm | 0.4417 ppm | 0.4567 ppm | 0.4685 ppm |
| Concentration per Run 2 | 0.4709 ppm | 0.4548 ppm | 0.4665 ppm | 0.4565 ppm | 0.4475 ppm | 0.4625 ppm | 0.4777 ppm |
| Concentration per Run 3 | 0.4706 ppm | 0.4712 ppm | 0.4668 ppm | 0.4590 ppm | 0.4544 ppm | 0.4681 ppm | 0.4927 ppm |
| Recovery Percentage 1 | 94.152 % | 91.975 % | 93.451 % | 91.640 % | 89.571 % | 92.480 % | 95.926 % |
| Concentration RSD | 0.0 % | 2.1 % | 0.2 % | 0.3 % | 1.4 % | 1.2 % | 2.5 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4802 ppm | 0.4851 ppm | 0.5022 ppm | 0.4867 ppm | 0.4844 ppm | 4.6955 ppm | 0.4472 ppm |
| Concentration per Run 1 | 0.4824 ppm | 0.4874 ppm | 0.5031 ppm | 0.4876 ppm | 0.4749 ppm | 4.6458 ppm | 0.4438 ppm |
| Concentration per Run 2 | 0.4781 ppm | 0.4826 ppm | 0.5023 ppm | 0.4867 ppm | 0.4882 ppm | 4.6854 ppm | 0.4465 ppm |
| Concentration per Run 3 | 0.4800 ppm | 0.4853 ppm | 0.5013 ppm | 0.4857 ppm | 0.4902 ppm | 4.7553 ppm | 0.4513 ppm |
| Recovery Percentage 1 | 96.039 % | 97.019 % | 100.445 % | 97.331 % | 96.888 % | 93.910 % | 89.439 % |
| Concentration RSD | 0.4 % | 0.5 % | 0.2 % | 0.2 % | 1.7 % | 1.2 % | 0.8 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5076 ppm | 0.4606 ppm | 0.4604 ppm | 9.1172 ppm | 0.4837 ppm | 0.4884 ppm | 0.4751 ppm |
| Concentration per Run 1 | 0.5085 ppm | 0.4555 ppm | 0.4606 ppm | 9.0110 ppm | 0.4853 ppm | 0.4902 ppm | 0.4752 ppm |
| Concentration per Run 2 | 0.5055 ppm | 0.4609 ppm | 0.4591 ppm | 9.1165 ppm | 0.4823 ppm | 0.4868 ppm | 0.4732 ppm |
| Concentration per Run 3 | 0.5088 ppm | 0.4656 ppm | 0.4614 ppm | 9.2241 ppm | 0.4836 ppm | 0.4882 ppm | 0.4769 ppm |
| Recovery Percentage 1 | 101.521 % | 92.130 % | 92.072 % | 91.172 % | 96.745 % | 97.679 % | 95.024 % |
| Concentration RSD | 0.4 % | 1.1 % | 0.3 % | 1.2 % | 0.3 % | 0.3 % | 0.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4696 ppm | 5.3207 ppm | 0.4788 ppm | 0.4485 ppm | 0.4900 ppm | 0.4853 ppm | 0.4892 ppm |
| Concentration per Run 1 | 0.4735 ppm | 5.3372 ppm | 0.4797 ppm | 0.4428 ppm | 0.4906 ppm | 0.4893 ppm | 0.4905 ppm |
| Concentration per Run 2 | 0.4661 ppm | 5.3024 ppm | 0.4773 ppm | 0.4485 ppm | 0.4906 ppm | 0.4840 ppm | 0.4903 ppm |
| Concentration per Run 3 | 0.4691 ppm | 5.3224 ppm | 0.4793 ppm | 0.4543 ppm | 0.4889 ppm | 0.4826 ppm | 0.4868 ppm |
| Recovery Percentage 1 | 93.913 % | 101.346 % | 95.751 % | 89.707 % | 98.007 % | 97.061 % | 97.839 % |
| Concentration RSD | 0.8 % | 0.3 % | 0.3 % | 1.3 % | 0.2 % | 0.7 % | 0.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4869 ppm | 102.1278 % | 102.5137 % | 104.2898 % | 103.9541 % | 104.6240 % | 103.6204 % |
| Concentration per Run 1 | 0.4884 ppm | 102.8955 % | 102.2204 % | 104.2293 % | 104.7145 % | 104.2249 % | 103.4144 % |
| Concentration per Run 2 | 0.4851 ppm | 102.1972 % | 102.7150 % | 104.4454 % | 104.1241 % | 105.0243 % | 103.6184 % |
| Concentration per Run 3 | 0.4872 ppm | 101.2907 % | 102.6056 % | 104.1949 % | 103.0236 % | 104.6229 % | 103.8284 % |
| Recovery Percentage 1 | 97.377 % | | | | | | |
| Concentration RSD | 0.3 % | 0.8 % | 0.3 % | 0.1 % | 0.8 % | 0.4 % | 0.2 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCB
Analysis started at: 3/12/2025 11:12:03 PM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0047 ppm | 0.0001 ppm | 0.0010 ppm | 0.0002 ppm | 0.0001 ppm | 0.0030 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0075 ppm | 0.0009 ppm | 0.0008 ppm | 0.0002 ppm | 0.0000 ppm | 0.0069 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0001 ppm | -0.0007 ppm | 0.0010 ppm | 0.0002 ppm | 0.0000 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0066 ppm | 0.0002 ppm | 0.0011 ppm | 0.0002 ppm | 0.0001 ppm | 0.0014 ppm |
| Recovery Percentage 1 | -0.576 % | -4.650 % | 2.571 % | 3.280 % | 2.124 % | 1.100 % | 3.012 % |
| Concentration RSD | 247.4 % | 88.5 % | 630.7 % | 15.7 % | 12.3 % | 55.9 % | 112.7 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | 0.0001 ppm | -0.0003 ppm | 0.0008 ppm | -0.0289 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | -0.0003 ppm | 0.0009 ppm | -0.0463 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | -0.0002 ppm | 0.0002 ppm | -0.0316 ppm | 0.0022 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0003 ppm | 0.0002 ppm | -0.0005 ppm | 0.0013 ppm | -0.0088 ppm | 0.0000 ppm |
| Recovery Percentage 1 | 0.562 % | -0.316 % | 1.361 % | -3.313 % | 1.583 % | -1.156 % | 7.602 % |
| Concentration RSD | 240.9 % | 304.4 % | 51.8 % | 38.0 % | 74.8 % | 65.5 % | 159.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0002 ppm | 0.0014 ppm | -0.0112 ppm | 0.0000 ppm | 0.0002 ppm | -0.0007 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0004 ppm | 0.0015 ppm | -0.0129 ppm | -0.0001 ppm | 0.0007 ppm | -0.0002 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0002 ppm | 0.0015 ppm | -0.0114 ppm | 0.0000 ppm | -0.0002 ppm | -0.0018 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0001 ppm | 0.0011 ppm | -0.0093 ppm | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm |
| Recovery Percentage 1 | -0.024 % | 1.798 % | 2.783 % | -0.560 % | -0.098 % | 1.732 % | -1.417 % |
| Concentration RSD | 2,143.9 % | 138.7 % | 17.7 % | 16.4 % | 293.6 % | 284.5 % | 138.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | -0.0009 ppm | 0.0002 ppm | 0.0001 ppm | 0.0001 ppm | 0.0012 ppm | -0.0002 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0013 ppm | 0.0004 ppm | 0.0002 ppm | -0.0001 ppm | 0.0010 ppm | -0.0002 ppm |
| Concentration per Run 2 | -0.0008 ppm | -0.0004 ppm | 0.0005 ppm | 0.0001 ppm | 0.0001 ppm | 0.0012 ppm | -0.0003 ppm |
| Concentration per Run 3 | -0.0008 ppm | -0.0010 ppm | -0.0002 ppm | 0.0000 ppm | 0.0004 ppm | 0.0014 ppm | 0.0000 ppm |
| Recovery Percentage 1 | -5.821 % | -0.181 % | 0.428 % | 0.991 % | 1.266 % | 5.942 % | -1.513 % |
| Concentration RSD | 65.9 % | 47.4 % | 173.6 % | 95.1 % | 206.6 % | 18.1 % | 103.4 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 102.6708 % | 102.9263 % | 105.4644 % | 102.8516 % | 105.5331 % | 102.7759 % |
| Concentration per Run 1 | 0.0010 ppm | 104.0240 % | 102.9803 % | 105.7629 % | 103.7931 % | 105.7032 % | 103.0929 % |
| Concentration per Run 2 | 0.0010 ppm | 102.3786 % | 102.5848 % | 105.4032 % | 102.8298 % | 105.5303 % | 102.3362 % |
| Concentration per Run 3 | 0.0010 ppm | 101.6097 % | 103.2137 % | 105.2272 % | 101.9319 % | 105.3659 % | 102.8986 % |
| Recovery Percentage 1 | 20.125 % | | | | | | |
| Concentration RSD | 3.9 % | 1.2 % | 0.3 % | 0.3 % | 0.9 % | 0.2 % | 0.4 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCV
Analysis started at: 3/12/2025 11:18:29 PM
Comments <Comment>
Rack: 0
Vial: 10

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | -0.0025 ppm | -0.0017 ppm | -0.0003 ppm | 0.0000 ppm | -0.0001 ppm | -0.0102 ppm |
| Concentration per Run 1 | 0.0004 ppm | -0.0013 ppm | N/A | N/A | 0.0000 ppm | -0.0001 ppm | -0.0099 ppm |
| Concentration per Run 2 | 0.0004 ppm | -0.0036 ppm | N/A | N/A | 0.0000 ppm | -0.0001 ppm | -0.0104 ppm |
| Concentration per Run 3 | 0.0005 ppm | N/A | -0.0017 ppm | -0.0003 ppm | N/A | N/A | N/A |
| Recovery Percentage 1 | 0.086 % | -0.493 % | -0.335 % | -0.066 % | 0.002 % | -0.023 % | -2.031 % |
| Concentration RSD | 10.4 % | 65.0 % | N/A | N/A | 482.8 % | 4.6 % | 3.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0005 ppm | 0.0007 ppm | -0.0032 ppm | 0.0011 ppm | -0.0755 ppm | -0.0009 ppm |
| Concentration per Run 1 | N/A | N/A | 0.0007 ppm | -0.0033 ppm | 0.0008 ppm | -0.0656 ppm | -0.0008 ppm |
| Concentration per Run 2 | N/A | N/A | 0.0007 ppm | -0.0028 ppm | 0.0014 ppm | -0.0853 ppm | -0.0010 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0005 ppm | 0.0007 ppm | -0.0035 ppm | N/A | N/A | N/A |
| Recovery Percentage 1 | 0.002 % | -0.098 % | 0.138 % | -0.636 % | 0.216 % | -1.509 % | -0.174 % |
| Concentration RSD | N/A | N/A | 6.5 % | 11.1 % | 37.9 % | 18.5 % | 13.6 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | 0.0000 ppm | 0.0001 ppm | -0.0475 ppm | 0.0010 ppm | 0.0009 ppm | -0.0013 ppm |
| Concentration per Run 1 | -0.0013 ppm | 0.0000 ppm | N/A | -0.0459 ppm | N/A | N/A | N/A |
| Concentration per Run 2 | -0.0017 ppm | 0.0000 ppm | N/A | -0.0492 ppm | N/A | N/A | N/A |
| Concentration per Run 3 | -0.0007 ppm | N/A | 0.0001 ppm | N/A | 0.0010 ppm | 0.0009 ppm | -0.0013 ppm |
| Recovery Percentage 1 | -0.241 % | -0.001 % | 0.027 % | -0.475 % | 0.203 % | 0.184 % | -0.256 % |
| Concentration RSD | 41.7 % | 680.9 % | N/A | 4.9 % | N/A | N/A | N/A |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0022 ppm | -0.0024 ppm | -0.0002 ppm | 0.0002 ppm | 0.0009 ppm | 0.0010 ppm | 0.0006 ppm |
| Concentration per Run 1 | N/A | N/A | N/A | 0.0002 ppm | 0.0010 ppm | N/A | 0.0006 ppm |
| Concentration per Run 2 | N/A | N/A | N/A | 0.0002 ppm | 0.0009 ppm | N/A | 0.0005 ppm |
| Concentration per Run 3 | 0.0022 ppm | -0.0024 ppm | -0.0002 ppm | N/A | 0.0009 ppm | 0.0010 ppm | 0.0006 ppm |
| Recovery Percentage 1 | 0.445 % | -0.046 % | -0.042 % | 0.040 % | 0.186 % | 0.207 % | 0.116 % |
| Concentration RSD | N/A | N/A | N/A | 13.5 % | 7.0 % | N/A | 9.0 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 299.6881 % | 390.6577 % | 457.0560 % | 303.4186 % | 455.3735 % | 487.4996 % |
| Concentration per Run 1 | N/A | 316.9632 % | N/A | N/A | 320.2202 % | N/A | 543.1178 % |
| Concentration per Run 2 | N/A | 282.4130 % | N/A | N/A | 286.6171 % | N/A | 489.6853 % |
| Concentration per Run 3 | 0.0000 ppm | N/A | 390.6577 % | 457.0560 % | N/A | 455.3735 % | 429.6957 % |
| Recovery Percentage 1 | 0.002 % | | | | | | |
| Concentration RSD | N/A | 8.2 % | N/A | N/A | 7.8 % | N/A | 11.6 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: CCB
Analysis started at: 3/12/2025 11:25:11 PM
Comments <Comment>
Rack: 0
Vial: 4

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | -0.0041 ppm | -0.0006 ppm | 0.0007 ppm | 0.0001 ppm | -0.0001 ppm | 0.0038 ppm |
| Concentration per Run 1 | 0.0004 ppm | -0.0121 ppm | -0.0019 ppm | 0.0005 ppm | 0.0001 ppm | -0.0001 ppm | 0.0018 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0019 ppm | 0.0002 ppm | 0.0007 ppm | 0.0001 ppm | -0.0001 ppm | 0.0055 ppm |
| Concentration per Run 3 | 0.0003 ppm | -0.0022 ppm | -0.0002 ppm | 0.0008 ppm | 0.0001 ppm | -0.0002 ppm | 0.0042 ppm |
| Recovery Percentage 1 | 4.836 % | -4.147 % | -12.931 % | 2.242 % | 0.777 % | -1.784 % | 3.809 % |
| Concentration RSD | 26.7 % | 173.8 % | 175.3 % | 16.6 % | 25.6 % | 64.2 % | 49.4 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | -0.0003 ppm | 0.0009 ppm | -0.0219 ppm | 0.0012 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | -0.0001 ppm | 0.0010 ppm | -0.0016 ppm | 0.0035 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0005 ppm | -0.0006 ppm | 0.0011 ppm | -0.0246 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0001 ppm | 0.0000 ppm | -0.0003 ppm | 0.0007 ppm | -0.0397 ppm | -0.0003 ppm |
| Recovery Percentage 1 | 0.466 % | 0.242 % | 2.187 % | -3.376 % | 1.843 % | -0.878 % | 11.815 % |
| Concentration RSD | 72.5 % | 172.2 % | 123.9 % | 72.2 % | 22.8 % | 87.4 % | 173.2 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | -0.0001 ppm | 0.0002 ppm | -0.0172 ppm | 0.0001 ppm | 0.0008 ppm | 0.0005 ppm |
| Concentration per Run 1 | -0.0008 ppm | -0.0002 ppm | 0.0002 ppm | -0.0210 ppm | 0.0001 ppm | 0.0007 ppm | 0.0004 ppm |
| Concentration per Run 2 | -0.0008 ppm | 0.0001 ppm | 0.0001 ppm | -0.0165 ppm | 0.0003 ppm | 0.0012 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0018 ppm | -0.0002 ppm | 0.0003 ppm | -0.0141 ppm | 0.0000 ppm | 0.0004 ppm | 0.0009 ppm |
| Recovery Percentage 1 | 0.081 % | -0.962 % | 0.419 % | -0.860 % | 0.523 % | 7.687 % | 1.085 % |
| Concentration RSD | 1,828.4 % | 194.5 % | 36.3 % | 20.4 % | 121.8 % | 51.0 % | 65.2 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | -0.0012 ppm | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | 0.0014 ppm | -0.0002 ppm |
| Concentration per Run 1 | -0.0010 ppm | -0.0011 ppm | 0.0003 ppm | 0.0000 ppm | -0.0001 ppm | 0.0011 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0003 ppm | -0.0012 ppm | -0.0003 ppm | 0.0000 ppm | -0.0001 ppm | 0.0033 ppm | -0.0003 ppm |
| Concentration per Run 3 | -0.0022 ppm | -0.0015 ppm | -0.0001 ppm | -0.0001 ppm | -0.0001 ppm | -0.0001 ppm | -0.0001 ppm |
| Recovery Percentage 1 | -11.679 % | -0.248 % | -0.095 % | -0.289 % | -0.867 % | 7.232 % | -1.502 % |
| Concentration RSD | 81.9 % | 16.2 % | 731.5 % | 216.0 % | 51.2 % | 119.2 % | 74.3 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 103.3268 % | 103.0680 % | 105.2812 % | 103.7362 % | 105.3041 % | 102.5411 % |
| Concentration per Run 1 | 0.0009 ppm | 106.3485 % | 103.1865 % | 105.3892 % | 106.4406 % | 105.5841 % | 102.5622 % |
| Concentration per Run 2 | 0.0009 ppm | 102.2260 % | 102.9052 % | 105.3665 % | 103.1324 % | 105.5591 % | 102.5521 % |
| Concentration per Run 3 | 0.0010 ppm | 101.4060 % | 103.1123 % | 105.0879 % | 101.6354 % | 104.7689 % | 102.5090 % |
| Recovery Percentage 1 | 18.937 % | | | | | | |
| Concentration RSD | 0.4 % | 2.6 % | 0.1 % | 0.2 % | 2.4 % | 0.4 % | 0.0 % |

# ICP DataTrace 5

3/13/2025 10:58:28 AM

LabBook: WG2039392_03122025T5.imexp

Sample: LLOQ RL
Analysis started at: 3/12/2025 11:31:36 PM
Comments <Comment>
Rack: 0
Vial: 5

| | Ag 328.068 {103} (Axial) | Al 396.152 {85} (Radial) | As 189.042 {478} (Axial) | B 208.959 {461} (Axial) | Ba 455.403 {74} (Radial) | Be 313.042 {108} (Radial) | Ca 315.887 {107} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0051 ppm | 0.0937 ppm | 0.0042 ppm | 0.0287 ppm | 0.0093 ppm | 0.0047 ppm | 0.0985 ppm |
| Concentration per Run 1 | 0.0052 ppm | 0.1004 ppm | 0.0048 ppm | 0.0286 ppm | 0.0093 ppm | 0.0046 ppm | 0.0986 ppm |
| Concentration per Run 2 | 0.0050 ppm | 0.0839 ppm | 0.0038 ppm | 0.0284 ppm | 0.0093 ppm | 0.0047 ppm | 0.0983 ppm |
| Concentration per Run 3 | 0.0050 ppm | 0.0969 ppm | 0.0039 ppm | 0.0290 ppm | 0.0094 ppm | 0.0047 ppm | 0.0985 ppm |
| Recovery Percentage 1 | 101.266 % | 93.716 % | 83.291 % | 95.617 % | 93.205 % | 93.522 % | 98.462 % |
| Concentration RSD | 3.0 % | 9.3 % | 12.9 % | 1.1 % | 0.8 % | 1.5 % | 0.1 % |

| | Cd 214.438 {457} (Axial) | Co 228.616 {447} (Axial) | Cr 267.716 {126} (Axial) | Cu 324.754 {104} (Axial) | Fe 259.940 {130} (Radial) | K 766.490 {44} (Radial) | Li 670.784 {50} (Radial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0040 ppm | 0.0097 ppm | 0.0103 ppm | 0.0095 ppm | 0.0531 ppm | 2.3253 ppm | 0.0097 ppm |
| Concentration per Run 1 | 0.0040 ppm | 0.0097 ppm | 0.0101 ppm | 0.0091 ppm | 0.0520 ppm | 2.2978 ppm | 0.0093 ppm |
| Concentration per Run 2 | 0.0040 ppm | 0.0098 ppm | 0.0104 ppm | 0.0098 ppm | 0.0541 ppm | 2.3280 ppm | 0.0103 ppm |
| Concentration per Run 3 | 0.0040 ppm | 0.0097 ppm | 0.0105 ppm | 0.0097 ppm | 0.0531 ppm | 2.3501 ppm | 0.0095 ppm |
| Recovery Percentage 1 | 99.379 % | 97.092 % | 103.307 % | 95.117 % | 106.130 % | 93.012 % | 97.260 % |
| Concentration RSD | 0.4 % | 0.7 % | 2.2 % | 3.6 % | 2.0 % | 1.1 % | 5.5 % |

| | Mg 279.079 {121} (Axial) | Mn 257.610 {131} (Radial) | Mo 202.030 {467} (Axial) | Na 589.592 {57} (Radial) | Ni 231.604 {445} (Axial) | Pb 220.353 {453} (Axial) | Sb 206.833 {463} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1032 ppm | 0.0096 ppm | 0.0470 ppm | 1.8358 ppm | 0.0191 ppm | 0.0107 ppm | 0.0469 ppm |
| Concentration per Run 1 | 0.1022 ppm | 0.0096 ppm | 0.0467 ppm | 1.8075 ppm | 0.0189 ppm | 0.0104 ppm | 0.0469 ppm |
| Concentration per Run 2 | 0.1039 ppm | 0.0095 ppm | 0.0469 ppm | 1.8369 ppm | 0.0192 ppm | 0.0103 ppm | 0.0462 ppm |
| Concentration per Run 3 | 0.1034 ppm | 0.0098 ppm | 0.0473 ppm | 1.8628 ppm | 0.0193 ppm | 0.0112 ppm | 0.0475 ppm |
| Recovery Percentage 1 | 103.154 % | 96.129 % | 93.921 % | 91.788 % | 95.611 % | 106.614 % | 93.724 % |
| Concentration RSD | 0.8 % | 1.6 % | 0.6 % | 1.5 % | 1.2 % | 4.8 % | 1.4 % |

| | Se 196.090 {472} (Axial) | Si 212.412 {459} (Axial) | Sn 189.989 {477} (Axial) | Sr 421.552 {80} (Radial) | Ti 334.904 {101} (Axial) | Tl 190.856 {477} (Axial) | V 292.402 {115} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0086 ppm | 0.5130 ppm | 0.0493 ppm | 0.0091 ppm | 0.0099 ppm | 0.0208 ppm | 0.0101 ppm |
| Concentration per Run 1 | 0.0090 ppm | 0.5131 ppm | 0.0493 ppm | 0.0091 ppm | 0.0099 ppm | 0.0202 ppm | 0.0102 ppm |
| Concentration per Run 2 | 0.0097 ppm | 0.5128 ppm | 0.0495 ppm | 0.0091 ppm | 0.0101 ppm | 0.0211 ppm | 0.0100 ppm |
| Concentration per Run 3 | 0.0072 ppm | 0.5130 ppm | 0.0491 ppm | 0.0091 ppm | 0.0098 ppm | 0.0211 ppm | 0.0100 ppm |
| Recovery Percentage 1 | 86.243 % | 102.595 % | 98.664 % | 91.116 % | 99.171 % | 103.963 % | 100.759 % |
| Concentration RSD | 14.9 % | 0.0 % | 0.4 % | 0.3 % | 1.7 % | 2.6 % | 0.6 % |

| | Zn 206.200 {463} (Axial) | Y 371.030 {91} (Radial) | Y 360.073 {94} (Axial) | Y 224.306 {450} (Axial) | Sc 361.384 {93} (Radial) | Sc 227.318 {448} (Axial) | Sc 361.384 {93} (Axial) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0053 ppm | 101.4030 % | 102.7978 % | 105.8079 % | 103.1718 % | 105.8941 % | 104.1594 % |
| Concentration per Run 1 | 0.0052 ppm | 103.2904 % | 102.8083 % | 105.9942 % | 104.5737 % | 106.0426 % | 104.2268 % |
| Concentration per Run 2 | 0.0053 ppm | 101.4821 % | 102.8032 % | 105.7088 % | 103.2833 % | 105.7148 % | 104.0698 % |
| Concentration per Run 3 | 0.0053 ppm | 99.4365 % | 102.7819 % | 105.7208 % | 101.6583 % | 105.9248 % | 104.1816 % |
| Recovery Percentage 1 | 105.385 % | | | | | | |
| Concentration RSD | 1.2 % | 1.9 % | 0.0 % | 0.2 % | 1.4 % | 0.2 % | 0.1 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: Blank JMF Trace9
Analysis started at: 3/13/2025 8:15:45 AM
Rack 0
Vial 1
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -1.0 % | 0.2 % | -4.9 % | -0.7 % | 0.1 % | -0.7 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | 1.6 % | 0.6 % | -0.3 % | -0.1 % | 0.5 % | -0.4 % | 0.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | -0.1 % | -0.4 % | 1.1 % | 0.1 % | 3.5 % | -0.6 % | 2.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration per Run | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm | 0.0000 ppm |
| Concentration RSD | 4.7 % | 0.1 % | 0.3 % | 1.4 % | -0.1 % | -0.7 % | -0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % |
| Concentration per Run | 0.0000 ppm | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % | 100.0000 % |
| Concentration RSD | 0.6 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: ICAL
Analysis started at: 3/13/2025 8:19:25 AM
Rack 0
Vial 2
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 10.0000 ppm |
| Concentration per Run 1 | 0.9953 ppm | 24.9543 ppm | 1.0047 ppm | 0.9988 ppm | 0.9988 ppm | 0.9992 ppm | 10.0272 ppm |
| Concentration per Run 2 | 1.0021 ppm | 25.0234 ppm | 1.0021 ppm | 1.0034 ppm | 1.0020 ppm | 1.0015 ppm | 9.9869 ppm |
| Concentration per Run 3 | 1.0026 ppm | 25.0222 ppm | 0.9932 ppm | 0.9977 ppm | 0.9992 ppm | 0.9993 ppm | 9.9859 ppm |
| Concentration RSD | 0.4 % | 0.2 % | 0.6 % | 0.3 % | 0.2 % | 0.1 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 35.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 0.9986 ppm | 0.9979 ppm | 0.9968 ppm | 1.0008 ppm | 24.9807 ppm | 34.9155 ppm | 0.9958 ppm |
| Concentration per Run 2 | 1.0007 ppm | 1.0015 ppm | 1.0013 ppm | 0.9984 ppm | 25.0151 ppm | 35.1056 ppm | 1.0057 ppm |
| Concentration per Run 3 | 1.0007 ppm | 1.0007 ppm | 1.0019 ppm | 1.0008 ppm | 25.0041 ppm | 34.9789 ppm | 0.9985 ppm |
| Concentration RSD | 0.1 % | 0.2 % | 0.3 % | 0.1 % | 0.1 % | 0.3 % | 0.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.0000 ppm | 1.0000 ppm | 1.0000 ppm | 25.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 9.9688 ppm | 0.9990 ppm | 0.9949 ppm | 24.9661 ppm | 0.9925 ppm | 1.0045 ppm | 1.0025 ppm |
| Concentration per Run 2 | 10.0305 ppm | 1.0024 ppm | 1.0012 ppm | 25.1068 ppm | 1.0063 ppm | 0.9979 ppm | 0.9976 ppm |
| Concentration per Run 3 | 10.0007 ppm | 0.9986 ppm | 1.0039 ppm | 24.9272 ppm | 1.0012 ppm | 0.9976 ppm | 1.0000 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 0.5 % | 0.4 % | 0.7 % | 0.4 % | 0.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 10.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm | 1.0000 ppm |
| Concentration per Run 1 | 1.0028 ppm | 9.9650 ppm | 0.9949 ppm | 0.9989 ppm | 0.9955 ppm | 1.0017 ppm | 0.9974 ppm |
| Concentration per Run 2 | 1.0014 ppm | 10.0283 ppm | 1.0009 ppm | 1.0022 ppm | 1.0024 ppm | 0.9995 ppm | 1.0019 ppm |
| Concentration per Run 3 | 0.9957 ppm | 10.0067 ppm | 1.0042 ppm | 0.9989 ppm | 1.0021 ppm | 0.9987 ppm | 1.0007 ppm |
| Concentration RSD | 0.4 % | 0.3 % | 0.5 % | 0.2 % | 0.4 % | 0.2 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.0000 ppm | 103.5467 % | 101.8302 % | 103.1231 % | 100.2400 % | 99.1481 % | 99.6491 % |
| Concentration per Run 1 | 0.9943 ppm | 103.9602 % | 101.6529 % | 103.2903 % | 100.5016 % | 98.8400 % | 99.9422 % |
| Concentration per Run 2 | 1.0021 ppm | 103.5930 % | 101.6349 % | 102.7719 % | 100.3230 % | 98.9860 % | 99.4339 % |
| Concentration per Run 3 | 1.0036 ppm | 103.0870 % | 102.2027 % | 103.3072 % | 99.8953 % | 99.6185 % | 99.5712 % |
| Concentration RSD | 0.5 % | 0.4 % | 0.3 % | 0.3 % | 0.3 % | 0.4 % | 0.3 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: ICV
Analysis started at: 3/13/2025 8:22:51 AM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4663 ppm | 0.4854 ppm | 0.4918 ppm | 0.4810 ppm | 0.4808 ppm | 0.5091 ppm | 0.4997 ppm |
| Concentration per Run 1 | 0.4652 ppm | 0.4825 ppm | 0.4916 ppm | 0.4814 ppm | 0.4831 ppm | 0.5108 ppm | 0.5038 ppm |
| Concentration per Run 2 | 0.4656 ppm | 0.4821 ppm | 0.4928 ppm | 0.4801 ppm | 0.4821 ppm | 0.5086 ppm | 0.4979 ppm |
| Concentration per Run 3 | 0.4682 ppm | 0.4915 ppm | 0.4910 ppm | 0.4816 ppm | 0.4771 ppm | 0.5079 ppm | 0.4975 ppm |
| Recovery Percentage 1 | 93.267 % | 97.072 % | 98.357 % | 96.203 % | 96.153 % | 101.816 % | 99.942 % |
| Concentration RSD | 0.3 % | 1.1 % | 0.2 % | 0.2 % | 0.7 % | 0.3 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4999 ppm | 0.5096 ppm | 0.4938 ppm | 0.4723 ppm | 0.5134 ppm | 5.0880 ppm | 0.5009 ppm |
| Concentration per Run 1 | 0.4997 ppm | 0.5111 ppm | 0.4915 ppm | 0.4762 ppm | 0.5101 ppm | 5.1065 ppm | 0.4993 ppm |
| Concentration per Run 2 | 0.4976 ppm | 0.5071 ppm | 0.4948 ppm | 0.4679 ppm | 0.5182 ppm | 5.1101 ppm | 0.5035 ppm |
| Concentration per Run 3 | 0.5024 ppm | 0.5107 ppm | 0.4949 ppm | 0.4729 ppm | 0.5119 ppm | 5.0476 ppm | 0.4999 ppm |
| Recovery Percentage 1 | 99.981 % | 101.930 % | 98.751 % | 94.469 % | 102.682 % | 101.761 % | 100.175 % |
| Concentration RSD | 0.5 % | 0.4 % | 0.4 % | 0.9 % | 0.8 % | 0.7 % | 0.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4909 ppm | 0.4939 ppm | 0.4947 ppm | 9.9982 ppm | 0.5045 ppm | 0.5016 ppm | 0.4942 ppm |
| Concentration per Run 1 | 0.4931 ppm | 0.4922 ppm | 0.4915 ppm | 10.0297 ppm | 0.5014 ppm | 0.5029 ppm | 0.4876 ppm |
| Concentration per Run 2 | 0.4886 ppm | 0.4925 ppm | 0.4930 ppm | 9.9861 ppm | 0.5072 ppm | 0.5022 ppm | 0.4945 ppm |
| Concentration per Run 3 | 0.4911 ppm | 0.4970 ppm | 0.4996 ppm | 9.9788 ppm | 0.5049 ppm | 0.4997 ppm | 0.5006 ppm |
| Recovery Percentage 1 | 98.184 % | 98.782 % | 98.942 % | 99.982 % | 100.897 % | 100.314 % | 98.848 % |
| Concentration RSD | 0.5 % | 0.5 % | 0.9 % | 0.3 % | 0.6 % | 0.3 % | 1.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4927 ppm | 5.4644 ppm | 0.5091 ppm | 0.5012 ppm | 0.4936 ppm | 0.4900 ppm | 0.4889 ppm |
| Concentration per Run 1 | 0.4917 ppm | 5.4464 ppm | 0.5059 ppm | 0.5035 ppm | 0.4923 ppm | 0.4897 ppm | 0.4880 ppm |
| Concentration per Run 2 | 0.4936 ppm | 5.4554 ppm | 0.5073 ppm | 0.5028 ppm | 0.4934 ppm | 0.4914 ppm | 0.4875 ppm |
| Concentration per Run 3 | 0.4926 ppm | 5.4914 ppm | 0.5141 ppm | 0.4972 ppm | 0.4951 ppm | 0.4889 ppm | 0.4913 ppm |
| Recovery Percentage 1 | 98.532 % | 104.084 % | 101.819 % | 100.237 % | 98.719 % | 98.002 % | 97.788 % |
| Concentration RSD | 0.2 % | 0.4 % | 0.9 % | 0.7 % | 0.3 % | 0.3 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5065 ppm | 103.2592 % | 102.1058 % | 103.0480 % | 101.4665 % | 100.0922 % | 100.6415 % |
| Concentration per Run 1 | 0.5050 ppm | 103.4562 % | 101.9850 % | 103.3105 % | 101.8990 % | 99.7962 % | 100.7305 % |
| Concentration per Run 2 | 0.5062 ppm | 103.7516 % | 102.3928 % | 102.5840 % | 101.8960 % | 100.3143 % | 100.8294 % |
| Concentration per Run 3 | 0.5081 ppm | 102.5698 % | 101.9395 % | 103.2496 % | 100.6044 % | 100.1661 % | 100.3646 % |
| Recovery Percentage 1 | 101.291 % | | | | | | |
| Concentration RSD | 0.3 % | 0.6 % | 0.2 % | 0.4 % | 0.7 % | 0.3 % | 0.2 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: ICB
Analysis started at: 3/13/2025 8:26:18 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0003 ppm | 0.0001 ppm | -0.0009 ppm | 0.0000 ppm | 0.0000 ppm | 0.0019 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0031 ppm | 0.0003 ppm | 0.0014 ppm | 0.0000 ppm | 0.0000 ppm | 0.0034 ppm |
| Concentration per Run 2 | -0.0007 ppm | -0.0037 ppm | 0.0000 ppm | -0.0028 ppm | 0.0000 ppm | 0.0000 ppm | -0.0011 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0017 ppm | 0.0001 ppm | -0.0013 ppm | 0.0000 ppm | 0.0000 ppm | 0.0033 ppm |
| Recovery Percentage 1 | 0.433 % | 0.349 % | 2.403 % | -2.999 % | 0.076 % | 0.044 % | 1.861 % |
| Concentration RSD | 2,102.5 % | 1,029.6 % | 130.9 % | 235.7 % | 307.9 % | 1,232.3 % | 137.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0004 ppm | -0.0003 ppm | -0.0001 ppm | 0.0005 ppm | -0.0118 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0004 ppm | 0.0002 ppm | 0.0003 ppm | 0.0011 ppm | 0.0081 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0002 ppm | -0.0010 ppm | -0.0008 ppm | 0.0006 ppm | 0.0001 ppm | -0.0372 ppm | -0.0005 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0003 ppm | -0.0003 ppm | -0.0011 ppm | 0.0002 ppm | -0.0063 ppm | -0.0003 ppm |
| Recovery Percentage 1 | 0.039 % | -1.828 % | -2.825 % | -0.789 % | 0.917 % | -0.472 % | -0.423 % |
| Concentration RSD | 8,251.3 % | 174.7 % | 179.5 % | 1,176.7 % | 120.0 % | 196.1 % | 3,159.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0017 ppm | -0.0001 ppm | 0.0023 ppm | -0.0086 ppm | 0.0013 ppm | 0.0005 ppm | 0.0037 ppm |
| Concentration per Run 1 | 0.0014 ppm | -0.0002 ppm | 0.0026 ppm | -0.0096 ppm | 0.0018 ppm | -0.0002 ppm | 0.0048 ppm |
| Concentration per Run 2 | 0.0019 ppm | -0.0002 ppm | 0.0019 ppm | -0.0099 ppm | 0.0006 ppm | 0.0019 ppm | 0.0032 ppm |
| Concentration per Run 3 | 0.0018 ppm | 0.0001 ppm | 0.0023 ppm | -0.0064 ppm | 0.0015 ppm | -0.0001 ppm | 0.0031 ppm |
| Recovery Percentage 1 | 1.718 % | -0.679 % | 4.575 % | -0.432 % | 5.169 % | 5.361 % | 7.401 % |
| Concentration RSD | 15.1 % | 244.3 % | 14.9 % | 22.9 % | 49.1 % | 227.3 % | 25.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0014 ppm | -0.0089 ppm | -0.0003 ppm | 0.0000 ppm | 0.0002 ppm | 0.0017 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0003 ppm | -0.0074 ppm | -0.0012 ppm | 0.0000 ppm | 0.0000 ppm | 0.0022 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0019 ppm | -0.0085 ppm | -0.0005 ppm | 0.0000 ppm | 0.0004 ppm | 0.0007 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0020 ppm | -0.0107 ppm | 0.0008 ppm | 0.0000 ppm | 0.0000 ppm | 0.0021 ppm | -0.0001 ppm |
| Recovery Percentage 1 | -13.992 % | -1.771 % | -0.617 % | 0.058 % | 1.527 % | 8.327 % | 0.284 % |
| Concentration RSD | 66.3 % | 18.9 % | 323.8 % | 766.2 % | 159.2 % | 49.2 % | 533.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 99.4858 % | 100.6698 % | 101.3037 % | 99.6448 % | 100.6148 % | 101.1136 % |
| Concentration per Run 1 | 0.0003 ppm | 100.4454 % | 100.6577 % | 101.4384 % | 100.0876 % | 101.1686 % | 101.5201 % |
| Concentration per Run 2 | 0.0002 ppm | 99.2064 % | 100.2603 % | 101.4643 % | 99.4338 % | 100.0908 % | 100.8190 % |
| Concentration per Run 3 | 0.0001 ppm | 98.8057 % | 101.0912 % | 101.0084 % | 99.4130 % | 100.5850 % | 101.0016 % |
| Recovery Percentage 1 | 3.724 % | | | | | | |
| Concentration RSD | 40.1 % | 0.9 % | 0.4 % | 0.3 % | 0.4 % | 0.5 % | 0.4 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: ICV
Analysis started at: 3/13/2025 8:29:46 AM
Rack 0
Vial 10
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4854 ppm | 0.4950 ppm | 0.4966 ppm | 0.4923 ppm | 0.4917 ppm | 0.5182 ppm | 0.5097 ppm |
| Concentration per Run 1 | 0.4854 ppm | 0.4949 ppm | 0.4982 ppm | 0.4882 ppm | 0.4924 ppm | 0.5180 ppm | 0.5120 ppm |
| Concentration per Run 2 | 0.4860 ppm | 0.4996 ppm | 0.4964 ppm | 0.4961 ppm | 0.4917 ppm | 0.5184 ppm | 0.5102 ppm |
| Concentration per Run 3 | 0.4847 ppm | 0.4905 ppm | 0.4951 ppm | 0.4925 ppm | 0.4911 ppm | 0.5182 ppm | 0.5071 ppm |
| Recovery Percentage 1 | 97.076 % | 99.003 % | 99.322 % | 98.450 % | 98.347 % | 103.639 % | 101.949 % |
| Concentration RSD | 0.1 % | 0.9 % | 0.3 % | 0.8 % | 0.1 % | 0.0 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5073 ppm | 0.5158 ppm | 0.5038 ppm | 0.4793 ppm | 0.5262 ppm | 5.1959 ppm | 0.5114 ppm |
| Concentration per Run 1 | 0.5062 ppm | 0.5161 ppm | 0.5046 ppm | 0.4751 ppm | 0.5287 ppm | 5.2126 ppm | 0.5116 ppm |
| Concentration per Run 2 | 0.5076 ppm | 0.5164 ppm | 0.5050 ppm | 0.4837 ppm | 0.5240 ppm | 5.1923 ppm | 0.5098 ppm |
| Concentration per Run 3 | 0.5080 ppm | 0.5149 ppm | 0.5017 ppm | 0.4792 ppm | 0.5258 ppm | 5.1828 ppm | 0.5129 ppm |
| Recovery Percentage 1 | 101.456 % | 103.160 % | 100.755 % | 95.868 % | 105.231 % | 103.918 % | 102.281 % |
| Concentration RSD | 0.2 % | 0.2 % | 0.4 % | 0.9 % | 0.4 % | 0.3 % | 0.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5043 ppm | 0.5005 ppm | 0.4986 ppm | 10.2227 ppm | 0.5153 ppm | 0.5090 ppm | 0.4990 ppm |
| Concentration per Run 1 | 0.5046 ppm | 0.4997 ppm | 0.4983 ppm | 10.2287 ppm | 0.5169 ppm | 0.5098 ppm | 0.4968 ppm |
| Concentration per Run 2 | 0.5038 ppm | 0.5017 ppm | 0.4989 ppm | 10.2089 ppm | 0.5160 ppm | 0.5095 ppm | 0.4997 ppm |
| Concentration per Run 3 | 0.5046 ppm | 0.5000 ppm | 0.4985 ppm | 10.2304 ppm | 0.5131 ppm | 0.5077 ppm | 0.5005 ppm |
| Recovery Percentage 1 | 100.862 % | 100.096 % | 99.712 % | 102.227 % | 103.064 % | 101.797 % | 99.796 % |
| Concentration RSD | 0.1 % | 0.2 % | 0.1 % | 0.1 % | 0.4 % | 0.2 % | 0.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4982 ppm | 5.5139 ppm | 0.5169 ppm | 0.5101 ppm | 0.5046 ppm | 0.4946 ppm | 0.4980 ppm |
| Concentration per Run 1 | 0.4960 ppm | 5.5079 ppm | 0.5161 ppm | 0.5106 ppm | 0.5024 ppm | 0.4945 ppm | 0.4968 ppm |
| Concentration per Run 2 | 0.5010 ppm | 5.5046 ppm | 0.5200 ppm | 0.5110 ppm | 0.5061 ppm | 0.4947 ppm | 0.4982 ppm |
| Concentration per Run 3 | 0.4977 ppm | 5.5293 ppm | 0.5146 ppm | 0.5087 ppm | 0.5055 ppm | 0.4946 ppm | 0.4990 ppm |
| Recovery Percentage 1 | 99.646 % | 105.027 % | 103.384 % | 102.019 % | 100.928 % | 98.920 % | 99.601 % |
| Concentration RSD | 0.5 % | 0.2 % | 0.5 % | 0.2 % | 0.4 % | 0.0 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5138 ppm | 103.1830 % | 102.4658 % | 104.0228 % | 101.0504 % | 100.2783 % | 101.5816 % |
| Concentration per Run 1 | 0.5155 ppm | 103.9715 % | 102.6853 % | 103.8867 % | 101.7969 % | 100.6163 % | 101.5524 % |
| Concentration per Run 2 | 0.5142 ppm | 102.6559 % | 102.4609 % | 103.8381 % | 100.4622 % | 100.4924 % | 101.5071 % |
| Concentration per Run 3 | 0.5116 ppm | 102.9215 % | 102.2512 % | 104.3434 % | 100.8920 % | 99.7262 % | 101.6852 % |
| Recovery Percentage 1 | 102.762 % | | | | | | |
| Concentration RSD | 0.4 % | 0.7 % | 0.2 % | 0.3 % | 0.7 % | 0.5 % | 0.1 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: ICB
Analysis started at: 3/13/2025 8:33:17 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0024 ppm | -0.0006 ppm | -0.0002 ppm | 0.0001 ppm | 0.0000 ppm | 0.0023 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0002 ppm | -0.0005 ppm | -0.0009 ppm | 0.0002 ppm | 0.0000 ppm | 0.0022 ppm |
| Concentration per Run 2 | -0.0004 ppm | -0.0014 ppm | 0.0002 ppm | -0.0002 ppm | 0.0002 ppm | -0.0001 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0059 ppm | -0.0015 ppm | 0.0007 ppm | 0.0000 ppm | 0.0000 ppm | 0.0045 ppm |
| Recovery Percentage 1 | -2.138 % | -2.378 % | -11.874 % | -0.505 % | 1.255 % | -0.334 % | 2.334 % |
| Concentration RSD | 191.7 % | 131.9 % | 145.2 % | 545.4 % | 91.5 % | 304.9 % | 90.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0001 ppm | -0.0004 ppm | -0.0001 ppm | -0.0003 ppm | -0.0051 ppm | 0.0008 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0001 ppm | -0.0008 ppm | 0.0000 ppm | -0.0003 ppm | 0.0039 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0001 ppm | 0.0002 ppm | -0.0206 ppm | 0.0007 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0003 ppm | -0.0003 ppm | -0.0003 ppm | -0.0008 ppm | 0.0015 ppm | 0.0012 ppm |
| Recovery Percentage 1 | -1.555 % | -0.487 % | -3.951 % | -0.963 % | -0.610 % | -0.202 % | 15.162 % |
| Concentration RSD | 121.5 % | 220.3 % | 99.4 % | 209.5 % | 170.1 % | 267.1 % | 61.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 0.0000 ppm | 0.0020 ppm | -0.0146 ppm | 0.0006 ppm | 0.0021 ppm | 0.0030 ppm |
| Concentration per Run 1 | -0.0004 ppm | -0.0001 ppm | 0.0025 ppm | -0.0162 ppm | -0.0003 ppm | 0.0028 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0000 ppm | 0.0022 ppm | -0.0124 ppm | 0.0011 ppm | 0.0036 ppm | 0.0009 ppm |
| Concentration per Run 3 | 0.0027 ppm | 0.0002 ppm | 0.0013 ppm | -0.0153 ppm | 0.0010 ppm | -0.0001 ppm | 0.0071 ppm |
| Recovery Percentage 1 | 0.841 % | 0.360 % | 3.998 % | -0.732 % | 2.292 % | 21.074 % | 6.089 % |
| Concentration RSD | 193.4 % | 366.4 % | 32.2 % | 13.3 % | 137.1 % | 92.5 % | 115.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0019 ppm | -0.0111 ppm | 0.0002 ppm | 0.0001 ppm | 0.0000 ppm | 0.0013 ppm | -0.0002 ppm |
| Concentration per Run 1 | -0.0015 ppm | -0.0142 ppm | 0.0002 ppm | 0.0000 ppm | 0.0003 ppm | 0.0011 ppm | 0.0005 ppm |
| Concentration per Run 2 | -0.0015 ppm | -0.0085 ppm | -0.0003 ppm | 0.0001 ppm | 0.0001 ppm | 0.0010 ppm | -0.0005 ppm |
| Concentration per Run 3 | -0.0028 ppm | -0.0107 ppm | 0.0006 ppm | 0.0001 ppm | -0.0004 ppm | 0.0017 ppm | -0.0006 ppm |
| Recovery Percentage 1 | -19.317 % | -2.227 % | 0.311 % | 0.620 % | 0.170 % | 6.412 % | -2.441 % |
| Concentration RSD | 38.2 % | 25.5 % | 303.4 % | 106.5 % | 2,223.3 % | 30.6 % | 250.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 100.4566 % | 100.5790 % | 100.9055 % | 100.6503 % | 100.4796 % | 100.8326 % |
| Concentration per Run 1 | 0.0000 ppm | 101.3376 % | 100.6721 % | 100.4390 % | 101.7426 % | 100.6200 % | 100.6205 % |
| Concentration per Run 2 | 0.0002 ppm | 100.4512 % | 100.2302 % | 101.2755 % | 100.0577 % | 100.0487 % | 101.0942 % |
| Concentration per Run 3 | 0.0001 ppm | 99.5808 % | 100.8348 % | 101.0020 % | 100.1506 % | 100.7702 % | 100.7830 % |
| Recovery Percentage 1 | 1.921 % | | | | | | |
| Concentration RSD | 79.8 % | 0.9 % | 0.3 % | 0.4 % | 0.9 % | 0.4 % | 0.2 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: LLOQ
Analysis started at: 3/13/2025 8:41:45 AM
Rack 0
Vial 5
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0049 ppm | 0.1009 ppm | 0.0045 ppm | 0.0299 ppm | 0.0098 ppm | 0.0052 ppm | 0.1024 ppm |
| Concentration per Run 1 | 0.0046 ppm | 0.1007 ppm | 0.0018 ppm | 0.0296 ppm | 0.0098 ppm | 0.0051 ppm | 0.1009 ppm |
| Concentration per Run 2 | 0.0047 ppm | 0.0971 ppm | 0.0057 ppm | 0.0302 ppm | 0.0098 ppm | 0.0052 ppm | 0.1022 ppm |
| Concentration per Run 3 | 0.0053 ppm | 0.1050 ppm | 0.0060 ppm | 0.0301 ppm | 0.0096 ppm | 0.0052 ppm | 0.1040 ppm |
| Recovery Percentage 1 | 97.888 % | 100.936 % | 89.967 % | 99.823 % | 97.526 % | 103.330 % | 102.372 % |
| Concentration RSD | 8.1 % | 3.9 % | 52.6 % | 1.0 % | 1.1 % | 0.7 % | 1.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0042 ppm | 0.0103 ppm | 0.0099 ppm | 0.0094 ppm | 0.0552 ppm | 2.5626 ppm | 0.0102 ppm |
| Concentration per Run 1 | 0.0042 ppm | 0.0101 ppm | 0.0102 ppm | 0.0096 ppm | 0.0541 ppm | 2.5510 ppm | 0.0101 ppm |
| Concentration per Run 2 | 0.0041 ppm | 0.0100 ppm | 0.0099 ppm | 0.0092 ppm | 0.0563 ppm | 2.5439 ppm | 0.0103 ppm |
| Concentration per Run 3 | 0.0042 ppm | 0.0108 ppm | 0.0096 ppm | 0.0094 ppm | 0.0551 ppm | 2.5927 ppm | 0.0104 ppm |
| Recovery Percentage 1 | 104.932 % | 102.904 % | 99.175 % | 93.987 % | 110.311 % | 102.502 % | 102.464 % |
| Concentration RSD | 1.3 % | 4.0 % | 3.2 % | 2.1 % | 2.1 % | 1.0 % | 1.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1041 ppm | 0.0101 ppm | 0.0500 ppm | 2.0290 ppm | 0.0211 ppm | 0.0119 ppm | 0.0515 ppm |
| Concentration per Run 1 | 0.1052 ppm | 0.0102 ppm | 0.0497 ppm | 2.0260 ppm | 0.0207 ppm | 0.0136 ppm | 0.0509 ppm |
| Concentration per Run 2 | 0.1026 ppm | 0.0101 ppm | 0.0503 ppm | 2.0244 ppm | 0.0208 ppm | 0.0116 ppm | 0.0507 ppm |
| Concentration per Run 3 | 0.1046 ppm | 0.0099 ppm | 0.0499 ppm | 2.0367 ppm | 0.0217 ppm | 0.0105 ppm | 0.0528 ppm |
| Recovery Percentage 1 | 104.116 % | 100.743 % | 99.950 % | 101.451 % | 84.206 % | 119.081 % | 102.979 % |
| Concentration RSD | 1.3 % | 1.3 % | 0.7 % | 0.3 % | 2.7 % | 12.9 % | 2.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0106 ppm | 0.5095 ppm | 0.0508 ppm | 0.0101 ppm | 0.0099 ppm | 0.0207 ppm | 0.0099 ppm |
| Concentration per Run 1 | 0.0100 ppm | 0.5135 ppm | 0.0508 ppm | 0.0099 ppm | 0.0099 ppm | 0.0202 ppm | 0.0102 ppm |
| Concentration per Run 2 | 0.0102 ppm | 0.5053 ppm | 0.0508 ppm | 0.0101 ppm | 0.0098 ppm | 0.0215 ppm | 0.0096 ppm |
| Concentration per Run 3 | 0.0114 ppm | 0.5097 ppm | 0.0507 ppm | 0.0102 ppm | 0.0099 ppm | 0.0203 ppm | 0.0099 ppm |
| Recovery Percentage 1 | 105.605 % | 101.896 % | 101.582 % | 100.719 % | 98.757 % | 103.442 % | 99.138 % |
| Concentration RSD | 7.0 % | 0.8 % | 0.1 % | 1.4 % | 0.4 % | 3.6 % | 2.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0056 ppm | 103.8847 % | 103.5775 % | 103.7294 % | 102.1269 % | 102.0612 % | 102.1637 % |
| Concentration per Run 1 | 0.0056 ppm | 103.7806 % | 103.4940 % | 103.4679 % | 101.9366 % | 102.1554 % | 102.4039 % |
| Concentration per Run 2 | 0.0058 ppm | 104.0962 % | 104.0780 % | 103.4321 % | 102.4882 % | 102.1631 % | 101.6081 % |
| Concentration per Run 3 | 0.0054 ppm | 103.7773 % | 103.1605 % | 104.2883 % | 101.9561 % | 101.8651 % | 102.4790 % |
| Recovery Percentage 1 | 111.525 % | | | | | | |
| Concentration RSD | 3.5 % | 0.2 % | 0.4 % | 0.5 % | 0.3 % | 0.2 % | 0.5 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: ICSA
Analysis started at: 3/13/2025 8:45:20 AM
Rack 0
Vial 6
Comment LDR +/-10%

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0016 ppm | 522.5802 [SIC 500] | -0.0054 ppm | -0.0071 ppm | 0.0015 ppm | 0.0000 ppm | 490.7384 ppm |
| Concentration per Run 1 | -0.0016 ppm | 523.3868 ppm | -0.0062 ppm | -0.0081 ppm | 0.0016 ppm | 0.0001 ppm | 488.8909 ppm |
| Concentration per Run 2 | -0.0017 ppm | 522.7577 ppm | -0.0036 ppm | -0.0091 ppm | 0.0015 ppm | 0.0000 ppm | 491.3506 ppm |
| Concentration per Run 3 | -0.0014 ppm | 521.5961 ppm | -0.0065 ppm | -0.0042 ppm | 0.0013 ppm | 0.0000 ppm | 491.9736 ppm |
| Recovery Percentage 1 | -22.169 % | | -108.859 % | -23.735 % | 14.708 % | 1.093 % | |
| Concentration RSD | 8.8 % | 0.2 % | 29.8 % | 36.4 % | 9.1 % | 41.6 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0012 ppm | -0.0009 ppm | -0.0010 ppm | -0.0054 ppm | 192.5513 ppm | -0.0123 ppm | -0.0036 ppm |
| Concentration per Run 1 | -0.0012 ppm | -0.0009 ppm | -0.0005 ppm | -0.0052 ppm | 192.3822 ppm | 0.0013 ppm | -0.0036 ppm |
| Concentration per Run 2 | -0.0012 ppm | -0.0015 ppm | -0.0010 ppm | -0.0054 ppm | 192.0111 ppm | -0.0234 ppm | -0.0033 ppm |
| Concentration per Run 3 | -0.0012 ppm | -0.0003 ppm | -0.0015 ppm | -0.0056 ppm | 193.2608 ppm | -0.0146 ppm | -0.0038 ppm |
| Recovery Percentage 1 | -24.328 % | -4.516 % | -10.289 % | -53.847 % | | -0.490 % | -71.326 % |
| Concentration RSD | 1.3 % | 65.5 % | 49.5 % | 3.9 % | 0.3 % | 102.3 % | 7.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 488.9938 ppm | -0.0004 ppm | -0.0012 ppm | 0.0022 ppm | 0.0008 ppm | 0.0002 ppm | -0.0138 ppm |
| Concentration per Run 1 | 490.1868 ppm | -0.0002 ppm | -0.0005 ppm | 0.0041 ppm | 0.0009 ppm | 0.0001 ppm | -0.0131 ppm |
| Concentration per Run 2 | 488.7827 ppm | -0.0004 ppm | -0.0021 ppm | -0.0010 ppm | 0.0007 ppm | -0.0021 ppm | -0.0125 ppm |
| Concentration per Run 3 | 488.0120 ppm | -0.0005 ppm | -0.0011 ppm | 0.0035 ppm | 0.0009 ppm | 0.0026 ppm | -0.0158 ppm |
| Recovery Percentage 1 | | -3.713 % | -2.431 % | 0.109 % | 3.209 % | 2.099 % | -27.645 % |
| Concentration RSD | 0.2 % | 41.4 % | 68.1 % | 127.4 % | 13.3 % | 1,120.6 % | 12.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0015 ppm | 0.0007 ppm | 0.0008 ppm | 0.0026 ppm | 0.0034 ppm | 0.0047 ppm | -0.0016 ppm |
| Concentration per Run 1 | -0.0012 ppm | 0.0027 ppm | 0.0007 ppm | 0.0027 ppm | 0.0033 ppm | 0.0043 ppm | -0.0020 ppm |
| Concentration per Run 2 | -0.0009 ppm | 0.0011 ppm | 0.0017 ppm | 0.0024 ppm | 0.0034 ppm | 0.0042 ppm | -0.0015 ppm |
| Concentration per Run 3 | -0.0023 ppm | -0.0017 ppm | 0.0000 ppm | 0.0027 ppm | 0.0036 ppm | 0.0056 ppm | -0.0014 ppm |
| Recovery Percentage 1 | -14.835 % | 0.142 % | 1.602 % | 26.002 % | 34.236 % | 23.440 % | -16.196 % |
| Concentration RSD | 48.0 % | 312.5 % | 103.7 % | 5.7 % | 3.6 % | 17.0 % | 19.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0026 ppm | 96.9918 % | 93.5638 % | 89.1982 % | 93.5263 % | 91.3443 % | 89.8600 % |
| Concentration per Run 1 | -0.0030 ppm | 96.6106 % | 93.5532 % | 89.4396 % | 92.9302 % | 92.0986 % | 89.8936 % |
| Concentration per Run 2 | -0.0020 ppm | 96.9770 % | 94.0769 % | 88.6624 % | 93.7343 % | 91.6347 % | 89.6049 % |
| Concentration per Run 3 | -0.0028 ppm | 97.3879 % | 93.0613 % | 89.4926 % | 93.9146 % | 90.2998 % | 90.0814 % |
| Recovery Percentage 1 | -52.272 % | | | | | | |
| Concentration RSD | 20.5 % | 0.4 % | 0.5 % | 0.5 % | 0.6 % | 1.0 % | 0.3 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: SIC Multi
Analysis started at: 3/13/2025 8:50:50 AM
Rack 0
Vial 7
Comment LDR +/-10%

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0010 ppm | 0.0054 ppm | -0.0018 ppm | 0.0012 ppm | 0.0002 ppm | -0.0005 ppm | -0.0180 ppm |
| Concentration per Run 1 | -0.0010 ppm | 0.0093 ppm | -0.0018 ppm | 0.0010 ppm | 0.0003 ppm | -0.0004 ppm | -0.0189 ppm |
| Concentration per Run 2 | -0.0010 ppm | 0.0042 ppm | -0.0019 ppm | 0.0008 ppm | 0.0002 ppm | -0.0004 ppm | -0.0153 ppm |
| Concentration per Run 3 | -0.0010 ppm | 0.0027 ppm | -0.0016 ppm | 0.0016 ppm | 0.0000 ppm | -0.0005 ppm | -0.0197 ppm |
| Recovery Percentage 1 | -14.148 % | 5.404 % | -35.493 % | 3.842 % | 1.569 % | -11.584 % | -17.985 % |
| Concentration RSD | 3.0 % | 63.6 % | 11.4 % | 37.4 % | 91.6 % | 15.3 % | 13.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | -0.0035 ppm | **20.4772 ppm** | -0.0024 ppm | 0.0062 ppm | -0.0258 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0003 ppm | -0.0038 ppm | 20.5413 ppm | -0.0026 ppm | 0.0063 ppm | -0.0320 ppm | -0.0006 ppm |
| Concentration per Run 2 | -0.0003 ppm | -0.0031 ppm | 20.4803 ppm | -0.0020 ppm | 0.0055 ppm | -0.0277 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0005 ppm | -0.0037 ppm | 20.4101 ppm | -0.0026 ppm | 0.0067 ppm | -0.0178 ppm | 0.0016 ppm |
| Recovery Percentage 1 | -7.238 % | -17.555 % | 204,772.432 % | -24.053 % | 12.337 % | -1.033 % | 8.651 % |
| Concentration RSD | 36.4 % | 9.6 % | **0.3 %** | 13.8 % | 9.6 % | 28.3 % | 248.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0076 ppm | **20.1255 [SIC 100]** | -0.0019 ppm | -0.0129 ppm | 0.0010 ppm | 0.0000 ppm | -0.0022 ppm |
| Concentration per Run 1 | -0.0023 ppm | 20.1479 ppm | -0.0029 ppm | -0.0107 ppm | 0.0014 ppm | 0.0009 ppm | -0.0025 ppm |
| Concentration per Run 2 | -0.0098 ppm | 20.0576 ppm | -0.0017 ppm | -0.0106 ppm | 0.0005 ppm | -0.0005 ppm | -0.0005 ppm |
| Concentration per Run 3 | -0.0105 ppm | 20.1711 ppm | -0.0010 ppm | -0.0175 ppm | 0.0013 ppm | -0.0005 ppm | -0.0037 ppm |
| Recovery Percentage 1 | -7.552 % | 201,255.390 % | -3.760 % | -0.646 % | 4.185 % | -0.173 % | -4.454 % |
| Concentration RSD | 60.2 % | **0.3 %** | 49.2 % | 30.5 % | 45.6 % | 4,652.3 % | 72.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0031 ppm | 0.0488 ppm | 0.0015 ppm | 0.0000 ppm | **19.7627 ppm** | 0.0017 ppm | **10.0684 [SIC 10]** |
| Concentration per Run 1 | -0.0048 ppm | 0.0096 ppm | 0.0008 ppm | 0.0001 ppm | 19.7974 ppm | 0.0005 ppm | 10.0380 ppm |
| Concentration per Run 2 | -0.0012 ppm | 0.0622 ppm | 0.0024 ppm | 0.0000 ppm | 19.7447 ppm | 0.0029 ppm | 10.1087 ppm |
| Concentration per Run 3 | -0.0033 ppm | 0.0745 ppm | 0.0013 ppm | 0.0001 ppm | 19.7461 ppm | 0.0018 ppm | 10.0586 ppm |
| Recovery Percentage 1 | -31.093 % | 9.756 % | 2.989 % | 0.473 % | 197,627.443 % | 8.723 % | 100,684.302 % |
| Concentration RSD | 58.5 % | 70.7 % | 55.8 % | 177.6 % | **0.2 %** | 66.8 % | **0.4 %** |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 102.6684 % | 102.3670 % | 105.7011 % | 100.8420 % | 100.0128 % | 102.2320 % |
| Concentration per Run 1 | -0.0012 ppm | 102.6985 % | 102.0513 % | 106.2625 % | 100.5839 % | 99.9044 % | 102.8827 % |
| Concentration per Run 2 | -0.0003 ppm | 102.9419 % | 102.8421 % | 105.4754 % | 101.2800 % | 100.4366 % | 102.1310 % |
| Concentration per Run 3 | -0.0005 ppm | 102.3647 % | 102.2077 % | 105.3655 % | 100.6619 % | 99.6973 % | 101.6823 % |
| Recovery Percentage 1 | -13.368 % | | | | | | |
| Concentration RSD | 65.8 % | 0.3 % | 0.4 % | 0.5 % | 0.4 % | 0.4 % | 0.6 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: LDR Check
Analysis started at: 3/13/2025 8:55:23 AM
Rack 0
Vial 8
Comment LDR +/-10%

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0029 ppm | 0.0143 ppm | 20.4218 ppm | 19.1087 ppm | 19.4708 ppm | 4.8318 ppm | 0.0254 ppm |
| Concentration per Run 1 | 0.0027 ppm | 0.0185 ppm | 20.3356 ppm | 19.1205 ppm | 19.4581 ppm | 4.8270 ppm | 0.0291 ppm |
| Concentration per Run 2 | 0.0032 ppm | 0.0092 ppm | 20.4058 ppm | 19.1334 ppm | 19.5269 ppm | 4.8465 ppm | 0.0209 ppm |
| Concentration per Run 3 | 0.0028 ppm | 0.0151 ppm | 20.5239 ppm | 19.0723 ppm | 19.4273 ppm | 4.8220 ppm | 0.0263 ppm |
| Recovery Percentage 1 | | | 102.109 % | 95.544 % | 97.354 % | | |
| Concentration RSD | 8.7 % | 33.0 % | 0.5 % | 0.2 % | 0.3 % | 0.3 % | 16.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.6472 ppm | 4.8417 ppm | 0.0013 ppm | 20.4023 [SIC 60] | 0.0016 ppm | 515.1333 ppm | 19.0673 ppm |
| Concentration per Run 1 | 4.6660 ppm | 4.8445 ppm | 0.0019 ppm | 20.3937 ppm | 0.0029 ppm | 511.5094 ppm | 18.9451 ppm |
| Concentration per Run 2 | 4.6546 ppm | 4.8353 ppm | 0.0015 ppm | 20.4080 ppm | 0.0007 ppm | 518.7672 ppm | 19.0702 ppm |
| Concentration per Run 3 | 4.6209 ppm | 4.8454 ppm | 0.0004 ppm | 20.4051 ppm | 0.0011 ppm | 515.1232 ppm | 19.1867 ppm |
| Recovery Percentage 1 | 92.944 % | 96.835 % | | 102.011 % | | 103.027 % | 95.337 % |
| Concentration RSD | 0.5 % | 0.1 % | 63.6 % | 0.0 % | 74.7 % | 0.7 % | 0.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0049 ppm | 0.0004 ppm | 5.0003 [SIC 20] | 459.3187 ppm | 9.4207 ppm | 52.4709 ppm | 4.9940 ppm |
| Concentration per Run 1 | -0.0024 ppm | 0.0004 ppm | 4.9863 ppm | 457.4592 ppm | 9.4527 ppm | 52.0610 ppm | 4.9865 ppm |
| Concentration per Run 2 | -0.0054 ppm | 0.0003 ppm | 5.0054 ppm | 459.6915 ppm | 9.4025 ppm | 52.5340 ppm | 4.9906 ppm |
| Concentration per Run 3 | -0.0070 ppm | 0.0005 ppm | 5.0094 ppm | 460.8053 ppm | 9.4069 ppm | 52.8176 ppm | 5.0048 ppm |
| Recovery Percentage 1 | | 0.000 % | 100.007 % | 91.864 % | 94.207 % | 104.942 % | 99.879 % |
| Concentration RSD | 47.8 % | 32.5 % | 0.2 % | 0.4 % | 0.3 % | 0.7 % | 0.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.8933 ppm | 21.0545 [SIC 100] | 9.7676 ppm | 5.0620 ppm | 0.0093 ppm | 5.1149 ppm | 0.0025 ppm |
| Concentration per Run 1 | 4.8758 ppm | 21.0212 ppm | 9.7586 ppm | 5.0600 ppm | 0.0107 ppm | 5.0844 ppm | 0.0024 ppm |
| Concentration per Run 2 | 4.9007 ppm | 21.1795 ppm | 9.7399 ppm | 5.0757 ppm | 0.0090 ppm | 5.1097 ppm | 0.0028 ppm |
| Concentration per Run 3 | 4.9034 ppm | 20.9626 ppm | 9.8043 ppm | 5.0503 ppm | 0.0083 ppm | 5.1507 ppm | 0.0022 ppm |
| Recovery Percentage 1 | 97.866 % | 105.272 % | 97.676 % | 101.240 % | 0.000 % | 102.299 % | 0.000 % |
| Concentration RSD | 0.3 % | 0.5 % | 0.3 % | 0.3 % | 13.6 % | 0.7 % | 13.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 18.6063 ppm | 103.6574 % | 97.1892 % | 100.7275 % | 102.3412 % | 95.4827 % | 94.1765 % |
| Concentration per Run 1 | 18.6448 ppm | 103.8440 % | 97.6147 % | 101.2240 % | 102.5841 % | 95.7444 % | 94.4101 % |
| Concentration per Run 2 | 18.5292 ppm | 103.9818 % | 96.9968 % | 100.5191 % | 102.9540 % | 95.3618 % | 93.8190 % |
| Concentration per Run 3 | 18.6449 ppm | 103.1463 % | 96.9562 % | 100.4393 % | 101.4855 % | 95.3420 % | 94.3004 % |
| Recovery Percentage 1 | 93.031 % | | | | | | |
| Concentration RSD | 0.4 % | 0.4 % | 0.4 % | 0.4 % | 0.7 % | 0.2 % | 0.3 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: LLOQ 0.005ppm As
Analysis started at: 3/13/2025 9:30:48 AM
Rack 1
Vial 1
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0049 ppm | 0.0073 ppm | 0.0042 ppm | 0.0046 ppm | 0.0052 ppm | 0.0052 ppm | 0.0116 ppm |
| Concentration per Run 1 | 0.0050 ppm | 0.0056 ppm | 0.0040 ppm | 0.0043 ppm | 0.0051 ppm | 0.0052 ppm | 0.0089 ppm |
| Concentration per Run 2 | 0.0050 ppm | 0.0039 ppm | 0.0052 ppm | 0.0046 ppm | 0.0052 ppm | 0.0052 ppm | 0.0132 ppm |
| Concentration per Run 3 | 0.0048 ppm | 0.0124 ppm | 0.0035 ppm | 0.0048 ppm | 0.0051 ppm | 0.0051 ppm | 0.0128 ppm |
| Recovery Percentage 1 | 98.606 % | 0.000 % | 84.435 % | 0.000 % | 0.000 % | 103.137 % | 0.000 % |
| Concentration RSD | 2.8 % | 61.7 % | 20.0 % | 6.1 % | 1.2 % | 1.5 % | 20.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0051 ppm | 0.0054 ppm | 0.0051 ppm | 0.0040 ppm | 0.0061 ppm | 0.0681 ppm | 0.0053 ppm |
| Concentration per Run 1 | 0.0051 ppm | 0.0053 ppm | 0.0050 ppm | 0.0038 ppm | 0.0075 ppm | 0.0630 ppm | 0.0047 ppm |
| Concentration per Run 2 | 0.0050 ppm | 0.0057 ppm | 0.0052 ppm | 0.0042 ppm | 0.0055 ppm | 0.0721 ppm | 0.0055 ppm |
| Concentration per Run 3 | 0.0051 ppm | 0.0053 ppm | 0.0052 ppm | 0.0040 ppm | 0.0053 ppm | 0.0691 ppm | 0.0055 ppm |
| Recovery Percentage 1 | 101.275 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % |
| Concentration RSD | 1.4 % | 4.2 % | 2.1 % | 5.3 % | 20.5 % | 6.8 % | 9.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0074 ppm | 0.0051 ppm | 0.0049 ppm | 0.0961 ppm | 0.0060 ppm | 0.0076 ppm | 0.0051 ppm |
| Concentration per Run 1 | 0.0093 ppm | 0.0051 ppm | 0.0046 ppm | 0.1005 ppm | 0.0059 ppm | 0.0088 ppm | 0.0023 ppm |
| Concentration per Run 2 | 0.0070 ppm | 0.0051 ppm | 0.0052 ppm | 0.0936 ppm | 0.0059 ppm | 0.0069 ppm | 0.0051 ppm |
| Concentration per Run 3 | 0.0061 ppm | 0.0050 ppm | 0.0049 ppm | 0.0942 ppm | 0.0063 ppm | 0.0072 ppm | 0.0081 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % |
| Concentration RSD | 21.7 % | 1.2 % | 6.4 % | 4.0 % | 4.0 % | 13.7 % | 57.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0043 ppm | 0.0419 ppm | 0.0053 ppm | 0.0053 ppm | 0.0051 ppm | 0.0061 ppm | 0.0050 ppm |
| Concentration per Run 1 | 0.0039 ppm | 0.0397 ppm | 0.0063 ppm | 0.0054 ppm | 0.0052 ppm | 0.0055 ppm | 0.0051 ppm |
| Concentration per Run 2 | 0.0056 ppm | 0.0429 ppm | 0.0062 ppm | 0.0053 ppm | 0.0048 ppm | 0.0064 ppm | 0.0052 ppm |
| Concentration per Run 3 | 0.0035 ppm | 0.0433 ppm | 0.0033 ppm | 0.0052 ppm | 0.0052 ppm | 0.0063 ppm | 0.0047 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % | 0.000 % |
| Concentration RSD | 25.3 % | 4.7 % | 32.2 % | 1.7 % | 4.9 % | 7.8 % | 5.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0057 ppm | 102.7965 % | 102.1148 % | 107.3250 % | 103.1738 % | 102.0786 % | 105.7339 % |
| Concentration per Run 1 | 0.0059 ppm | 102.6909 % | 100.4760 % | 104.6392 % | 103.6109 % | 100.6988 % | 103.1748 % |
| Concentration per Run 2 | 0.0057 ppm | 103.1556 % | 102.2331 % | 114.5275 % | 103.2702 % | 102.0841 % | 111.7209 % |
| Concentration per Run 3 | 0.0057 ppm | 102.5431 % | 103.6353 % | 102.8083 % | 102.6404 % | 103.4531 % | 102.3062 % |
| Recovery Percentage 1 | 114.683 % | | | | | | |
| Concentration RSD | 1.8 % | 0.3 % | 1.6 % | 5.9 % | 0.5 % | 1.3 % | 4.9 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: zLLOQ 0.01ppm
Analysis started at: 3/13/2025 9:34:26 AM
Rack 1
Vial 2
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0093 ppm | 0.0068 ppm | 0.0101 ppm | 0.0086 ppm | 0.0100 ppm | 0.0102 ppm | 0.0139 ppm |
| Concentration per Run 1 | 0.0096 ppm | 0.0063 ppm | 0.0096 ppm | 0.0093 ppm | 0.0100 ppm | 0.0102 ppm | 0.0127 ppm |
| Concentration per Run 2 | 0.0091 ppm | 0.0058 ppm | 0.0115 ppm | 0.0073 ppm | 0.0099 ppm | 0.0102 ppm | 0.0163 ppm |
| Concentration per Run 3 | 0.0092 ppm | 0.0081 ppm | 0.0092 ppm | 0.0093 ppm | 0.0100 ppm | 0.0102 ppm | 0.0129 ppm |
| Recovery Percentage 1 | 0.000 % | 0.000 % | 101.129 % | 86.342 % | 99.530 % | 0.000 % | 0.000 % |
| Concentration RSD | 3.1 % | 18.0 % | 12.3 % | 12.9 % | 0.2 % | 0.3 % | 14.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0103 ppm | 0.0110 ppm | 0.0103 ppm | 0.0089 ppm | 0.0112 ppm | 0.1020 ppm | 0.0101 ppm |
| Concentration per Run 1 | 0.0102 ppm | 0.0111 ppm | 0.0107 ppm | 0.0086 ppm | 0.0115 ppm | 0.1052 ppm | 0.0110 ppm |
| Concentration per Run 2 | 0.0102 ppm | 0.0106 ppm | 0.0102 ppm | 0.0086 ppm | 0.0101 ppm | 0.0956 ppm | 0.0103 ppm |
| Concentration per Run 3 | 0.0103 ppm | 0.0114 ppm | 0.0101 ppm | 0.0094 ppm | 0.0119 ppm | 0.1052 ppm | 0.0092 ppm |
| Recovery Percentage 1 | 0.000 % | 110.356 % | 103.142 % | 88.740 % | 0.000 % | 0.000 % | 101.482 % |
| Concentration RSD | 0.7 % | 3.9 % | 3.1 % | 5.3 % | 8.1 % | 5.4 % | 8.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0120 ppm | 0.0101 ppm | 0.0092 ppm | 0.1966 ppm | 0.0108 ppm | 0.0120 ppm | 0.0096 ppm |
| Concentration per Run 1 | 0.0140 ppm | 0.0099 ppm | 0.0091 ppm | 0.2015 ppm | 0.0113 ppm | 0.0126 ppm | 0.0094 ppm |
| Concentration per Run 2 | 0.0103 ppm | 0.0100 ppm | 0.0089 ppm | 0.1969 ppm | 0.0111 ppm | 0.0118 ppm | 0.0124 ppm |
| Concentration per Run 3 | 0.0116 ppm | 0.0102 ppm | 0.0094 ppm | 0.1913 ppm | 0.0099 ppm | 0.0116 ppm | 0.0069 ppm |
| Recovery Percentage 1 | 0.000 % | 100.675 % | 91.581 % | 0.000 % | 107.725 % | 119.971 % | 0.000 % |
| Concentration RSD | 15.9 % | 1.5 % | 2.9 % | 2.6 % | 7.0 % | 4.4 % | 28.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0099 ppm | 0.0943 ppm | 0.0091 ppm | 0.0101 ppm | 0.0101 ppm | 0.0116 ppm | 0.0098 ppm |
| Concentration per Run 1 | 0.0072 ppm | 0.0955 ppm | 0.0098 ppm | 0.0100 ppm | 0.0099 ppm | 0.0120 ppm | 0.0096 ppm |
| Concentration per Run 2 | 0.0092 ppm | 0.0938 ppm | 0.0082 ppm | 0.0101 ppm | 0.0103 ppm | 0.0113 ppm | 0.0100 ppm |
| Concentration per Run 3 | 0.0133 ppm | 0.0938 ppm | 0.0092 ppm | 0.0102 ppm | 0.0102 ppm | 0.0114 ppm | 0.0098 ppm |
| Recovery Percentage 1 | 98.995 % | 0.000 % | 90.593 % | 101.136 % | 101.223 % | 115.741 % | 98.070 % |
| Concentration RSD | 31.6 % | 1.1 % | 9.0 % | 1.5 % | 2.2 % | 3.2 % | 2.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0107 ppm | 103.2425 % | 103.1008 % | 104.7758 % | 102.8268 % | 102.7817 % | 104.1421 % |
| Concentration per Run 1 | 0.0107 ppm | 103.3547 % | 102.7463 % | 104.7411 % | 103.5266 % | 102.4300 % | 104.2477 % |
| Concentration per Run 2 | 0.0109 ppm | 103.7882 % | 103.1485 % | 104.7215 % | 103.1359 % | 102.7613 % | 103.9158 % |
| Concentration per Run 3 | 0.0104 ppm | 102.5844 % | 103.4077 % | 104.8646 % | 101.8180 % | 103.1538 % | 104.2628 % |
| Recovery Percentage 1 | 106.799 % | | | | | | |
| Concentration RSD | 2.6 % | 0.6 % | 0.3 % | 0.1 % | 0.9 % | 0.4 % | 0.2 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: CCV
Analysis started at: 3/13/2025 9:49:03 AM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4686 ppm | 0.4817 ppm | 0.4874 ppm | 0.4860 ppm | 0.4853 ppm | 0.5096 ppm | 0.5056 ppm |
| Concentration per Run 1 | 0.4711 ppm | 0.4292 ppm | 0.4921 ppm | 0.4896 ppm | 0.4266 ppm | 0.4492 ppm | 0.4429 ppm |
| Concentration per Run 2 | 0.4671 ppm | 0.5272 ppm | 0.4864 ppm | 0.4859 ppm | 0.5296 ppm | 0.5554 ppm | 0.5496 ppm |
| Concentration per Run 3 | 0.4675 ppm | 0.4887 ppm | 0.4836 ppm | 0.4823 ppm | 0.4999 ppm | 0.5242 ppm | 0.5242 ppm |
| Recovery Percentage 1 | 93.714 % | 96.346 % | 97.481 % | 97.195 % | 97.069 % | 101.924 % | 101.111 % |
| Concentration RSD | 0.5 % | 10.3 % | 0.9 % | 0.8 % | 10.9 % | 10.7 % | 11.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5013 ppm | 0.5120 ppm | 0.4983 ppm | 0.4710 ppm | 0.5172 ppm | 5.1229 ppm | 0.4964 ppm |
| Concentration per Run 1 | 0.5030 ppm | 0.5109 ppm | 0.5008 ppm | 0.4710 ppm | 0.4607 ppm | 4.6018 ppm | 0.4419 ppm |
| Concentration per Run 2 | 0.5006 ppm | 0.5117 ppm | 0.4946 ppm | 0.4694 ppm | 0.5635 ppm | 5.5349 ppm | 0.5389 ppm |
| Concentration per Run 3 | 0.5004 ppm | 0.5136 ppm | 0.4996 ppm | 0.4726 ppm | 0.5274 ppm | 5.2321 ppm | 0.5084 ppm |
| Recovery Percentage 1 | 100.265 % | 102.406 % | 99.666 % | 94.203 % | 103.439 % | 102.458 % | 99.275 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.7 % | 0.3 % | 10.1 % | 9.3 % | 10.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4945 ppm | 0.4972 ppm | 0.4959 ppm | 9.9426 ppm | 0.5099 ppm | 0.5053 ppm | 0.4952 ppm |
| Concentration per Run 1 | 0.4961 ppm | 0.4386 ppm | 0.4945 ppm | 8.8080 ppm | 0.5137 ppm | 0.5083 ppm | 0.4963 ppm |
| Concentration per Run 2 | 0.4935 ppm | 0.5420 ppm | 0.4949 ppm | 10.8058 ppm | 0.5087 ppm | 0.5015 ppm | 0.4979 ppm |
| Concentration per Run 3 | 0.4941 ppm | 0.5111 ppm | 0.4982 ppm | 10.2140 ppm | 0.5074 ppm | 0.5063 ppm | 0.4913 ppm |
| Recovery Percentage 1 | 98.910 % | 99.443 % | 99.173 % | 99.426 % | 101.984 % | 101.068 % | 99.036 % |
| Concentration RSD | 0.3 % | 10.7 % | 0.4 % | 10.3 % | 0.6 % | 0.7 % | 0.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4915 ppm | 5.4617 ppm | 0.5147 ppm | 0.5046 ppm | 0.4982 ppm | 0.4920 ppm | 0.4934 ppm |
| Concentration per Run 1 | 0.4935 ppm | 5.4847 ppm | 0.5176 ppm | 0.4451 ppm | 0.4997 ppm | 0.4924 ppm | 0.4947 ppm |
| Concentration per Run 2 | 0.4935 ppm | 5.4527 ppm | 0.5138 ppm | 0.5518 ppm | 0.4969 ppm | 0.4930 ppm | 0.4926 ppm |
| Concentration per Run 3 | 0.4876 ppm | 5.4478 ppm | 0.5129 ppm | 0.5168 ppm | 0.4980 ppm | 0.4908 ppm | 0.4929 ppm |
| Recovery Percentage 1 | 98.308 % | 104.033 % | 102.948 % | 100.910 % | 99.639 % | 98.407 % | 98.681 % |
| Concentration RSD | 0.7 % | 0.4 % | 0.5 % | 10.8 % | 0.3 % | 0.2 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5077 ppm | 103.3087 % | 103.2091 % | 104.2351 % | 101.6425 % | 101.5680 % | 101.4155 % |
| Concentration per Run 1 | 0.5103 ppm | 103.8352 % | 114.5251 % | 104.0199 % | 101.8692 % | 111.0148 % | 101.5602 % |
| Concentration per Run 2 | 0.5062 ppm | 103.4229 % | 95.2282 % | 104.5275 % | 101.3806 % | 94.2235 % | 101.2629 % |
| Concentration per Run 3 | 0.5066 ppm | 102.6680 % | 99.8739 % | 104.1578 % | 101.6777 % | 99.4656 % | 101.4236 % |
| Recovery Percentage 1 | 101.541 % | | | | | | |
| Concentration RSD | 0.4 % | 0.6 % | 9.8 % | 0.3 % | 0.2 % | 8.5 % | 0.1 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: CCB
Analysis started at: 3/13/2025 9:52:43 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | -0.0020 ppm | -0.0012 ppm | -0.0004 ppm | 0.0000 ppm | 0.0000 ppm | 0.0019 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0004 ppm | -0.0009 ppm | -0.0004 ppm | 0.0001 ppm | 0.0000 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0031 ppm | -0.0003 ppm | -0.0010 ppm | -0.0002 ppm | 0.0000 ppm | 0.0055 ppm |
| Concentration per Run 3 | 0.0003 ppm | -0.0034 ppm | -0.0023 ppm | 0.0003 ppm | 0.0001 ppm | 0.0000 ppm | 0.0004 ppm |
| Recovery Percentage 1 | 3.993 % | -2.012 % | -23.419 % | -1.249 % | -0.118 % | -0.383 % | 1.887 % |
| Concentration RSD | 73.6 % | 105.6 % | 84.4 % | 170.7 % | 1,436.3 % | 106.4 % | 166.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | 0.0002 ppm | -0.0011 ppm | -0.0032 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0004 ppm | 0.0003 ppm | -0.0002 ppm | -0.0013 ppm | -0.0319 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0002 ppm | -0.0003 ppm | 0.0005 ppm | 0.0011 ppm | 0.0022 ppm | 0.0000 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0002 ppm | -0.0004 ppm | 0.0004 ppm | -0.0029 ppm | 0.0199 ppm | 0.0014 ppm |
| Recovery Percentage 1 | -0.558 % | -0.004 % | -1.162 % | 2.347 % | -2.145 % | -0.130 % | 10.957 % |
| Concentration RSD | 657.3 % | 37,693.4 % | 289.6 % | 155.7 % | 187.7 % | 809.7 % | 135.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0001 ppm | 0.0015 ppm | -0.0116 ppm | -0.0006 ppm | 0.0016 ppm | 0.0009 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0000 ppm | 0.0018 ppm | -0.0127 ppm | -0.0006 ppm | 0.0026 ppm | 0.0025 ppm |
| Concentration per Run 2 | -0.0001 ppm | -0.0003 ppm | 0.0012 ppm | -0.0071 ppm | -0.0006 ppm | 0.0000 ppm | -0.0016 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0002 ppm | 0.0014 ppm | -0.0149 ppm | -0.0004 ppm | 0.0022 ppm | 0.0018 ppm |
| Recovery Percentage 1 | -0.004 % | -1.406 % | 2.971 % | -0.579 % | -2.235 % | 15.820 % | 1.770 % |
| Concentration RSD | 5,960.1 % | 83.1 % | 22.0 % | 34.6 % | 19.0 % | 88.5 % | 250.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | -0.0079 ppm | 0.0004 ppm | 0.0000 ppm | -0.0003 ppm | 0.0009 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0003 ppm | -0.0086 ppm | 0.0012 ppm | 0.0001 ppm | -0.0004 ppm | 0.0001 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0010 ppm | -0.0072 ppm | -0.0015 ppm | 0.0001 ppm | -0.0004 ppm | 0.0025 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0008 ppm | -0.0079 ppm | 0.0015 ppm | -0.0001 ppm | 0.0000 ppm | 0.0002 ppm | 0.0003 ppm |
| Recovery Percentage 1 | 7.085 % | -1.581 % | 0.814 % | 0.456 % | -2.873 % | 4.709 % | 1.416 % |
| Concentration RSD | 50.7 % | 8.9 % | 406.2 % | 314.0 % | 79.0 % | 143.5 % | 109.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 100.0858 % | 99.9881 % | 101.0594 % | 101.0586 % | 100.3090 % | 101.0447 % |
| Concentration per Run 1 | 0.0005 ppm | 98.9758 % | 99.8554 % | 101.6154 % | 100.4572 % | 100.5469 % | 101.3593 % |
| Concentration per Run 2 | 0.0001 ppm | 100.9453 % | 100.2585 % | 101.4798 % | 101.7575 % | 100.5061 % | 101.1320 % |
| Concentration per Run 3 | -0.0004 ppm | 100.3363 % | 99.8503 % | 100.0830 % | 100.9612 % | 99.8740 % | 100.6429 % |
| Recovery Percentage 1 | 0.545 % | | | | | | |
| Concentration RSD | 1,648.1 % | 1.0 % | 0.2 % | 0.8 % | 0.6 % | 0.4 % | 0.4 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: WG2039414-1 WG2039414
Analysis started at: 3/13/2025 10:12:16 AM
Rack 1
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0014 ppm | 0.0001 ppm | 0.0008 ppm | 0.0000 ppm | 0.0000 ppm | 0.0144 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0052 ppm | 0.0000 ppm | 0.0014 ppm | -0.0001 ppm | 0.0000 ppm | 0.0110 ppm |
| Concentration per Run 2 | -0.0005 ppm | 0.0034 ppm | 0.0001 ppm | 0.0008 ppm | 0.0001 ppm | 0.0000 ppm | 0.0167 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0042 ppm | 0.0002 ppm | 0.0003 ppm | 0.0001 ppm | 0.0000 ppm | 0.0156 ppm |
| Recovery Percentage 1 | -4.370 % | 1.435 % | 1.424 % | 2.728 % | 0.491 % | -0.192 % | 14.411 % |
| Concentration RSD | 67.0 % | 347.9 % | 147.8 % | 65.7 % | 244.8 % | 255.8 % | 21.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0001 ppm | -0.0002 ppm | -0.0001 ppm | -0.0007 ppm | -0.0294 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0002 ppm | -0.0008 ppm | -0.0316 ppm | -0.0003 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0005 ppm | -0.0004 ppm | -0.0004 ppm | 0.0002 ppm | -0.0316 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0007 ppm | -0.0003 ppm | -0.0002 ppm | -0.0014 ppm | -0.0249 ppm | -0.0003 ppm |
| Recovery Percentage 1 | -2.131 % | -0.487 % | -2.406 % | -1.326 % | -1.377 % | -1.174 % | -1.631 % |
| Concentration RSD | 62.9 % | 577.9 % | 74.6 % | 221.3 % | 119.9 % | 13.2 % | 477.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0039 ppm | 0.0004 ppm | 0.0001 ppm | -0.0120 ppm | 0.0001 ppm | 0.0005 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.0038 ppm | 0.0006 ppm | 0.0002 ppm | -0.0097 ppm | -0.0007 ppm | 0.0023 ppm | 0.0021 ppm |
| Concentration per Run 2 | 0.0054 ppm | 0.0004 ppm | -0.0003 ppm | -0.0074 ppm | -0.0005 ppm | -0.0003 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0024 ppm | 0.0004 ppm | 0.0003 ppm | -0.0189 ppm | 0.0016 ppm | -0.0003 ppm | 0.0012 ppm |
| Recovery Percentage 1 | 3.887 % | 4.474 % | 0.112 % | -0.600 % | 0.550 % | 5.420 % | 1.929 % |
| Concentration RSD | 38.8 % | 26.4 % | 541.4 % | 51.0 % | 915.1 % | 279.1 % | 129.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0014 ppm | -0.0081 ppm | 0.0002 ppm | 0.0000 ppm | 0.0000 ppm | 0.0009 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0029 ppm | -0.0060 ppm | 0.0017 ppm | 0.0001 ppm | 0.0000 ppm | 0.0031 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0024 ppm | -0.0049 ppm | -0.0008 ppm | 0.0000 ppm | 0.0003 ppm | 0.0006 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0012 ppm | -0.0133 ppm | -0.0004 ppm | 0.0001 ppm | -0.0002 ppm | -0.0011 ppm | -0.0002 ppm |
| Recovery Percentage 1 | -13.786 % | -1.619 % | 0.326 % | 0.485 % | 0.305 % | 4.354 % | -1.069 % |
| Concentration RSD | 161.7 % | 56.2 % | 825.3 % | 56.7 % | 956.2 % | 240.9 % | 105.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 98.0980 % | 103.6355 % | 103.1131 % | 98.1162 % | 103.3055 % | 102.8817 % |
| Concentration per Run 1 | 0.0002 ppm | 91.9763 % | 104.2595 % | 114.3931 % | 89.8655 % | 103.8152 % | 110.6358 % |
| Concentration per Run 2 | 0.0009 ppm | 99.8959 % | 103.1608 % | 91.8112 % | 100.6748 % | 103.2199 % | 93.2347 % |
| Concentration per Run 3 | 0.0006 ppm | 102.4217 % | 103.4862 % | 103.1351 % | 103.8083 % | 102.8813 % | 104.7745 % |
| Recovery Percentage 1 | 11.416 % | | | | | | |
| Concentration RSD | 62.6 % | 5.6 % | 0.5 % | 11.0 % | 7.5 % | 0.5 % | 8.6 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: WG2039414-2 WG2039414
Analysis started at: 3/13/2025 10:15:48 AM
Rack 1
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0491 ppm | 2.0185 ppm | 0.1180 ppm | 0.9849 ppm | 1.9731 ppm | 0.0513 ppm | 10.4962 ppm |
| Concentration per Run 1 | 0.0496 ppm | 2.0232 ppm | 0.1160 ppm | 0.9871 ppm | 1.9687 ppm | 0.0513 ppm | 10.5136 ppm |
| Concentration per Run 2 | 0.0487 ppm | 2.0210 ppm | 0.1193 ppm | 0.9884 ppm | 1.9792 ppm | 0.0513 ppm | 10.4927 ppm |
| Concentration per Run 3 | 0.0489 ppm | 2.0114 ppm | 0.1187 ppm | 0.9791 ppm | 1.9715 ppm | 0.0512 ppm | 10.4824 ppm |
| Concentration RSD | 0.9 % | 0.3 % | 1.5 % | 0.5 % | 0.3 % | 0.1 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0527 ppm | 0.4996 ppm | 0.1959 ppm | 0.2412 ppm | 1.0464 ppm | 10.6416 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0525 ppm | 0.4988 ppm | 0.1962 ppm | 0.2400 ppm | 1.0397 ppm | 10.6428 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0529 ppm | 0.5009 ppm | 0.1962 ppm | 0.2394 ppm | 1.0495 ppm | 10.6812 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0528 ppm | 0.4992 ppm | 0.1955 ppm | 0.2441 ppm | 1.0500 ppm | 10.6008 ppm | 0.0003 ppm |
| Concentration RSD | 0.4 % | 0.2 % | 0.2 % | 1.1 % | 0.6 % | 0.4 % | 41.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.2563 ppm | 0.5046 ppm | 0.9995 ppm | 10.6393 ppm | 0.4966 ppm | 0.5496 ppm | 0.4108 ppm |
| Concentration per Run 1 | 10.2746 ppm | 0.5050 ppm | 0.9912 ppm | 10.6438 ppm | 0.4992 ppm | 0.5507 ppm | 0.4026 ppm |
| Concentration per Run 2 | 10.2312 ppm | 0.5041 ppm | 1.0043 ppm | 10.6828 ppm | 0.4970 ppm | 0.5478 ppm | 0.4148 ppm |
| Concentration per Run 3 | 10.2630 ppm | 0.5046 ppm | 1.0032 ppm | 10.5913 ppm | 0.4936 ppm | 0.5503 ppm | 0.4150 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 0.7 % | 0.4 % | 0.6 % | 0.3 % | 1.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1170 ppm | 1.0982 ppm | 0.9964 ppm | 1.0317 ppm | 1.0246 ppm | 0.1150 ppm | 0.5018 ppm |
| Concentration per Run 1 | 0.1163 ppm | 1.0995 ppm | 0.9899 ppm | 1.0290 ppm | 1.0296 ppm | 0.1130 ppm | 0.5019 ppm |
| Concentration per Run 2 | 0.1174 ppm | 1.1007 ppm | 1.0043 ppm | 1.0347 ppm | 1.0210 ppm | 0.1162 ppm | 0.5001 ppm |
| Concentration per Run 3 | 0.1174 ppm | 1.0942 ppm | 0.9948 ppm | 1.0314 ppm | 1.0232 ppm | 0.1157 ppm | 0.5032 ppm |
| Concentration RSD | 0.6 % | 0.3 % | 0.7 % | 0.3 % | 0.4 % | 1.5 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5046 ppm | 103.9912 % | 103.7573 % | 103.9343 % | 102.1923 % | 101.7899 % | 101.5707 % |
| Concentration per Run 1 | 0.5073 ppm | 104.7619 % | 103.6322 % | 103.7403 % | 102.8962 % | 101.5580 % | 101.6106 % |
| Concentration per Run 2 | 0.5079 ppm | 103.4622 % | 103.7571 % | 103.8554 % | 102.2443 % | 101.7921 % | 101.7687 % |
| Concentration per Run 3 | 0.4987 ppm | 103.7495 % | 103.8827 % | 104.2072 % | 101.4365 % | 102.0197 % | 101.3327 % |
| Concentration RSD | 1.0 % | 0.7 % | 0.1 % | 0.2 % | 0.7 % | 0.2 % | 0.2 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512967-01 WG2039414
Analysis started at: 3/13/2025 10:19:14 AM
Rack 1
Vial 30
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0433 ppm | 0.0019 ppm | 0.0682 ppm | 0.1294 ppm | 0.0000 ppm | 44.1787 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0402 ppm | 0.0021 ppm | 0.0671 ppm | 0.1287 ppm | 0.0000 ppm | 44.2607 ppm |
| Concentration per Run 2 | -0.0005 ppm | 0.0464 ppm | 0.0038 ppm | 0.0697 ppm | 0.1293 ppm | 0.0000 ppm | 44.0623 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0434 ppm | -0.0004 ppm | 0.0679 ppm | 0.1302 ppm | 0.0000 ppm | 44.2129 ppm |
| Concentration RSD | 125.5 % | 7.2 % | 113.1 % | 2.0 % | 0.6 % | 437.3 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0004 ppm | 0.0125 ppm | 0.0171 ppm | 0.1406 ppm | 1.9532 ppm | 0.0046 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0001 ppm | 0.0126 ppm | 0.0166 ppm | 0.1411 ppm | 1.9336 ppm | 0.0044 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0002 ppm | 0.0123 ppm | 0.0177 ppm | 0.1428 ppm | 1.9738 ppm | 0.0055 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0009 ppm | 0.0125 ppm | 0.0170 ppm | 0.1379 ppm | 1.9521 ppm | 0.0040 ppm |
| Concentration RSD | 27.7 % | 123.8 % | 1.2 % | 3.4 % | 1.8 % | 1.0 % | 17.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.7684 ppm | 0.0034 ppm | 0.0076 ppm | 36.6819 ppm | 0.0127 ppm | 0.0026 ppm | 0.0090 ppm |
| Concentration per Run 1 | 9.7528 ppm | 0.0033 ppm | 0.0076 ppm | 36.3922 ppm | 0.0118 ppm | 0.0041 ppm | 0.0083 ppm |
| Concentration per Run 2 | 9.7928 ppm | 0.0033 ppm | 0.0076 ppm | 36.6485 ppm | 0.0136 ppm | 0.0018 ppm | 0.0136 ppm |
| Concentration per Run 3 | 9.7596 ppm | 0.0035 ppm | 0.0076 ppm | 37.0050 ppm | 0.0126 ppm | 0.0019 ppm | 0.0052 ppm |
| Concentration RSD | 0.2 % | 2.3 % | 0.2 % | 0.8 % | 6.9 % | 49.2 % | 46.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0030 ppm | 7.8095 ppm | 0.0051 ppm | 0.2976 ppm | 0.0048 ppm | -0.0003 ppm | 0.0035 ppm |
| Concentration per Run 1 | 0.0040 ppm | 7.7862 ppm | 0.0057 ppm | 0.2965 ppm | 0.0046 ppm | -0.0001 ppm | 0.0032 ppm |
| Concentration per Run 2 | 0.0031 ppm | 7.8360 ppm | 0.0039 ppm | 0.2978 ppm | 0.0050 ppm | -0.0007 ppm | 0.0037 ppm |
| Concentration per Run 3 | 0.0017 ppm | 7.8062 ppm | 0.0056 ppm | 0.2986 ppm | 0.0047 ppm | -0.0001 ppm | 0.0036 ppm |
| Concentration RSD | 39.7 % | 0.3 % | 19.4 % | 0.3 % | 4.5 % | 122.6 % | 7.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0596 ppm | 101.3213 % | 100.2860 % | 101.1780 % | 99.4922 % | 98.1694 % | 98.6155 % |
| Concentration per Run 1 | 0.0596 ppm | 101.3919 % | 100.1522 % | 101.4368 % | 99.4274 % | 98.0939 % | 98.8866 % |
| Concentration per Run 2 | 0.0593 ppm | 101.0393 % | 100.5576 % | 101.6281 % | 99.1977 % | 98.1233 % | 98.9355 % |
| Concentration per Run 3 | 0.0598 ppm | 101.5326 % | 100.1483 % | 100.4692 % | 99.8514 % | 98.2909 % | 98.0243 % |
| Concentration RSD | 0.5 % | 0.3 % | 0.2 % | 0.6 % | 0.3 % | 0.1 % | 0.5 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2513762-01 WG2039414
Analysis started at: 3/13/2025 10:22:40 AM
Rack 1
Vial 31
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | 0.0173 ppm | -0.0002 ppm | 0.2238 ppm | 0.0205 ppm | 0.0000 ppm | 194.2322 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0203 ppm | -0.0008 ppm | 0.2237 ppm | 0.0206 ppm | 0.0000 ppm | 193.6872 ppm |
| Concentration per Run 2 | -0.0012 ppm | 0.0135 ppm | -0.0002 ppm | 0.2249 ppm | 0.0206 ppm | 0.0000 ppm | 195.2605 ppm |
| Concentration per Run 3 | -0.0009 ppm | 0.0180 ppm | 0.0005 ppm | 0.2229 ppm | 0.0202 ppm | 0.0000 ppm | 193.7488 ppm |
| Concentration RSD | 44.1 % | 20.0 % | 337.0 % | 0.4 % | 1.1 % | 142.2 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 0.0010 ppm | 0.0001 ppm | 0.0187 ppm | 0.0568 ppm | 5.7628 ppm | 0.0317 ppm |
| Concentration per Run 1 | 0.0015 ppm | 0.0005 ppm | -0.0004 ppm | 0.0185 ppm | 0.0587 ppm | 5.7397 ppm | 0.0329 ppm |
| Concentration per Run 2 | 0.0017 ppm | 0.0006 ppm | 0.0006 ppm | 0.0193 ppm | 0.0548 ppm | 5.7841 ppm | 0.0324 ppm |
| Concentration per Run 3 | 0.0015 ppm | 0.0018 ppm | -0.0001 ppm | 0.0182 ppm | 0.0567 ppm | 5.7646 ppm | 0.0300 ppm |
| Concentration RSD | 9.0 % | 78.2 % | 791.8 % | 3.2 % | 3.5 % | 0.4 % | 4.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 35.6288 ppm | 0.4294 ppm | 0.0061 ppm | 41.5394 ppm | 0.0028 ppm | 0.0042 ppm | 0.0150 ppm |
| Concentration per Run 1 | 35.5690 ppm | 0.4298 ppm | 0.0057 ppm | 41.4579 ppm | 0.0025 ppm | 0.0035 ppm | 0.0135 ppm |
| Concentration per Run 2 | 35.7853 ppm | 0.4298 ppm | 0.0068 ppm | 41.6263 ppm | 0.0026 ppm | 0.0050 ppm | 0.0186 ppm |
| Concentration per Run 3 | 35.5322 ppm | 0.4287 ppm | 0.0059 ppm | 41.5339 ppm | 0.0032 ppm | 0.0042 ppm | 0.0130 ppm |
| Concentration RSD | 0.4 % | 0.2 % | 9.8 % | 0.2 % | 14.4 % | 18.1 % | 20.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 2.2498 ppm | 0.0003 ppm | 2.6976 ppm | 0.0017 ppm | 0.0014 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0028 ppm | 2.2435 ppm | -0.0009 ppm | 2.6876 ppm | 0.0014 ppm | 0.0021 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0019 ppm | 2.2664 ppm | -0.0005 ppm | 2.7093 ppm | 0.0022 ppm | 0.0010 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0028 ppm | 2.2394 ppm | 0.0023 ppm | 2.6958 ppm | 0.0016 ppm | 0.0012 ppm | -0.0001 ppm |
| Concentration RSD | 477.4 % | 0.6 % | 541.9 % | 0.4 % | 24.4 % | 40.3 % | 114.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.2429 ppm | 103.6196 % | 100.1693 % | 102.6825 % | 101.7653 % | 98.4650 % | 100.2441 % |
| Concentration per Run 1 | 3.2473 ppm | 103.5152 % | 100.3357 % | 102.6115 % | 102.0290 % | 98.7815 % | 100.4003 % |
| Concentration per Run 2 | 3.2572 ppm | 103.0994 % | 99.7526 % | 102.6969 % | 101.0996 % | 97.9364 % | 100.3792 % |
| Concentration per Run 3 | 3.2241 ppm | 104.2440 % | 100.4196 % | 102.7390 % | 102.1675 % | 98.6770 % | 99.9529 % |
| Concentration RSD | 0.5 % | 0.6 % | 0.4 % | 0.1 % | 0.6 % | 0.5 % | 0.3 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2513762-02 WG2039414
Analysis started at: 3/13/2025 10:26:07 AM
Rack 1
Vial 32
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0248 ppm | 0.0012 ppm | 0.2740 ppm | 0.0226 ppm | 0.0000 ppm | 248.5117 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0211 ppm | 0.0003 ppm | 0.2749 ppm | 0.0227 ppm | 0.0000 ppm | 249.2611 ppm |
| Concentration per Run 2 | -0.0007 ppm | 0.0282 ppm | 0.0035 ppm | 0.2742 ppm | 0.0228 ppm | 0.0000 ppm | 248.0092 ppm |
| Concentration per Run 3 | 0.0005 ppm | 0.0250 ppm | -0.0001 ppm | 0.2730 ppm | 0.0224 ppm | 0.0000 ppm | 248.2649 ppm |
| Concentration RSD | 860.7 % | 14.2 % | 161.9 % | 0.4 % | 0.8 % | 5,494.5 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | 0.0004 ppm | 0.0005 ppm | 0.0305 ppm | 0.0711 ppm | 10.3090 ppm | 0.0560 ppm |
| Concentration per Run 1 | -0.0008 ppm | 0.0000 ppm | 0.0005 ppm | 0.0302 ppm | 0.0722 ppm | 10.3423 ppm | 0.0550 ppm |
| Concentration per Run 2 | -0.0008 ppm | 0.0003 ppm | 0.0010 ppm | 0.0310 ppm | 0.0715 ppm | 10.2850 ppm | 0.0574 ppm |
| Concentration per Run 3 | -0.0009 ppm | 0.0008 ppm | 0.0000 ppm | 0.0305 ppm | 0.0694 ppm | 10.2997 ppm | 0.0557 ppm |
| Concentration RSD | 7.0 % | 108.4 % | 106.4 % | 1.3 % | 2.0 % | 0.3 % | 2.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 36.8145 ppm | 0.1784 ppm | 0.0096 ppm | 75.2973 ppm | 0.0015 ppm | 0.0021 ppm | 0.0284 ppm |
| Concentration per Run 1 | 36.8230 ppm | 0.1794 ppm | 0.0101 ppm | 74.9502 ppm | 0.0021 ppm | 0.0042 ppm | 0.0269 ppm |
| Concentration per Run 2 | 36.8146 ppm | 0.1785 ppm | 0.0091 ppm | 75.2071 ppm | 0.0008 ppm | -0.0001 ppm | 0.0278 ppm |
| Concentration per Run 3 | 36.8060 ppm | 0.1771 ppm | 0.0097 ppm | 75.7346 ppm | 0.0017 ppm | 0.0022 ppm | 0.0304 ppm |
| Concentration RSD | 0.0 % | 0.6 % | 5.4 % | 0.5 % | 43.9 % | 100.3 % | 6.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0007 ppm | 2.8311 ppm | 0.0000 ppm | 3.1667 ppm | 0.0022 ppm | 0.0027 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0025 ppm | 2.8282 ppm | 0.0002 ppm | 3.1623 ppm | 0.0017 ppm | 0.0018 ppm | 0.0006 ppm |
| Concentration per Run 2 | -0.0008 ppm | 2.8339 ppm | 0.0001 ppm | 3.1662 ppm | 0.0024 ppm | 0.0036 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0005 ppm | 2.8312 ppm | -0.0003 ppm | 3.1716 ppm | 0.0024 ppm | 0.0027 ppm | -0.0002 ppm |
| Concentration RSD | 228.5 % | 0.1 % | 4,116.1 % | 0.1 % | 18.0 % | 33.1 % | 231.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.3970 ppm | 104.3877 % | 99.2855 % | 102.7352 % | 102.4962 % | 98.2403 % | 99.9871 % |
| Concentration per Run 1 | 0.3971 ppm | 104.3443 % | 99.6178 % | 101.7512 % | 102.3393 % | 98.8531 % | 99.1988 % |
| Concentration per Run 2 | 0.3972 ppm | 104.1782 % | 98.6969 % | 103.0105 % | 102.2175 % | 97.1784 % | 100.1807 % |
| Concentration per Run 3 | 0.3965 ppm | 104.6405 % | 99.5417 % | 103.4440 % | 102.9318 % | 98.6895 % | 100.5819 % |
| Concentration RSD | 0.1 % | 0.2 % | 0.5 % | 0.9 % | 0.4 % | 0.9 % | 0.7 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512572-01 WG2039414
Analysis started at: 3/13/2025 10:29:35 AM
Rack 1
Vial 5
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.4295 ppm | 0.0009 ppm | 0.0499 ppm | 0.0695 ppm | 0.0000 ppm | 96.7232 ppm |
| Concentration per Run 1 | -0.0005 ppm | 0.4311 ppm | -0.0002 ppm | 0.0502 ppm | 0.0698 ppm | 0.0000 ppm | 97.2169 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.4281 ppm | 0.0013 ppm | 0.0492 ppm | 0.0692 ppm | 0.0000 ppm | 96.8732 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.4291 ppm | 0.0017 ppm | 0.0503 ppm | 0.0696 ppm | 0.0001 ppm | 96.0794 ppm |
| Concentration RSD | 147.8 % | 0.4 % | 108.7 % | 1.2 % | 0.4 % | 57.4 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0008 ppm | 0.0055 ppm | 0.0879 ppm | 1.0580 ppm | 23.3910 ppm | 0.0059 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0004 ppm | 0.0056 ppm | 0.0883 ppm | 1.0611 ppm | 23.4460 ppm | 0.0065 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0009 ppm | 0.0062 ppm | 0.0873 ppm | 1.0588 ppm | 23.3296 ppm | 0.0053 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0010 ppm | 0.0049 ppm | 0.0880 ppm | 1.0542 ppm | 23.3973 ppm | 0.0060 ppm |
| Concentration RSD | 57.7 % | 47.4 % | 12.0 % | 0.6 % | 0.3 % | 0.2 % | 10.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 16.6802 ppm | 0.0742 ppm | 0.0025 ppm | 198.6784 ppm | 0.0056 ppm | 0.0055 ppm | -0.0010 ppm |
| Concentration per Run 1 | 16.7116 ppm | 0.0748 ppm | 0.0027 ppm | 199.0501 ppm | 0.0052 ppm | 0.0074 ppm | 0.0004 ppm |
| Concentration per Run 2 | 16.7536 ppm | 0.0740 ppm | 0.0021 ppm | 198.5740 ppm | 0.0051 ppm | 0.0040 ppm | 0.0009 ppm |
| Concentration per Run 3 | 16.5754 ppm | 0.0740 ppm | 0.0026 ppm | 198.4111 ppm | 0.0063 ppm | 0.0051 ppm | -0.0044 ppm |
| Concentration RSD | 0.6 % | 0.6 % | 14.2 % | 0.2 % | 12.1 % | 31.3 % | 282.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 3.2931 ppm | 0.0004 ppm | 0.3589 ppm | 0.0115 ppm | 0.0030 ppm | 0.0009 ppm |
| Concentration per Run 1 | 0.0016 ppm | 3.3209 ppm | 0.0003 ppm | 0.3610 ppm | 0.0122 ppm | 0.0059 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0003 ppm | 3.2960 ppm | 0.0009 ppm | 0.3580 ppm | 0.0117 ppm | 0.0012 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0009 ppm | 3.2624 ppm | 0.0002 ppm | 0.3576 ppm | 0.0107 ppm | 0.0020 ppm | 0.0009 ppm |
| Concentration RSD | 64.5 % | 0.9 % | 79.7 % | 0.5 % | 6.8 % | 82.7 % | 29.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1208 ppm | 104.3684 % | 101.2133 % | 103.1426 % | 104.4293 % | 100.6628 % | 101.1433 % |
| Concentration per Run 1 | 0.1209 ppm | 104.0620 % | 100.6271 % | 102.3492 % | 104.6588 % | 100.1463 % | 100.5611 % |
| Concentration per Run 2 | 0.1213 ppm | 104.8380 % | 101.0823 % | 104.1148 % | 104.6732 % | 100.6477 % | 101.7044 % |
| Concentration per Run 3 | 0.1201 ppm | 104.2051 % | 101.9305 % | 102.9639 % | 103.9559 % | 101.1945 % | 101.1645 % |
| Concentration RSD | 0.5 % | 0.4 % | 0.7 % | 0.9 % | 0.4 % | 0.5 % | 0.6 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: WG2039414-3 WG2039414
Analysis started at: 3/13/2025 10:33:01 AM
Rack 1
Vial 6
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0508 ppm | 2.4254 ppm | 0.1202 ppm | 1.0490 ppm | 2.0636 ppm | 0.0507 ppm | 106.7200 ppm |
| Concentration per Run 1 | 0.0508 ppm | 2.4373 ppm | 0.1213 ppm | 1.0419 ppm | 2.0632 ppm | 0.0507 ppm | 106.5078 ppm |
| Concentration per Run 2 | 0.0510 ppm | 2.4236 ppm | 0.1199 ppm | 1.0543 ppm | 2.0624 ppm | 0.0509 ppm | 107.0811 ppm |
| Concentration per Run 3 | 0.0505 ppm | 2.4152 ppm | 0.1193 ppm | 1.0507 ppm | 2.0654 ppm | 0.0505 ppm | 106.5710 ppm |
| Concentration RSD | 0.5 % | 0.5 % | 0.8 % | 0.6 % | 0.1 % | 0.3 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0501 ppm | 0.4924 ppm | 0.1964 ppm | 0.3497 ppm | 1.9473 ppm | 34.3017 ppm | 0.0070 ppm |
| Concentration per Run 1 | 0.0495 ppm | 0.4892 ppm | 0.1969 ppm | 0.3473 ppm | 1.9381 ppm | 34.3201 ppm | 0.0081 ppm |
| Concentration per Run 2 | 0.0505 ppm | 0.4942 ppm | 0.1970 ppm | 0.3525 ppm | 1.9424 ppm | 34.3282 ppm | 0.0064 ppm |
| Concentration per Run 3 | 0.0503 ppm | 0.4940 ppm | 0.1954 ppm | 0.3495 ppm | 1.9614 ppm | 34.2568 ppm | 0.0064 ppm |
| Concentration RSD | 1.1 % | 0.6 % | 0.5 % | 0.7 % | 0.6 % | 0.1 % | 13.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 26.7017 ppm | 0.5762 ppm | 0.9779 ppm | 209.6176 ppm | 0.4878 ppm | 0.5520 ppm | 0.4528 ppm |
| Concentration per Run 1 | 26.7159 ppm | 0.5765 ppm | 0.9702 ppm | 209.8086 ppm | 0.4868 ppm | 0.5555 ppm | 0.4473 ppm |
| Concentration per Run 2 | 26.7526 ppm | 0.5777 ppm | 0.9850 ppm | 210.6673 ppm | 0.4885 ppm | 0.5504 ppm | 0.4577 ppm |
| Concentration per Run 3 | 26.6365 ppm | 0.5744 ppm | 0.9784 ppm | 208.3769 ppm | 0.4883 ppm | 0.5501 ppm | 0.4535 ppm |
| Concentration RSD | 0.2 % | 0.3 % | 0.8 % | 0.6 % | 0.2 % | 0.5 % | 1.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1232 ppm | 4.4213 ppm | 0.7352 ppm | 1.3832 ppm | 0.9668 ppm | 0.1211 ppm | 0.5054 ppm |
| Concentration per Run 1 | 0.1242 ppm | 4.4020 ppm | 0.7339 ppm | 1.3847 ppm | 0.9694 ppm | 0.1220 ppm | 0.5041 ppm |
| Concentration per Run 2 | 0.1216 ppm | 4.4368 ppm | 0.7356 ppm | 1.3817 ppm | 0.9671 ppm | 0.1204 ppm | 0.5076 ppm |
| Concentration per Run 3 | 0.1238 ppm | 4.4252 ppm | 0.7360 ppm | 1.3831 ppm | 0.9640 ppm | 0.1209 ppm | 0.5047 ppm |
| Concentration RSD | 1.1 % | 0.4 % | 0.2 % | 0.1 % | 0.3 % | 0.7 % | 0.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.6065 ppm | 104.7183 % | 101.4536 % | 101.7856 % | 103.4596 % | 99.9921 % | 99.3336 % |
| Concentration per Run 1 | 0.6053 ppm | 105.1187 % | 101.5299 % | 100.9364 % | 103.6361 % | 100.0771 % | 98.6883 % |
| Concentration per Run 2 | 0.6081 ppm | 104.1541 % | 101.0951 % | 101.9274 % | 102.9732 % | 99.9508 % | 99.3733 % |
| Concentration per Run 3 | 0.6062 ppm | 104.8821 % | 101.7357 % | 102.4931 % | 103.7694 % | 99.9483 % | 99.9393 % |
| Concentration RSD | 0.2 % | 0.5 % | 0.3 % | 0.8 % | 0.4 % | 0.1 % | 0.6 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: WG2039414-4 WG2039414
Analysis started at: 3/13/2025 10:36:28 AM
Rack 1
Vial 7
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.4142 ppm | 0.0005 ppm | 0.0510 ppm | 0.0707 ppm | 0.0000 ppm | 97.9664 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.4090 ppm | -0.0003 ppm | 0.0516 ppm | 0.0709 ppm | 0.0000 ppm | 97.5675 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.4223 ppm | 0.0013 ppm | 0.0495 ppm | 0.0709 ppm | 0.0000 ppm | 98.0992 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.4113 ppm | 0.0004 ppm | 0.0520 ppm | 0.0703 ppm | 0.0000 ppm | 98.2326 ppm |
| Concentration RSD | 187.7 % | 1.7 % | 162.3 % | 2.6 % | 0.4 % | 37.3 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0002 ppm | 0.0027 ppm | 0.0851 ppm | 1.0254 ppm | 23.5543 ppm | 0.0063 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0005 ppm | 0.0028 ppm | 0.0846 ppm | 1.0273 ppm | 23.5973 ppm | 0.0066 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0002 ppm | 0.0027 ppm | 0.0857 ppm | 1.0220 ppm | 23.7161 ppm | 0.0058 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0004 ppm | 0.0028 ppm | 0.0852 ppm | 1.0270 ppm | 23.3496 ppm | 0.0063 ppm |
| Concentration RSD | 51.5 % | 160.7 % | 2.7 % | 0.6 % | 0.3 % | 0.8 % | 6.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 16.9962 ppm | 0.0747 ppm | 0.0078 ppm | 200.8986 ppm | 0.0038 ppm | 0.0045 ppm | 0.0025 ppm |
| Concentration per Run 1 | 17.0332 ppm | 0.0743 ppm | 0.0079 ppm | 201.7683 ppm | 0.0027 ppm | 0.0064 ppm | 0.0000 ppm |
| Concentration per Run 2 | 17.0183 ppm | 0.0751 ppm | 0.0087 ppm | 201.6237 ppm | 0.0035 ppm | 0.0036 ppm | 0.0036 ppm |
| Concentration per Run 3 | 16.9370 ppm | 0.0747 ppm | 0.0069 ppm | 199.3038 ppm | 0.0053 ppm | 0.0035 ppm | 0.0039 ppm |
| Concentration RSD | 0.3 % | 0.5 % | 11.8 % | 0.7 % | 35.2 % | 36.9 % | 86.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0030 ppm | 3.3261 ppm | 0.0022 ppm | 0.3628 ppm | 0.0118 ppm | 0.0018 ppm | 0.0009 ppm |
| Concentration per Run 1 | 0.0025 ppm | 3.3317 ppm | 0.0031 ppm | 0.3623 ppm | 0.0126 ppm | -0.0002 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0040 ppm | 3.3280 ppm | 0.0011 ppm | 0.3655 ppm | 0.0116 ppm | 0.0038 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0024 ppm | 3.3185 ppm | 0.0022 ppm | 0.3605 ppm | 0.0111 ppm | 0.0017 ppm | 0.0009 ppm |
| Concentration RSD | 31.0 % | 0.2 % | 47.8 % | 0.7 % | 6.3 % | 115.0 % | 17.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1227 ppm | 104.5465 % | 100.8752 % | 103.2056 % | 103.9394 % | 100.1967 % | 101.1795 % |
| Concentration per Run 1 | 0.1231 ppm | 104.9338 % | 100.8487 % | 103.5536 % | 104.1235 % | 99.9974 % | 101.5713 % |
| Concentration per Run 2 | 0.1222 ppm | 104.5320 % | 100.7905 % | 103.0953 % | 103.9129 % | 100.1339 % | 100.8739 % |
| Concentration per Run 3 | 0.1227 ppm | 104.1737 % | 100.9865 % | 102.9678 % | 103.7819 % | 100.4588 % | 101.0932 % |
| Concentration RSD | 0.4 % | 0.4 % | 0.1 % | 0.3 % | 0.2 % | 0.2 % | 0.4 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: WG2039414-5 WG2039414
Analysis started at: 3/13/2025 10:39:55 AM
Rack 1
Vial 8
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0285 ppm | 2.3876 ppm | 0.1200 ppm | 1.0084 ppm | 2.0077 ppm | 0.0498 ppm | 103.0148 ppm |
| Concentration per Run 1 | 0.0295 ppm | 2.4118 ppm | 0.1192 ppm | 1.0045 ppm | 2.0041 ppm | 0.0500 ppm | 103.2514 ppm |
| Concentration per Run 2 | 0.0297 ppm | 2.3788 ppm | 0.1207 ppm | 1.0085 ppm | 2.0084 ppm | 0.0497 ppm | 103.0057 ppm |
| Concentration per Run 3 | 0.0262 ppm | 2.3721 ppm | 0.1201 ppm | 1.0122 ppm | 2.0107 ppm | 0.0497 ppm | 102.7874 ppm |
| Concentration RSD | 6.9 % | 0.9 % | 0.6 % | 0.4 % | 0.2 % | 0.3 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0493 ppm | 0.4839 ppm | 0.1964 ppm | 0.3466 ppm | 2.0436 ppm | 33.0372 ppm | 0.0057 ppm |
| Concentration per Run 1 | 0.0493 ppm | 0.4835 ppm | 0.1972 ppm | 0.3477 ppm | 2.0617 ppm | 32.8833 ppm | 0.0057 ppm |
| Concentration per Run 2 | 0.0492 ppm | 0.4842 ppm | 0.1970 ppm | 0.3463 ppm | 2.0313 ppm | 33.1221 ppm | 0.0062 ppm |
| Concentration per Run 3 | 0.0493 ppm | 0.4842 ppm | 0.1949 ppm | 0.3457 ppm | 2.0378 ppm | 33.1061 ppm | 0.0053 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 0.6 % | 0.3 % | 0.8 % | 0.4 % | 8.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 25.6787 ppm | 0.5630 ppm | 0.9548 ppm | 200.8092 ppm | 0.4796 ppm | 0.5401 ppm | 0.3597 ppm |
| Concentration per Run 1 | 25.7551 ppm | 0.5630 ppm | 0.9480 ppm | 200.1651 ppm | 0.4781 ppm | 0.5369 ppm | 0.3497 ppm |
| Concentration per Run 2 | 25.6167 ppm | 0.5631 ppm | 0.9558 ppm | 200.3271 ppm | 0.4817 ppm | 0.5404 ppm | 0.3619 ppm |
| Concentration per Run 3 | 25.6643 ppm | 0.5631 ppm | 0.9607 ppm | 201.9354 ppm | 0.4790 ppm | 0.5428 ppm | 0.3675 ppm |
| Concentration RSD | 0.3 % | 0.0 % | 0.7 % | 0.5 % | 0.4 % | 0.5 % | 2.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1257 ppm | 3.9494 ppm | 0.9713 ppm | 1.3354 ppm | 0.9964 ppm | 0.1246 ppm | 0.4937 ppm |
| Concentration per Run 1 | 0.1250 ppm | 3.9549 ppm | 0.9629 ppm | 1.3290 ppm | 0.9965 ppm | 0.1240 ppm | 0.4948 ppm |
| Concentration per Run 2 | 0.1268 ppm | 3.9418 ppm | 0.9760 ppm | 1.3363 ppm | 0.9979 ppm | 0.1235 ppm | 0.4930 ppm |
| Concentration per Run 3 | 0.1254 ppm | 3.9516 ppm | 0.9751 ppm | 1.3409 ppm | 0.9949 ppm | 0.1263 ppm | 0.4934 ppm |
| Concentration RSD | 0.7 % | 0.2 % | 0.7 % | 0.4 % | 0.1 % | 1.2 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5932 ppm | 104.5717 % | 101.5345 % | 102.7934 % | 103.2034 % | 100.0421 % | 99.8050 % |
| Concentration per Run 1 | 0.5925 ppm | 104.4997 % | 101.0726 % | 103.7679 % | 103.2640 % | 99.8357 % | 100.2567 % |
| Concentration per Run 2 | 0.5924 ppm | 104.7503 % | 101.9591 % | 102.3633 % | 103.3163 % | 100.5321 % | 99.6977 % |
| Concentration per Run 3 | 0.5946 ppm | 104.4652 % | 101.5717 % | 102.2489 % | 103.0300 % | 99.7587 % | 99.4606 % |
| Concentration RSD | 0.2 % | 0.1 % | 0.4 % | 0.8 % | 0.1 % | 0.4 % | 0.4 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: WG2039414-6D5 WG2039414
Analysis started at: 3/13/2025 10:43:23 AM
Rack 1
Vial 9
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0799 ppm | 0.0007 ppm | 0.0104 ppm | 0.0134 ppm | 0.0000 ppm | 19.1279 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0799 ppm | 0.0021 ppm | 0.0104 ppm | 0.0136 ppm | 0.0000 ppm | 19.1023 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0847 ppm | -0.0003 ppm | 0.0099 ppm | 0.0133 ppm | 0.0000 ppm | 19.1358 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0751 ppm | 0.0002 ppm | 0.0109 ppm | 0.0134 ppm | 0.0000 ppm | 19.1456 ppm |
| Concentration RSD | 3,776.7 % | 6.0 % | 186.7 % | 4.8 % | 1.1 % | 30.2 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0001 ppm | 0.0012 ppm | 0.0159 ppm | 0.2108 ppm | 4.4262 ppm | 0.0018 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0001 ppm | 0.0017 ppm | 0.0161 ppm | 0.2077 ppm | 4.4494 ppm | 0.0028 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0001 ppm | 0.0011 ppm | 0.0159 ppm | 0.2127 ppm | 4.4004 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0004 ppm | 0.0008 ppm | 0.0157 ppm | 0.2119 ppm | 4.4288 ppm | 0.0014 ppm |
| Concentration RSD | 144.3 % | 216.0 % | 39.0 % | 1.3 % | 1.3 % | 0.6 % | 53.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.2902 ppm | 0.0148 ppm | 0.0059 ppm | 39.0226 ppm | 0.0011 ppm | 0.0023 ppm | 0.0166 ppm |
| Concentration per Run 1 | 3.3110 ppm | 0.0149 ppm | 0.0061 ppm | 39.2075 ppm | 0.0019 ppm | 0.0029 ppm | 0.0172 ppm |
| Concentration per Run 2 | 3.2897 ppm | 0.0147 ppm | 0.0055 ppm | 38.7863 ppm | 0.0014 ppm | 0.0015 ppm | 0.0163 ppm |
| Concentration per Run 3 | 3.2700 ppm | 0.0146 ppm | 0.0061 ppm | 39.0739 ppm | 0.0000 ppm | 0.0023 ppm | 0.0163 ppm |
| Concentration RSD | 0.6 % | 1.1 % | 5.6 % | 0.6 % | 89.1 % | 31.0 % | 3.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0019 ppm | 0.6157 ppm | 0.0054 ppm | 0.0688 ppm | 0.0025 ppm | 0.0021 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0023 ppm | 0.6167 ppm | 0.0048 ppm | 0.0692 ppm | 0.0025 ppm | 0.0014 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.6154 ppm | 0.0072 ppm | 0.0686 ppm | 0.0025 ppm | 0.0028 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0031 ppm | 0.6149 ppm | 0.0041 ppm | 0.0687 ppm | 0.0023 ppm | 0.0023 ppm | 0.0001 ppm |
| Concentration RSD | 75.3 % | 0.2 % | 30.9 % | 0.4 % | 4.2 % | 32.8 % | 52.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0247 ppm | 106.2296 % | 103.9970 % | 107.0393 % | 105.1706 % | 103.4654 % | 104.3756 % |
| Concentration per Run 1 | 0.0248 ppm | 105.5743 % | 104.0086 % | 107.4125 % | 104.7022 % | 103.3052 % | 104.6066 % |
| Concentration per Run 2 | 0.0246 ppm | 106.7547 % | 104.2528 % | 107.5288 % | 105.7974 % | 103.6980 % | 104.4701 % |
| Concentration per Run 3 | 0.0249 ppm | 106.3598 % | 103.7297 % | 106.1764 % | 105.0123 % | 103.3931 % | 104.0499 % |
| Concentration RSD | 0.6 % | 0.6 % | 0.3 % | 0.7 % | 0.5 % | 0.2 % | 0.3 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: CCV
Analysis started at: 3/13/2025 10:46:51 AM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4688 ppm | 0.4764 ppm | 0.4835 ppm | 0.4763 ppm | 0.4870 ppm | 0.5014 ppm | 0.5036 ppm |
| Concentration per Run 1 | 0.4695 ppm | 0.4777 ppm | 0.4809 ppm | 0.4759 ppm | 0.4886 ppm | 0.5030 ppm | 0.5060 ppm |
| Concentration per Run 2 | 0.4693 ppm | 0.4761 ppm | 0.4863 ppm | 0.4739 ppm | 0.4862 ppm | 0.5014 ppm | 0.5034 ppm |
| Concentration per Run 3 | 0.4676 ppm | 0.4755 ppm | 0.4832 ppm | 0.4789 ppm | 0.4863 ppm | 0.4999 ppm | 0.5014 ppm |
| Recovery Percentage 1 | 93.760 % | 95.284 % | 96.695 % | 95.251 % | 97.404 % | 100.280 % | 100.715 % |
| Concentration RSD | 0.2 % | 0.2 % | 0.6 % | 0.5 % | 0.3 % | 0.3 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4970 ppm | 0.5087 ppm | 0.4961 ppm | 0.4706 ppm | 0.5157 ppm | 5.0603 ppm | 0.4890 ppm |
| Concentration per Run 1 | 0.4964 ppm | 0.5072 ppm | 0.4977 ppm | 0.4695 ppm | 0.5207 ppm | 5.0696 ppm | 0.4918 ppm |
| Concentration per Run 2 | 0.4980 ppm | 0.5107 ppm | 0.4965 ppm | 0.4729 ppm | 0.5148 ppm | 5.0614 ppm | 0.4884 ppm |
| Concentration per Run 3 | 0.4965 ppm | 0.5083 ppm | 0.4942 ppm | 0.4693 ppm | 0.5115 ppm | 5.0500 ppm | 0.4868 ppm |
| Recovery Percentage 1 | 99.393 % | 101.749 % | 99.225 % | 94.119 % | 103.132 % | 101.206 % | 97.802 % |
| Concentration RSD | 0.2 % | 0.3 % | 0.4 % | 0.4 % | 0.9 % | 0.2 % | 0.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4905 ppm | 0.4971 ppm | 0.4936 ppm | 9.9173 ppm | 0.5035 ppm | 0.5027 ppm | 0.4979 ppm |
| Concentration per Run 1 | 0.4930 ppm | 0.4965 ppm | 0.4932 ppm | 9.9820 ppm | 0.5062 ppm | 0.4987 ppm | 0.4994 ppm |
| Concentration per Run 2 | 0.4873 ppm | 0.4983 ppm | 0.4959 ppm | 9.9340 ppm | 0.5029 ppm | 0.5044 ppm | 0.4975 ppm |
| Concentration per Run 3 | 0.4911 ppm | 0.4965 ppm | 0.4918 ppm | 9.8359 ppm | 0.5013 ppm | 0.5051 ppm | 0.4967 ppm |
| Recovery Percentage 1 | 98.095 % | 99.418 % | 98.720 % | 99.173 % | 100.697 % | 100.544 % | 99.572 % |
| Concentration RSD | 0.6 % | 0.2 % | 0.4 % | 0.8 % | 0.5 % | 0.7 % | 0.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4877 ppm | 5.3497 ppm | 0.5141 ppm | 0.5033 ppm | 0.4964 ppm | 0.4913 ppm | 0.4890 ppm |
| Concentration per Run 1 | 0.4827 ppm | 5.3520 ppm | 0.5190 ppm | 0.5038 ppm | 0.4961 ppm | 0.4887 ppm | 0.4883 ppm |
| Concentration per Run 2 | 0.4915 ppm | 5.3445 ppm | 0.5095 ppm | 0.5024 ppm | 0.4958 ppm | 0.4940 ppm | 0.4890 ppm |
| Concentration per Run 3 | 0.4890 ppm | 5.3527 ppm | 0.5138 ppm | 0.5036 ppm | 0.4972 ppm | 0.4912 ppm | 0.4897 ppm |
| Recovery Percentage 1 | 97.543 % | 101.899 % | 102.828 % | 100.651 % | 99.279 % | 98.261 % | 97.806 % |
| Concentration RSD | 0.9 % | 0.1 % | 0.9 % | 0.2 % | 0.1 % | 0.5 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5007 ppm | 105.8075 % | 104.9419 % | 106.0099 % | 103.9777 % | 103.9032 % | 103.9246 % |
| Concentration per Run 1 | 0.5052 ppm | 105.4965 % | 104.0933 % | 106.2642 % | 103.7738 % | 103.4221 % | 104.0327 % |
| Concentration per Run 2 | 0.4967 ppm | 105.9616 % | 104.9231 % | 105.3320 % | 104.3644 % | 103.9193 % | 103.7926 % |
| Concentration per Run 3 | 0.5002 ppm | 105.9643 % | 105.8093 % | 106.4334 % | 103.7949 % | 104.3682 % | 103.9484 % |
| Recovery Percentage 1 | 100.141 % | | | | | | |
| Concentration RSD | 0.9 % | 0.3 % | 0.8 % | 0.6 % | 0.3 % | 0.5 % | 0.1 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: CCB
Analysis started at: 3/13/2025 10:50:18 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | -0.0058 ppm | -0.0001 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm | 0.0010 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0022 ppm | 0.0015 ppm | -0.0004 ppm | -0.0002 ppm | 0.0000 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0005 ppm | -0.0083 ppm | -0.0010 ppm | 0.0010 ppm | 0.0000 ppm | 0.0000 ppm | -0.0011 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0114 ppm | -0.0008 ppm | 0.0003 ppm | 0.0000 ppm | 0.0000 ppm | 0.0031 ppm |
| Recovery Percentage 1 | 4.949 % | -5.849 % | -1.404 % | 1.053 % | -0.461 % | 0.260 % | 0.961 % |
| Concentration RSD | 117.4 % | 121.4 % | 1,996.1 % | 217.8 % | 241.4 % | 214.3 % | 221.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0002 ppm | 0.0000 ppm | -0.0002 ppm | 0.0002 ppm | 0.0164 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0002 ppm | 0.0000 ppm | 0.0000 ppm | -0.0005 ppm | 0.0154 ppm | -0.0006 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0004 ppm | 0.0000 ppm | -0.0002 ppm | 0.0008 ppm | 0.0264 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0002 ppm | 0.0001 ppm | -0.0005 ppm | 0.0002 ppm | 0.0073 ppm | 0.0003 ppm |
| Recovery Percentage 1 | -0.177 % | -0.774 % | 0.092 % | -2.023 % | 0.319 % | 0.655 % | 1.520 % |
| Concentration RSD | 610.3 % | 194.7 % | 728.6 % | 132.1 % | 389.7 % | 58.5 % | 761.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0000 ppm | 0.0021 ppm | -0.0017 ppm | -0.0004 ppm | 0.0026 ppm | 0.0026 ppm |
| Concentration per Run 1 | 0.0016 ppm | -0.0001 ppm | 0.0024 ppm | -0.0028 ppm | 0.0011 ppm | 0.0028 ppm | 0.0022 ppm |
| Concentration per Run 2 | -0.0005 ppm | -0.0002 ppm | 0.0019 ppm | -0.0047 ppm | -0.0002 ppm | 0.0018 ppm | 0.0056 ppm |
| Concentration per Run 3 | -0.0020 ppm | 0.0001 ppm | 0.0020 ppm | 0.0023 ppm | -0.0021 ppm | 0.0032 ppm | 0.0001 ppm |
| Recovery Percentage 1 | -0.323 % | -0.364 % | 4.176 % | -0.087 % | -1.552 % | 25.663 % | 5.261 % |
| Concentration RSD | 566.3 % | 455.7 % | 12.5 % | 208.9 % | 403.8 % | 28.4 % | 106.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | -0.0081 ppm | 0.0009 ppm | 0.0000 ppm | 0.0000 ppm | 0.0014 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0029 ppm | -0.0085 ppm | 0.0034 ppm | 0.0001 ppm | -0.0002 ppm | 0.0008 ppm | -0.0003 ppm |
| Concentration per Run 2 | -0.0007 ppm | -0.0088 ppm | -0.0009 ppm | -0.0001 ppm | -0.0003 ppm | -0.0005 ppm | -0.0002 ppm |
| Concentration per Run 3 | -0.0016 ppm | -0.0070 ppm | 0.0001 ppm | -0.0001 ppm | 0.0004 ppm | 0.0038 ppm | -0.0001 ppm |
| Recovery Percentage 1 | 1.914 % | -1.620 % | 1.744 % | -0.326 % | -0.116 % | 6.869 % | -1.898 % |
| Concentration RSD | 1,229.7 % | 11.8 % | 260.4 % | 431.4 % | 3,403.4 % | 160.3 % | 61.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 103.5780 % | 103.0573 % | 104.1492 % | 104.7287 % | 103.9008 % | 104.6458 % |
| Concentration per Run 1 | 0.0002 ppm | 105.1235 % | 103.3903 % | 103.9848 % | 106.4924 % | 103.6571 % | 104.4863 % |
| Concentration per Run 2 | -0.0001 ppm | 103.4273 % | 103.1073 % | 104.0620 % | 104.4433 % | 103.9920 % | 105.1297 % |
| Concentration per Run 3 | 0.0003 ppm | 102.1831 % | 102.6743 % | 104.4007 % | 103.2503 % | 104.0533 % | 104.3213 % |
| Recovery Percentage 1 | 2.578 % | | | | | | |
| Concentration RSD | 144.3 % | 1.4 % | 0.3 % | 0.2 % | 1.6 % | 0.2 % | 0.4 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: WG2039767-1 WG2039767
Analysis started at: 3/13/2025 11:19:02 AM
Rack 1
Vial 33
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0028 ppm | -0.0008 ppm | -0.0006 ppm | -0.0001 ppm | 0.0000 ppm | 0.0325 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0020 ppm | -0.0019 ppm | -0.0016 ppm | 0.0000 ppm | 0.0000 ppm | 0.0332 ppm |
| Concentration per Run 2 | 0.0005 ppm | -0.0008 ppm | -0.0003 ppm | 0.0000 ppm | -0.0001 ppm | 0.0000 ppm | 0.0316 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0071 ppm | -0.0001 ppm | -0.0001 ppm | -0.0001 ppm | 0.0000 ppm | 0.0329 ppm |
| Recovery Percentage 1 | 2.890 % | 2.776 % | -15.738 % | -1.858 % | -0.681 % | -0.397 % | 32.540 % |
| Concentration RSD | 207.6 % | 142.6 % | 127.1 % | 154.9 % | 122.9 % | 65.7 % | 2.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0005 ppm | 0.0001 ppm | -0.0003 ppm | 0.0024 ppm | 0.0041 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0001 ppm | -0.0008 ppm | 0.0002 ppm | 0.0012 ppm | 0.0184 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0012 ppm | 0.0003 ppm | -0.0006 ppm | 0.0045 ppm | 0.0034 ppm | -0.0012 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0002 ppm | 0.0009 ppm | -0.0004 ppm | 0.0014 ppm | -0.0096 ppm | 0.0002 ppm |
| Recovery Percentage 1 | -0.847 % | -2.620 % | 1.188 % | -2.714 % | 4.712 % | 0.163 % | -4.791 % |
| Concentration RSD | 156.6 % | 111.2 % | 744.0 % | 150.9 % | 77.9 % | 344.5 % | 342.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0044 ppm | 0.0001 ppm | -0.0006 ppm | -0.0036 ppm | 0.0016 ppm | 0.0010 ppm | 0.0014 ppm |
| Concentration per Run 1 | 0.0045 ppm | 0.0001 ppm | -0.0005 ppm | -0.0017 ppm | 0.0006 ppm | -0.0003 ppm | 0.0012 ppm |
| Concentration per Run 2 | 0.0036 ppm | 0.0002 ppm | -0.0003 ppm | -0.0046 ppm | 0.0014 ppm | 0.0023 ppm | 0.0049 ppm |
| Concentration per Run 3 | 0.0051 ppm | 0.0001 ppm | -0.0010 ppm | -0.0043 ppm | 0.0029 ppm | 0.0011 ppm | -0.0020 ppm |
| Recovery Percentage 1 | 4.374 % | 1.388 % | -1.196 % | -0.178 % | 6.532 % | 10.112 % | 2.764 % |
| Concentration RSD | 17.2 % | 65.3 % | 56.2 % | 44.5 % | 70.0 % | 127.8 % | 248.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0020 ppm | -0.0091 ppm | -0.0005 ppm | 0.0001 ppm | -0.0001 ppm | 0.0011 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0047 ppm | -0.0087 ppm | -0.0008 ppm | 0.0001 ppm | 0.0000 ppm | 0.0012 ppm | -0.0004 ppm |
| Concentration per Run 2 | -0.0024 ppm | -0.0087 ppm | -0.0006 ppm | 0.0000 ppm | 0.0000 ppm | 0.0033 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0012 ppm | -0.0100 ppm | 0.0000 ppm | 0.0000 ppm | -0.0004 ppm | -0.0013 ppm | 0.0001 ppm |
| Recovery Percentage 1 | -19.965 % | -1.827 % | -0.974 % | 0.612 % | -1.418 % | 5.507 % | -1.250 % |
| Concentration RSD | 147.9 % | 8.3 % | 85.0 % | 115.4 % | 175.1 % | 210.7 % | 231.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0010 ppm | 105.6533 % | 105.9301 % | 106.4687 % | 106.6332 % | 106.0555 % | 106.0266 % |
| Concentration per Run 1 | 0.0010 ppm | 105.4055 % | 105.7782 % | 106.5551 % | 106.7309 % | 106.0294 % | 106.3744 % |
| Concentration per Run 2 | 0.0008 ppm | 105.5779 % | 105.6240 % | 106.3786 % | 106.1590 % | 105.6681 % | 105.7359 % |
| Concentration per Run 3 | 0.0011 ppm | 105.9765 % | 106.3881 % | 106.4725 % | 107.0097 % | 106.4691 % | 105.9696 % |
| Recovery Percentage 1 | 19.600 % | | | | | | |
| Concentration RSD | 15.1 % | 0.3 % | 0.4 % | 0.1 % | 0.4 % | 0.4 % | 0.3 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: WG2039729-1 WG2039729
Analysis started at: 3/13/2025 11:22:45 AM
Rack 1
Vial 38
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0052 ppm | 0.0003 ppm | 0.0038 ppm | 0.0001 ppm | 0.0000 ppm | 0.0538 ppm |
| Concentration per Run 1 | 0.0006 ppm | -0.0009 ppm | -0.0022 ppm | 0.0033 ppm | 0.0002 ppm | 0.0000 ppm | 0.0520 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0134 ppm | 0.0013 ppm | 0.0051 ppm | 0.0001 ppm | 0.0000 ppm | 0.0528 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0030 ppm | 0.0017 ppm | 0.0031 ppm | 0.0001 ppm | 0.0000 ppm | 0.0567 ppm |
| Recovery Percentage 1 | 3.223 % | 5.157 % | 5.341 % | 12.718 % | 1.465 % | 0.228 % | 53.829 % |
| Concentration RSD | 159.3 % | 143.6 % | 794.5 % | 29.4 % | 57.3 % | 276.2 % | 4.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0002 ppm | -0.0001 ppm | 0.0001 ppm | 0.0022 ppm | 0.0696 ppm | 0.0004 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0003 ppm | 0.0006 ppm | 0.0002 ppm | 0.0023 ppm | 0.0696 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0006 ppm | -0.0001 ppm | 0.0004 ppm | 0.0015 ppm | 0.0545 ppm | -0.0006 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0003 ppm | -0.0008 ppm | -0.0003 ppm | 0.0027 ppm | 0.0848 ppm | 0.0008 ppm |
| Recovery Percentage 1 | -1.296 % | -0.996 % | -0.924 % | 1.317 % | 4.304 % | 2.785 % | 8.545 % |
| Concentration RSD | 57.7 % | 250.4 % | 774.6 % | 280.4 % | 28.7 % | 21.8 % | 202.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0130 ppm | 0.0002 ppm | -0.0003 ppm | 136.6332 ppm | 0.0004 ppm | 0.0015 ppm | 0.0021 ppm |
| Concentration per Run 1 | 0.0112 ppm | 0.0000 ppm | -0.0003 ppm | 136.6137 ppm | 0.0002 ppm | 0.0038 ppm | 0.0029 ppm |
| Concentration per Run 2 | 0.0135 ppm | 0.0003 ppm | -0.0003 ppm | 136.6136 ppm | 0.0013 ppm | -0.0002 ppm | 0.0027 ppm |
| Concentration per Run 3 | 0.0143 ppm | 0.0002 ppm | -0.0004 ppm | 136.6723 ppm | -0.0004 ppm | 0.0008 ppm | 0.0008 ppm |
| Recovery Percentage 1 | 12.977 % | 1.838 % | -0.698 % | 6,831.660 % | 1.532 % | 14.822 % | 4.278 % |
| Concentration RSD | 12.5 % | 72.8 % | 12.5 % | 0.0 % | 224.7 % | 141.7 % | 52.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 0.0065 ppm | 0.0002 ppm | 0.0002 ppm | -0.0002 ppm | -0.0024 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0011 ppm | 0.0064 ppm | 0.0004 ppm | 0.0002 ppm | -0.0006 ppm | -0.0016 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0063 ppm | 0.0001 ppm | 0.0002 ppm | 0.0004 ppm | -0.0020 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0017 ppm | 0.0068 ppm | 0.0002 ppm | 0.0003 ppm | -0.0003 ppm | -0.0035 ppm | 0.0004 ppm |
| Recovery Percentage 1 | 8.613 % | 1.301 % | 0.444 % | 2.230 % | -1.672 % | -11.822 % | 2.306 % |
| Concentration RSD | 112.2 % | 3.9 % | 68.6 % | 22.3 % | 311.3 % | 43.6 % | 80.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0024 ppm | 105.1162 % | 103.0453 % | 104.8043 % | 103.3404 % | 101.5015 % | 101.9120 % |
| Concentration per Run 1 | 0.0024 ppm | 104.9307 % | 102.6328 % | 105.2640 % | 102.8345 % | 101.2703 % | 102.2094 % |
| Concentration per Run 2 | 0.0024 ppm | 105.2079 % | 103.1161 % | 104.5038 % | 103.5018 % | 101.3217 % | 101.7866 % |
| Concentration per Run 3 | 0.0025 ppm | 105.2101 % | 103.3869 % | 104.6452 % | 103.6850 % | 101.9125 % | 101.7399 % |
| Recovery Percentage 1 | 48.734 % | | | | | | |
| Concentration RSD | 4.1 % | 0.2 % | 0.4 % | 0.4 % | 0.4 % | 0.4 % | 0.3 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: WG2039767-2 WG2039767
Analysis started at: 3/13/2025 11:26:11 AM
Rack 1
Vial 34
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0499 ppm | 2.0132 ppm | 0.1120 ppm | 0.9639 ppm | 1.9856 ppm | 0.0509 ppm | 10.3116 ppm |
| Concentration per Run 1 | 0.0494 ppm | 2.0164 ppm | 0.1135 ppm | 0.9585 ppm | 1.9779 ppm | 0.0508 ppm | 10.3096 ppm |
| Concentration per Run 2 | 0.0503 ppm | 2.0143 ppm | 0.1109 ppm | 0.9681 ppm | 1.9887 ppm | 0.0509 ppm | 10.3064 ppm |
| Concentration per Run 3 | 0.0501 ppm | 2.0091 ppm | 0.1115 ppm | 0.9651 ppm | 1.9901 ppm | 0.0510 ppm | 10.3189 ppm |
| Concentration RSD | 0.9 % | 0.2 % | 1.2 % | 0.5 % | 0.3 % | 0.2 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0533 ppm | 0.5078 ppm | 0.2007 ppm | 0.2463 ppm | 1.0484 ppm | 10.3819 ppm | -0.0008 ppm |
| Concentration per Run 1 | 0.0531 ppm | 0.5089 ppm | 0.2001 ppm | 0.2484 ppm | 1.0442 ppm | 10.3784 ppm | -0.0010 ppm |
| Concentration per Run 2 | 0.0536 ppm | 0.5073 ppm | 0.2016 ppm | 0.2457 ppm | 1.0492 ppm | 10.3515 ppm | -0.0008 ppm |
| Concentration per Run 3 | 0.0530 ppm | 0.5072 ppm | 0.2005 ppm | 0.2449 ppm | 1.0518 ppm | 10.4159 ppm | -0.0008 ppm |
| Concentration RSD | 0.6 % | 0.2 % | 0.4 % | 0.7 % | 0.4 % | 0.3 % | 14.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 10.0204 ppm | 0.5145 ppm | 0.9838 ppm | 10.2826 ppm | 0.5080 ppm | 0.5322 ppm | 0.4408 ppm |
| Concentration per Run 1 | 9.9645 ppm | 0.5161 ppm | 0.9791 ppm | 10.1794 ppm | 0.5014 ppm | 0.5356 ppm | 0.4359 ppm |
| Concentration per Run 2 | 10.0782 ppm | 0.5132 ppm | 0.9864 ppm | 10.3188 ppm | 0.5117 ppm | 0.5286 ppm | 0.4416 ppm |
| Concentration per Run 3 | 10.0186 ppm | 0.5143 ppm | 0.9859 ppm | 10.3496 ppm | 0.5108 ppm | 0.5325 ppm | 0.4451 ppm |
| Concentration RSD | 0.6 % | 0.3 % | 0.4 % | 0.9 % | 1.1 % | 0.7 % | 1.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1124 ppm | 0.8363 ppm | 0.9898 ppm | 0.9953 ppm | 1.0015 ppm | 0.1124 ppm | 0.5068 ppm |
| Concentration per Run 1 | 0.1107 ppm | 0.8355 ppm | 0.9840 ppm | 0.9915 ppm | 0.9992 ppm | 0.1147 ppm | 0.5064 ppm |
| Concentration per Run 2 | 0.1130 ppm | 0.8413 ppm | 0.9903 ppm | 0.9962 ppm | 1.0051 ppm | 0.1132 ppm | 0.5077 ppm |
| Concentration per Run 3 | 0.1134 ppm | 0.8321 ppm | 0.9952 ppm | 0.9981 ppm | 1.0003 ppm | 0.1092 ppm | 0.5064 ppm |
| Concentration RSD | 1.3 % | 0.6 % | 0.6 % | 0.3 % | 0.3 % | 2.5 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5134 ppm | 106.3590 % | 105.2167 % | 105.7416 % | 104.6954 % | 104.0102 % | 103.2317 % |
| Concentration per Run 1 | 0.5085 ppm | 106.2722 % | 105.5543 % | 105.0330 % | 104.5988 % | 104.1701 % | 102.9871 % |
| Concentration per Run 2 | 0.5151 ppm | 106.1334 % | 105.2911 % | 106.0277 % | 104.4817 % | 104.1608 % | 103.1512 % |
| Concentration per Run 3 | 0.5166 ppm | 106.6714 % | 104.8049 % | 106.1641 % | 105.0058 % | 103.6997 % | 103.5567 % |
| Concentration RSD | 0.8 % | 0.3 % | 0.4 % | 0.6 % | 0.3 % | 0.3 % | 0.3 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: WG2039767-3 WG2039767
Analysis started at: 3/13/2025 11:29:39 AM
Rack 1
Vial 35
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0495 ppm | 2.0161 ppm | 0.1114 ppm | 0.9639 ppm | 1.9875 ppm | 0.0511 ppm | 10.1489 ppm |
| Concentration per Run 1 | 0.0497 ppm | 2.0197 ppm | 0.1098 ppm | 0.9656 ppm | 1.9903 ppm | 0.0511 ppm | 10.1622 ppm |
| Concentration per Run 2 | 0.0496 ppm | 2.0161 ppm | 0.1112 ppm | 0.9642 ppm | 1.9907 ppm | 0.0512 ppm | 10.1666 ppm |
| Concentration per Run 3 | 0.0492 ppm | 2.0124 ppm | 0.1132 ppm | 0.9620 ppm | 1.9814 ppm | 0.0509 ppm | 10.1179 ppm |
| Concentration RSD | 0.5 % | 0.2 % | 1.5 % | 0.2 % | 0.3 % | 0.3 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0538 ppm | 0.5105 ppm | 0.2021 ppm | 0.2499 ppm | 1.0468 ppm | 10.2679 ppm | -0.0004 ppm |
| Concentration per Run 1 | 0.0538 ppm | 0.5102 ppm | 0.2038 ppm | 0.2514 ppm | 1.0482 ppm | 10.2779 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0538 ppm | 0.5113 ppm | 0.2024 ppm | 0.2487 ppm | 1.0446 ppm | 10.3277 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0538 ppm | 0.5099 ppm | 0.2001 ppm | 0.2496 ppm | 1.0475 ppm | 10.1980 ppm | -0.0017 ppm |
| Concentration RSD | 0.1 % | 0.1 % | 0.9 % | 0.6 % | 0.2 % | 0.6 % | 264.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.9573 ppm | 0.5116 ppm | 0.9886 ppm | 10.2034 ppm | 0.5142 ppm | 0.5307 ppm | 0.4549 ppm |
| Concentration per Run 1 | 9.9792 ppm | 0.5119 ppm | 0.9841 ppm | 10.2031 ppm | 0.5172 ppm | 0.5306 ppm | 0.4509 ppm |
| Concentration per Run 2 | 9.9833 ppm | 0.5141 ppm | 0.9881 ppm | 10.2006 ppm | 0.5144 ppm | 0.5291 ppm | 0.4596 ppm |
| Concentration per Run 3 | 9.9094 ppm | 0.5089 ppm | 0.9935 ppm | 10.2064 ppm | 0.5110 ppm | 0.5324 ppm | 0.4541 ppm |
| Concentration RSD | 0.4 % | 0.5 % | 0.5 % | 0.0 % | 0.6 % | 0.3 % | 1.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1129 ppm | 0.8339 ppm | 0.9930 ppm | 0.9893 ppm | 0.9954 ppm | 0.1114 ppm | 0.5116 ppm |
| Concentration per Run 1 | 0.1134 ppm | 0.8335 ppm | 0.9883 ppm | 0.9909 ppm | 0.9981 ppm | 0.1147 ppm | 0.5126 ppm |
| Concentration per Run 2 | 0.1129 ppm | 0.8341 ppm | 0.9935 ppm | 0.9899 ppm | 0.9962 ppm | 0.1086 ppm | 0.5104 ppm |
| Concentration per Run 3 | 0.1125 ppm | 0.8340 ppm | 0.9972 ppm | 0.9871 ppm | 0.9918 ppm | 0.1109 ppm | 0.5119 ppm |
| Concentration RSD | 0.4 % | 0.0 % | 0.5 % | 0.2 % | 0.3 % | 2.8 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5191 ppm | 105.2571 % | 105.6372 % | 105.8898 % | 103.9870 % | 104.4376 % | 103.6013 % |
| Concentration per Run 1 | 0.5198 ppm | 105.0147 % | 105.0632 % | 106.0995 % | 104.0368 % | 103.7322 % | 103.7845 % |
| Concentration per Run 2 | 0.5195 ppm | 105.8820 % | 105.5589 % | 105.7226 % | 104.6306 % | 104.4686 % | 103.3794 % |
| Concentration per Run 3 | 0.5179 ppm | 104.8746 % | 106.2893 % | 105.8473 % | 103.2937 % | 105.1119 % | 103.6398 % |
| Concentration RSD | 0.2 % | 0.5 % | 0.6 % | 0.2 % | 0.6 % | 0.7 % | 0.2 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: WG2039729-2 WG2039729
Analysis started at: 3/13/2025 11:33:07 AM
Rack 1
Vial 39
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0489 ppm | 1.9850 ppm | 0.1089 ppm | 0.9108 ppm | 1.9683 ppm | 0.0509 ppm | 10.0105 ppm |
| Concentration per Run 1 | 0.0494 ppm | 1.9822 ppm | 0.1030 ppm | 0.9185 ppm | 1.9686 ppm | 0.0509 ppm | 10.0120 ppm |
| Concentration per Run 2 | 0.0484 ppm | 1.9876 ppm | 0.1143 ppm | 0.9033 ppm | 1.9577 ppm | 0.0509 ppm | 10.0158 ppm |
| Concentration per Run 3 | 0.0490 ppm | 1.9852 ppm | 0.1094 ppm | 0.9106 ppm | 1.9786 ppm | 0.0511 ppm | 10.0037 ppm |
| Concentration RSD | 1.0 % | 0.1 % | 5.2 % | 0.8 % | 0.5 % | 0.3 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0510 ppm | 0.4938 ppm | 0.1953 ppm | 0.2578 ppm | 1.0522 ppm | 10.1419 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0510 ppm | 0.4941 ppm | 0.1978 ppm | 0.2582 ppm | 1.0522 ppm | 10.2034 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0508 ppm | 0.4932 ppm | 0.1934 ppm | 0.2558 ppm | 1.0481 ppm | 10.0213 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0511 ppm | 0.4942 ppm | 0.1948 ppm | 0.2595 ppm | 1.0564 ppm | 10.2010 ppm | -0.0003 ppm |
| Concentration RSD | 0.3 % | 0.1 % | 1.2 % | 0.7 % | 0.4 % | 1.0 % | 143.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.4124 ppm | 0.5075 ppm | 0.9639 ppm | 146.0796 ppm | 0.4928 ppm | 0.5206 ppm | 0.5169 ppm |
| Concentration per Run 1 | 9.4091 ppm | 0.5069 ppm | 0.9616 ppm | 146.9171 ppm | 0.4963 ppm | 0.4841 ppm | 0.5185 ppm |
| Concentration per Run 2 | 9.4166 ppm | 0.5070 ppm | 0.9627 ppm | 145.0911 ppm | 0.4894 ppm | 0.5501 ppm | 0.5134 ppm |
| Concentration per Run 3 | 9.4116 ppm | 0.5084 ppm | 0.9673 ppm | 146.2306 ppm | 0.4927 ppm | 0.5275 ppm | 0.5189 ppm |
| Concentration RSD | 0.0 % | 0.2 % | 0.3 % | 0.6 % | 0.7 % | 6.4 % | 0.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1107 ppm | 1.1303 ppm | 0.9672 ppm | 0.9580 ppm | 0.9627 ppm | 0.1083 ppm | 0.5007 ppm |
| Concentration per Run 1 | 0.1028 ppm | 1.1315 ppm | 0.9688 ppm | 0.9570 ppm | 0.9687 ppm | 0.0988 ppm | 0.5011 ppm |
| Concentration per Run 2 | 0.1192 ppm | 1.1229 ppm | 0.9640 ppm | 0.9555 ppm | 0.9565 ppm | 0.1174 ppm | 0.5003 ppm |
| Concentration per Run 3 | 0.1100 ppm | 1.1367 ppm | 0.9687 ppm | 0.9614 ppm | 0.9628 ppm | 0.1088 ppm | 0.5008 ppm |
| Concentration RSD | 7.4 % | 0.6 % | 0.3 % | 0.3 % | 0.6 % | 8.6 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4969 ppm | 105.9231 % | 102.3791 % | 103.5690 % | 103.4537 % | 100.7649 % | 100.1297 % |
| Concentration per Run 1 | 0.4975 ppm | 105.3345 % | 101.9174 % | 109.9104 % | 102.8145 % | 100.3943 % | 104.7680 % |
| Concentration per Run 2 | 0.4939 ppm | 106.0668 % | 102.6734 % | 98.9254 % | 103.3371 % | 101.0596 % | 96.4480 % |
| Concentration per Run 3 | 0.4992 ppm | 106.3681 % | 102.5464 % | 101.8712 % | 104.2094 % | 100.8409 % | 99.1730 % |
| Concentration RSD | 0.5 % | 0.5 % | 0.4 % | 5.5 % | 0.7 % | 0.3 % | 4.2 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512663-01 WG2039767
Analysis started at: 3/13/2025 11:36:33 AM
Rack 1
Vial 36
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 3.0731 ppm | 0.0011 ppm | 0.1554 ppm | 0.0807 ppm | 0.0003 ppm | 22.5409 ppm |
| Concentration per Run 1 | 0.0019 ppm | 3.0745 ppm | 0.0002 ppm | 0.1547 ppm | 0.0808 ppm | 0.0003 ppm | 22.5752 ppm |
| Concentration per Run 2 | 0.0015 ppm | 3.0839 ppm | 0.0013 ppm | 0.1555 ppm | 0.0809 ppm | 0.0003 ppm | 22.4749 ppm |
| Concentration per Run 3 | 0.0015 ppm | 3.0610 ppm | 0.0018 ppm | 0.1561 ppm | 0.0804 ppm | 0.0003 ppm | 22.5725 ppm |
| Concentration RSD | 12.9 % | 0.4 % | 77.2 % | 0.5 % | 0.3 % | 6.8 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0042 ppm | 0.0072 ppm | 0.0096 ppm | 3.9203 ppm | 2.9150 ppm | 0.0023 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0039 ppm | 0.0074 ppm | 0.0098 ppm | 3.9099 ppm | 2.9044 ppm | 0.0033 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0046 ppm | 0.0071 ppm | 0.0099 ppm | 3.9228 ppm | 2.9255 ppm | 0.0012 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0042 ppm | 0.0070 ppm | 0.0090 ppm | 3.9281 ppm | 2.9150 ppm | 0.0024 ppm |
| Concentration RSD | 18.1 % | 8.7 % | 2.5 % | 5.6 % | 0.2 % | 0.4 % | 45.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 4.3977 ppm | 0.1463 ppm | 0.0072 ppm | 85.8367 ppm | 0.0066 ppm | 0.0060 ppm | 0.0027 ppm |
| Concentration per Run 1 | 4.4097 ppm | 0.1469 ppm | 0.0069 ppm | 86.1397 ppm | 0.0067 ppm | 0.0065 ppm | 0.0021 ppm |
| Concentration per Run 2 | 4.4165 ppm | 0.1463 ppm | 0.0070 ppm | 86.1814 ppm | 0.0071 ppm | 0.0068 ppm | 0.0014 ppm |
| Concentration per Run 3 | 4.3669 ppm | 0.1455 ppm | 0.0078 ppm | 85.1890 ppm | 0.0060 ppm | 0.0047 ppm | 0.0047 ppm |
| Concentration RSD | 0.6 % | 0.5 % | 6.8 % | 0.7 % | 8.9 % | 19.2 % | 64.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 5.9876 ppm | 0.0024 ppm | 0.0981 ppm | 0.1835 ppm | 0.0013 ppm | 0.0075 ppm |
| Concentration per Run 1 | -0.0011 ppm | 5.9998 ppm | 0.0016 ppm | 0.0983 ppm | 0.1831 ppm | 0.0020 ppm | 0.0071 ppm |
| Concentration per Run 2 | -0.0006 ppm | 6.0034 ppm | 0.0025 ppm | 0.0985 ppm | 0.1849 ppm | 0.0001 ppm | 0.0077 ppm |
| Concentration per Run 3 | 0.0019 ppm | 5.9596 ppm | 0.0032 ppm | 0.0977 ppm | 0.1826 ppm | 0.0019 ppm | 0.0077 ppm |
| Concentration RSD | 1,523.1 % | 0.4 % | 32.6 % | 0.5 % | 0.7 % | 82.5 % | 4.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0161 ppm | 107.5009 % | 105.4105 % | 108.1338 % | 108.9271 % | 107.2580 % | 108.2432 % |
| Concentration per Run 1 | 0.0159 ppm | 108.0537 % | 105.3268 % | 108.5572 % | 109.2574 % | 107.4611 % | 108.5491 % |
| Concentration per Run 2 | 0.0157 ppm | 107.4989 % | 105.6732 % | 107.7334 % | 109.3555 % | 107.7712 % | 108.1467 % |
| Concentration per Run 3 | 0.0168 ppm | 106.9500 % | 105.2314 % | 108.1107 % | 108.1684 % | 106.5417 % | 108.0338 % |
| Concentration RSD | 3.8 % | 0.5 % | 0.2 % | 0.4 % | 0.6 % | 0.6 % | 0.3 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2513444-01 WG2039729
Analysis started at: 3/13/2025 11:40:01 AM
Rack 1
Vial 40
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0020 ppm | -0.0003 ppm | 0.0040 ppm | 0.0367 ppm | 0.0000 ppm | 56.4503 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0015 ppm | 0.0002 ppm | 0.0048 ppm | 0.0368 ppm | 0.0000 ppm | 56.4714 ppm |
| Concentration per Run 2 | 0.0003 ppm | -0.0008 ppm | -0.0008 ppm | 0.0018 ppm | 0.0365 ppm | 0.0000 ppm | 56.4698 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0054 ppm | -0.0002 ppm | 0.0052 ppm | 0.0368 ppm | 0.0000 ppm | 56.4098 ppm |
| Concentration RSD | 191.4 % | 152.9 % | 200.1 % | 46.5 % | 0.5 % | 71.6 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0001 ppm | 0.0000 ppm | -0.0001 ppm | 0.0038 ppm | 0.1186 ppm | 0.0031 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0003 ppm | -0.0001 ppm | 0.0002 ppm | 0.0044 ppm | 0.0987 ppm | 0.0030 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0001 ppm | -0.0001 ppm | -0.0005 ppm | 0.0038 ppm | 0.1370 ppm | 0.0030 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0008 ppm | 0.0002 ppm | 0.0000 ppm | 0.0033 ppm | 0.1203 ppm | 0.0033 ppm |
| Concentration RSD | 43.8 % | 361.6 % | 16,877.5 % | 313.9 % | 14.4 % | 16.2 % | 5.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.2654 ppm | 0.1570 ppm | 0.0011 ppm | 132.5470 ppm | 0.0008 ppm | 0.0020 ppm | 0.0054 ppm |
| Concentration per Run 1 | 6.2633 ppm | 0.1568 ppm | 0.0015 ppm | 132.2898 ppm | 0.0008 ppm | 0.0040 ppm | 0.0063 ppm |
| Concentration per Run 2 | 6.2578 ppm | 0.1568 ppm | 0.0013 ppm | 132.9352 ppm | 0.0009 ppm | 0.0015 ppm | 0.0028 ppm |
| Concentration per Run 3 | 6.2751 ppm | 0.1576 ppm | 0.0003 ppm | 132.4159 ppm | 0.0008 ppm | 0.0005 ppm | 0.0072 ppm |
| Concentration RSD | 0.1 % | 0.3 % | 59.3 % | 0.3 % | 7.8 % | 89.2 % | 42.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0024 ppm | 0.2854 ppm | 0.0007 ppm | 0.2218 ppm | 0.0008 ppm | -0.0023 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0031 ppm | 0.2886 ppm | 0.0014 ppm | 0.2223 ppm | 0.0010 ppm | -0.0009 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.2836 ppm | 0.0000 ppm | 0.2216 ppm | 0.0010 ppm | -0.0026 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0041 ppm | 0.2840 ppm | 0.0007 ppm | 0.2214 ppm | 0.0005 ppm | -0.0034 ppm | -0.0002 ppm |
| Concentration RSD | 84.0 % | 1.0 % | 93.8 % | 0.2 % | 30.4 % | 55.5 % | 294.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 105.5989 % | 103.0175 % | 104.4969 % | 103.9115 % | 102.1323 % | 102.2337 % |
| Concentration per Run 1 | 0.0008 ppm | 105.0416 % | 103.0024 % | 104.2938 % | 103.6338 % | 102.3209 % | 102.7732 % |
| Concentration per Run 2 | 0.0010 ppm | 105.9381 % | 103.0447 % | 104.8826 % | 104.1474 % | 102.1426 % | 101.9888 % |
| Concentration per Run 3 | 0.0005 ppm | 105.8170 % | 103.0055 % | 104.3144 % | 103.9533 % | 101.9333 % | 101.9390 % |
| Concentration RSD | 31.8 % | 0.5 % | 0.0 % | 0.3 % | 0.2 % | 0.2 % | 0.5 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: WG2039729-3 WG2039729
Analysis started at: 3/13/2025 11:43:28 AM
Rack 1
Vial 41
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0486 ppm | 1.9948 ppm | 0.1084 ppm | 0.9110 ppm | 1.9974 ppm | 0.0508 ppm | 65.8500 ppm |
| Concentration per Run 1 | 0.0492 ppm | 1.9967 ppm | 0.1083 ppm | 0.9138 ppm | 1.9911 ppm | 0.0508 ppm | 65.8932 ppm |
| Concentration per Run 2 | 0.0482 ppm | 1.9897 ppm | 0.1096 ppm | 0.9076 ppm | 2.0090 ppm | 0.0509 ppm | 65.7587 ppm |
| Concentration per Run 3 | 0.0483 ppm | 1.9981 ppm | 0.1074 ppm | 0.9114 ppm | 1.9921 ppm | 0.0507 ppm | 65.8982 ppm |
| Concentration RSD | 1.1 % | 0.2 % | 1.0 % | 0.3 % | 0.5 % | 0.2 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0504 ppm | 0.4918 ppm | 0.1942 ppm | 0.2591 ppm | 1.0359 ppm | 10.2027 ppm | 0.0027 ppm |
| Concentration per Run 1 | 0.0506 ppm | 0.4950 ppm | 0.1941 ppm | 0.2621 ppm | 1.0332 ppm | 10.1989 ppm | 0.0030 ppm |
| Concentration per Run 2 | 0.0499 ppm | 0.4876 ppm | 0.1929 ppm | 0.2574 ppm | 1.0360 ppm | 10.2696 ppm | 0.0029 ppm |
| Concentration per Run 3 | 0.0506 ppm | 0.4929 ppm | 0.1955 ppm | 0.2579 ppm | 1.0383 ppm | 10.1394 ppm | 0.0022 ppm |
| Concentration RSD | 0.8 % | 0.8 % | 0.6 % | 1.0 % | 0.2 % | 0.6 % | 16.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 15.5035 ppm | 0.6594 ppm | 0.9554 ppm | 141.2333 ppm | 0.4857 ppm | 0.5103 ppm | 0.4917 ppm |
| Concentration per Run 1 | 15.5027 ppm | 0.6592 ppm | 0.9557 ppm | 140.6877 ppm | 0.4853 ppm | 0.5132 ppm | 0.4971 ppm |
| Concentration per Run 2 | 15.4517 ppm | 0.6627 ppm | 0.9521 ppm | 143.1987 ppm | 0.4852 ppm | 0.5095 ppm | 0.4910 ppm |
| Concentration per Run 3 | 15.5560 ppm | 0.6563 ppm | 0.9583 ppm | 139.8134 ppm | 0.4866 ppm | 0.5081 ppm | 0.4870 ppm |
| Concentration RSD | 0.3 % | 0.5 % | 0.3 % | 1.2 % | 0.2 % | 0.5 % | 1.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1076 ppm | 1.4238 ppm | 0.9434 ppm | 1.1742 ppm | 0.9605 ppm | 0.1079 ppm | 0.5046 ppm |
| Concentration per Run 1 | 0.1081 ppm | 1.4224 ppm | 0.9459 ppm | 1.1704 ppm | 0.9611 ppm | 0.1096 ppm | 0.5059 ppm |
| Concentration per Run 2 | 0.1089 ppm | 1.4223 ppm | 0.9397 ppm | 1.1803 ppm | 0.9572 ppm | 0.1066 ppm | 0.5028 ppm |
| Concentration per Run 3 | 0.1058 ppm | 1.4266 ppm | 0.9447 ppm | 1.1719 ppm | 0.9633 ppm | 0.1075 ppm | 0.5051 ppm |
| Concentration RSD | 1.5 % | 0.2 % | 0.3 % | 0.5 % | 0.3 % | 1.4 % | 0.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4856 ppm | 105.6109 % | 102.4656 % | 103.9478 % | 103.6064 % | 100.8803 % | 101.4339 % |
| Concentration per Run 1 | 0.4844 ppm | 105.4158 % | 102.4178 % | 102.9855 % | 103.6471 % | 100.9340 % | 100.8042 % |
| Concentration per Run 2 | 0.4847 ppm | 106.0872 % | 101.9650 % | 104.2277 % | 103.7297 % | 100.7975 % | 101.8853 % |
| Concentration per Run 3 | 0.4876 ppm | 105.3296 % | 103.0142 % | 104.6303 % | 103.4423 % | 100.9095 % | 101.6121 % |
| Concentration RSD | 0.4 % | 0.4 % | 0.5 % | 0.8 % | 0.1 % | 0.1 % | 0.6 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: WG2039729-4 WG2039729
Analysis started at: 3/13/2025 11:46:54 AM
Rack 1
Vial 42
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0003 ppm | 0.0005 ppm | 0.0044 ppm | 0.0359 ppm | 0.0000 ppm | 55.5010 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0038 ppm | 0.0009 ppm | 0.0047 ppm | 0.0354 ppm | 0.0000 ppm | 55.4223 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0021 ppm | 0.0010 ppm | 0.0039 ppm | 0.0360 ppm | 0.0000 ppm | 55.7821 ppm |
| Concentration per Run 3 | -0.0001 ppm | -0.0051 ppm | -0.0006 ppm | 0.0045 ppm | 0.0362 ppm | 0.0000 ppm | 55.2987 ppm |
| Concentration RSD | 171.3 % | 1,794.3 % | 202.0 % | 9.2 % | 1.1 % | 997.8 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0000 ppm | 0.0003 ppm | 0.0002 ppm | 0.0046 ppm | 0.0952 ppm | 0.0032 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0001 ppm | 0.0007 ppm | 0.0000 ppm | 0.0044 ppm | 0.0779 ppm | 0.0026 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0001 ppm | -0.0001 ppm | 0.0010 ppm | 0.0052 ppm | 0.0962 ppm | 0.0033 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0002 ppm | 0.0004 ppm | -0.0005 ppm | 0.0042 ppm | 0.1116 ppm | 0.0036 ppm |
| Concentration RSD | 59.0 % | 367.6 % | 113.6 % | 486.0 % | 11.5 % | 17.7 % | 15.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.1511 ppm | 0.1542 ppm | 0.0028 ppm | 129.8605 ppm | 0.0011 ppm | 0.0027 ppm | -0.0001 ppm |
| Concentration per Run 1 | 6.1395 ppm | 0.1539 ppm | 0.0032 ppm | 129.6349 ppm | 0.0006 ppm | 0.0032 ppm | -0.0023 ppm |
| Concentration per Run 2 | 6.1716 ppm | 0.1543 ppm | 0.0021 ppm | 129.6286 ppm | 0.0014 ppm | 0.0022 ppm | 0.0028 ppm |
| Concentration per Run 3 | 6.1423 ppm | 0.1544 ppm | 0.0029 ppm | 130.3181 ppm | 0.0014 ppm | 0.0025 ppm | -0.0008 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 20.3 % | 0.3 % | 41.9 % | 19.0 % | 2,353.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0025 ppm | 0.2789 ppm | 0.0010 ppm | 0.2183 ppm | 0.0007 ppm | -0.0029 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0015 ppm | 0.2780 ppm | 0.0001 ppm | 0.2180 ppm | 0.0005 ppm | -0.0026 ppm | 0.0005 ppm |
| Concentration per Run 2 | 0.0044 ppm | 0.2768 ppm | 0.0006 ppm | 0.2182 ppm | 0.0008 ppm | -0.0031 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0015 ppm | 0.2820 ppm | 0.0024 ppm | 0.2188 ppm | 0.0008 ppm | -0.0031 ppm | 0.0002 ppm |
| Concentration RSD | 68.8 % | 1.0 % | 120.3 % | 0.2 % | 26.9 % | 8.8 % | 204.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 105.8177 % | 103.2420 % | 105.0077 % | 103.8330 % | 101.7001 % | 102.5165 % |
| Concentration per Run 1 | 0.0008 ppm | 105.5309 % | 104.0013 % | 104.7712 % | 103.6335 % | 102.7340 % | 102.7288 % |
| Concentration per Run 2 | 0.0008 ppm | 105.6043 % | 102.5328 % | 105.6139 % | 103.3055 % | 100.9597 % | 102.0921 % |
| Concentration per Run 3 | 0.0008 ppm | 106.3180 % | 103.1920 % | 104.6381 % | 104.5599 % | 101.4066 % | 102.7286 % |
| Concentration RSD | 1.5 % | 0.4 % | 0.7 % | 0.5 % | 0.6 % | 0.9 % | 0.4 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2513238-01 WG2039729
Analysis started at: 3/13/2025 11:50:21 AM
Rack 1
Vial 43
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0310 ppm | 0.0001 ppm | 0.0110 ppm | 0.1789 ppm | 0.0000 ppm | 5.8927 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0384 ppm | -0.0008 ppm | 0.0118 ppm | 0.1783 ppm | 0.0000 ppm | 5.9178 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0262 ppm | 0.0006 ppm | 0.0109 ppm | 0.1785 ppm | 0.0000 ppm | 5.9054 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.0283 ppm | 0.0005 ppm | 0.0102 ppm | 0.1799 ppm | 0.0000 ppm | 5.8550 ppm |
| Concentration RSD | 125.6 % | 20.9 % | 859.4 % | 7.3 % | 0.5 % | 56.5 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0013 ppm | 0.0020 ppm | 0.0005 ppm | 0.1556 ppm | 0.0398 ppm | 0.3334 ppm | 0.0020 ppm |
| Concentration per Run 1 | 0.0013 ppm | 0.0015 ppm | 0.0005 ppm | 0.1540 ppm | 0.0381 ppm | 0.3357 ppm | 0.0011 ppm |
| Concentration per Run 2 | 0.0013 ppm | 0.0032 ppm | 0.0002 ppm | 0.1563 ppm | 0.0403 ppm | 0.3431 ppm | 0.0028 ppm |
| Concentration per Run 3 | 0.0015 ppm | 0.0014 ppm | 0.0009 ppm | 0.1564 ppm | 0.0409 ppm | 0.3214 ppm | 0.0020 ppm |
| Concentration RSD | 7.9 % | 49.9 % | 68.5 % | 0.9 % | 3.8 % | 3.3 % | 44.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.2319 ppm | 0.1076 ppm | 0.0007 ppm | 135.2983 ppm | 0.0045 ppm | 0.3740 ppm | 0.0111 ppm |
| Concentration per Run 1 | 0.2308 ppm | 0.1073 ppm | 0.0007 ppm | 134.6941 ppm | 0.0043 ppm | 0.3720 ppm | 0.0078 ppm |
| Concentration per Run 2 | 0.2332 ppm | 0.1081 ppm | 0.0006 ppm | 135.1879 ppm | 0.0052 ppm | 0.3731 ppm | 0.0123 ppm |
| Concentration per Run 3 | 0.2316 ppm | 0.1075 ppm | 0.0010 ppm | 136.0129 ppm | 0.0041 ppm | 0.3770 ppm | 0.0133 ppm |
| Concentration RSD | 0.5 % | 0.4 % | 31.4 % | 0.5 % | 11.9 % | 0.7 % | 26.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.2033 ppm | -0.0008 ppm | 0.0315 ppm | 0.0002 ppm | -0.0016 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0019 ppm | 0.2023 ppm | -0.0023 ppm | 0.0312 ppm | 0.0006 ppm | -0.0007 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.2035 ppm | 0.0009 ppm | 0.0314 ppm | 0.0002 ppm | -0.0037 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0028 ppm | 0.2041 ppm | -0.0009 ppm | 0.0318 ppm | -0.0002 ppm | -0.0004 ppm | -0.0002 ppm |
| Concentration RSD | 739.1 % | 0.5 % | 206.6 % | 0.9 % | 196.3 % | 112.8 % | 3,544.3 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.7803 ppm | 106.2150 % | 103.6506 % | 106.1053 % | 104.1572 % | 101.6390 % | 103.1406 % |
| Concentration per Run 1 | 0.7844 ppm | 105.7643 % | 103.5523 % | 105.7684 % | 103.6831 % | 101.8601 % | 102.6529 % |
| Concentration per Run 2 | 0.7796 ppm | 106.4165 % | 103.6818 % | 106.4649 % | 104.2695 % | 101.5750 % | 103.3745 % |
| Concentration per Run 3 | 0.7769 ppm | 106.4643 % | 103.7178 % | 106.0825 % | 104.5192 % | 101.4819 % | 103.3943 % |
| Concentration RSD | 0.5 % | 0.4 % | 0.1 % | 0.3 % | 0.4 % | 0.2 % | 0.4 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: CCV
Analysis started at: 3/13/2025 11:53:49 AM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4593 ppm | 0.4732 ppm | 0.4649 ppm | 0.4659 ppm | 0.4780 ppm | 0.4964 ppm | 0.4963 ppm |
| Concentration per Run 1 | 0.4611 ppm | 0.4756 ppm | 0.4408 ppm | 0.4672 ppm | 0.4772 ppm | 0.4972 ppm | 0.4962 ppm |
| Concentration per Run 2 | 0.4326 ppm | 0.4750 ppm | 0.4767 ppm | 0.4376 ppm | 0.4785 ppm | 0.4959 ppm | 0.5019 ppm |
| Concentration per Run 3 | 0.4842 ppm | 0.4689 ppm | 0.4772 ppm | 0.4928 ppm | 0.4783 ppm | 0.4960 ppm | 0.4909 ppm |
| Recovery Percentage 1 | 91.864 % | 94.632 % | 92.975 % | 93.171 % | 95.595 % | 99.277 % | 99.264 % |
| Concentration RSD | 5.6 % | 0.8 % | 4.5 % | 5.9 % | 0.1 % | 0.1 % | 1.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4880 ppm | 0.4984 ppm | 0.4861 ppm | 0.4612 ppm | 0.5044 ppm | 4.9704 ppm | 0.4839 ppm |
| Concentration per Run 1 | 0.4880 ppm | 0.4987 ppm | 0.4879 ppm | 0.4592 ppm | 0.5018 ppm | 5.0023 ppm | 0.4846 ppm |
| Concentration per Run 2 | 0.4569 ppm | 0.4644 ppm | 0.4554 ppm | 0.4319 ppm | 0.5042 ppm | 4.9843 ppm | 0.4841 ppm |
| Concentration per Run 3 | 0.5191 ppm | 0.5321 ppm | 0.5152 ppm | 0.4925 ppm | 0.5072 ppm | 4.9246 ppm | 0.4830 ppm |
| Recovery Percentage 1 | 97.600 % | 99.684 % | 97.230 % | 92.241 % | 100.879 % | 99.408 % | 96.779 % |
| Concentration RSD | 6.4 % | 6.8 % | 6.2 % | 6.6 % | 0.5 % | 0.8 % | 0.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4834 ppm | 0.4879 ppm | 0.4818 ppm | 9.7053 ppm | 0.4927 ppm | 0.4900 ppm | 0.4808 ppm |
| Concentration per Run 1 | 0.4856 ppm | 0.4882 ppm | 0.4808 ppm | 9.6896 ppm | 0.4970 ppm | 0.4693 ppm | 0.4755 ppm |
| Concentration per Run 2 | 0.4524 ppm | 0.4880 ppm | 0.4489 ppm | 9.7007 ppm | 0.4620 ppm | 0.5027 ppm | 0.4539 ppm |
| Concentration per Run 3 | 0.5122 ppm | 0.4874 ppm | 0.5158 ppm | 9.7257 ppm | 0.5190 ppm | 0.4981 ppm | 0.5131 ppm |
| Recovery Percentage 1 | 96.675 % | 97.579 % | 96.365 % | 97.053 % | 98.537 % | 98.010 % | 96.168 % |
| Concentration RSD | 6.2 % | 0.1 % | 6.9 % | 0.2 % | 5.8 % | 3.7 % | 6.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4693 ppm | 5.2674 ppm | 0.4977 ppm | 0.4958 ppm | 0.4873 ppm | 0.4747 ppm | 0.4811 ppm |
| Concentration per Run 1 | 0.4505 ppm | 5.2703 ppm | 0.5004 ppm | 0.4950 ppm | 0.4886 ppm | 0.4573 ppm | 0.4818 ppm |
| Concentration per Run 2 | 0.4823 ppm | 4.9536 ppm | 0.4659 ppm | 0.4961 ppm | 0.4576 ppm | 0.4909 ppm | 0.4497 ppm |
| Concentration per Run 3 | 0.4752 ppm | 5.5783 ppm | 0.5268 ppm | 0.4964 ppm | 0.5156 ppm | 0.4760 ppm | 0.5118 ppm |
| Recovery Percentage 1 | 93.868 % | 100.332 % | 99.542 % | 99.165 % | 97.456 % | 94.943 % | 96.220 % |
| Concentration RSD | 3.6 % | 5.9 % | 6.1 % | 0.2 % | 6.0 % | 3.5 % | 6.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4891 ppm | 108.2986 % | 106.2634 % | 110.1221 % | 105.7263 % | 104.9714 % | 107.9713 % |
| Concentration per Run 1 | 0.4917 ppm | 107.2799 % | 105.7949 % | 115.3896 % | 105.9514 % | 104.7340 % | 111.7118 % |
| Concentration per Run 2 | 0.4588 ppm | 115.0593 % | 106.0939 % | 106.8520 % | 109.8372 % | 104.7642 % | 105.8590 % |
| Concentration per Run 3 | 0.5166 ppm | 102.5566 % | 106.9016 % | 108.1247 % | 101.3903 % | 105.4160 % | 106.3431 % |
| Recovery Percentage 1 | 97.811 % | | | | | | |
| Concentration RSD | 5.9 % | 5.8 % | 0.5 % | 4.2 % | 4.0 % | 0.4 % | 3.0 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: CCB
Analysis started at: 3/13/2025 11:57:17 AM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0052 ppm | -0.0009 ppm | 0.0004 ppm | 0.0002 ppm | 0.0000 ppm | 0.0015 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0073 ppm | 0.0008 ppm | 0.0009 ppm | 0.0003 ppm | 0.0000 ppm | 0.0040 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0050 ppm | -0.0024 ppm | -0.0011 ppm | 0.0001 ppm | 0.0000 ppm | -0.0006 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0033 ppm | -0.0012 ppm | 0.0015 ppm | 0.0001 ppm | 0.0000 ppm | 0.0012 ppm |
| Recovery Percentage 1 | -0.105 % | -5.205 % | -18.404 % | 1.349 % | 1.739 % | 0.156 % | 1.539 % |
| Concentration RSD | 2,336.0 % | 38.3 % | 178.8 % | 334.8 % | 65.9 % | 584.5 % | 152.9 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0004 ppm | -0.0002 ppm | -0.0006 ppm | -0.0011 ppm | -0.0130 ppm | 0.0004 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0002 ppm | 0.0000 ppm | -0.0011 ppm | -0.0011 ppm | -0.0219 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0002 ppm | -0.0002 ppm | -0.0009 ppm | -0.0084 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0009 ppm | -0.0008 ppm | -0.0006 ppm | -0.0011 ppm | -0.0088 ppm | 0.0002 ppm |
| Recovery Percentage 1 | 1.011 % | 1.790 % | -2.251 % | -6.403 % | -2.118 % | -0.520 % | 8.477 % |
| Concentration RSD | 159.0 % | 132.4 % | 226.0 % | 70.0 % | 10.1 % | 59.2 % | 39.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | -0.0001 ppm | 0.0015 ppm | -0.0044 ppm | 0.0004 ppm | 0.0028 ppm | 0.0030 ppm |
| Concentration per Run 1 | 0.0010 ppm | -0.0003 ppm | 0.0017 ppm | -0.0025 ppm | 0.0006 ppm | 0.0031 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0001 ppm | 0.0015 ppm | -0.0040 ppm | 0.0003 ppm | 0.0025 ppm | 0.0047 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0001 ppm | 0.0014 ppm | -0.0068 ppm | 0.0004 ppm | 0.0026 ppm | 0.0036 ppm |
| Recovery Percentage 1 | 0.397 % | -1.084 % | 3.089 % | -0.221 % | 1.687 % | 27.563 % | 5.923 % |
| Concentration RSD | 127.2 % | 152.6 % | 9.3 % | 49.5 % | 29.1 % | 11.3 % | 72.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0004 ppm | -0.0087 ppm | 0.0002 ppm | 0.0000 ppm | 0.0002 ppm | 0.0003 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0006 ppm | -0.0131 ppm | 0.0003 ppm | 0.0000 ppm | 0.0002 ppm | -0.0010 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0012 ppm | -0.0062 ppm | 0.0005 ppm | 0.0000 ppm | 0.0004 ppm | 0.0014 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0019 ppm | -0.0070 ppm | -0.0003 ppm | 0.0000 ppm | 0.0001 ppm | 0.0004 ppm | 0.0001 ppm |
| Recovery Percentage 1 | 4.440 % | -1.748 % | 0.346 % | -0.015 % | 2.133 % | 1.380 % | 0.338 % |
| Concentration RSD | 350.2 % | 43.3 % | 245.2 % | 1,028.5 % | 92.4 % | 430.1 % | 305.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 105.8133 % | 104.8842 % | 105.3455 % | 105.0450 % | 105.5757 % | 105.9044 % |
| Concentration per Run 1 | -0.0001 ppm | 105.2722 % | 104.5646 % | 104.3859 % | 105.5973 % | 105.2394 % | 105.4404 % |
| Concentration per Run 2 | 0.0000 ppm | 114.3573 % | 105.2778 % | 106.1444 % | 112.4730 % | 105.9511 % | 105.9451 % |
| Concentration per Run 3 | 0.0001 ppm | 97.8103 % | 104.8101 % | 105.5062 % | 97.0646 % | 105.5366 % | 106.3277 % |
| Recovery Percentage 1 | 0.483 % | | | | | | |
| Concentration RSD | 437.6 % | 7.8 % | 0.3 % | 0.8 % | 7.3 % | 0.3 % | 0.4 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512679-01 WG2039767
Analysis started at: 3/13/2025 12:04:05 PM
Rack 1
Vial 37
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0221 ppm | -0.0002 ppm | 0.0099 ppm | 0.0052 ppm | 0.0000 ppm | 5.3118 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0169 ppm | -0.0013 ppm | 0.0102 ppm | 0.0052 ppm | 0.0000 ppm | 5.3120 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0255 ppm | 0.0013 ppm | 0.0116 ppm | 0.0051 ppm | 0.0000 ppm | 5.3102 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0239 ppm | -0.0005 ppm | 0.0080 ppm | 0.0053 ppm | 0.0000 ppm | 5.3132 ppm |
| Concentration RSD | 126.3 % | 20.7 % | 810.5 % | 18.4 % | 1.8 % | 75.1 % | 0.0 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0004 ppm | 0.0001 ppm | 0.0206 ppm | 1.3090 ppm | 0.0007 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0004 ppm | 0.0007 ppm | -0.0001 ppm | 0.0219 ppm | 1.3050 ppm | 0.0010 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0005 ppm | 0.0001 ppm | 0.0002 ppm | 0.0192 ppm | 1.3008 ppm | 0.0000 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0000 ppm | 0.0004 ppm | 0.0002 ppm | 0.0206 ppm | 1.3213 ppm | 0.0012 ppm |
| Concentration RSD | 46.0 % | 1,053.0 % | 69.8 % | 192.2 % | 6.6 % | 0.8 % | 88.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.2226 ppm | 0.0049 ppm | 0.0007 ppm | 22.0756 ppm | 0.0014 ppm | 0.0011 ppm | -0.0015 ppm |
| Concentration per Run 1 | 1.2628 ppm | 0.0049 ppm | 0.0012 ppm | 22.0103 ppm | 0.0012 ppm | 0.0007 ppm | -0.0005 ppm |
| Concentration per Run 2 | 1.2655 ppm | 0.0048 ppm | 0.0003 ppm | 22.2574 ppm | 0.0013 ppm | 0.0015 ppm | -0.0018 ppm |
| Concentration per Run 3 | 1.1396 ppm | 0.0050 ppm | 0.0005 ppm | 21.9592 ppm | 0.0017 ppm | 0.0012 ppm | -0.0022 ppm |
| Concentration RSD | 5.9 % | 1.3 % | 68.5 % | 0.7 % | 18.8 % | 35.0 % | 57.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0007 ppm | 2.5330 ppm | -0.0014 ppm | 0.0444 ppm | 0.0006 ppm | 0.0009 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0014 ppm | 2.6085 ppm | -0.0027 ppm | 0.0444 ppm | 0.0008 ppm | 0.0023 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0009 ppm | 2.6054 ppm | -0.0001 ppm | 0.0444 ppm | 0.0000 ppm | -0.0007 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0001 ppm | 2.3852 ppm | -0.0015 ppm | 0.0444 ppm | 0.0009 ppm | 0.0011 ppm | 0.0004 ppm |
| Concentration RSD | 104.4 % | 5.1 % | 91.3 % | 0.1 % | 85.1 % | 164.9 % | 91.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | 111.2023 % | 105.9991 % | 106.8289 % | 106.7965 % | 104.4235 % | 105.2714 % |
| Concentration per Run 1 | 0.0001 ppm | 107.9448 % | 105.9556 % | 105.1300 % | 106.2463 % | 104.3562 % | 103.7112 % |
| Concentration per Run 2 | 0.0007 ppm | 107.7258 % | 105.6281 % | 107.4702 % | 106.7523 % | 104.2527 % | 105.9603 % |
| Concentration per Run 3 | 0.0005 ppm | 117.9361 % | 106.4136 % | 107.8866 % | 107.3910 % | 104.6616 % | 106.1427 % |
| Concentration RSD | 66.8 % | 5.2 % | 0.4 % | 1.4 % | 0.5 % | 0.2 % | 1.3 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512572-03 WG2039414
Analysis started at: 3/13/2025 12:07:45 PM
Rack 1
Vial 15
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.2999 ppm | 0.0005 ppm | 0.0473 ppm | 0.0554 ppm | 0.0000 ppm | 88.3957 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.2925 ppm | 0.0011 ppm | 0.0492 ppm | 0.0555 ppm | 0.0000 ppm | 88.4053 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.3051 ppm | 0.0004 ppm | 0.0480 ppm | 0.0557 ppm | 0.0000 ppm | 88.5471 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.3021 ppm | 0.0000 ppm | 0.0447 ppm | 0.0549 ppm | 0.0000 ppm | 88.2346 ppm |
| Concentration RSD | 3,187.8 % | 2.2 % | 108.4 % | 5.0 % | 0.7 % | 159.5 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0003 ppm | 0.0018 ppm | 0.0407 ppm | 0.8359 ppm | 19.2567 ppm | 0.0057 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0003 ppm | 0.0015 ppm | 0.0404 ppm | 0.8319 ppm | 19.2589 ppm | 0.0053 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0002 ppm | 0.0020 ppm | 0.0412 ppm | 0.8414 ppm | 19.3262 ppm | 0.0058 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0003 ppm | 0.0020 ppm | 0.0405 ppm | 0.8344 ppm | 19.1849 ppm | 0.0059 ppm |
| Concentration RSD | 6.3 % | 31.8 % | 15.7 % | 1.0 % | 0.6 % | 0.4 % | 5.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 15.3453 ppm | 0.0615 ppm | 0.0025 ppm | 185.4783 ppm | 0.0029 ppm | 0.0035 ppm | -0.0001 ppm |
| Concentration per Run 1 | 15.3660 ppm | 0.0616 ppm | 0.0025 ppm | 185.5026 ppm | 0.0030 ppm | 0.0043 ppm | -0.0029 ppm |
| Concentration per Run 2 | 15.3287 ppm | 0.0617 ppm | 0.0030 ppm | 185.7418 ppm | 0.0036 ppm | 0.0020 ppm | 0.0015 ppm |
| Concentration per Run 3 | 15.3412 ppm | 0.0613 ppm | 0.0020 ppm | 185.1905 ppm | 0.0022 ppm | 0.0041 ppm | 0.0012 ppm |
| Concentration RSD | 0.1 % | 0.3 % | 20.4 % | 0.1 % | 23.7 % | 35.9 % | 2,403.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 3.1266 ppm | 0.0005 ppm | 0.3258 ppm | 0.0102 ppm | 0.0026 ppm | 0.0005 ppm |
| Concentration per Run 1 | -0.0013 ppm | 3.1185 ppm | 0.0018 ppm | 0.3261 ppm | 0.0109 ppm | 0.0038 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0001 ppm | 3.1204 ppm | -0.0001 ppm | 0.3274 ppm | 0.0099 ppm | 0.0018 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0015 ppm | 3.1410 ppm | -0.0003 ppm | 0.3240 ppm | 0.0100 ppm | 0.0023 ppm | 0.0003 ppm |
| Concentration RSD | 1,317.1 % | 0.4 % | 249.0 % | 0.5 % | 5.3 % | 39.5 % | 34.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0790 ppm | 106.0676 % | 102.9734 % | 105.1312 % | 105.5425 % | 101.8835 % | 102.8981 % |
| Concentration per Run 1 | 0.0792 ppm | 106.0974 % | 103.2165 % | 104.5689 % | 105.1606 % | 102.2291 % | 102.6894 % |
| Concentration per Run 2 | 0.0786 ppm | 106.3946 % | 102.7367 % | 105.4532 % | 106.1387 % | 101.6461 % | 102.7071 % |
| Concentration per Run 3 | 0.0791 ppm | 105.7107 % | 102.9671 % | 105.3714 % | 105.3282 % | 101.7751 % | 103.2979 % |
| Concentration RSD | 0.4 % | 0.3 % | 0.2 % | 0.5 % | 0.5 % | 0.3 % | 0.3 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512572-04 WG2039414
Analysis started at: 3/13/2025 12:11:12 PM
Rack 1
Vial 16
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.2593 ppm | 0.0001 ppm | 0.0522 ppm | 0.0662 ppm | 0.0000 ppm | 83.6847 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.2610 ppm | 0.0017 ppm | 0.0525 ppm | 0.0665 ppm | 0.0000 ppm | 83.5218 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.2594 ppm | 0.0008 ppm | 0.0529 ppm | 0.0662 ppm | 0.0000 ppm | 83.7045 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.2576 ppm | -0.0021 ppm | 0.0513 ppm | 0.0660 ppm | 0.0000 ppm | 83.8278 ppm |
| Concentration RSD | 74.6 % | 0.7 % | 1,309.2 % | 1.6 % | 0.3 % | 942.4 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0008 ppm | 0.0021 ppm | 0.0214 ppm | 0.5496 ppm | 6.1363 ppm | 0.0074 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0010 ppm | 0.0019 ppm | 0.0216 ppm | 0.5520 ppm | 6.1732 ppm | 0.0076 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0005 ppm | 0.0022 ppm | 0.0216 ppm | 0.5527 ppm | 6.1214 ppm | 0.0070 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0007 ppm | 0.0021 ppm | 0.0210 ppm | 0.5440 ppm | 6.1144 ppm | 0.0075 ppm |
| Concentration RSD | 21.8 % | 32.7 % | 6.2 % | 1.5 % | 0.9 % | 0.5 % | 4.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 18.3235 ppm | 0.0514 ppm | 0.0021 ppm | 268.2707 ppm | 0.0022 ppm | 0.0014 ppm | -0.0003 ppm |
| Concentration per Run 1 | 18.4325 ppm | 0.0511 ppm | 0.0026 ppm | 270.0020 ppm | 0.0030 ppm | 0.0035 ppm | 0.0028 ppm |
| Concentration per Run 2 | 18.4027 ppm | 0.0515 ppm | 0.0018 ppm | 264.8359 ppm | 0.0021 ppm | 0.0008 ppm | -0.0016 ppm |
| Concentration per Run 3 | 18.1352 ppm | 0.0517 ppm | 0.0018 ppm | 269.9741 ppm | 0.0016 ppm | -0.0001 ppm | -0.0021 ppm |
| Concentration RSD | 0.9 % | 0.5 % | 23.2 % | 1.1 % | 31.7 % | 132.7 % | 886.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0027 ppm | 3.5069 ppm | -0.0003 ppm | 0.5767 ppm | 0.0168 ppm | 0.0019 ppm | 0.0009 ppm |
| Concentration per Run 1 | 0.0030 ppm | 3.5239 ppm | -0.0007 ppm | 0.5791 ppm | 0.0163 ppm | 0.0014 ppm | 0.0010 ppm |
| Concentration per Run 2 | 0.0027 ppm | 3.5240 ppm | -0.0008 ppm | 0.5766 ppm | 0.0177 ppm | 0.0015 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0024 ppm | 3.4730 ppm | 0.0006 ppm | 0.5744 ppm | 0.0165 ppm | 0.0028 ppm | 0.0008 ppm |
| Concentration RSD | 11.1 % | 0.8 % | 245.9 % | 0.4 % | 4.5 % | 40.2 % | 14.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0501 ppm | 104.6436 % | 102.4316 % | 105.2851 % | 104.5164 % | 101.5890 % | 103.1005 % |
| Concentration per Run 1 | 0.0502 ppm | 104.2835 % | 102.2489 % | 105.7580 % | 104.5840 % | 101.5820 % | 103.2789 % |
| Concentration per Run 2 | 0.0502 ppm | 104.2731 % | 102.5682 % | 104.5912 % | 103.9592 % | 101.4453 % | 102.7531 % |
| Concentration per Run 3 | 0.0499 ppm | 105.3743 % | 102.4777 % | 105.5063 % | 105.0061 % | 101.7399 % | 103.2695 % |
| Concentration RSD | 0.4 % | 0.6 % | 0.2 % | 0.6 % | 0.5 % | 0.1 % | 0.3 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512572-05 WG2039414
Analysis started at: 3/13/2025 12:14:38 PM
Rack 1
Vial 17
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.3631 ppm | -0.0003 ppm | 0.0292 ppm | 0.0399 ppm | 0.0000 ppm | 73.0356 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.3701 ppm | -0.0003 ppm | 0.0301 ppm | 0.0399 ppm | 0.0000 ppm | 73.0999 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.3576 ppm | 0.0003 ppm | 0.0291 ppm | 0.0400 ppm | 0.0000 ppm | 72.8601 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.3615 ppm | -0.0009 ppm | 0.0283 ppm | 0.0399 ppm | 0.0000 ppm | 73.1468 ppm |
| Concentration RSD | 118.3 % | 1.8 % | 179.7 % | 3.1 % | 0.2 % | 73.3 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0003 ppm | 0.0017 ppm | 0.0178 ppm | 0.5964 ppm | 13.2770 ppm | 0.0035 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0007 ppm | 0.0016 ppm | 0.0182 ppm | 0.5959 ppm | 13.2420 ppm | 0.0041 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0005 ppm | 0.0020 ppm | 0.0175 ppm | 0.5986 ppm | 13.3468 ppm | 0.0038 ppm |
| Concentration per Run 3 | -0.0004 ppm | -0.0003 ppm | 0.0017 ppm | 0.0177 ppm | 0.5948 ppm | 13.2422 ppm | 0.0026 ppm |
| Concentration RSD | 20.9 % | 153.4 % | 11.7 % | 2.2 % | 0.3 % | 0.5 % | 22.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 11.3343 ppm | 0.0371 ppm | 0.0026 ppm | 167.4858 ppm | 0.0030 ppm | 0.0034 ppm | -0.0021 ppm |
| Concentration per Run 1 | 11.4161 ppm | 0.0368 ppm | 0.0025 ppm | 166.5500 ppm | 0.0036 ppm | 0.0027 ppm | -0.0044 ppm |
| Concentration per Run 2 | 11.2756 ppm | 0.0372 ppm | 0.0025 ppm | 168.4252 ppm | 0.0029 ppm | 0.0021 ppm | -0.0020 ppm |
| Concentration per Run 3 | 11.3112 ppm | 0.0373 ppm | 0.0027 ppm | 167.4821 ppm | 0.0025 ppm | 0.0056 ppm | 0.0001 ppm |
| Concentration RSD | 0.6 % | 0.7 % | 5.2 % | 0.6 % | 18.5 % | 55.4 % | 107.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 3.0808 ppm | -0.0010 ppm | 0.2440 ppm | 0.0115 ppm | 0.0015 ppm | 0.0010 ppm |
| Concentration per Run 1 | -0.0015 ppm | 3.0845 ppm | -0.0010 ppm | 0.2437 ppm | 0.0109 ppm | 0.0009 ppm | 0.0013 ppm |
| Concentration per Run 2 | 0.0021 ppm | 3.0894 ppm | -0.0004 ppm | 0.2448 ppm | 0.0098 ppm | 0.0015 ppm | 0.0010 ppm |
| Concentration per Run 3 | -0.0002 ppm | 3.0685 ppm | -0.0015 ppm | 0.2433 ppm | 0.0136 ppm | 0.0019 ppm | 0.0006 ppm |
| Concentration RSD | 1,494.0 % | 0.4 % | 57.8 % | 0.3 % | 17.2 % | 34.9 % | 33.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0485 ppm | 107.0247 % | 104.3279 % | 106.9190 % | 106.0287 % | 102.8275 % | 103.6814 % |
| Concentration per Run 1 | 0.0485 ppm | 107.0031 % | 104.3977 % | 106.2585 % | 106.3331 % | 103.1406 % | 103.4854 % |
| Concentration per Run 2 | 0.0481 ppm | 106.9485 % | 104.5743 % | 106.3776 % | 105.8390 % | 102.9705 % | 103.4481 % |
| Concentration per Run 3 | 0.0488 ppm | 107.1226 % | 104.0116 % | 108.1210 % | 105.9140 % | 102.3713 % | 104.1108 % |
| Concentration RSD | 0.7 % | 0.1 % | 0.3 % | 1.0 % | 0.3 % | 0.4 % | 0.4 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512572-06 WG2039414
Analysis started at: 3/13/2025 12:18:05 PM
Rack 1
Vial 18
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.5379 ppm | 0.0004 ppm | 0.0322 ppm | 0.0494 ppm | 0.0000 ppm | 67.8768 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.5305 ppm | 0.0012 ppm | 0.0326 ppm | 0.0496 ppm | 0.0000 ppm | 67.9351 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.5407 ppm | 0.0010 ppm | 0.0325 ppm | 0.0495 ppm | 0.0000 ppm | 67.8884 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.5423 ppm | -0.0009 ppm | 0.0314 ppm | 0.0491 ppm | 0.0000 ppm | 67.8069 ppm |
| Concentration RSD | 116.3 % | 1.2 % | 290.3 % | 2.1 % | 0.6 % | 36.9 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.0009 ppm | 0.0027 ppm | 0.0157 ppm | 0.7565 ppm | 3.7944 ppm | 0.0059 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0010 ppm | 0.0025 ppm | 0.0155 ppm | 0.7532 ppm | 3.8141 ppm | 0.0057 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0009 ppm | 0.0027 ppm | 0.0152 ppm | 0.7563 ppm | 3.7829 ppm | 0.0062 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0009 ppm | 0.0028 ppm | 0.0165 ppm | 0.7600 ppm | 3.7862 ppm | 0.0059 ppm |
| Concentration RSD | 40.4 % | 3.3 % | 4.7 % | 4.2 % | 0.4 % | 0.5 % | 3.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 12.6927 ppm | 0.0361 ppm | 0.0018 ppm | 213.8470 ppm | 0.0025 ppm | 0.0051 ppm | 0.0013 ppm |
| Concentration per Run 1 | 12.6411 ppm | 0.0363 ppm | 0.0021 ppm | 214.7466 ppm | 0.0032 ppm | 0.0042 ppm | 0.0017 ppm |
| Concentration per Run 2 | 12.6967 ppm | 0.0362 ppm | 0.0012 ppm | 213.3037 ppm | 0.0012 ppm | 0.0059 ppm | 0.0000 ppm |
| Concentration per Run 3 | 12.7404 ppm | 0.0359 ppm | 0.0021 ppm | 213.4907 ppm | 0.0032 ppm | 0.0053 ppm | 0.0022 ppm |
| Concentration RSD | 0.4 % | 0.6 % | 29.2 % | 0.4 % | 44.5 % | 16.7 % | 87.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | 3.4996 ppm | -0.0003 ppm | 0.3851 ppm | 0.0135 ppm | 0.0007 ppm | 0.0015 ppm |
| Concentration per Run 1 | -0.0014 ppm | 3.4868 ppm | 0.0004 ppm | 0.3874 ppm | 0.0144 ppm | 0.0007 ppm | 0.0014 ppm |
| Concentration per Run 2 | -0.0013 ppm | 3.5226 ppm | 0.0002 ppm | 0.3844 ppm | 0.0134 ppm | -0.0003 ppm | 0.0015 ppm |
| Concentration per Run 3 | 0.0001 ppm | 3.4892 ppm | -0.0014 ppm | 0.3834 ppm | 0.0127 ppm | 0.0018 ppm | 0.0017 ppm |
| Concentration RSD | 93.8 % | 0.6 % | 363.4 % | 0.5 % | 6.6 % | 150.9 % | 8.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0474 ppm | 106.9681 % | 103.2412 % | 106.4123 % | 106.0008 % | 102.0664 % | 103.9516 % |
| Concentration per Run 1 | 0.0467 ppm | 107.2925 % | 103.0147 % | 106.6675 % | 106.3175 % | 102.2301 % | 104.4758 % |
| Concentration per Run 2 | 0.0480 ppm | 106.4270 % | 103.4577 % | 106.2897 % | 105.7498 % | 101.9391 % | 103.8534 % |
| Concentration per Run 3 | 0.0475 ppm | 107.1849 % | 103.2511 % | 106.2796 % | 105.9351 % | 102.0300 % | 103.5255 % |
| Concentration RSD | 1.3 % | 0.4 % | 0.2 % | 0.2 % | 0.3 % | 0.1 % | 0.5 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512572-02 WG2039414
Analysis started at: 3/13/2025 12:21:32 PM
Rack 1
Vial 10
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.1754 ppm | -0.0009 ppm | 0.0684 ppm | 0.0658 ppm | 0.0000 ppm | 86.1603 ppm |
| Concentration per Run 1 | -0.0007 ppm | 0.1740 ppm | -0.0013 ppm | 0.0683 ppm | 0.0661 ppm | 0.0000 ppm | 86.3487 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.1799 ppm | -0.0011 ppm | 0.0682 ppm | 0.0654 ppm | 0.0000 ppm | 85.9410 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.1724 ppm | -0.0002 ppm | 0.0686 ppm | 0.0659 ppm | 0.0000 ppm | 86.1913 ppm |
| Concentration RSD | 13,898.9 % | 2.3 % | 66.2 % | 0.3 % | 0.5 % | 517.9 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 0.0004 ppm | 0.0014 ppm | 0.0204 ppm | 0.4405 ppm | 6.6947 ppm | 0.0085 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.0005 ppm | 0.0017 ppm | 0.0210 ppm | 0.4358 ppm | 6.6953 ppm | 0.0081 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.0004 ppm | 0.0017 ppm | 0.0205 ppm | 0.4368 ppm | 6.6886 ppm | 0.0085 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0004 ppm | 0.0008 ppm | 0.0198 ppm | 0.4489 ppm | 6.7001 ppm | 0.0089 ppm |
| Concentration RSD | 24.0 % | 12.8 % | 36.5 % | 2.9 % | 1.7 % | 0.1 % | 4.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 18.7623 ppm | 0.0540 ppm | 0.0018 ppm | 259.8759 ppm | 0.0028 ppm | 0.0024 ppm | -0.0003 ppm |
| Concentration per Run 1 | 18.6726 ppm | 0.0542 ppm | 0.0018 ppm | 260.5509 ppm | 0.0024 ppm | 0.0041 ppm | 0.0020 ppm |
| Concentration per Run 2 | 18.7927 ppm | 0.0540 ppm | 0.0022 ppm | 258.9827 ppm | 0.0020 ppm | 0.0027 ppm | -0.0009 ppm |
| Concentration per Run 3 | 18.8214 ppm | 0.0538 ppm | 0.0014 ppm | 260.0941 ppm | 0.0040 ppm | 0.0004 ppm | -0.0020 ppm |
| Concentration RSD | 0.4 % | 0.4 % | 21.7 % | 0.3 % | 38.0 % | 77.3 % | 660.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0018 ppm | 3.3246 ppm | -0.0001 ppm | 0.5970 ppm | 0.0154 ppm | 0.0025 ppm | 0.0005 ppm |
| Concentration per Run 1 | 0.0023 ppm | 3.3270 ppm | 0.0006 ppm | 0.5974 ppm | 0.0155 ppm | 0.0026 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0017 ppm | 3.3239 ppm | 0.0004 ppm | 0.5949 ppm | 0.0164 ppm | 0.0014 ppm | 0.0005 ppm |
| Concentration per Run 3 | 0.0015 ppm | 3.3230 ppm | -0.0014 ppm | 0.5988 ppm | 0.0143 ppm | 0.0035 ppm | 0.0003 ppm |
| Concentration RSD | 24.2 % | 0.1 % | 788.5 % | 0.3 % | 6.7 % | 43.2 % | 39.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0494 ppm | 106.4058 % | 103.8165 % | 105.9750 % | 105.8914 % | 102.9549 % | 103.9207 % |
| Concentration per Run 1 | 0.0489 ppm | 106.3195 % | 103.5940 % | 105.1186 % | 106.0620 % | 103.1252 % | 103.7059 % |
| Concentration per Run 2 | 0.0497 ppm | 106.3082 % | 104.3928 % | 106.7395 % | 105.6802 % | 103.3753 % | 104.0737 % |
| Concentration per Run 3 | 0.0496 ppm | 106.5897 % | 103.4625 % | 106.0670 % | 105.9318 % | 102.3643 % | 103.9824 % |
| Concentration RSD | 0.8 % | 0.1 % | 0.5 % | 0.8 % | 0.2 % | 0.5 % | 0.2 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: WG2039414-7 WG2039414
Analysis started at: 3/13/2025 12:25:00 PM
Rack 1
Vial 11
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0488 ppm | 2.1240 ppm | 0.1160 ppm | 1.0152 ppm | 1.9933 ppm | 0.0494 ppm | 95.3100 ppm |
| Concentration per Run 1 | 0.0488 ppm | 2.1179 ppm | 0.1158 ppm | 1.0139 ppm | 2.0001 ppm | 0.0496 ppm | 95.1550 ppm |
| Concentration per Run 2 | 0.0490 ppm | 2.1268 ppm | 0.1161 ppm | 1.0138 ppm | 1.9919 ppm | 0.0493 ppm | 95.2103 ppm |
| Concentration per Run 3 | 0.0487 ppm | 2.1272 ppm | 0.1160 ppm | 1.0180 ppm | 1.9880 ppm | 0.0491 ppm | 95.5647 ppm |
| Concentration RSD | 0.3 % | 0.2 % | 0.1 % | 0.2 % | 0.3 % | 0.4 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0480 ppm | 0.4748 ppm | 0.1897 ppm | 0.2753 ppm | 1.4055 ppm | 17.4180 ppm | 0.0078 ppm |
| Concentration per Run 1 | 0.0476 ppm | 0.4733 ppm | 0.1906 ppm | 0.2764 ppm | 1.4202 ppm | 17.3957 ppm | 0.0083 ppm |
| Concentration per Run 2 | 0.0481 ppm | 0.4770 ppm | 0.1890 ppm | 0.2754 ppm | 1.3990 ppm | 17.4361 ppm | 0.0072 ppm |
| Concentration per Run 3 | 0.0483 ppm | 0.4741 ppm | 0.1895 ppm | 0.2740 ppm | 1.3973 ppm | 17.4221 ppm | 0.0080 ppm |
| Concentration RSD | 0.7 % | 0.4 % | 0.4 % | 0.4 % | 0.9 % | 0.1 % | 7.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 28.2524 ppm | 0.5361 ppm | 0.9500 ppm | 268.4144 ppm | 0.4717 ppm | 0.5329 ppm | 0.4425 ppm |
| Concentration per Run 1 | 28.2213 ppm | 0.5387 ppm | 0.9418 ppm | 269.0581 ppm | 0.4690 ppm | 0.5317 ppm | 0.4341 ppm |
| Concentration per Run 2 | 28.2718 ppm | 0.5358 ppm | 0.9504 ppm | 268.3031 ppm | 0.4726 ppm | 0.5345 ppm | 0.4439 ppm |
| Concentration per Run 3 | 28.2642 ppm | 0.5339 ppm | 0.9578 ppm | 267.8820 ppm | 0.4734 ppm | 0.5325 ppm | 0.4494 ppm |
| Concentration RSD | 0.1 % | 0.5 % | 0.8 % | 0.2 % | 0.5 % | 0.3 % | 1.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1151 ppm | 4.4617 ppm | 0.8088 ppm | 1.5898 ppm | 0.9807 ppm | 0.1172 ppm | 0.4882 ppm |
| Concentration per Run 1 | 0.1147 ppm | 4.4571 ppm | 0.8122 ppm | 1.5973 ppm | 0.9795 ppm | 0.1195 ppm | 0.4884 ppm |
| Concentration per Run 2 | 0.1172 ppm | 4.4528 ppm | 0.8054 ppm | 1.5864 ppm | 0.9831 ppm | 0.1179 ppm | 0.4887 ppm |
| Concentration per Run 3 | 0.1134 ppm | 4.4753 ppm | 0.8087 ppm | 1.5856 ppm | 0.9796 ppm | 0.1141 ppm | 0.4874 ppm |
| Concentration RSD | 1.7 % | 0.3 % | 0.4 % | 0.4 % | 0.2 % | 2.3 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5159 ppm | 107.7504 % | 104.2383 % | 105.8069 % | 105.7608 % | 102.2751 % | 102.6909 % |
| Concentration per Run 1 | 0.5141 ppm | 108.1439 % | 104.1796 % | 106.5719 % | 106.1961 % | 102.0091 % | 102.8860 % |
| Concentration per Run 2 | 0.5158 ppm | 107.4063 % | 104.2270 % | 105.2322 % | 105.7988 % | 102.0540 % | 102.7621 % |
| Concentration per Run 3 | 0.5176 ppm | 107.7009 % | 104.3082 % | 105.6167 % | 105.2876 % | 102.7623 % | 102.4247 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.1 % | 0.7 % | 0.4 % | 0.4 % | 0.2 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: WG2039414-8 WG2039414
Analysis started at: 3/13/2025 12:28:29 PM
Rack 1
Vial 12
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 0.1810 ppm | 0.0006 ppm | 0.0696 ppm | 0.0668 ppm | 0.0000 ppm | 86.8335 ppm |
| Concentration per Run 1 | -0.0005 ppm | 0.1875 ppm | 0.0004 ppm | 0.0711 ppm | 0.0668 ppm | 0.0000 ppm | 86.7460 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.1803 ppm | 0.0001 ppm | 0.0688 ppm | 0.0667 ppm | 0.0000 ppm | 87.0816 ppm |
| Concentration per Run 3 | -0.0006 ppm | 0.1753 ppm | 0.0012 ppm | 0.0690 ppm | 0.0668 ppm | 0.0000 ppm | 86.6729 ppm |
| Concentration RSD | 122.2 % | 3.4 % | 94.4 % | 1.8 % | 0.1 % | 250.5 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 0.0000 ppm | 0.0010 ppm | 0.0211 ppm | 0.4357 ppm | 6.7706 ppm | 0.0085 ppm |
| Concentration per Run 1 | -0.0004 ppm | -0.0002 ppm | 0.0011 ppm | 0.0208 ppm | 0.4380 ppm | 6.7811 ppm | 0.0088 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0004 ppm | 0.0007 ppm | 0.0210 ppm | 0.4349 ppm | 6.7549 ppm | 0.0078 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0000 ppm | 0.0011 ppm | 0.0216 ppm | 0.4341 ppm | 6.7757 ppm | 0.0091 ppm |
| Concentration RSD | 7.0 % | 886.9 % | 20.5 % | 2.0 % | 0.5 % | 0.2 % | 7.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 18.9119 ppm | 0.0541 ppm | 0.0073 ppm | 262.5453 ppm | 0.0021 ppm | 0.0033 ppm | 0.0058 ppm |
| Concentration per Run 1 | 18.9525 ppm | 0.0540 ppm | 0.0081 ppm | 261.8241 ppm | 0.0024 ppm | 0.0014 ppm | 0.0053 ppm |
| Concentration per Run 2 | 18.8800 ppm | 0.0539 ppm | 0.0071 ppm | 260.2089 ppm | 0.0015 ppm | 0.0030 ppm | 0.0056 ppm |
| Concentration per Run 3 | 18.9031 ppm | 0.0544 ppm | 0.0067 ppm | 265.6029 ppm | 0.0025 ppm | 0.0055 ppm | 0.0065 ppm |
| Concentration RSD | 0.2 % | 0.5 % | 10.0 % | 1.1 % | 27.7 % | 63.1 % | 11.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0009 ppm | 3.3514 ppm | 0.0037 ppm | 0.6028 ppm | 0.0148 ppm | 0.0024 ppm | 0.0008 ppm |
| Concentration per Run 1 | 0.0007 ppm | 3.3457 ppm | 0.0048 ppm | 0.6028 ppm | 0.0139 ppm | 0.0014 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0021 ppm | 3.3545 ppm | 0.0030 ppm | 0.6031 ppm | 0.0164 ppm | 0.0044 ppm | 0.0010 ppm |
| Concentration per Run 3 | -0.0001 ppm | 3.3539 ppm | 0.0031 ppm | 0.6027 ppm | 0.0141 ppm | 0.0013 ppm | 0.0007 ppm |
| Concentration RSD | 126.9 % | 0.1 % | 27.7 % | 0.0 % | 9.4 % | 72.3 % | 22.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0493 ppm | 106.7908 % | 103.2193 % | 106.0551 % | 106.1695 % | 102.3506 % | 104.1431 % |
| Concentration per Run 1 | 0.0498 ppm | 106.9831 % | 103.5109 % | 105.6428 % | 106.5379 % | 102.8642 % | 103.9899 % |
| Concentration per Run 2 | 0.0490 ppm | 106.9942 % | 103.3278 % | 106.3108 % | 106.4107 % | 101.8814 % | 104.3516 % |
| Concentration per Run 3 | 0.0492 ppm | 106.3951 % | 102.8193 % | 106.2118 % | 105.5600 % | 102.3063 % | 104.0879 % |
| Concentration RSD | 0.8 % | 0.3 % | 0.3 % | 0.3 % | 0.5 % | 0.5 % | 0.2 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: WG2039414-9 WG2039414
Analysis started at: 3/13/2025 12:31:57 PM
Rack 1
Vial 13
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0321 ppm | 2.1019 ppm | 0.1197 ppm | 0.9991 ppm | 1.9680 ppm | 0.0491 ppm | 92.1603 ppm |
| Concentration per Run 1 | 0.0321 ppm | 2.0999 ppm | 0.1184 ppm | 0.9981 ppm | 1.9645 ppm | 0.0492 ppm | 91.9549 ppm |
| Concentration per Run 2 | 0.0324 ppm | 2.1046 ppm | 0.1207 ppm | 0.9989 ppm | 1.9628 ppm | 0.0490 ppm | 92.6551 ppm |
| Concentration per Run 3 | 0.0318 ppm | 2.1013 ppm | 0.1199 ppm | 1.0003 ppm | 1.9766 ppm | 0.0491 ppm | 91.8708 ppm |
| Concentration RSD | 0.8 % | 0.1 % | 1.0 % | 0.1 % | 0.4 % | 0.2 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0480 ppm | 0.4707 ppm | 0.1889 ppm | 0.2724 ppm | 1.4188 ppm | 17.0183 ppm | 0.0078 ppm |
| Concentration per Run 1 | 0.0483 ppm | 0.4728 ppm | 0.1888 ppm | 0.2730 ppm | 1.4142 ppm | 17.0408 ppm | 0.0080 ppm |
| Concentration per Run 2 | 0.0478 ppm | 0.4701 ppm | 0.1889 ppm | 0.2722 ppm | 1.4298 ppm | 16.9903 ppm | 0.0079 ppm |
| Concentration per Run 3 | 0.0480 ppm | 0.4692 ppm | 0.1890 ppm | 0.2721 ppm | 1.4124 ppm | 17.0238 ppm | 0.0076 ppm |
| Concentration RSD | 0.6 % | 0.4 % | 0.0 % | 0.2 % | 0.7 % | 0.2 % | 2.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 27.3690 ppm | 0.5337 ppm | 0.9363 ppm | 259.6835 ppm | 0.4711 ppm | 0.5299 ppm | 0.3513 ppm |
| Concentration per Run 1 | 27.4769 ppm | 0.5337 ppm | 0.9328 ppm | 259.6505 ppm | 0.4716 ppm | 0.5270 ppm | 0.3420 ppm |
| Concentration per Run 2 | 27.2313 ppm | 0.5357 ppm | 0.9330 ppm | 259.5523 ppm | 0.4711 ppm | 0.5340 ppm | 0.3505 ppm |
| Concentration per Run 3 | 27.3989 ppm | 0.5318 ppm | 0.9432 ppm | 259.8477 ppm | 0.4705 ppm | 0.5287 ppm | 0.3614 ppm |
| Concentration RSD | 0.5 % | 0.4 % | 0.6 % | 0.1 % | 0.1 % | 0.7 % | 2.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1221 ppm | 4.0054 ppm | 0.9311 ppm | 1.5512 ppm | 0.9867 ppm | 0.1205 ppm | 0.4857 ppm |
| Concentration per Run 1 | 0.1194 ppm | 4.0203 ppm | 0.9278 ppm | 1.5479 ppm | 0.9885 ppm | 0.1213 ppm | 0.4864 ppm |
| Concentration per Run 2 | 0.1232 ppm | 3.9977 ppm | 0.9332 ppm | 1.5485 ppm | 0.9853 ppm | 0.1200 ppm | 0.4852 ppm |
| Concentration per Run 3 | 0.1238 ppm | 3.9984 ppm | 0.9324 ppm | 1.5573 ppm | 0.9864 ppm | 0.1204 ppm | 0.4854 ppm |
| Concentration RSD | 1.9 % | 0.3 % | 0.3 % | 0.3 % | 0.2 % | 0.6 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5143 ppm | 107.6984 % | 103.8365 % | 106.5633 % | 105.5991 % | 101.9762 % | 103.2285 % |
| Concentration per Run 1 | 0.5154 ppm | 107.6684 % | 103.8095 % | 106.4805 % | 106.0576 % | 102.1658 % | 102.9481 % |
| Concentration per Run 2 | 0.5146 ppm | 107.7585 % | 102.9261 % | 106.5352 % | 105.3000 % | 101.0897 % | 103.7765 % |
| Concentration per Run 3 | 0.5128 ppm | 107.6683 % | 104.7740 % | 106.6741 % | 105.4397 % | 102.6732 % | 102.9610 % |
| Concentration RSD | 0.3 % | 0.0 % | 0.9 % | 0.1 % | 0.4 % | 0.8 % | 0.5 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: WG2039414-10D5 WG2039414
Analysis started at: 3/13/2025 12:35:23 PM
Rack 1
Vial 14
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0272 ppm | -0.0007 ppm | 0.0130 ppm | 0.0131 ppm | 0.0000 ppm | 17.2937 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.0264 ppm | 0.0003 ppm | 0.0131 ppm | 0.0131 ppm | 0.0000 ppm | 17.3531 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0265 ppm | -0.0011 ppm | 0.0128 ppm | 0.0130 ppm | 0.0000 ppm | 17.2175 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0286 ppm | -0.0013 ppm | 0.0130 ppm | 0.0132 ppm | 0.0000 ppm | 17.3105 ppm |
| Concentration RSD | 190.6 % | 4.6 % | 119.0 % | 1.0 % | 0.6 % | 2,611.3 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0010 ppm | 0.5198 ppm | 0.0038 ppm | 3.8190 ppm | 1.2894 ppm | 0.0016 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0015 ppm | 0.5264 ppm | 0.0036 ppm | 3.8810 ppm | 1.3078 ppm | 0.0024 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0012 ppm | 0.5175 ppm | 0.0041 ppm | 3.8378 ppm | 1.2946 ppm | 0.0006 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0004 ppm | 0.5156 ppm | 0.0038 ppm | 3.7382 ppm | 1.2660 ppm | 0.0018 ppm |
| Concentration RSD | 140.5 % | 51.8 % | 1.1 % | 7.4 % | 1.9 % | 1.7 % | 57.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.7267 ppm | 0.0654 ppm | 0.0079 ppm | 52.5648 ppm | 0.0098 ppm | 0.0018 ppm | 0.0160 ppm |
| Concentration per Run 1 | 3.7394 ppm | 0.0668 ppm | 0.0079 ppm | 52.3941 ppm | 0.0094 ppm | 0.0023 ppm | 0.0142 ppm |
| Concentration per Run 2 | 3.7226 ppm | 0.0652 ppm | 0.0077 ppm | 52.8519 ppm | 0.0096 ppm | 0.0015 ppm | 0.0162 ppm |
| Concentration per Run 3 | 3.7180 ppm | 0.0642 ppm | 0.0081 ppm | 52.4484 ppm | 0.0104 ppm | 0.0015 ppm | 0.0175 ppm |
| Concentration RSD | 0.3 % | 2.0 % | 2.2 % | 0.5 % | 5.6 % | 27.0 % | 10.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0015 ppm | 0.6828 ppm | 0.0098 ppm | 0.1185 ppm | 0.0034 ppm | 0.0020 ppm | 0.0016 ppm |
| Concentration per Run 1 | -0.0030 ppm | 0.6804 ppm | 0.0099 ppm | 0.1182 ppm | 0.0034 ppm | 0.0043 ppm | 0.0016 ppm |
| Concentration per Run 2 | -0.0009 ppm | 0.6868 ppm | 0.0106 ppm | 0.1191 ppm | 0.0038 ppm | 0.0003 ppm | 0.0018 ppm |
| Concentration per Run 3 | -0.0005 ppm | 0.6811 ppm | 0.0089 ppm | 0.1183 ppm | 0.0029 ppm | 0.0013 ppm | 0.0015 ppm |
| Concentration RSD | 90.0 % | 0.5 % | 8.8 % | 0.4 % | 13.3 % | 106.5 % | 11.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0101 ppm | 109.4032 % | 107.0850 % | 109.7331 % | 107.7929 % | 105.0226 % | 106.3934 % |
| Concentration per Run 1 | 0.0101 ppm | 108.5764 % | 107.5030 % | 109.3982 % | 107.3861 % | 105.0926 % | 105.9114 % |
| Concentration per Run 2 | 0.0101 ppm | 110.3489 % | 107.0626 % | 110.3531 % | 108.9057 % | 105.2345 % | 106.8850 % |
| Concentration per Run 3 | 0.0102 ppm | 109.2845 % | 106.6893 % | 109.4480 % | 107.0869 % | 104.7407 % | 106.3839 % |
| Concentration RSD | 0.7 % | 0.8 % | 0.4 % | 0.5 % | 0.9 % | 0.2 % | 0.5 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: CCV
Analysis started at: 3/13/2025 12:38:49 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4538 ppm | 0.4594 ppm | 0.4662 ppm | 0.4591 ppm | 0.4739 ppm | 0.4910 ppm | 0.4898 ppm |
| Concentration per Run 1 | 0.4543 ppm | 0.4662 ppm | 0.4650 ppm | 0.4569 ppm | 0.4742 ppm | 0.4919 ppm | 0.4879 ppm |
| Concentration per Run 2 | 0.4522 ppm | 0.4627 ppm | 0.4676 ppm | 0.4599 ppm | 0.4733 ppm | 0.4909 ppm | 0.4889 ppm |
| Concentration per Run 3 | 0.4549 ppm | 0.4492 ppm | 0.4661 ppm | 0.4606 ppm | 0.4742 ppm | 0.4900 ppm | 0.4927 ppm |
| Recovery Percentage 1 | 90.753 % | 91.875 % | 93.250 % | 91.822 % | 94.776 % | 98.191 % | 97.967 % |
| Concentration RSD | 0.3 % | 1.9 % | 0.3 % | 0.4 % | 0.1 % | 0.2 % | 0.5 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4797 ppm | 0.4908 ppm | 0.4798 ppm | 0.4561 ppm | 0.4994 ppm | 4.9183 ppm | 0.4765 ppm |
| Concentration per Run 1 | 0.4807 ppm | 0.4907 ppm | 0.4791 ppm | 0.4572 ppm | 0.5016 ppm | 4.8896 ppm | 0.4773 ppm |
| Concentration per Run 2 | 0.4780 ppm | 0.4892 ppm | 0.4804 ppm | 0.4522 ppm | 0.4979 ppm | 4.9370 ppm | 0.4762 ppm |
| Concentration per Run 3 | 0.4802 ppm | 0.4925 ppm | 0.4798 ppm | 0.4590 ppm | 0.4986 ppm | 4.9283 ppm | 0.4761 ppm |
| Recovery Percentage 1 | 95.930 % | 98.161 % | 95.956 % | 91.227 % | 99.878 % | 98.365 % | 95.307 % |
| Concentration RSD | 0.3 % | 0.3 % | 0.1 % | 0.8 % | 0.4 % | 0.5 % | 0.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4775 ppm | 0.4798 ppm | 0.4801 ppm | 9.5899 ppm | 0.4893 ppm | 0.4911 ppm | 0.4784 ppm |
| Concentration per Run 1 | 0.4784 ppm | 0.4790 ppm | 0.4790 ppm | 9.6011 ppm | 0.4871 ppm | 0.4923 ppm | 0.4751 ppm |
| Concentration per Run 2 | 0.4766 ppm | 0.4810 ppm | 0.4809 ppm | 9.5978 ppm | 0.4906 ppm | 0.4920 ppm | 0.4794 ppm |
| Concentration per Run 3 | 0.4775 ppm | 0.4793 ppm | 0.4805 ppm | 9.5709 ppm | 0.4902 ppm | 0.4890 ppm | 0.4808 ppm |
| Recovery Percentage 1 | 95.500 % | 95.951 % | 96.020 % | 95.899 % | 97.860 % | 98.215 % | 95.683 % |
| Concentration RSD | 0.2 % | 0.2 % | 0.2 % | 0.2 % | 0.4 % | 0.4 % | 0.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4669 ppm | 5.1668 ppm | 0.4979 ppm | 0.4905 ppm | 0.4844 ppm | 0.4782 ppm | 0.4762 ppm |
| Concentration per Run 1 | 0.4685 ppm | 5.1589 ppm | 0.5011 ppm | 0.4899 ppm | 0.4839 ppm | 0.4777 ppm | 0.4750 ppm |
| Concentration per Run 2 | 0.4670 ppm | 5.1668 ppm | 0.4943 ppm | 0.4902 ppm | 0.4849 ppm | 0.4802 ppm | 0.4749 ppm |
| Concentration per Run 3 | 0.4650 ppm | 5.1746 ppm | 0.4983 ppm | 0.4914 ppm | 0.4844 ppm | 0.4767 ppm | 0.4788 ppm |
| Recovery Percentage 1 | 93.371 % | 98.415 % | 99.584 % | 98.095 % | 96.883 % | 95.640 % | 95.244 % |
| Concentration RSD | 0.4 % | 0.2 % | 0.7 % | 0.2 % | 0.1 % | 0.4 % | 0.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4831 ppm | 108.7460 % | 106.9166 % | 109.0520 % | 106.9047 % | 105.1420 % | 106.8980 % |
| Concentration per Run 1 | 0.4845 ppm | 108.3353 % | 107.3335 % | 108.5722 % | 106.2784 % | 105.6520 % | 106.4945 % |
| Concentration per Run 2 | 0.4837 ppm | 108.4519 % | 106.9128 % | 108.5160 % | 106.8452 % | 105.0669 % | 106.9979 % |
| Concentration per Run 3 | 0.4812 ppm | 109.4507 % | 106.5036 % | 110.0680 % | 107.5904 % | 104.7071 % | 107.2016 % |
| Recovery Percentage 1 | 96.624 % | | | | | | |
| Concentration RSD | 0.4 % | 0.6 % | 0.4 % | 0.8 % | 0.6 % | 0.5 % | 0.3 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: CCB
Analysis started at: 3/13/2025 12:42:17 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | -0.0030 ppm | 0.0001 ppm | -0.0011 ppm | 0.0000 ppm | 0.0000 ppm | 0.0014 ppm |
| Concentration per Run 1 | -0.0003 ppm | -0.0001 ppm | 0.0002 ppm | -0.0009 ppm | 0.0000 ppm | 0.0000 ppm | 0.0034 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0058 ppm | 0.0007 ppm | -0.0028 ppm | 0.0000 ppm | 0.0001 ppm | -0.0015 ppm |
| Concentration per Run 3 | -0.0005 ppm | -0.0033 ppm | -0.0006 ppm | 0.0004 ppm | -0.0001 ppm | 0.0000 ppm | 0.0023 ppm |
| Recovery Percentage 1 | -3.872 % | -3.033 % | 1.723 % | -3.587 % | -0.383 % | 0.937 % | 1.388 % |
| Concentration RSD | 107.5 % | 94.1 % | 788.6 % | 146.6 % | 51.8 % | 57.6 % | 187.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | 0.0001 ppm | -0.0008 ppm | -0.0014 ppm | -0.0217 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0001 ppm | -0.0001 ppm | -0.0003 ppm | -0.0009 ppm | -0.0022 ppm | -0.0314 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0002 ppm | 0.0011 ppm | -0.0005 ppm | -0.0001 ppm | -0.0171 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0002 ppm | -0.0006 ppm | -0.0010 ppm | -0.0019 ppm | -0.0166 ppm | 0.0008 ppm |
| Recovery Percentage 1 | 0.340 % | -0.177 % | 0.510 % | -7.925 % | -2.835 % | -0.867 % | 3.414 % |
| Concentration RSD | 404.5 % | 533.1 % | 1,759.0 % | 33.1 % | 80.7 % | 38.8 % | 347.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | -0.0001 ppm | 0.0015 ppm | 0.0143 ppm | 0.0013 ppm | 0.0014 ppm | 0.0043 ppm |
| Concentration per Run 1 | 0.0021 ppm | 0.0000 ppm | 0.0019 ppm | 0.0156 ppm | 0.0021 ppm | 0.0014 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0002 ppm | -0.0001 ppm | 0.0008 ppm | 0.0092 ppm | 0.0007 ppm | 0.0016 ppm | 0.0071 ppm |
| Concentration per Run 3 | -0.0012 ppm | -0.0001 ppm | 0.0018 ppm | 0.0181 ppm | 0.0013 ppm | 0.0012 ppm | 0.0049 ppm |
| Recovery Percentage 1 | 0.347 % | -0.576 % | 3.041 % | 0.715 % | 5.353 % | 13.975 % | 8.605 % |
| Concentration RSD | 470.6 % | 140.8 % | 41.7 % | 32.1 % | 51.9 % | 11.9 % | 73.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | -0.0102 ppm | 0.0008 ppm | 0.0000 ppm | 0.0006 ppm | 0.0001 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0012 ppm | -0.0098 ppm | 0.0007 ppm | 0.0000 ppm | 0.0008 ppm | 0.0024 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0017 ppm | -0.0110 ppm | 0.0001 ppm | -0.0002 ppm | 0.0004 ppm | -0.0001 ppm | -0.0001 ppm |
| Concentration per Run 3 | -0.0015 ppm | -0.0097 ppm | 0.0015 ppm | 0.0001 ppm | 0.0005 ppm | -0.0020 ppm | -0.0003 ppm |
| Recovery Percentage 1 | -3.224 % | -2.033 % | 1.509 % | -0.240 % | 5.776 % | 0.357 % | -0.744 % |
| Concentration RSD | 538.2 % | 7.3 % | 92.8 % | 568.7 % | 35.4 % | 3,075.3 % | 287.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 106.1058 % | 106.5213 % | 106.9068 % | 106.8192 % | 106.5886 % | 107.0729 % |
| Concentration per Run 1 | 0.0002 ppm | 106.6336 % | 106.1945 % | 107.4089 % | 107.6167 % | 106.3000 % | 107.5272 % |
| Concentration per Run 2 | 0.0000 ppm | 106.2660 % | 106.1781 % | 106.4738 % | 107.2715 % | 106.4180 % | 106.9599 % |
| Concentration per Run 3 | 0.0002 ppm | 105.4179 % | 107.1913 % | 106.8378 % | 105.5694 % | 107.0480 % | 106.7317 % |
| Recovery Percentage 1 | 2.869 % | | | | | | |
| Concentration RSD | 91.6 % | 0.6 % | 0.5 % | 0.4 % | 1.0 % | 0.4 % | 0.4 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512522-11 WG2038451
Analysis started at: 3/13/2025 12:57:11 PM
Rack 1
Vial 46
Comment FB

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | -0.0019 ppm | -0.0008 ppm | -0.0003 ppm | 0.0005 ppm | 0.0000 ppm | 0.1306 ppm |
| Concentration per Run 1 | -0.0008 ppm | -0.0041 ppm | -0.0018 ppm | 0.0011 ppm | 0.0005 ppm | 0.0000 ppm | 0.1303 ppm |
| Concentration per Run 2 | -0.0005 ppm | -0.0022 ppm | 0.0001 ppm | -0.0018 ppm | 0.0003 ppm | 0.0000 ppm | 0.1298 ppm |
| Concentration per Run 3 | -0.0005 ppm | 0.0007 ppm | -0.0007 ppm | -0.0002 ppm | 0.0005 ppm | 0.0000 ppm | 0.1315 ppm |
| Concentration RSD | 31.7 % | 128.3 % | 116.3 % | 456.4 % | 27.4 % | 194.3 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0002 ppm | -0.0001 ppm | -0.0007 ppm | 0.0012 ppm | -0.0212 ppm | 0.0005 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0001 ppm | -0.0003 ppm | -0.0006 ppm | 0.0016 ppm | -0.0249 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0004 ppm | -0.0003 ppm | -0.0005 ppm | 0.0003 ppm | -0.0178 ppm | 0.0003 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0002 ppm | 0.0003 ppm | -0.0012 ppm | 0.0018 ppm | -0.0210 ppm | 0.0011 ppm |
| Concentration RSD | 5,295.8 % | 138.9 % | 324.4 % | 48.2 % | 64.8 % | 16.6 % | 126.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0068 ppm | 0.0000 ppm | 0.0000 ppm | 0.0307 ppm | 0.0003 ppm | 0.0019 ppm | -0.0027 ppm |
| Concentration per Run 1 | 0.0041 ppm | 0.0000 ppm | 0.0002 ppm | 0.0348 ppm | 0.0009 ppm | 0.0012 ppm | -0.0025 ppm |
| Concentration per Run 2 | 0.0068 ppm | 0.0000 ppm | -0.0001 ppm | 0.0281 ppm | 0.0006 ppm | 0.0024 ppm | -0.0017 ppm |
| Concentration per Run 3 | 0.0095 ppm | 0.0001 ppm | 0.0000 ppm | 0.0291 ppm | -0.0005 ppm | 0.0022 ppm | -0.0038 ppm |
| Concentration RSD | 40.1 % | 179.3 % | 423.9 % | 11.8 % | 217.6 % | 32.1 % | 40.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0014 ppm | -0.0112 ppm | -0.0009 ppm | 0.0003 ppm | 0.0002 ppm | 0.0001 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0037 ppm | -0.0137 ppm | -0.0004 ppm | 0.0003 ppm | 0.0002 ppm | -0.0003 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0005 ppm | -0.0089 ppm | -0.0007 ppm | 0.0004 ppm | 0.0002 ppm | 0.0011 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0111 ppm | -0.0015 ppm | 0.0003 ppm | 0.0003 ppm | -0.0006 ppm | -0.0002 ppm |
| Concentration RSD | 148.8 % | 21.0 % | 64.4 % | 17.7 % | 28.2 % | 1,493.5 % | 139.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0019 ppm | 108.2318 % | 107.5902 % | 108.2244 % | 107.7945 % | 106.9554 % | 108.0751 % |
| Concentration per Run 1 | 0.0018 ppm | 108.3207 % | 107.3213 % | 109.2913 % | 108.1441 % | 106.9650 % | 108.7609 % |
| Concentration per Run 2 | 0.0020 ppm | 108.3554 % | 107.8478 % | 108.5999 % | 107.8083 % | 107.1336 % | 108.4673 % |
| Concentration per Run 3 | 0.0018 ppm | 108.0194 % | 107.6016 % | 106.7819 % | 107.4311 % | 106.7674 % | 106.9971 % |
| Concentration RSD | 6.7 % | 0.2 % | 0.2 % | 1.2 % | 0.3 % | 0.2 % | 0.9 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512607-06 WG2039059
Analysis started at: 3/13/2025 1:00:53 PM
Rack 1
Vial 45
Comment EB

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.2170 ppm | -0.0004 ppm | 0.0000 ppm | 0.0024 ppm | 0.0000 ppm | 0.1154 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.2198 ppm | 0.0000 ppm | -0.0002 ppm | 0.0024 ppm | 0.0000 ppm | 0.1177 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.2133 ppm | -0.0005 ppm | 0.0011 ppm | 0.0026 ppm | 0.0001 ppm | 0.1163 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.2179 ppm | -0.0006 ppm | -0.0010 ppm | 0.0023 ppm | 0.0000 ppm | 0.1120 ppm |
| Concentration RSD | 711.5 % | 1.5 % | 85.1 % | 44,603.1 % | 5.4 % | 228.6 % | 2.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0003 ppm | 0.0004 ppm | 0.0002 ppm | 0.2708 ppm | 0.0213 ppm | 0.0003 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0010 ppm | 0.0001 ppm | 0.0004 ppm | 0.2722 ppm | 0.0147 ppm | 0.0007 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0002 ppm | 0.0005 ppm | 0.0002 ppm | 0.2726 ppm | 0.0134 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0001 ppm | 0.0005 ppm | -0.0001 ppm | 0.2676 ppm | 0.0358 ppm | 0.0000 ppm |
| Concentration RSD | 58.1 % | 164.1 % | 63.9 % | 144.5 % | 1.0 % | 58.9 % | 91.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0600 ppm | 0.0136 ppm | -0.0004 ppm | 0.0130 ppm | 0.0008 ppm | 0.0017 ppm | -0.0041 ppm |
| Concentration per Run 1 | 0.0598 ppm | 0.0135 ppm | -0.0005 ppm | 0.0098 ppm | 0.0014 ppm | 0.0005 ppm | -0.0018 ppm |
| Concentration per Run 2 | 0.0628 ppm | 0.0136 ppm | -0.0006 ppm | 0.0138 ppm | -0.0001 ppm | 0.0024 ppm | -0.0072 ppm |
| Concentration per Run 3 | 0.0573 ppm | 0.0136 ppm | 0.0000 ppm | 0.0153 ppm | 0.0010 ppm | 0.0022 ppm | -0.0034 ppm |
| Concentration RSD | 4.5 % | 0.7 % | 95.1 % | 22.0 % | 97.2 % | 59.3 % | 66.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.1915 ppm | -0.0017 ppm | 0.0009 ppm | 0.0115 ppm | -0.0016 ppm | 0.0006 ppm |
| Concentration per Run 1 | 0.0029 ppm | 0.1927 ppm | -0.0014 ppm | 0.0008 ppm | 0.0116 ppm | -0.0027 ppm | 0.0006 ppm |
| Concentration per Run 2 | -0.0021 ppm | 0.1940 ppm | -0.0020 ppm | 0.0009 ppm | 0.0113 ppm | -0.0001 ppm | 0.0006 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.1879 ppm | -0.0018 ppm | 0.0009 ppm | 0.0116 ppm | -0.0020 ppm | 0.0005 ppm |
| Concentration RSD | 1,316.4 % | 1.7 % | 19.3 % | 5.1 % | 1.5 % | 85.7 % | 9.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0015 ppm | 108.2024 % | 107.7652 % | 109.5064 % | 107.9697 % | 106.2726 % | 108.5238 % |
| Concentration per Run 1 | 0.0013 ppm | 108.5926 % | 107.5177 % | 109.4596 % | 108.5058 % | 106.4243 % | 108.9159 % |
| Concentration per Run 2 | 0.0015 ppm | 108.0101 % | 107.8058 % | 108.8553 % | 108.0057 % | 105.7486 % | 107.9724 % |
| Concentration per Run 3 | 0.0016 ppm | 108.0043 % | 107.9722 % | 110.2045 % | 107.3977 % | 106.6450 % | 108.6833 % |
| Concentration RSD | 11.5 % | 0.3 % | 0.2 % | 0.6 % | 0.5 % | 0.4 % | 0.5 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512368-02 WG2039059
Analysis started at: 3/13/2025 1:04:21 PM
Rack 1
Vial 44
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0005 ppm | 0.0010 ppm | -0.0017 ppm | 0.0118 ppm | 0.0708 ppm | 0.0000 ppm | 17.0790 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0011 ppm | -0.0018 ppm | 0.0114 ppm | 0.0706 ppm | 0.0000 ppm | 17.1028 ppm |
| Concentration per Run 2 | -0.0010 ppm | 0.0016 ppm | -0.0007 ppm | 0.0125 ppm | 0.0709 ppm | 0.0000 ppm | 17.0776 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0002 ppm | -0.0025 ppm | 0.0114 ppm | 0.0709 ppm | 0.0000 ppm | 17.0567 ppm |
| Concentration RSD | 84.7 % | 73.2 % | 55.6 % | 5.2 % | 0.3 % | 95.4 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | -0.0001 ppm | 0.0030 ppm | -0.0004 ppm | 0.0109 ppm | 1.0755 ppm | 0.0011 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0002 ppm | 0.0035 ppm | -0.0004 ppm | 0.0110 ppm | 1.0742 ppm | 0.0014 ppm |
| Concentration per Run 2 | -0.0002 ppm | -0.0006 ppm | 0.0026 ppm | -0.0001 ppm | 0.0106 ppm | 1.0677 ppm | 0.0015 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0002 ppm | 0.0030 ppm | -0.0007 ppm | 0.0110 ppm | 1.0846 ppm | 0.0004 ppm |
| Concentration RSD | 36.0 % | 585.0 % | 16.3 % | 79.6 % | 2.1 % | 0.8 % | 52.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 7.2860 ppm | 0.0006 ppm | -0.0005 ppm | 12.4766 ppm | 0.0018 ppm | 0.0017 ppm | -0.0039 ppm |
| Concentration per Run 1 | 7.2699 ppm | 0.0006 ppm | -0.0010 ppm | 12.4160 ppm | 0.0019 ppm | 0.0027 ppm | -0.0033 ppm |
| Concentration per Run 2 | 7.3120 ppm | 0.0006 ppm | -0.0004 ppm | 12.5650 ppm | 0.0020 ppm | 0.0005 ppm | -0.0047 ppm |
| Concentration per Run 3 | 7.2759 ppm | 0.0006 ppm | -0.0001 ppm | 12.4487 ppm | 0.0016 ppm | 0.0019 ppm | -0.0037 ppm |
| Concentration RSD | 0.3 % | 7.9 % | 91.2 % | 0.6 % | 11.4 % | 63.3 % | 19.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | 5.3040 ppm | -0.0014 ppm | 0.0839 ppm | 0.0006 ppm | -0.0006 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0025 ppm | 5.2957 ppm | -0.0003 ppm | 0.0837 ppm | 0.0008 ppm | 0.0017 ppm | 0.0000 ppm |
| Concentration per Run 2 | -0.0009 ppm | 5.3088 ppm | -0.0018 ppm | 0.0840 ppm | 0.0007 ppm | -0.0023 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0007 ppm | 5.3077 ppm | -0.0020 ppm | 0.0841 ppm | 0.0005 ppm | -0.0011 ppm | -0.0004 ppm |
| Concentration RSD | 173.8 % | 0.1 % | 69.4 % | 0.3 % | 26.2 % | 368.6 % | 594.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0128 ppm | 108.4455 % | 107.2064 % | 108.3579 % | 107.0541 % | 105.3682 % | 106.6150 % |
| Concentration per Run 1 | 0.0129 ppm | 108.4433 % | 107.0777 % | 108.2715 % | 107.2755 % | 105.4865 % | 106.3563 % |
| Concentration per Run 2 | 0.0126 ppm | 108.1055 % | 107.3497 % | 107.8773 % | 107.1691 % | 105.5694 % | 106.4953 % |
| Concentration per Run 3 | 0.0128 ppm | 108.7876 % | 107.1919 % | 108.9249 % | 106.7179 % | 105.0488 % | 106.9935 % |
| Concentration RSD | 1.3 % | 0.3 % | 0.1 % | 0.5 % | 0.3 % | 0.3 % | 0.3 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512625-01 WG2039414
Analysis started at: 3/13/2025 1:07:50 PM
Rack 1
Vial 20
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | -0.0074 ppm | -0.0017 ppm | 0.3701 ppm | 0.4192 ppm | 0.0000 ppm | 116.8349 ppm |
| Concentration per Run 1 | -0.0003 ppm | -0.0050 ppm | -0.0004 ppm | 0.3711 ppm | 0.4169 ppm | 0.0000 ppm | 117.3516 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0058 ppm | -0.0016 ppm | 0.3708 ppm | 0.4199 ppm | 0.0000 ppm | 117.1787 ppm |
| Concentration per Run 3 | -0.0005 ppm | -0.0114 ppm | -0.0031 ppm | 0.3685 ppm | 0.4209 ppm | -0.0001 ppm | 115.9743 ppm |
| Concentration RSD | 102.8 % | 46.4 % | 78.4 % | 0.4 % | 0.5 % | 333.5 % | 0.6 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | 0.0023 ppm | 0.0009 ppm | 0.0102 ppm | 0.0213 ppm | 31.5631 ppm | 0.0183 ppm |
| Concentration per Run 1 | -0.0006 ppm | 0.0023 ppm | 0.0006 ppm | 0.0100 ppm | 0.0224 ppm | 31.3976 ppm | 0.0198 ppm |
| Concentration per Run 2 | -0.0006 ppm | 0.0024 ppm | 0.0011 ppm | 0.0102 ppm | 0.0197 ppm | 31.7380 ppm | 0.0168 ppm |
| Concentration per Run 3 | -0.0006 ppm | 0.0021 ppm | 0.0010 ppm | 0.0105 ppm | 0.0216 ppm | 31.5537 ppm | 0.0182 ppm |
| Concentration RSD | 4.6 % | 5.2 % | 31.7 % | 2.2 % | 6.5 % | 0.5 % | 8.0 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 67.6855 ppm | 0.0590 ppm | -0.0002 ppm | 150.1866 ppm | 0.0204 ppm | 0.0017 ppm | -0.0001 ppm |
| Concentration per Run 1 | 67.7038 ppm | 0.0589 ppm | -0.0003 ppm | 149.8803 ppm | 0.0202 ppm | 0.0004 ppm | 0.0015 ppm |
| Concentration per Run 2 | 67.7233 ppm | 0.0592 ppm | -0.0002 ppm | 150.8536 ppm | 0.0203 ppm | 0.0025 ppm | -0.0033 ppm |
| Concentration per Run 3 | 67.6293 ppm | 0.0588 ppm | -0.0002 ppm | 149.8258 ppm | 0.0208 ppm | 0.0020 ppm | 0.0016 ppm |
| Concentration RSD | 0.1 % | 0.4 % | 41.2 % | 0.4 % | 1.6 % | 66.0 % | 4,403.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0009 ppm | 4.3880 ppm | -0.0007 ppm | 1.2843 ppm | 0.0008 ppm | 0.0025 ppm | -0.0001 ppm |
| Concentration per Run 1 | 0.0002 ppm | 4.3915 ppm | -0.0013 ppm | 1.2783 ppm | 0.0007 ppm | 0.0036 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0015 ppm | 4.3919 ppm | -0.0006 ppm | 1.2857 ppm | 0.0006 ppm | 0.0024 ppm | 0.0004 ppm |
| Concentration per Run 3 | -0.0014 ppm | 4.3805 ppm | 0.0000 ppm | 1.2888 ppm | 0.0010 ppm | 0.0014 ppm | -0.0004 ppm |
| Concentration RSD | 106.7 % | 0.1 % | 99.9 % | 0.4 % | 24.9 % | 45.6 % | 578.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0037 ppm | 107.4617 % | 104.7760 % | 106.1484 % | 105.9794 % | 102.7979 % | 103.1953 % |
| Concentration per Run 1 | 0.0037 ppm | 107.1043 % | 104.3509 % | 106.5385 % | 105.8597 % | 102.4231 % | 103.4232 % |
| Concentration per Run 2 | 0.0036 ppm | 107.3092 % | 104.4024 % | 105.6280 % | 105.6614 % | 102.7157 % | 103.0054 % |
| Concentration per Run 3 | 0.0037 ppm | 107.9717 % | 105.5747 % | 106.2786 % | 106.4171 % | 103.2550 % | 103.1573 % |
| Concentration RSD | 1.7 % | 0.4 % | 0.7 % | 0.4 % | 0.4 % | 0.4 % | 0.2 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512634-01 WG2039414
Analysis started at: 3/13/2025 1:11:17 PM
Rack 1
Vial 21
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | -0.0069 ppm | -0.0016 ppm | 0.0803 ppm | 0.3810 ppm | 0.0000 ppm | 65.2616 ppm |
| Concentration per Run 1 | -0.0006 ppm | -0.0015 ppm | -0.0013 ppm | 0.0814 ppm | 0.3812 ppm | -0.0001 ppm | 65.3837 ppm |
| Concentration per Run 2 | -0.0004 ppm | -0.0114 ppm | -0.0014 ppm | 0.0809 ppm | 0.3794 ppm | 0.0000 ppm | 65.0921 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0077 ppm | -0.0021 ppm | 0.0786 ppm | 0.3826 ppm | 0.0000 ppm | 65.3089 ppm |
| Concentration RSD | 126.3 % | 72.9 % | 28.7 % | 1.9 % | 0.4 % | 185.0 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0004 ppm | 0.0003 ppm | 0.0084 ppm | 0.0381 ppm | 0.9354 ppm | 1.1108 ppm | 0.0036 ppm |
| Concentration per Run 1 | -0.0005 ppm | -0.0001 ppm | 0.0095 ppm | 0.0382 ppm | 0.9366 ppm | 1.1311 ppm | 0.0041 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0004 ppm | 0.0079 ppm | 0.0383 ppm | 0.9404 ppm | 1.0992 ppm | 0.0028 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0004 ppm | 0.0078 ppm | 0.0379 ppm | 0.9291 ppm | 1.1020 ppm | 0.0039 ppm |
| Concentration RSD | 45.6 % | 116.4 % | 11.1 % | 0.6 % | 0.6 % | 1.6 % | 20.3 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 6.3494 ppm | 0.0041 ppm | 0.0005 ppm | 58.9306 ppm | 0.0093 ppm | 0.0029 ppm | -0.0043 ppm |
| Concentration per Run 1 | 6.3812 ppm | 0.0042 ppm | 0.0000 ppm | 58.9579 ppm | 0.0094 ppm | 0.0031 ppm | -0.0052 ppm |
| Concentration per Run 2 | 6.3227 ppm | 0.0041 ppm | 0.0004 ppm | 58.6683 ppm | 0.0090 ppm | 0.0007 ppm | -0.0033 ppm |
| Concentration per Run 3 | 6.3444 ppm | 0.0040 ppm | 0.0010 ppm | 59.1656 ppm | 0.0096 ppm | 0.0048 ppm | -0.0043 ppm |
| Concentration RSD | 0.5 % | 1.7 % | 99.5 % | 0.4 % | 2.8 % | 73.1 % | 23.0 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 7.7488 ppm | 0.0116 ppm | 0.1313 ppm | 0.0002 ppm | 0.0014 ppm | 0.0013 ppm |
| Concentration per Run 1 | 0.0019 ppm | 7.7638 ppm | 0.0107 ppm | 0.1315 ppm | 0.0003 ppm | 0.0021 ppm | 0.0021 ppm |
| Concentration per Run 2 | -0.0023 ppm | 7.7136 ppm | 0.0119 ppm | 0.1310 ppm | 0.0003 ppm | 0.0017 ppm | 0.0012 ppm |
| Concentration per Run 3 | 0.0004 ppm | 7.7690 ppm | 0.0123 ppm | 0.1315 ppm | 0.0000 ppm | 0.0005 ppm | 0.0006 ppm |
| Concentration RSD | 12,104.8 % | 0.4 % | 7.1 % | 0.2 % | 89.0 % | 57.4 % | 55.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0049 ppm | 106.7051 % | 105.0286 % | 107.0548 % | 105.0252 % | 102.7047 % | 104.4314 % |
| Concentration per Run 1 | 0.0050 ppm | 107.0599 % | 104.6722 % | 107.1299 % | 105.2856 % | 102.6381 % | 104.3097 % |
| Concentration per Run 2 | 0.0047 ppm | 106.8046 % | 105.1051 % | 108.0487 % | 105.3713 % | 102.3185 % | 105.3467 % |
| Concentration per Run 3 | 0.0050 ppm | 106.2510 % | 105.3085 % | 105.9857 % | 104.4187 % | 103.1575 % | 103.6377 % |
| Concentration RSD | 3.7 % | 0.4 % | 0.3 % | 1.0 % | 0.5 % | 0.4 % | 0.8 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512637-01 WG2039414
Analysis started at: 3/13/2025 1:14:46 PM
Rack 1
Vial 22
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0002 ppm | -0.0009 ppm | 2.6502 ppm | 0.0561 ppm | 0.0000 ppm | 6.7910 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0004 ppm | -0.0024 ppm | 2.6517 ppm | 0.0560 ppm | 0.0000 ppm | 6.7830 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0021 ppm | -0.0008 ppm | 2.6518 ppm | 0.0564 ppm | 0.0000 ppm | 6.8073 ppm |
| Concentration per Run 3 | 0.0001 ppm | -0.0012 ppm | 0.0005 ppm | 2.6471 ppm | 0.0560 ppm | 0.0000 ppm | 6.7826 ppm |
| Concentration RSD | 84.7 % | 834.3 % | 165.3 % | 0.1 % | 0.4 % | 204.4 % | 0.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0002 ppm | 0.0738 ppm | 0.1378 ppm | 0.0107 ppm | 15.1445 ppm | 0.0039 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0000 ppm | 0.0732 ppm | 0.1387 ppm | 0.0113 ppm | 15.1657 ppm | 0.0041 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0740 ppm | 0.1379 ppm | 0.0087 ppm | 15.1833 ppm | 0.0040 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0006 ppm | 0.0742 ppm | 0.1369 ppm | 0.0123 ppm | 15.0845 ppm | 0.0036 ppm |
| Concentration RSD | 238.6 % | 171.1 % | 0.7 % | 0.7 % | 17.4 % | 0.3 % | 7.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.9679 ppm | 0.0029 ppm | 0.0003 ppm | 365.8723 ppm | 0.9616 ppm | 0.0020 ppm | 0.0313 ppm |
| Concentration per Run 1 | 0.9709 ppm | 0.0030 ppm | -0.0003 ppm | 366.6437 ppm | 0.9601 ppm | 0.0003 ppm | 0.0317 ppm |
| Concentration per Run 2 | 0.9695 ppm | 0.0029 ppm | 0.0001 ppm | 363.6181 ppm | 0.9660 ppm | 0.0030 ppm | 0.0286 ppm |
| Concentration per Run 3 | 0.9632 ppm | 0.0028 ppm | 0.0009 ppm | 367.3550 ppm | 0.9587 ppm | 0.0028 ppm | 0.0337 ppm |
| Concentration RSD | 0.4 % | 4.7 % | 248.0 % | 0.5 % | 0.4 % | 72.8 % | 8.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 2.6981 ppm | -0.0008 ppm | 0.0846 ppm | 0.0000 ppm | 0.0041 ppm | 0.0002 ppm |
| Concentration per Run 1 | -0.0015 ppm | 2.7070 ppm | -0.0004 ppm | 0.0844 ppm | -0.0002 ppm | 0.0039 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0000 ppm | 2.7061 ppm | -0.0014 ppm | 0.0849 ppm | -0.0001 ppm | 0.0055 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0012 ppm | 2.6813 ppm | -0.0006 ppm | 0.0844 ppm | 0.0003 ppm | 0.0029 ppm | 0.0005 ppm |
| Concentration RSD | 1,430.0 % | 0.5 % | 67.4 % | 0.4 % | 1,926.6 % | 32.7 % | 169.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0152 ppm | 109.0404 % | 105.4975 % | 109.2798 % | 107.3755 % | 103.5359 % | 105.6468 % |
| Concentration per Run 1 | 0.0154 ppm | 109.3339 % | 105.2980 % | 109.3930 % | 107.7981 % | 102.9291 % | 106.1276 % |
| Concentration per Run 2 | 0.0151 ppm | 109.0984 % | 105.8594 % | 109.2474 % | 107.1735 % | 103.9362 % | 105.5208 % |
| Concentration per Run 3 | 0.0153 ppm | 108.6890 % | 105.3351 % | 109.1991 % | 107.1550 % | 103.7425 % | 105.2921 % |
| Concentration RSD | 0.8 % | 0.3 % | 0.3 % | 0.1 % | 0.3 % | 0.5 % | 0.4 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: xL2512598-01D2 WG2039414
Analysis started at: 3/13/2025 1:18:14 PM
Rack 1
Vial 19
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0153 ppm | 0.0002 ppm | 0.0036 ppm | 0.0002 ppm | 0.0000 ppm | 0.0980 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0150 ppm | 0.0009 ppm | 0.0045 ppm | 0.0003 ppm | 0.0000 ppm | 0.0974 ppm |
| Concentration per Run 2 | 0.0006 ppm | 0.0127 ppm | -0.0008 ppm | 0.0028 ppm | 0.0001 ppm | 0.0000 ppm | 0.0952 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0182 ppm | 0.0005 ppm | 0.0034 ppm | 0.0003 ppm | 0.0000 ppm | 0.1013 ppm |
| Concentration RSD | 133.0 % | 18.2 % | 436.7 % | 24.1 % | 45.9 % | 707.3 % | 3.2 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0053 ppm | 0.0003 ppm | 0.0099 ppm | 0.0142 ppm | 0.6965 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0051 ppm | -0.0001 ppm | 0.0100 ppm | 0.0151 ppm | 0.6971 ppm | 0.0001 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0047 ppm | 0.0006 ppm | 0.0096 ppm | 0.0148 ppm | 0.6988 ppm | 0.0003 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0063 ppm | 0.0004 ppm | 0.0101 ppm | 0.0128 ppm | 0.6938 ppm | -0.0005 ppm |
| Concentration RSD | 254.2 % | 15.3 % | 126.1 % | 2.5 % | 8.8 % | 0.4 % | 2,260.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0170 ppm | 0.0003 ppm | 0.0032 ppm | 0.1000 ppm | 0.0042 ppm | 0.0016 ppm | 0.0025 ppm |
| Concentration per Run 1 | 0.0153 ppm | 0.0003 ppm | 0.0034 ppm | 0.1032 ppm | 0.0047 ppm | 0.0022 ppm | 0.0025 ppm |
| Concentration per Run 2 | 0.0182 ppm | 0.0005 ppm | 0.0034 ppm | 0.1011 ppm | 0.0040 ppm | 0.0022 ppm | 0.0024 ppm |
| Concentration per Run 3 | 0.0175 ppm | 0.0003 ppm | 0.0028 ppm | 0.0956 ppm | 0.0039 ppm | 0.0004 ppm | 0.0027 ppm |
| Concentration RSD | 8.9 % | 38.7 % | 10.2 % | 3.9 % | 10.3 % | 66.5 % | 6.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 1.5344 ppm | 0.0018 ppm | 0.0001 ppm | 0.0174 ppm | 0.0003 ppm | 0.0003 ppm |
| Concentration per Run 1 | 0.0008 ppm | 1.9211 ppm | 0.0025 ppm | 0.0001 ppm | 0.0190 ppm | 0.0015 ppm | -0.0001 ppm |
| Concentration per Run 2 | 0.0021 ppm | 1.5710 ppm | 0.0027 ppm | 0.0001 ppm | 0.0178 ppm | 0.0001 ppm | 0.0004 ppm |
| Concentration per Run 3 | 0.0006 ppm | 1.1111 ppm | 0.0003 ppm | 0.0001 ppm | 0.0154 ppm | -0.0006 ppm | 0.0005 ppm |
| Concentration RSD | 66.6 % | 26.5 % | 73.1 % | 27.6 % | 10.4 % | 319.6 % | 113.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0084 ppm | 104.5651 % | 104.1325 % | 104.3532 % | 103.2686 % | 103.2127 % | 103.1506 % |
| Concentration per Run 1 | 0.0083 ppm | 104.8590 % | 103.7925 % | 102.5937 % | 103.3612 % | 102.8276 % | 101.6615 % |
| Concentration per Run 2 | 0.0084 ppm | 103.8821 % | 104.3814 % | 105.5317 % | 101.9820 % | 103.4606 % | 103.9125 % |
| Concentration per Run 3 | 0.0084 ppm | 104.9543 % | 104.2236 % | 104.9341 % | 104.4627 % | 103.3498 % | 103.8776 % |
| Concentration RSD | 1.1 % | 0.6 % | 0.3 % | 1.5 % | 1.2 % | 0.3 % | 1.3 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512638-01 WG2039414
Analysis started at: 3/13/2025 1:21:41 PM
Rack 1
Vial 23
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.1497 ppm | -0.0002 ppm | 0.1801 ppm | 0.0227 ppm | 0.0000 ppm | 43.7428 ppm |
| Concentration per Run 1 | -0.0004 ppm | 0.1509 ppm | 0.0009 ppm | 0.1788 ppm | 0.0228 ppm | 0.0000 ppm | 43.4352 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.1494 ppm | -0.0016 ppm | 0.1802 ppm | 0.0228 ppm | 0.0000 ppm | 44.0136 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.1489 ppm | 0.0000 ppm | 0.1813 ppm | 0.0227 ppm | 0.0000 ppm | 43.7795 ppm |
| Concentration RSD | 806.9 % | 0.7 % | 581.0 % | 0.7 % | 0.2 % | 179.0 % | 0.7 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | -0.0001 ppm | 0.0003 ppm | 0.0013 ppm | 0.0118 ppm | 33.3330 ppm | 0.0006 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0002 ppm | -0.0002 ppm | 0.0016 ppm | 0.0112 ppm | 33.2374 ppm | 0.0002 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0000 ppm | 0.0004 ppm | 0.0007 ppm | 0.0138 ppm | 33.1946 ppm | 0.0005 ppm |
| Concentration per Run 3 | -0.0003 ppm | -0.0005 ppm | 0.0007 ppm | 0.0015 ppm | 0.0105 ppm | 33.5672 ppm | 0.0012 ppm |
| Concentration RSD | 11.0 % | 358.0 % | 134.1 % | 37.3 % | 14.9 % | 0.6 % | 86.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.2026 ppm | 0.0299 ppm | 0.0036 ppm | 66.0803 ppm | 0.0015 ppm | 0.0016 ppm | -0.0009 ppm |
| Concentration per Run 1 | 3.2065 ppm | 0.0300 ppm | 0.0033 ppm | 65.6905 ppm | 0.0025 ppm | 0.0030 ppm | -0.0017 ppm |
| Concentration per Run 2 | 3.2079 ppm | 0.0300 ppm | 0.0038 ppm | 65.9177 ppm | 0.0012 ppm | 0.0002 ppm | -0.0020 ppm |
| Concentration per Run 3 | 3.1934 ppm | 0.0299 ppm | 0.0037 ppm | 66.6328 ppm | 0.0009 ppm | 0.0017 ppm | 0.0010 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 7.8 % | 0.7 % | 56.4 % | 86.4 % | 177.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 2.7404 ppm | 0.0004 ppm | 0.2329 ppm | 0.0007 ppm | -0.0019 ppm | 0.0009 ppm |
| Concentration per Run 1 | -0.0017 ppm | 2.7449 ppm | 0.0000 ppm | 0.2330 ppm | 0.0009 ppm | 0.0000 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0003 ppm | 2.7441 ppm | 0.0003 ppm | 0.2326 ppm | 0.0004 ppm | -0.0030 ppm | 0.0007 ppm |
| Concentration per Run 3 | 0.0008 ppm | 2.7323 ppm | 0.0008 ppm | 0.2332 ppm | 0.0007 ppm | -0.0026 ppm | 0.0011 ppm |
| Concentration RSD | 642.7 % | 0.3 % | 110.8 % | 0.1 % | 38.7 % | 86.1 % | 17.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1042 ppm | 107.2364 % | 103.8028 % | 107.0703 % | 105.0751 % | 101.7940 % | 103.6477 % |
| Concentration per Run 1 | 0.1037 ppm | 107.9180 % | 104.2530 % | 105.8850 % | 105.4409 % | 102.2824 % | 103.2099 % |
| Concentration per Run 2 | 0.1049 ppm | 106.7048 % | 103.6730 % | 108.3434 % | 104.9421 % | 101.6382 % | 104.9187 % |
| Concentration per Run 3 | 0.1041 ppm | 107.0865 % | 103.4823 % | 106.9824 % | 104.8423 % | 101.4613 % | 102.8144 % |
| Concentration RSD | 0.6 % | 0.6 % | 0.4 % | 1.2 % | 0.3 % | 0.4 % | 1.1 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512647-01 WG2039414
Analysis started at: 3/13/2025 1:25:10 PM
Rack 1
Vial 25
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.4148 ppm | 0.0044 ppm | 0.0797 ppm | 0.0090 ppm | 0.0000 ppm | 38.7951 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.4185 ppm | 0.0049 ppm | 0.0808 ppm | 0.0090 ppm | 0.0001 ppm | 38.9371 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.4194 ppm | 0.0041 ppm | 0.0796 ppm | 0.0090 ppm | 0.0000 ppm | 38.6607 ppm |
| Concentration per Run 3 | 0.0006 ppm | 0.4066 ppm | 0.0042 ppm | 0.0787 ppm | 0.0089 ppm | 0.0000 ppm | 38.7876 ppm |
| Concentration RSD | 91.0 % | 1.7 % | 10.7 % | 1.3 % | 0.0 % | 34.1 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0011 ppm | 0.0052 ppm | 0.0217 ppm | 5.4936 ppm | 84.7475 ppm | 0.0042 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0012 ppm | 0.0053 ppm | 0.0220 ppm | 5.4766 ppm | 84.4326 ppm | 0.0042 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0007 ppm | 0.0051 ppm | 0.0219 ppm | 5.4753 ppm | 85.2029 ppm | 0.0040 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0014 ppm | 0.0053 ppm | 0.0213 ppm | 5.5289 ppm | 84.6069 ppm | 0.0045 ppm |
| Concentration RSD | 21.9 % | 32.7 % | 2.1 % | 1.7 % | 0.6 % | 0.5 % | 5.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 14.1673 ppm | 0.1063 ppm | 0.0051 ppm | 568.4906 [SIC 500] | 0.0295 ppm | 0.0171 ppm | 0.0003 ppm |
| Concentration per Run 1 | 14.2224 ppm | 0.1063 ppm | 0.0050 ppm | 568.2949 ppm | 0.0287 ppm | 0.0167 ppm | 0.0022 ppm |
| Concentration per Run 2 | 14.1591 ppm | 0.1062 ppm | 0.0054 ppm | 570.7890 ppm | 0.0316 ppm | 0.0174 ppm | -0.0039 ppm |
| Concentration per Run 3 | 14.1204 ppm | 0.1062 ppm | 0.0049 ppm | 566.3880 ppm | 0.0284 ppm | 0.0173 ppm | 0.0027 ppm |
| Concentration RSD | 0.4 % | 0.1 % | 5.5 % | 0.4 % | 5.9 % | 2.4 % | 1,095.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0026 ppm | 3.1664 ppm | 0.0021 ppm | 0.1526 ppm | 0.0134 ppm | 0.0009 ppm | 0.0014 ppm |
| Concentration per Run 1 | 0.0014 ppm | 3.1826 ppm | 0.0015 ppm | 0.1524 ppm | 0.0142 ppm | 0.0024 ppm | 0.0015 ppm |
| Concentration per Run 2 | 0.0037 ppm | 3.1697 ppm | 0.0018 ppm | 0.1530 ppm | 0.0128 ppm | -0.0022 ppm | 0.0017 ppm |
| Concentration per Run 3 | 0.0025 ppm | 3.1467 ppm | 0.0029 ppm | 0.1525 ppm | 0.0132 ppm | 0.0026 ppm | 0.0009 ppm |
| Concentration RSD | 44.7 % | 0.6 % | 34.8 % | 0.2 % | 5.5 % | 289.4 % | 29.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1362 ppm | 107.4091 % | 103.8546 % | 104.8023 % | 106.2629 % | 102.7252 % | 102.9423 % |
| Concentration per Run 1 | 0.1365 ppm | 107.5531 % | 103.9160 % | 104.4410 % | 107.1443 % | 103.1110 % | 102.8873 % |
| Concentration per Run 2 | 0.1366 ppm | 107.5517 % | 104.0048 % | 105.5008 % | 106.1540 % | 103.0566 % | 103.3200 % |
| Concentration per Run 3 | 0.1356 ppm | 107.1226 % | 103.6430 % | 104.4649 % | 105.4904 % | 102.0079 % | 102.6196 % |
| Concentration RSD | 0.4 % | 0.2 % | 0.2 % | 0.6 % | 0.8 % | 0.6 % | 0.3 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512681-01 WG2039414
Analysis started at: 3/13/2025 1:28:36 PM
Rack 1
Vial 28
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0138 ppm | 0.0082 ppm | 0.3909 ppm | 0.1002 ppm | 0.0000 ppm | 11.8984 ppm |
| Concentration per Run 1 | -0.0003 ppm | 0.0152 ppm | 0.0073 ppm | 0.3928 ppm | 0.1005 ppm | 0.0000 ppm | 11.8650 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0067 ppm | 0.0082 ppm | 0.3922 ppm | 0.1000 ppm | 0.0000 ppm | 11.9346 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0193 ppm | 0.0092 ppm | 0.3878 ppm | 0.1002 ppm | 0.0000 ppm | 11.8958 ppm |
| Concentration RSD | 43.9 % | 46.7 % | 11.5 % | 0.7 % | 0.3 % | 229.2 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0018 ppm | 0.0161 ppm | 0.0813 ppm | 14.5671 ppm | 43.5430 ppm | 0.0018 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0010 ppm | 0.0160 ppm | 0.0822 ppm | 14.5753 ppm | 43.5688 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0022 ppm | 0.0165 ppm | 0.0807 ppm | 14.5804 ppm | 43.5433 ppm | 0.0025 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0020 ppm | 0.0159 ppm | 0.0810 ppm | 14.5455 ppm | 43.5168 ppm | 0.0021 ppm |
| Concentration RSD | 46.9 % | 36.3 % | 2.1 % | 1.0 % | 0.1 % | 0.1 % | 52.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.8305 ppm | 0.1670 ppm | 0.0809 ppm | 750.5786 [SIC 500] | 0.0186 ppm | 0.0016 ppm | 0.0013 ppm |
| Concentration per Run 1 | 2.8360 ppm | 0.1675 ppm | 0.0820 ppm | 753.5370 ppm | 0.0188 ppm | 0.0011 ppm | 0.0008 ppm |
| Concentration per Run 2 | 2.8312 ppm | 0.1665 ppm | 0.0807 ppm | 748.8342 ppm | 0.0184 ppm | 0.0019 ppm | 0.0028 ppm |
| Concentration per Run 3 | 2.8244 ppm | 0.1671 ppm | 0.0800 ppm | 749.3648 ppm | 0.0186 ppm | 0.0019 ppm | 0.0004 ppm |
| Concentration RSD | 0.2 % | 0.3 % | 1.2 % | 0.3 % | 1.0 % | 29.8 % | 96.9 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0012 ppm | 7.6032 ppm | 0.0006 ppm | 0.0420 ppm | 0.2115 ppm | 0.0033 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0007 ppm | 7.6233 ppm | -0.0001 ppm | 0.0421 ppm | 0.2115 ppm | 0.0045 ppm | 0.0000 ppm |
| Concentration per Run 2 | 0.0001 ppm | 7.5943 ppm | 0.0017 ppm | 0.0420 ppm | 0.2120 ppm | 0.0026 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0028 ppm | 7.5920 ppm | 0.0002 ppm | 0.0420 ppm | 0.2111 ppm | 0.0029 ppm | -0.0002 ppm |
| Concentration RSD | 114.5 % | 0.2 % | 159.8 % | 0.2 % | 0.2 % | 30.7 % | 4,771.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.5014 ppm | 107.6226 % | 102.7756 % | 104.1717 % | 106.5291 % | 101.7846 % | 103.0136 % |
| Concentration per Run 1 | 0.5038 ppm | 106.6746 % | 102.2959 % | 104.1147 % | 105.7443 % | 101.4880 % | 102.6687 % |
| Concentration per Run 2 | 0.5013 ppm | 108.3288 % | 103.0763 % | 104.1591 % | 107.5880 % | 102.0722 % | 103.2266 % |
| Concentration per Run 3 | 0.4991 ppm | 107.8645 % | 102.9546 % | 104.2414 % | 106.2550 % | 101.7936 % | 103.1456 % |
| Concentration RSD | 0.5 % | 0.8 % | 0.4 % | 0.1 % | 0.9 % | 0.3 % | 0.3 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: CCV
Analysis started at: 3/13/2025 1:32:02 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4602 ppm | 0.4617 ppm | 0.4740 ppm | 0.4667 ppm | 0.4750 ppm | 0.4926 ppm | 0.4926 ppm |
| Concentration per Run 1 | 0.4585 ppm | 0.4550 ppm | 0.4784 ppm | 0.4644 ppm | 0.4744 ppm | 0.4931 ppm | 0.4908 ppm |
| Concentration per Run 2 | 0.4599 ppm | 0.4585 ppm | 0.4736 ppm | 0.4662 ppm | 0.4753 ppm | 0.4915 ppm | 0.4933 ppm |
| Concentration per Run 3 | 0.4621 ppm | 0.4716 ppm | 0.4701 ppm | 0.4696 ppm | 0.4754 ppm | 0.4933 ppm | 0.4938 ppm |
| Recovery Percentage 1 | 92.031 % | 92.341 % | 94.803 % | 93.344 % | 95.009 % | 98.528 % | 98.529 % |
| Concentration RSD | 0.4 % | 1.9 % | 0.9 % | 0.6 % | 0.1 % | 0.2 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4804 ppm | 0.4938 ppm | 0.4808 ppm | 0.4666 ppm | 0.5046 ppm | 4.9649 ppm | 0.4823 ppm |
| Concentration per Run 1 | 0.4778 ppm | 0.4914 ppm | 0.4789 ppm | 0.4648 ppm | 0.5031 ppm | 4.9628 ppm | 0.4834 ppm |
| Concentration per Run 2 | 0.4810 ppm | 0.4929 ppm | 0.4786 ppm | 0.4671 ppm | 0.5078 ppm | 4.9522 ppm | 0.4811 ppm |
| Concentration per Run 3 | 0.4825 ppm | 0.4971 ppm | 0.4849 ppm | 0.4679 ppm | 0.5030 ppm | 4.9796 ppm | 0.4824 ppm |
| Recovery Percentage 1 | 96.080 % | 98.755 % | 96.157 % | 93.322 % | 100.920 % | 99.298 % | 96.462 % |
| Concentration RSD | 0.5 % | 0.6 % | 0.7 % | 0.3 % | 0.5 % | 0.3 % | 0.2 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4736 ppm | 0.4847 ppm | 0.4774 ppm | 9.6625 ppm | 0.4862 ppm | 0.4940 ppm | 0.4830 ppm |
| Concentration per Run 1 | 0.4727 ppm | 0.4852 ppm | 0.4740 ppm | 9.6874 ppm | 0.4851 ppm | 0.4938 ppm | 0.4816 ppm |
| Concentration per Run 2 | 0.4733 ppm | 0.4833 ppm | 0.4764 ppm | 9.5743 ppm | 0.4840 ppm | 0.4948 ppm | 0.4807 ppm |
| Concentration per Run 3 | 0.4748 ppm | 0.4856 ppm | 0.4820 ppm | 9.7259 ppm | 0.4894 ppm | 0.4933 ppm | 0.4868 ppm |
| Recovery Percentage 1 | 94.723 % | 96.938 % | 95.486 % | 96.625 % | 97.234 % | 98.797 % | 96.602 % |
| Concentration RSD | 0.2 % | 0.2 % | 0.9 % | 0.8 % | 0.6 % | 0.1 % | 0.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4763 ppm | 5.2053 ppm | 0.4960 ppm | 0.4922 ppm | 0.4842 ppm | 0.4797 ppm | 0.4787 ppm |
| Concentration per Run 1 | 0.4786 ppm | 5.1916 ppm | 0.4934 ppm | 0.4915 ppm | 0.4830 ppm | 0.4811 ppm | 0.4784 ppm |
| Concentration per Run 2 | 0.4737 ppm | 5.2041 ppm | 0.4983 ppm | 0.4924 ppm | 0.4828 ppm | 0.4799 ppm | 0.4792 ppm |
| Concentration per Run 3 | 0.4766 ppm | 5.2201 ppm | 0.4964 ppm | 0.4928 ppm | 0.4867 ppm | 0.4782 ppm | 0.4785 ppm |
| Recovery Percentage 1 | 95.254 % | 99.148 % | 99.201 % | 98.446 % | 96.836 % | 95.946 % | 95.736 % |
| Concentration RSD | 0.5 % | 0.3 % | 0.5 % | 0.1 % | 0.4 % | 0.3 % | 0.1 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4823 ppm | 107.8436 % | 106.3203 % | 107.2992 % | 105.9676 % | 104.8017 % | 105.0781 % |
| Concentration per Run 1 | 0.4792 ppm | 108.4934 % | 106.8079 % | 106.3944 % | 106.4071 % | 105.3431 % | 104.1178 % |
| Concentration per Run 2 | 0.4835 ppm | 107.5499 % | 106.2356 % | 107.9092 % | 105.6819 % | 104.3979 % | 106.1219 % |
| Concentration per Run 3 | 0.4842 ppm | 107.4876 % | 105.9174 % | 107.5940 % | 105.8137 % | 104.6640 % | 104.9947 % |
| Recovery Percentage 1 | 96.461 % | | | | | | |
| Concentration RSD | 0.6 % | 0.5 % | 0.4 % | 0.7 % | 0.4 % | 0.5 % | 1.0 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: CCB
Analysis started at: 3/13/2025 1:35:30 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | -0.0011 ppm | 0.0001 ppm | 0.0003 ppm | 0.0001 ppm | 0.0000 ppm | 0.0036 ppm |
| Concentration per Run 1 | 0.0004 ppm | 0.0014 ppm | -0.0004 ppm | 0.0004 ppm | 0.0002 ppm | 0.0000 ppm | 0.0051 ppm |
| Concentration per Run 2 | 0.0009 ppm | -0.0045 ppm | 0.0008 ppm | -0.0005 ppm | 0.0002 ppm | 0.0000 ppm | 0.0038 ppm |
| Concentration per Run 3 | -0.0004 ppm | -0.0002 ppm | -0.0001 ppm | 0.0011 ppm | 0.0001 ppm | 0.0000 ppm | 0.0019 ppm |
| Recovery Percentage 1 | 3.938 % | -1.066 % | 2.396 % | 1.100 % | 1.384 % | 0.431 % | 3.608 % |
| Concentration RSD | 240.1 % | 285.8 % | 532.2 % | 246.7 % | 19.5 % | 188.9 % | 44.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.0002 ppm | -0.0003 ppm | -0.0004 ppm | 0.0001 ppm | 0.0275 ppm | 0.0009 ppm |
| Concentration per Run 1 | 0.0000 ppm | -0.0004 ppm | -0.0003 ppm | -0.0004 ppm | 0.0004 ppm | 0.0337 ppm | 0.0009 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0008 ppm | 0.0001 ppm | -0.0004 ppm | 0.0003 ppm | 0.0325 ppm | 0.0008 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0003 ppm | -0.0007 ppm | -0.0004 ppm | -0.0005 ppm | 0.0164 ppm | 0.0010 ppm |
| Recovery Percentage 1 | 1.428 % | 1.121 % | -3.190 % | -3.889 % | 0.154 % | 1.101 % | 17.957 % |
| Concentration RSD | 140.1 % | 271.1 % | 128.4 % | 4.9 % | 625.0 % | 35.1 % | 10.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0006 ppm | -0.0002 ppm | 0.0018 ppm | 0.0428 ppm | 0.0011 ppm | 0.0021 ppm | 0.0027 ppm |
| Concentration per Run 1 | -0.0033 ppm | -0.0002 ppm | 0.0019 ppm | 0.0450 ppm | 0.0010 ppm | 0.0027 ppm | 0.0008 ppm |
| Concentration per Run 2 | 0.0005 ppm | -0.0001 ppm | 0.0025 ppm | 0.0422 ppm | 0.0005 ppm | 0.0021 ppm | 0.0045 ppm |
| Concentration per Run 3 | 0.0009 ppm | -0.0002 ppm | 0.0012 ppm | 0.0412 ppm | 0.0020 ppm | 0.0015 ppm | 0.0030 ppm |
| Recovery Percentage 1 | -0.624 % | -1.695 % | 3.653 % | 2.140 % | 4.561 % | 21.228 % | 5.494 % |
| Concentration RSD | 372.3 % | 24.7 % | 35.5 % | 4.5 % | 65.8 % | 28.6 % | 66.8 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | -0.0121 ppm | 0.0001 ppm | 0.0001 ppm | 0.0000 ppm | 0.0002 ppm | 0.0001 ppm |
| Concentration per Run 1 | -0.0003 ppm | -0.0121 ppm | -0.0002 ppm | 0.0001 ppm | 0.0002 ppm | 0.0012 ppm | 0.0001 ppm |
| Concentration per Run 2 | -0.0008 ppm | -0.0111 ppm | 0.0005 ppm | 0.0001 ppm | -0.0003 ppm | 0.0015 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0011 ppm | -0.0130 ppm | 0.0000 ppm | 0.0001 ppm | 0.0001 ppm | -0.0019 ppm | 0.0000 ppm |
| Recovery Percentage 1 | -0.034 % | -2.411 % | 0.252 % | 0.774 % | -0.386 % | 1.244 % | 1.434 % |
| Concentration RSD | 29,581.5 % | 7.8 % | 287.7 % | 17.1 % | 713.4 % | 752.4 % | 68.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 106.0778 % | 106.1919 % | 105.7106 % | 106.2870 % | 106.6669 % | 106.2582 % |
| Concentration per Run 1 | -0.0001 ppm | 106.4906 % | 106.5303 % | 106.3210 % | 106.5592 % | 106.8487 % | 106.5665 % |
| Concentration per Run 2 | 0.0001 ppm | 106.4537 % | 105.5207 % | 105.5953 % | 106.3766 % | 105.9733 % | 106.3851 % |
| Concentration per Run 3 | 0.0003 ppm | 105.2889 % | 106.5246 % | 105.2154 % | 105.9251 % | 107.1787 % | 105.8228 % |
| Recovery Percentage 1 | 2.446 % | | | | | | |
| Concentration RSD | 146.9 % | 0.6 % | 0.5 % | 0.5 % | 0.3 % | 0.6 % | 0.4 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: WG2039613-1 WG2039613
Analysis started at: 3/13/2025 2:03:00 PM
Rack 1
Vial 48
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | -0.0003 ppm | -0.0004 ppm | -0.0006 ppm | 0.0000 ppm | 0.0000 ppm | 0.0118 ppm |
| Concentration per Run 1 | 0.0001 ppm | -0.0071 ppm | -0.0002 ppm | -0.0013 ppm | 0.0000 ppm | 0.0000 ppm | 0.0127 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.0016 ppm | -0.0008 ppm | 0.0001 ppm | 0.0000 ppm | 0.0000 ppm | 0.0105 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.0046 ppm | -0.0001 ppm | -0.0005 ppm | 0.0001 ppm | 0.0000 ppm | 0.0122 ppm |
| Recovery Percentage 1 | 3.367 % | -0.270 % | -7.367 % | -1.973 % | 0.307 % | -0.282 % | 11.793 % |
| Concentration RSD | 70.7 % | 2,252.5 % | 91.2 % | 119.3 % | 244.8 % | 141.1 % | 10.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | -0.0003 ppm | -0.0003 ppm | 0.0002 ppm | 0.0050 ppm | 0.0086 ppm | -0.0007 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0003 ppm | -0.0007 ppm | 0.0001 ppm | 0.0060 ppm | -0.0078 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0001 ppm | -0.0011 ppm | 0.0001 ppm | -0.0004 ppm | 0.0054 ppm | 0.0207 ppm | -0.0010 ppm |
| Concentration per Run 3 | -0.0002 ppm | -0.0001 ppm | -0.0003 ppm | 0.0010 ppm | 0.0035 ppm | 0.0131 ppm | -0.0007 ppm |
| Recovery Percentage 1 | -1.643 % | -1.589 % | -2.954 % | 2.494 % | 9.904 % | 0.346 % | -13.430 % |
| Concentration RSD | 151.5 % | 224.6 % | 130.6 % | 282.2 % | 25.9 % | 170.9 % | 47.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0030 ppm | 0.0000 ppm | 0.0001 ppm | 0.0158 ppm | 0.0003 ppm | 0.0026 ppm | 0.0013 ppm |
| Concentration per Run 1 | 0.0018 ppm | -0.0001 ppm | 0.0002 ppm | 0.0140 ppm | -0.0002 ppm | 0.0034 ppm | -0.0020 ppm |
| Concentration per Run 2 | 0.0020 ppm | 0.0002 ppm | 0.0001 ppm | 0.0141 ppm | 0.0006 ppm | 0.0020 ppm | 0.0039 ppm |
| Concentration per Run 3 | 0.0052 ppm | 0.0000 ppm | -0.0001 ppm | 0.0193 ppm | 0.0006 ppm | 0.0023 ppm | 0.0021 ppm |
| Recovery Percentage 1 | 3.029 % | 0.074 % | 0.111 % | 0.790 % | 1.324 % | 25.774 % | 2.681 % |
| Concentration RSD | 62.8 % | 1,811.2 % | 331.7 % | 19.4 % | 145.2 % | 29.3 % | 226.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0014 ppm | -0.0126 ppm | -0.0020 ppm | 0.0001 ppm | 0.0002 ppm | 0.0008 ppm | -0.0002 ppm |
| Concentration per Run 1 | 0.0002 ppm | -0.0111 ppm | -0.0022 ppm | 0.0000 ppm | 0.0004 ppm | 0.0013 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0048 ppm | -0.0116 ppm | -0.0024 ppm | 0.0002 ppm | 0.0005 ppm | 0.0015 ppm | -0.0002 ppm |
| Concentration per Run 3 | 0.0003 ppm | -0.0151 ppm | -0.0016 ppm | 0.0001 ppm | -0.0002 ppm | -0.0005 ppm | -0.0004 ppm |
| Recovery Percentage 1 | -14.190 % | -2.523 % | -4.094 % | 0.678 % | 2.235 % | 3.825 % | -2.350 % |
| Concentration RSD | 208.8 % | 17.4 % | 19.6 % | 155.1 % | 148.8 % | 138.7 % | 60.6 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 106.5620 % | 106.1751 % | 106.9207 % | 106.2506 % | 105.8030 % | 105.9427 % |
| Concentration per Run 1 | 0.0003 ppm | 106.5846 % | 106.0904 % | 106.8162 % | 106.6020 % | 105.7713 % | 105.7838 % |
| Concentration per Run 2 | 0.0002 ppm | 107.0096 % | 106.9160 % | 107.0128 % | 106.5803 % | 106.4367 % | 106.1469 % |
| Concentration per Run 3 | 0.0003 ppm | 106.0918 % | 105.5190 % | 106.9330 % | 105.5696 % | 105.2011 % | 105.8975 % |
| Recovery Percentage 1 | 5.893 % | | | | | | |
| Concentration RSD | 16.4 % | 0.4 % | 0.7 % | 0.1 % | 0.6 % | 0.6 % | 0.2 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: WG2039613-2 WG2039613
Analysis started at: 3/13/2025 2:06:45 PM
Rack 1
Vial 49
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0480 ppm | 1.9070 ppm | 0.1092 ppm | 0.9310 ppm | 1.9033 ppm | 0.0487 ppm | 9.9214 ppm |
| Concentration per Run 1 | 0.0481 ppm | 1.8973 ppm | 0.1086 ppm | 0.9350 ppm | 1.8982 ppm | 0.0486 ppm | 9.8948 ppm |
| Concentration per Run 2 | 0.0481 ppm | 1.9116 ppm | 0.1096 ppm | 0.9237 ppm | 1.9086 ppm | 0.0488 ppm | 9.9456 ppm |
| Concentration per Run 3 | 0.0480 ppm | 1.9122 ppm | 0.1096 ppm | 0.9345 ppm | 1.9032 ppm | 0.0486 ppm | 9.9239 ppm |
| Concentration RSD | 0.1 % | 0.4 % | 0.5 % | 0.7 % | 0.3 % | 0.2 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0505 ppm | 0.4823 ppm | 0.1916 ppm | 0.2355 ppm | 0.9956 ppm | 10.0204 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0506 ppm | 0.4845 ppm | 0.1923 ppm | 0.2354 ppm | 0.9959 ppm | 10.0195 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0500 ppm | 0.4793 ppm | 0.1917 ppm | 0.2347 ppm | 1.0000 ppm | 10.0558 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0509 ppm | 0.4831 ppm | 0.1907 ppm | 0.2363 ppm | 0.9909 ppm | 9.9861 ppm | -0.0003 ppm |
| Concentration RSD | 0.9 % | 0.6 % | 0.4 % | 0.4 % | 0.5 % | 0.3 % | 42.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.5687 ppm | 0.4917 ppm | 0.9443 ppm | 9.9407 ppm | 0.4846 ppm | 0.5141 ppm | 0.4301 ppm |
| Concentration per Run 1 | 9.5892 ppm | 0.4917 ppm | 0.9418 ppm | 9.8775 ppm | 0.4835 ppm | 0.5155 ppm | 0.4232 ppm |
| Concentration per Run 2 | 9.5659 ppm | 0.4926 ppm | 0.9386 ppm | 10.0306 ppm | 0.4837 ppm | 0.5126 ppm | 0.4320 ppm |
| Concentration per Run 3 | 9.5511 ppm | 0.4910 ppm | 0.9525 ppm | 9.9140 ppm | 0.4866 ppm | 0.5142 ppm | 0.4352 ppm |
| Concentration RSD | 0.2 % | 0.2 % | 0.8 % | 0.8 % | 0.4 % | 0.3 % | 1.4 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.1117 ppm | 0.7808 ppm | 0.9517 ppm | 0.9639 ppm | 0.9644 ppm | 0.1086 ppm | 0.4830 ppm |
| Concentration per Run 1 | 0.1110 ppm | 0.7800 ppm | 0.9483 ppm | 0.9618 ppm | 0.9653 ppm | 0.1085 ppm | 0.4838 ppm |
| Concentration per Run 2 | 0.1113 ppm | 0.7801 ppm | 0.9574 ppm | 0.9668 ppm | 0.9655 ppm | 0.1075 ppm | 0.4820 ppm |
| Concentration per Run 3 | 0.1129 ppm | 0.7824 ppm | 0.9494 ppm | 0.9632 ppm | 0.9625 ppm | 0.1098 ppm | 0.4832 ppm |
| Concentration RSD | 0.9 % | 0.2 % | 0.5 % | 0.3 % | 0.2 % | 1.1 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4864 ppm | 106.2346 % | 105.6919 % | 105.5686 % | 105.0636 % | 104.4194 % | 103.3750 % |
| Concentration per Run 1 | 0.4883 ppm | 105.5115 % | 105.8683 % | 105.4617 % | 104.3324 % | 104.4924 % | 103.8823 % |
| Concentration per Run 2 | 0.4853 ppm | 106.3555 % | 104.9902 % | 105.9475 % | 105.0079 % | 104.1374 % | 103.1190 % |
| Concentration per Run 3 | 0.4855 ppm | 106.8369 % | 106.2171 % | 105.2966 % | 105.8504 % | 104.6284 % | 103.1236 % |
| Concentration RSD | 0.3 % | 0.6 % | 0.6 % | 0.3 % | 0.7 % | 0.2 % | 0.4 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512644-01 WG2039414
Analysis started at: 3/13/2025 2:10:12 PM
Rack 1
Vial 24
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0108 ppm | -0.0001 ppm | 0.0222 ppm | 0.0040 ppm | 0.0000 ppm | 35.0591 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0104 ppm | -0.0021 ppm | 0.0218 ppm | 0.0042 ppm | 0.0000 ppm | 35.1199 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0143 ppm | 0.0020 ppm | 0.0225 ppm | 0.0039 ppm | 0.0000 ppm | 34.9281 ppm |
| Concentration per Run 3 | -0.0006 ppm | 0.0075 ppm | -0.0003 ppm | 0.0222 ppm | 0.0040 ppm | 0.0000 ppm | 35.1293 ppm |
| Concentration RSD | 166.5 % | 31.9 % | 1,543.1 % | 1.7 % | 3.3 % | 172.7 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0012 ppm | 0.0010 ppm | 0.0053 ppm | 0.8034 ppm | 64.5081 ppm | 0.0016 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0017 ppm | 0.0010 ppm | 0.0051 ppm | 0.8049 ppm | 64.4878 ppm | 0.0022 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0007 ppm | 0.0008 ppm | 0.0052 ppm | 0.8001 ppm | 64.5748 ppm | 0.0010 ppm |
| Concentration per Run 3 | -0.0002 ppm | 0.0012 ppm | 0.0010 ppm | 0.0056 ppm | 0.8052 ppm | 64.4617 ppm | 0.0017 ppm |
| Concentration RSD | 16.8 % | 39.3 % | 13.7 % | 5.1 % | 0.4 % | 0.1 % | 37.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 7.1982 ppm | 0.0987 ppm | 0.0136 ppm | 269.4746 ppm | 0.0085 ppm | 0.0011 ppm | 0.0064 ppm |
| Concentration per Run 1 | 7.1978 ppm | 0.0986 ppm | 0.0137 ppm | 268.2367 ppm | 0.0087 ppm | 0.0023 ppm | 0.0075 ppm |
| Concentration per Run 2 | 7.2143 ppm | 0.0986 ppm | 0.0134 ppm | 269.9074 ppm | 0.0089 ppm | -0.0002 ppm | 0.0042 ppm |
| Concentration per Run 3 | 7.1824 ppm | 0.0988 ppm | 0.0138 ppm | 270.2797 ppm | 0.0078 ppm | 0.0012 ppm | 0.0076 ppm |
| Concentration RSD | 0.2 % | 0.1 % | 1.3 % | 0.4 % | 6.8 % | 116.4 % | 30.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 8.9710 ppm | 0.0027 ppm | 0.1817 ppm | 0.0005 ppm | 0.0007 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0002 ppm | 8.9649 ppm | 0.0035 ppm | 0.1816 ppm | 0.0003 ppm | -0.0007 ppm | -0.0001 ppm |
| Concentration per Run 2 | -0.0001 ppm | 8.9829 ppm | 0.0028 ppm | 0.1817 ppm | 0.0006 ppm | -0.0007 ppm | 0.0002 ppm |
| Concentration per Run 3 | 0.0000 ppm | 8.9652 ppm | 0.0017 ppm | 0.1817 ppm | 0.0007 ppm | 0.0036 ppm | 0.0000 ppm |
| Concentration RSD | 384.3 % | 0.1 % | 34.4 % | 0.0 % | 44.7 % | 326.6 % | 378.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0026 ppm | 107.3584 % | 104.0542 % | 106.9555 % | 106.1819 % | 102.7535 % | 103.5180 % |
| Concentration per Run 1 | 0.0028 ppm | 107.2636 % | 104.3919 % | 106.4225 % | 106.2574 % | 103.3972 % | 103.5650 % |
| Concentration per Run 2 | 0.0022 ppm | 107.1176 % | 104.1716 % | 107.0487 % | 106.0186 % | 102.7931 % | 103.5065 % |
| Concentration per Run 3 | 0.0028 ppm | 107.6939 % | 103.5990 % | 107.3953 % | 106.2697 % | 102.0701 % | 103.4825 % |
| Concentration RSD | 11.9 % | 0.3 % | 0.4 % | 0.5 % | 0.1 % | 0.6 % | 0.0 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512657-01 WG2039414
Analysis started at: 3/13/2025 2:13:41 PM
Rack 1
Vial 26
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0001 ppm | 0.2389 ppm | -0.0005 ppm | 0.0616 ppm | 0.0327 ppm | 0.0000 ppm | 25.2033 ppm |
| Concentration per Run 1 | 0.0005 ppm | 0.2410 ppm | -0.0016 ppm | 0.0617 ppm | 0.0327 ppm | 0.0000 ppm | 25.2123 ppm |
| Concentration per Run 2 | 0.0003 ppm | 0.2367 ppm | -0.0007 ppm | 0.0624 ppm | 0.0328 ppm | 0.0000 ppm | 25.2221 ppm |
| Concentration per Run 3 | -0.0005 ppm | 0.2389 ppm | 0.0008 ppm | 0.0608 ppm | 0.0325 ppm | 0.0000 ppm | 25.1756 ppm |
| Concentration RSD | 534.7 % | 0.9 % | 244.6 % | 1.3 % | 0.6 % | 52,796.0 % | 0.1 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0006 ppm | 0.0003 ppm | 0.0021 ppm | 0.0418 ppm | 10.5514 ppm | 0.0020 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0012 ppm | 0.0004 ppm | 0.0025 ppm | 0.0436 ppm | 10.5479 ppm | 0.0032 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0002 ppm | 0.0009 ppm | 0.0018 ppm | 0.0420 ppm | 10.5557 ppm | 0.0011 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0005 ppm | -0.0004 ppm | 0.0021 ppm | 0.0400 ppm | 10.5506 ppm | 0.0015 ppm |
| Concentration RSD | 1,815.2 % | 81.0 % | 208.0 % | 16.3 % | 4.2 % | 0.0 % | 57.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 5.8705 ppm | 0.0296 ppm | 0.0011 ppm | 88.7949 ppm | 0.0024 ppm | 0.0034 ppm | -0.0024 ppm |
| Concentration per Run 1 | 5.8668 ppm | 0.0294 ppm | 0.0011 ppm | 89.0504 ppm | 0.0023 ppm | 0.0026 ppm | -0.0051 ppm |
| Concentration per Run 2 | 5.8676 ppm | 0.0298 ppm | 0.0008 ppm | 88.7159 ppm | 0.0039 ppm | 0.0028 ppm | -0.0025 ppm |
| Concentration per Run 3 | 5.8771 ppm | 0.0295 ppm | 0.0014 ppm | 88.6185 ppm | 0.0010 ppm | 0.0048 ppm | 0.0003 ppm |
| Concentration RSD | 0.1 % | 0.7 % | 28.6 % | 0.3 % | 59.6 % | 35.4 % | 110.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 5.4653 ppm | 0.0008 ppm | 0.1361 ppm | 0.0003 ppm | 0.0017 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0014 ppm | 5.4772 ppm | 0.0010 ppm | 0.1361 ppm | 0.0002 ppm | 0.0024 ppm | 0.0002 ppm |
| Concentration per Run 2 | 0.0028 ppm | 5.4551 ppm | 0.0009 ppm | 0.1365 ppm | 0.0006 ppm | 0.0025 ppm | -0.0002 ppm |
| Concentration per Run 3 | -0.0017 ppm | 5.4636 ppm | 0.0005 ppm | 0.1357 ppm | 0.0000 ppm | 0.0001 ppm | -0.0002 ppm |
| Concentration RSD | 2,459.8 % | 0.2 % | 38.7 % | 0.3 % | 134.5 % | 81.4 % | 297.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0299 ppm | 107.7769 % | 105.4081 % | 106.8645 % | 106.6292 % | 104.1680 % | 104.1917 % |
| Concentration per Run 1 | 0.0301 ppm | 107.5674 % | 105.1061 % | 106.0087 % | 106.6305 % | 103.9071 % | 103.7718 % |
| Concentration per Run 2 | 0.0297 ppm | 108.1237 % | 105.6572 % | 107.5916 % | 107.0743 % | 104.7720 % | 104.4900 % |
| Concentration per Run 3 | 0.0298 ppm | 107.6395 % | 105.4609 % | 106.9932 % | 106.1829 % | 103.8248 % | 104.3133 % |
| Concentration RSD | 0.7 % | 0.3 % | 0.3 % | 0.7 % | 0.4 % | 0.5 % | 0.4 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512678-01 WG2039414
Analysis started at: 3/13/2025 2:17:07 PM
Rack 1
Vial 27
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0935 ppm | -0.0006 ppm | 0.0372 ppm | 0.0733 ppm | 0.0000 ppm | 39.6170 ppm |
| Concentration per Run 1 | 0.0006 ppm | 0.0916 ppm | -0.0015 ppm | 0.0374 ppm | 0.0736 ppm | 0.0000 ppm | 39.7571 ppm |
| Concentration per Run 2 | 0.0001 ppm | 0.0953 ppm | -0.0002 ppm | 0.0363 ppm | 0.0731 ppm | 0.0000 ppm | 39.5487 ppm |
| Concentration per Run 3 | 0.0001 ppm | 0.0935 ppm | -0.0001 ppm | 0.0379 ppm | 0.0734 ppm | 0.0000 ppm | 39.5451 ppm |
| Concentration RSD | 102.3 % | 2.0 % | 139.2 % | 2.1 % | 0.3 % | 43.5 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0001 ppm | 0.0000 ppm | 0.0006 ppm | 0.0144 ppm | 0.7403 ppm | 6.3789 ppm | 0.0024 ppm |
| Concentration per Run 1 | -0.0002 ppm | -0.0006 ppm | 0.0006 ppm | 0.0143 ppm | 0.7407 ppm | 6.4064 ppm | 0.0020 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | 0.0005 ppm | 0.0147 ppm | 0.7367 ppm | 6.3902 ppm | 0.0021 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0005 ppm | 0.0005 ppm | 0.0142 ppm | 0.7436 ppm | 6.3400 ppm | 0.0030 ppm |
| Concentration RSD | 99.1 % | 1,696.4 % | 10.1 % | 1.7 % | 0.5 % | 0.5 % | 24.4 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 8.8566 ppm | 0.0183 ppm | 0.0010 ppm | 44.5308 ppm | 0.0026 ppm | 0.0046 ppm | 0.0009 ppm |
| Concentration per Run 1 | 8.8421 ppm | 0.0184 ppm | 0.0001 ppm | 44.5577 ppm | 0.0035 ppm | 0.0038 ppm | 0.0007 ppm |
| Concentration per Run 2 | 8.8519 ppm | 0.0182 ppm | 0.0013 ppm | 44.3961 ppm | 0.0031 ppm | 0.0051 ppm | 0.0024 ppm |
| Concentration per Run 3 | 8.8757 ppm | 0.0182 ppm | 0.0015 ppm | 44.6386 ppm | 0.0013 ppm | 0.0049 ppm | -0.0003 ppm |
| Concentration RSD | 0.2 % | 0.8 % | 82.2 % | 0.3 % | 45.8 % | 14.7 % | 143.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0006 ppm | 0.8208 ppm | 0.0002 ppm | 0.1919 ppm | 0.0021 ppm | -0.0012 ppm | 0.0000 ppm |
| Concentration per Run 1 | 0.0016 ppm | 0.8233 ppm | 0.0014 ppm | 0.1921 ppm | 0.0021 ppm | -0.0004 ppm | 0.0004 ppm |
| Concentration per Run 2 | -0.0003 ppm | 0.8204 ppm | 0.0003 ppm | 0.1913 ppm | 0.0018 ppm | -0.0012 ppm | -0.0003 ppm |
| Concentration per Run 3 | 0.0004 ppm | 0.8187 ppm | -0.0012 ppm | 0.1922 ppm | 0.0024 ppm | -0.0020 ppm | -0.0002 ppm |
| Concentration RSD | 161.3 % | 0.3 % | 794.0 % | 0.2 % | 13.4 % | 69.2 % | 48,070.5 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0482 ppm | 105.8486 % | 104.7530 % | 106.1305 % | 105.6002 % | 104.7176 % | 104.5655 % |
| Concentration per Run 1 | 0.0480 ppm | 106.2025 % | 104.5338 % | 104.9557 % | 106.3083 % | 104.4534 % | 103.4862 % |
| Concentration per Run 2 | 0.0487 ppm | 105.3585 % | 104.6556 % | 107.4385 % | 104.8560 % | 104.4686 % | 105.8249 % |
| Concentration per Run 3 | 0.0480 ppm | 105.9847 % | 105.0695 % | 105.9973 % | 105.6362 % | 105.2308 % | 104.3855 % |
| Concentration RSD | 0.8 % | 0.4 % | 0.3 % | 1.2 % | 0.7 % | 0.4 % | 1.1 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512691-01 WG2039414
Analysis started at: 3/13/2025 2:20:33 PM
Rack 1
Vial 29
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 1.1759 ppm | 0.0015 ppm | 0.0043 ppm | 0.0104 ppm | 0.0000 ppm | 6.9354 ppm |
| Concentration per Run 1 | -0.0005 ppm | 1.1822 ppm | 0.0018 ppm | 0.0038 ppm | 0.0104 ppm | 0.0000 ppm | 6.9449 ppm |
| Concentration per Run 2 | 0.0000 ppm | 1.1718 ppm | 0.0004 ppm | 0.0039 ppm | 0.0104 ppm | 0.0001 ppm | 6.9107 ppm |
| Concentration per Run 3 | 0.0004 ppm | 1.1736 ppm | 0.0023 ppm | 0.0052 ppm | 0.0103 ppm | 0.0000 ppm | 6.9506 ppm |
| Concentration RSD | 3,298.2 % | 0.5 % | 63.5 % | 18.2 % | 0.6 % | 21.6 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0002 ppm | 0.0023 ppm | 0.0022 ppm | 1.6201 ppm | 2.0701 ppm | 0.0017 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0026 ppm | 0.0025 ppm | 1.6228 ppm | 2.0742 ppm | 0.0018 ppm |
| Concentration per Run 2 | 0.0000 ppm | -0.0003 ppm | 0.0019 ppm | 0.0020 ppm | 1.6158 ppm | 2.0755 ppm | 0.0018 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0007 ppm | 0.0023 ppm | 0.0022 ppm | 1.6218 ppm | 2.0606 ppm | 0.0014 ppm |
| Concentration RSD | 6.9 % | 312.1 % | 15.4 % | 9.5 % | 0.2 % | 0.4 % | 12.7 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 2.1109 ppm | 0.1392 ppm | 0.0002 ppm | 68.2424 ppm | 0.0027 ppm | 0.0043 ppm | 0.0010 ppm |
| Concentration per Run 1 | 2.1101 ppm | 0.1393 ppm | 0.0005 ppm | 68.4659 ppm | 0.0015 ppm | 0.0058 ppm | -0.0003 ppm |
| Concentration per Run 2 | 2.1021 ppm | 0.1393 ppm | 0.0007 ppm | 68.3508 ppm | 0.0022 ppm | 0.0047 ppm | 0.0044 ppm |
| Concentration per Run 3 | 2.1206 ppm | 0.1389 ppm | -0.0005 ppm | 67.9103 ppm | 0.0044 ppm | 0.0024 ppm | -0.0011 ppm |
| Concentration RSD | 0.4 % | 0.1 % | 276.6 % | 0.4 % | 56.3 % | 40.5 % | 298.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0008 ppm | 2.5782 ppm | -0.0016 ppm | 0.0422 ppm | 0.0347 ppm | 0.0005 ppm | 0.0020 ppm |
| Concentration per Run 1 | -0.0025 ppm | 2.5793 ppm | -0.0029 ppm | 0.0424 ppm | 0.0352 ppm | -0.0009 ppm | 0.0025 ppm |
| Concentration per Run 2 | 0.0011 ppm | 2.5813 ppm | -0.0011 ppm | 0.0421 ppm | 0.0344 ppm | 0.0014 ppm | 0.0020 ppm |
| Concentration per Run 3 | -0.0012 ppm | 2.5740 ppm | -0.0007 ppm | 0.0421 ppm | 0.0344 ppm | 0.0008 ppm | 0.0014 ppm |
| Concentration RSD | 215.6 % | 0.1 % | 73.1 % | 0.5 % | 1.2 % | 258.8 % | 28.4 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0239 ppm | 107.9485 % | 106.2190 % | 107.4889 % | 107.0037 % | 104.8512 % | 104.3722 % |
| Concentration per Run 1 | 0.0237 ppm | 107.5969 % | 105.7658 % | 106.5905 % | 106.4233 % | 104.5709 % | 103.6400 % |
| Concentration per Run 2 | 0.0241 ppm | 108.3189 % | 106.3872 % | 107.7651 % | 107.8490 % | 105.2413 % | 104.6963 % |
| Concentration per Run 3 | 0.0238 ppm | 107.9297 % | 106.5040 % | 108.1110 % | 106.7388 % | 104.7415 % | 104.7804 % |
| Concentration RSD | 0.9 % | 0.3 % | 0.4 % | 0.7 % | 0.7 % | 0.3 % | 0.6 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512598-01 WG2039414
Analysis started at: 3/13/2025 2:24:01 PM
Rack 1
Vial 47
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0184 ppm | 0.0017 ppm | 0.0053 ppm | 0.0006 ppm | 0.0000 ppm | 0.1800 ppm |
| Concentration per Run 1 | 0.0003 ppm | 0.0207 ppm | 0.0030 ppm | 0.0039 ppm | 0.0006 ppm | 0.0000 ppm | 0.1797 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0199 ppm | 0.0014 ppm | 0.0056 ppm | 0.0004 ppm | 0.0000 ppm | 0.1827 ppm |
| Concentration per Run 3 | -0.0003 ppm | 0.0147 ppm | 0.0009 ppm | 0.0063 ppm | 0.0007 ppm | 0.0000 ppm | 0.1777 ppm |
| Concentration RSD | 237.4 % | 17.8 % | 62.0 % | 23.9 % | 22.7 % | 490.3 % | 1.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0106 ppm | 0.0011 ppm | 0.0193 ppm | 0.0213 ppm | 1.3918 ppm | -0.0001 ppm |
| Concentration per Run 1 | -0.0001 ppm | 0.0093 ppm | 0.0009 ppm | 0.0196 ppm | 0.0204 ppm | 1.3799 ppm | 0.0004 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0107 ppm | 0.0016 ppm | 0.0189 ppm | 0.0227 ppm | 1.4030 ppm | -0.0004 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0117 ppm | 0.0009 ppm | 0.0193 ppm | 0.0209 ppm | 1.3927 ppm | -0.0001 ppm |
| Concentration RSD | 135.4 % | 11.6 % | 34.1 % | 1.7 % | 5.6 % | 0.8 % | 781.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0189 ppm | 0.0005 ppm | 0.0016 ppm | 0.1192 ppm | 0.0068 ppm | 0.0023 ppm | -0.0024 ppm |
| Concentration per Run 1 | 0.0176 ppm | 0.0004 ppm | 0.0012 ppm | 0.1185 ppm | 0.0057 ppm | 0.0021 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0186 ppm | 0.0007 ppm | 0.0018 ppm | 0.1224 ppm | 0.0080 ppm | 0.0023 ppm | -0.0033 ppm |
| Concentration per Run 3 | 0.0204 ppm | 0.0004 ppm | 0.0019 ppm | 0.1168 ppm | 0.0066 ppm | 0.0025 ppm | -0.0042 ppm |
| Concentration RSD | 7.3 % | 39.7 % | 21.1 % | 2.4 % | 16.7 % | 8.5 % | 99.5 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0044 ppm | 0.0038 ppm | 0.0022 ppm | 0.0003 ppm | 0.0015 ppm | -0.0007 ppm | -0.0003 ppm |
| Concentration per Run 1 | 0.0042 ppm | 0.0050 ppm | 0.0020 ppm | 0.0004 ppm | 0.0014 ppm | -0.0031 ppm | -0.0003 ppm |
| Concentration per Run 2 | 0.0028 ppm | 0.0034 ppm | 0.0022 ppm | 0.0003 ppm | 0.0016 ppm | 0.0018 ppm | -0.0004 ppm |
| Concentration per Run 3 | 0.0062 ppm | 0.0030 ppm | 0.0024 ppm | 0.0003 ppm | 0.0015 ppm | -0.0008 ppm | -0.0002 ppm |
| Concentration RSD | 38.3 % | 27.3 % | 9.1 % | 9.2 % | 5.9 % | 339.5 % | 36.9 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0169 ppm | 103.2579 % | 103.3752 % | 103.7849 % | 103.1074 % | 102.6771 % | 102.8820 % |
| Concentration per Run 1 | 0.0172 ppm | 102.6702 % | 103.8277 % | 103.7273 % | 102.4863 % | 102.9043 % | 102.9087 % |
| Concentration per Run 2 | 0.0169 ppm | 103.8168 % | 103.0365 % | 104.2307 % | 103.7479 % | 102.7431 % | 103.1347 % |
| Concentration per Run 3 | 0.0165 ppm | 103.2866 % | 103.2615 % | 103.3967 % | 103.0879 % | 102.3839 % | 102.6026 % |
| Concentration RSD | 2.1 % | 0.6 % | 0.4 % | 0.4 % | 0.6 % | 0.3 % | 0.3 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512805-02 WG2039613
Analysis started at: 3/13/2025 2:27:29 PM
Rack 1
Vial 55
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0586 ppm | 0.0005 ppm | 0.0142 ppm | 0.0080 ppm | 0.0000 ppm | 5.3325 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0539 ppm | 0.0000 ppm | 0.0129 ppm | 0.0080 ppm | 0.0000 ppm | 5.3390 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0570 ppm | 0.0001 ppm | 0.0144 ppm | 0.0080 ppm | 0.0000 ppm | 5.3445 ppm |
| Concentration per Run 3 | 0.0002 ppm | 0.0648 ppm | 0.0013 ppm | 0.0153 ppm | 0.0079 ppm | 0.0000 ppm | 5.3141 ppm |
| Concentration RSD | 45.0 % | 9.5 % | 157.3 % | 8.8 % | 0.7 % | 165.7 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0001 ppm | 0.0004 ppm | 0.0012 ppm | 0.0791 ppm | 4.0392 ppm | -0.0005 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0001 ppm | 0.0004 ppm | 0.0020 ppm | 0.0795 ppm | 4.0624 ppm | -0.0007 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0005 ppm | 0.0004 ppm | 0.0010 ppm | 0.0767 ppm | 4.0230 ppm | -0.0009 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0002 ppm | 0.0005 ppm | 0.0008 ppm | 0.0812 ppm | 4.0323 ppm | 0.0001 ppm |
| Concentration RSD | 182.2 % | 280.7 % | 18.6 % | 52.1 % | 2.9 % | 0.5 % | 110.5 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 1.7468 ppm | 0.2614 ppm | 0.0005 ppm | 5.7278 ppm | 0.0010 ppm | 0.0028 ppm | 0.0003 ppm |
| Concentration per Run 1 | 1.7433 ppm | 0.2618 ppm | -0.0004 ppm | 5.7320 ppm | 0.0011 ppm | 0.0027 ppm | 0.0009 ppm |
| Concentration per Run 2 | 1.7480 ppm | 0.2623 ppm | 0.0009 ppm | 5.7201 ppm | 0.0017 ppm | 0.0024 ppm | -0.0006 ppm |
| Concentration per Run 3 | 1.7490 ppm | 0.2602 ppm | 0.0010 ppm | 5.7313 ppm | 0.0000 ppm | 0.0033 ppm | 0.0007 ppm |
| Concentration RSD | 0.2 % | 0.4 % | 149.4 % | 0.1 % | 90.9 % | 15.2 % | 231.3 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0008 ppm | 3.7852 ppm | -0.0002 ppm | 0.0157 ppm | 0.0023 ppm | 0.0001 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0020 ppm | 3.7696 ppm | -0.0009 ppm | 0.0157 ppm | 0.0021 ppm | -0.0002 ppm | 0.0003 ppm |
| Concentration per Run 2 | 0.0017 ppm | 3.7952 ppm | 0.0000 ppm | 0.0156 ppm | 0.0025 ppm | 0.0015 ppm | 0.0002 ppm |
| Concentration per Run 3 | -0.0012 ppm | 3.7908 ppm | 0.0002 ppm | 0.0156 ppm | 0.0025 ppm | -0.0011 ppm | 0.0002 ppm |
| Concentration RSD | 213.8 % | 0.4 % | 255.4 % | 0.3 % | 10.5 % | 1,558.3 % | 21.0 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0016 ppm | 105.3948 % | 105.9374 % | 104.3913 % | 106.0018 % | 106.2871 % | 104.3563 % |
| Concentration per Run 1 | 0.0017 ppm | 106.3132 % | 106.2844 % | 103.5038 % | 106.9633 % | 106.6392 % | 103.9425 % |
| Concentration per Run 2 | 0.0016 ppm | 105.2195 % | 105.6984 % | 104.6552 % | 106.0259 % | 106.2355 % | 104.5447 % |
| Concentration per Run 3 | 0.0014 ppm | 104.6518 % | 105.8295 % | 105.0148 % | 105.0164 % | 105.9867 % | 104.5815 % |
| Concentration RSD | 8.9 % | 0.8 % | 0.3 % | 0.8 % | 0.9 % | 0.3 % | 0.3 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512805-03 WG2039613
Analysis started at: 3/13/2025 2:30:57 PM
Rack 1
Vial 56
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0003 ppm | 0.0716 ppm | -0.0003 ppm | 0.0208 ppm | 0.0318 ppm | 0.0000 ppm | 21.3630 ppm |
| Concentration per Run 1 | 0.0007 ppm | 0.0763 ppm | -0.0006 ppm | 0.0211 ppm | 0.0319 ppm | 0.0000 ppm | 21.3890 ppm |
| Concentration per Run 2 | 0.0004 ppm | 0.0721 ppm | 0.0002 ppm | 0.0202 ppm | 0.0320 ppm | 0.0000 ppm | 21.4075 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0665 ppm | -0.0004 ppm | 0.0209 ppm | 0.0316 ppm | 0.0000 ppm | 21.2923 ppm |
| Concentration RSD | 104.9 % | 6.8 % | 164.3 % | 2.4 % | 0.6 % | 40.1 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0131 ppm | 0.0000 ppm | 0.0028 ppm | 0.3607 ppm | 10.1819 ppm | -0.0006 ppm |
| Concentration per Run 1 | 0.0001 ppm | 0.0121 ppm | 0.0002 ppm | 0.0028 ppm | 0.3630 ppm | 10.2219 ppm | -0.0004 ppm |
| Concentration per Run 2 | -0.0001 ppm | 0.0142 ppm | 0.0000 ppm | 0.0028 ppm | 0.3587 ppm | 10.1738 ppm | -0.0006 ppm |
| Concentration per Run 3 | 0.0000 ppm | 0.0129 ppm | -0.0002 ppm | 0.0028 ppm | 0.3603 ppm | 10.1500 ppm | -0.0007 ppm |
| Concentration RSD | 691.4 % | 8.1 % | 577.3 % | 1.6 % | 0.6 % | 0.4 % | 27.6 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 9.2604 ppm | 3.7422 ppm | -0.0008 ppm | 9.1794 ppm | 0.0054 ppm | 0.0021 ppm | -0.0003 ppm |
| Concentration per Run 1 | 9.2789 ppm | 3.7576 ppm | -0.0008 ppm | 9.2112 ppm | 0.0058 ppm | 0.0037 ppm | 0.0021 ppm |
| Concentration per Run 2 | 9.2488 ppm | 3.7407 ppm | -0.0004 ppm | 9.2140 ppm | 0.0044 ppm | 0.0003 ppm | -0.0048 ppm |
| Concentration per Run 3 | 9.2534 ppm | 3.7283 ppm | -0.0011 ppm | 9.1130 ppm | 0.0061 ppm | 0.0022 ppm | 0.0017 ppm |
| Concentration RSD | 0.2 % | 0.4 % | 45.3 % | 0.6 % | 17.4 % | 84.0 % | 1,264.1 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0003 ppm | 2.9401 ppm | -0.0003 ppm | 0.0471 ppm | 0.0020 ppm | 0.0040 ppm | 0.0000 ppm |
| Concentration per Run 1 | -0.0009 ppm | 2.9419 ppm | 0.0001 ppm | 0.0474 ppm | 0.0021 ppm | 0.0052 ppm | 0.0006 ppm |
| Concentration per Run 2 | 0.0003 ppm | 2.9228 ppm | -0.0012 ppm | 0.0470 ppm | 0.0023 ppm | 0.0018 ppm | -0.0006 ppm |
| Concentration per Run 3 | -0.0002 ppm | 2.9557 ppm | 0.0000 ppm | 0.0470 ppm | 0.0016 ppm | 0.0051 ppm | -0.0001 ppm |
| Concentration RSD | 217.2 % | 0.6 % | 223.4 % | 0.5 % | 17.5 % | 48.3 % | 2,460.8 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | 106.9296 % | 106.2144 % | 105.5217 % | 106.9328 % | 105.8321 % | 104.8874 % |
| Concentration per Run 1 | 0.0013 ppm | 106.5462 % | 105.7107 % | 105.0847 % | 106.7357 % | 105.4224 % | 104.6955 % |
| Concentration per Run 2 | 0.0011 ppm | 107.1571 % | 105.9562 % | 105.4974 % | 107.2132 % | 105.7032 % | 104.6993 % |
| Concentration per Run 3 | 0.0009 ppm | 107.0856 % | 106.9762 % | 105.9831 % | 106.8495 % | 106.3706 % | 105.2674 % |
| Concentration RSD | 16.6 % | 0.3 % | 0.6 % | 0.4 % | 0.2 % | 0.5 % | 0.3 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: L2512805-04 WG2039613
Analysis started at: 3/13/2025 2:34:25 PM
Rack 1
Vial 57
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 0.0661 ppm | -0.0002 ppm | 0.0340 ppm | 0.0135 ppm | 0.0000 ppm | 35.6901 ppm |
| Concentration per Run 1 | 0.0000 ppm | 0.0556 ppm | -0.0013 ppm | 0.0335 ppm | 0.0135 ppm | 0.0000 ppm | 35.5597 ppm |
| Concentration per Run 2 | 0.0002 ppm | 0.0743 ppm | 0.0003 ppm | 0.0332 ppm | 0.0134 ppm | 0.0000 ppm | 35.6830 ppm |
| Concentration per Run 3 | 0.0003 ppm | 0.0684 ppm | 0.0004 ppm | 0.0353 ppm | 0.0137 ppm | 0.0000 ppm | 35.8275 ppm |
| Concentration RSD | 95.3 % | 14.5 % | 502.5 % | 3.4 % | 1.1 % | 218.9 % | 0.4 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0002 ppm | 0.0004 ppm | 0.0128 ppm | 0.0758 ppm | 14.5979 ppm | -0.0005 ppm |
| Concentration per Run 1 | -0.0002 ppm | 0.0001 ppm | 0.0005 ppm | 0.0127 ppm | 0.0763 ppm | 14.5446 ppm | -0.0002 ppm |
| Concentration per Run 2 | -0.0002 ppm | 0.0003 ppm | 0.0004 ppm | 0.0127 ppm | 0.0765 ppm | 14.6252 ppm | -0.0005 ppm |
| Concentration per Run 3 | -0.0001 ppm | 0.0001 ppm | 0.0004 ppm | 0.0130 ppm | 0.0746 ppm | 14.6240 ppm | -0.0007 ppm |
| Concentration RSD | 22.6 % | 58.3 % | 9.8 % | 1.4 % | 1.4 % | 0.3 % | 58.9 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 3.2228 ppm | 0.0069 ppm | 0.0008 ppm | 16.8829 ppm | 0.0007 ppm | 0.0011 ppm | 0.0004 ppm |
| Concentration per Run 1 | 3.2359 ppm | 0.0068 ppm | 0.0006 ppm | 16.7779 ppm | 0.0012 ppm | 0.0017 ppm | 0.0007 ppm |
| Concentration per Run 2 | 3.2135 ppm | 0.0069 ppm | 0.0010 ppm | 16.9305 ppm | 0.0004 ppm | 0.0008 ppm | -0.0024 ppm |
| Concentration per Run 3 | 3.2192 ppm | 0.0070 ppm | 0.0010 ppm | 16.9402 ppm | 0.0005 ppm | 0.0007 ppm | 0.0027 ppm |
| Concentration RSD | 0.4 % | 0.9 % | 29.0 % | 0.5 % | 62.9 % | 55.3 % | 720.7 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 4.0349 ppm | -0.0010 ppm | 0.1233 ppm | 0.0023 ppm | 0.0020 ppm | 0.0012 ppm |
| Concentration per Run 1 | 0.0005 ppm | 4.0450 ppm | -0.0039 ppm | 0.1231 ppm | 0.0020 ppm | 0.0027 ppm | 0.0012 ppm |
| Concentration per Run 2 | -0.0003 ppm | 4.0308 ppm | -0.0010 ppm | 0.1236 ppm | 0.0027 ppm | 0.0008 ppm | 0.0013 ppm |
| Concentration per Run 3 | 0.0004 ppm | 4.0290 ppm | 0.0019 ppm | 0.1232 ppm | 0.0024 ppm | 0.0025 ppm | 0.0010 ppm |
| Concentration RSD | 218.1 % | 0.2 % | 287.8 % | 0.2 % | 15.3 % | 51.1 % | 12.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0074 ppm | 108.4099 % | 106.4264 % | 106.6643 % | 107.1732 % | 105.1037 % | 104.2540 % |
| Concentration per Run 1 | 0.0077 ppm | 108.1248 % | 106.9744 % | 105.7373 % | 106.9481 % | 105.2379 % | 103.6391 % |
| Concentration per Run 2 | 0.0072 ppm | 107.9527 % | 106.0216 % | 107.4250 % | 106.5034 % | 104.9012 % | 104.5579 % |
| Concentration per Run 3 | 0.0073 ppm | 109.1522 % | 106.2831 % | 106.8306 % | 108.0681 % | 105.1722 % | 104.5651 % |
| Concentration RSD | 3.2 % | 0.6 % | 0.5 % | 0.8 % | 0.8 % | 0.2 % | 0.5 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: CCV
Analysis started at: 3/13/2025 2:37:53 PM
Rack 0
Vial 3
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4622 ppm | 0.4720 ppm | 0.4778 ppm | 0.4674 ppm | 0.4783 ppm | 0.4953 ppm | 0.4946 ppm |
| Concentration per Run 1 | 0.4611 ppm | 0.4791 ppm | 0.4768 ppm | 0.4675 ppm | 0.4767 ppm | 0.4936 ppm | 0.4942 ppm |
| Concentration per Run 2 | 0.4637 ppm | 0.4667 ppm | 0.4809 ppm | 0.4696 ppm | 0.4798 ppm | 0.4978 ppm | 0.4933 ppm |
| Concentration per Run 3 | 0.4618 ppm | 0.4701 ppm | 0.4756 ppm | 0.4651 ppm | 0.4783 ppm | 0.4945 ppm | 0.4964 ppm |
| Recovery Percentage 1 | 92.435 % | 94.391 % | 95.554 % | 93.480 % | 95.653 % | 99.055 % | 98.927 % |
| Concentration RSD | 0.3 % | 1.4 % | 0.6 % | 0.5 % | 0.3 % | 0.4 % | 0.3 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4841 ppm | 0.4969 ppm | 0.4835 ppm | 0.4658 ppm | 0.5020 ppm | 4.9681 ppm | 0.4844 ppm |
| Concentration per Run 1 | 0.4836 ppm | 0.4941 ppm | 0.4834 ppm | 0.4641 ppm | 0.5023 ppm | 4.9823 ppm | 0.4849 ppm |
| Concentration per Run 2 | 0.4845 ppm | 0.4976 ppm | 0.4859 ppm | 0.4670 ppm | 0.5009 ppm | 4.9600 ppm | 0.4847 ppm |
| Concentration per Run 3 | 0.4842 ppm | 0.4991 ppm | 0.4811 ppm | 0.4663 ppm | 0.5027 ppm | 4.9620 ppm | 0.4837 ppm |
| Recovery Percentage 1 | 96.817 % | 99.387 % | 96.694 % | 93.162 % | 100.394 % | 99.363 % | 96.880 % |
| Concentration RSD | 0.1 % | 0.5 % | 0.5 % | 0.3 % | 0.2 % | 0.2 % | 0.1 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4777 ppm | 0.4880 ppm | 0.4806 ppm | 9.6723 ppm | 0.4927 ppm | 0.4959 ppm | 0.4817 ppm |
| Concentration per Run 1 | 0.4790 ppm | 0.4883 ppm | 0.4806 ppm | 9.6670 ppm | 0.4929 ppm | 0.4980 ppm | 0.4821 ppm |
| Concentration per Run 2 | 0.4795 ppm | 0.4877 ppm | 0.4798 ppm | 9.7113 ppm | 0.4949 ppm | 0.4936 ppm | 0.4807 ppm |
| Concentration per Run 3 | 0.4745 ppm | 0.4878 ppm | 0.4813 ppm | 9.6386 ppm | 0.4904 ppm | 0.4960 ppm | 0.4823 ppm |
| Recovery Percentage 1 | 95.538 % | 97.591 % | 96.111 % | 96.723 % | 98.547 % | 99.171 % | 96.340 % |
| Concentration RSD | 0.6 % | 0.1 % | 0.2 % | 0.4 % | 0.5 % | 0.5 % | 0.2 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4800 ppm | 5.2076 ppm | 0.4987 ppm | 0.4949 ppm | 0.4844 ppm | 0.4789 ppm | 0.4792 ppm |
| Concentration per Run 1 | 0.4800 ppm | 5.1939 ppm | 0.4994 ppm | 0.4943 ppm | 0.4834 ppm | 0.4787 ppm | 0.4783 ppm |
| Concentration per Run 2 | 0.4804 ppm | 5.2136 ppm | 0.5014 ppm | 0.4955 ppm | 0.4861 ppm | 0.4798 ppm | 0.4794 ppm |
| Concentration per Run 3 | 0.4794 ppm | 5.2154 ppm | 0.4953 ppm | 0.4948 ppm | 0.4838 ppm | 0.4783 ppm | 0.4798 ppm |
| Recovery Percentage 1 | 95.991 % | 99.193 % | 99.742 % | 98.975 % | 96.889 % | 95.783 % | 95.831 % |
| Concentration RSD | 0.1 % | 0.2 % | 0.6 % | 0.1 % | 0.3 % | 0.2 % | 0.2 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.4880 ppm | 107.5170 % | 106.5458 % | 106.1004 % | 105.4072 % | 105.1373 % | 104.1625 % |
| Concentration per Run 1 | 0.4899 ppm | 107.1045 % | 106.7024 % | 105.8053 % | 104.6436 % | 105.2784 % | 103.6111 % |
| Concentration per Run 2 | 0.4889 ppm | 107.5668 % | 105.9026 % | 105.9625 % | 105.6767 % | 104.7268 % | 104.0175 % |
| Concentration per Run 3 | 0.4852 ppm | 107.8797 % | 107.0324 % | 106.5334 % | 105.9013 % | 105.4067 % | 104.8590 % |
| Recovery Percentage 1 | 97.609 % | | | | | | |
| Concentration RSD | 0.5 % | 0.4 % | 0.5 % | 0.4 % | 0.6 % | 0.3 % | 0.6 % |

# ICP DataTrace 9

3/13/2025 2:58:52 PM

LabBook: WG2039956_03132025T9.imexp

Sample: CCB
Analysis started at: 3/13/2025 2:41:21 PM
Rack 0
Vial 4
Comment <Comment>

| | Ag 328.068 (Axial-iFR) | Al 396.152 (Radial-iFR) | As 189.042 (Axial-eUV) | B 208.959 (Axial-iFR) | Ba 455.403 (Radial-iFR) | Be 313.042 (Radial-iFR) | Ca 315.887 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | -0.0002 ppm | 0.0041 ppm | -0.0005 ppm | -0.0014 ppm | 0.0000 ppm | 0.0000 ppm | 0.0032 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0064 ppm | -0.0008 ppm | -0.0007 ppm | -0.0002 ppm | 0.0000 ppm | 0.0030 ppm |
| Concentration per Run 2 | -0.0004 ppm | 0.0009 ppm | 0.0002 ppm | -0.0008 ppm | 0.0001 ppm | 0.0000 ppm | 0.0012 ppm |
| Concentration per Run 3 | -0.0004 ppm | 0.0050 ppm | -0.0008 ppm | -0.0027 ppm | 0.0000 ppm | 0.0000 ppm | 0.0053 ppm |
| Recovery Percentage 1 | -2.802 % | 4.103 % | -9.149 % | -4.612 % | -0.390 % | 0.218 % | 3.188 % |
| Concentration RSD | 167.3 % | 70.2 % | 133.8 % | 79.9 % | 346.9 % | 185.9 % | 64.8 % |

| | Cd 214.438 (Axial-iFR) | Co 228.616 (Axial-iFR) | Cr 267.716 (Axial-iFR) | Cu 324.754 (Axial-iFR) | Fe 259.940 (Radial-iFR) | K 766.490 (Radial-iFR) | Li 670.776 (Radial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0000 ppm | 0.0000 ppm | -0.0002 ppm | -0.0002 ppm | -0.0011 ppm | -0.0123 ppm | 0.0002 ppm |
| Concentration per Run 1 | 0.0002 ppm | 0.0013 ppm | -0.0004 ppm | -0.0002 ppm | 0.0000 ppm | -0.0123 ppm | 0.0007 ppm |
| Concentration per Run 2 | 0.0000 ppm | 0.0000 ppm | -0.0001 ppm | -0.0004 ppm | -0.0014 ppm | 0.0018 ppm | -0.0001 ppm |
| Concentration per Run 3 | 0.0000 ppm | -0.0011 ppm | -0.0002 ppm | 0.0000 ppm | -0.0018 ppm | -0.0265 ppm | 0.0001 ppm |
| Recovery Percentage 1 | 0.716 % | 0.197 % | -2.250 % | -2.330 % | -2.167 % | -0.493 % | 4.468 % |
| Concentration RSD | 282.1 % | 3,080.1 % | 60.3 % | 91.9 % | 88.7 % | 114.6 % | 200.8 % |

| | Mg 279.079 (Axial-iFR) | Mn 257.610 (Radial-iFR) | Mo 202.030 (Axial-iFR) | Na 589.592 (Radial-iFR) | Ni 231.604 (Axial-iFR) | Pb 220.353 (Axial-eUV) | Sb 206.833 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0005 ppm | -0.0001 ppm | 0.0013 ppm | 0.0024 ppm | 0.0009 ppm | 0.0028 ppm | 0.0048 ppm |
| Concentration per Run 1 | 0.0029 ppm | -0.0002 ppm | 0.0014 ppm | 0.0010 ppm | 0.0015 ppm | 0.0029 ppm | 0.0062 ppm |
| Concentration per Run 2 | -0.0021 ppm | -0.0002 ppm | 0.0014 ppm | 0.0005 ppm | 0.0008 ppm | 0.0019 ppm | 0.0057 ppm |
| Concentration per Run 3 | 0.0008 ppm | 0.0001 ppm | 0.0010 ppm | 0.0058 ppm | 0.0004 ppm | 0.0035 ppm | 0.0024 ppm |
| Recovery Percentage 1 | 0.544 % | -0.720 % | 2.522 % | 0.121 % | 3.605 % | 27.611 % | 9.547 % |
| Concentration RSD | 464.9 % | 231.3 % | 16.7 % | 119.6 % | 59.7 % | 28.1 % | 42.6 % |

| | Se 196.090 (Axial-eUV) | Si 212.412 (Axial-iFR) | Sn 189.989 (Axial-iFR) | Sr 421.552 (Radial-iFR) | Ti 334.904 (Axial-iFR) | Tl 190.856 (Axial-eUV) | V 292.402 (Axial-iFR) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0011 ppm | -0.0098 ppm | -0.0006 ppm | 0.0001 ppm | 0.0001 ppm | 0.0014 ppm | 0.0001 ppm |
| Concentration per Run 1 | 0.0031 ppm | -0.0121 ppm | -0.0006 ppm | 0.0000 ppm | 0.0004 ppm | -0.0011 ppm | -0.0003 ppm |
| Concentration per Run 2 | -0.0004 ppm | -0.0071 ppm | -0.0009 ppm | 0.0000 ppm | -0.0001 ppm | 0.0035 ppm | 0.0001 ppm |
| Concentration per Run 3 | 0.0006 ppm | -0.0103 ppm | -0.0003 ppm | 0.0002 ppm | 0.0001 ppm | 0.0017 ppm | 0.0004 ppm |
| Recovery Percentage 1 | 10.939 % | -1.967 % | -1.137 % | 0.589 % | 1.323 % | 6.868 % | 0.661 % |
| Concentration RSD | 167.7 % | 26.0 % | 53.8 % | 223.9 % | 191.8 % | 170.5 % | 504.7 % |

| | Zn 206.200 (Axial-iFR) | Sc 361.384 (Axial-iFR) | Sc 361.384 (Radial-iFR) | Sc 227.318 (Axial-eUV) | Y 360.073 (Axial-iFR) | Y 371.030 (Radial-iFR) | Y 224.306 (Axial-eUV) |
|---|---|---|---|---|---|---|---|
| Concentration average | 0.0002 ppm | 105.7793 % | 105.4065 % | 105.8162 % | 106.4937 % | 105.8187 % | 106.2046 % |
| Concentration per Run 1 | 0.0004 ppm | 105.4497 % | 105.5244 % | 106.3620 % | 105.8179 % | 106.2991 % | 106.3210 % |
| Concentration per Run 2 | 0.0001 ppm | 106.4227 % | 105.3935 % | 105.5848 % | 107.6422 % | 105.3740 % | 105.9432 % |
| Concentration per Run 3 | 0.0002 ppm | 105.4653 % | 105.3017 % | 105.5017 % | 106.0211 % | 105.7832 % | 106.3495 % |
| Recovery Percentage 1 | 4.444 % | | | | | | |
| Concentration RSD | 71.1 % | 0.5 % | 0.1 % | 0.4 % | 0.9 % | 0.4 % | 0.2 % |

**QC True Values: Trace 4,5,6,7**

| | Element | True Value (mg/L) |
|---|---|---|
| **ICV/CCV** | All | 0.50 |
| | K | 5.00 |
| | Na | 10.00 |
| | Si | 5.25 |
| **ICSA** | Al | 250 |
| | Ca | 250 |
| | Fe | 100 |
| | Mg | 250 |
| **ICSB** | Al | 9.00 |
| | Sb | 1.00 |
| | As | 1.00 |
| | Ba | 0.30 |
| | Be | 0.10 |
| | Bi | 1.00 |
| | B | 0.50 |
| | Cd | 0.30 |
| | Ca | 45.00 |
| | Cr | 0.30 |
| | Co | 0.30 |
| | Cu | 0.30 |
| | Fe | 37.50 |
| | Pb | 1.00 |
| | Mg | 22.50 |
| | Mn | 0.20 |
| | Mo | 0.30 |
| | Ni | 0.30 |
| | K | 20.00 |
| | Se | 0.50 |
| | Si | 1.23 |
| | Ag | 0.30 |
| | Na | 7.50 |
| | Sr | 1.00 |
| | Tl | 1.00 |
| | Sn | 1.00 |
| | Ti | 1.00 |
| | V | 0.30 |
| | Zn | 0.30 |

| | Element | True Value (mg/L) |
|---|---|---|
| **CRI** | Al | 0.40 |
| | Sb | 0.10 |
| | As | 0.02 |
| | Ba | 0.04 |
| | Be | 0.01 |
| | Bi | 0.02 |
| | B | 0.10 |
| | Cd | 0.01 |
| | Ca | 0.40 |
| | Cr | 0.02 |
| | Co | 0.10 |
| | Cu | 0.05 |
| | Fe | 0.20 |
| | Pb | 0.05 |
| | Mg | 0.40 |
| | Mn | 0.03 |
| | Mo | 0.10 |
| | Ni | 0.08 |
| | K | 5.00 |
| | Se | 0.02 |
| | Si | 1.00 |
| | Ag | 0.02 |
| | Na | 5.00 |
| | Sr | 0.02 |
| | Tl | 0.02 |
| | Sn | 0.02 |
| | Ti | 0.02 |
| | V | 0.10 |
| | Zn | 0.04 |

**LCS & MS Spike Concentrations**

| Element | Liquid concentrations (mg/L) | Soil concentrations (mg/kg) |
|---|---|---|
| Al | 2.00 | 100 |
| Sb | 0.50 | 25.0 |
| As | 0.12 | 6.0 |
| Ba | 2.00 | 100 |
| Be | 0.05 | 2.5 |
| Bi | 1.00 | 50.0 |
| B | 1.00 | 50.0 |
| Cd | 0.05 | 2.55 |
| Ca | 10.00 | 500 |
| Cr | 0.20 | 10.0 |
| Co | 0.50 | 25.0 |
| Cu | 0.25 | 12.5 |
| Fe | 1.00 | 50.0 |
| Pb | 0.51 | 25.5 |
| Mg | 10.00 | 500 |
| Mn | 0.50 | 25.0 |
| Mo | 1.00 | 50.0 |
| Ni | 0.50 | 25.0 |
| K | 10.00 | 500 |
| Se | 0.12 | 6.0 |
| Si | 1.00 | 50.0 |
| Ag | 0.05 | 2.5 |
| Na | 10.00 | 500 |
| Sr | 1.00 | 50.0 |
| Tl | 0.12 | 6.0 |
| Sn | 1.00 | 50.0 |
| Ti | 1.00 | 50.0 |
| V | 0.50 | 25.0 |
| Zn | 0.50 | 25.0 |

## LCS and MS Spike Concentrations—As of 08/09/2011

| Element | Liquid Concentration(mg/L) | Soil Concentration (mg/kg) |
|---|---|---|
| Al | 2.00 | 160 |
| Sb | 0.50 | 40 |
| As | 0.12 | 9.6 |
| Ba | 2.00 | 160 |
| Be | 0.05 | 4.0 |
| Bi | 1.00 | 80 |
| B | 1.00 | 80 |
| Cd | 0.051 | 4.08 |
| Ca | 10.0 | 800 |
| Cr | 0.20 | 16 |
| Co | 0.50 | 40 |
| Cu | 0.25 | 20 |
| Fe | 1.00 | 80 |
| Pb | 0.51 | 40.8 |
| Mg | 10.0 | 800 |
| Mn | 0.50 | 40 |
| Mo | 1.00 | 80 |
| Ni | 0.50 | 40 |
| K | 10.0 | 800 |
| Se | 0.12 | 9.6 |
| Si | 1.00 | 80 |
| Ag | 0.05 | 24 |
| Na | 10.0 | 800 |
| Sr | 1.00 | 80 |
| Tl | 0.12 | 9.6 |
| Sn | 1.00 | 80 |
| Ti | 1.00 | 80 |
| V | 0.50 | 40 |
| Zn | 0.50 | 40 |

Revised 8/9/11 Soil spike is based on (2x water spike)x(50/1.25), where 50 is the final volume of soil digestate and 1.25 is the nominal digestion weight of 1.25g, except in the case of Ag, where additional Ag is added to the spike.

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D102-540
**Certificate Issue Date:** June 22, 2018
**Expiration Date:** January 31, 2022
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8160 | 6.36 | 3960 - 12400 | 4080 - 12200 |
| Antimony | 120 | 60.9 | 9.42 | 0.822 - 121 | 12.0 - 166 |
| Arsenic | 144 | 135 | 5.08 | 112 - 158 | 94.6 - 176 |
| Barium | 469 | 443 | 6.77 | 366 - 521 | 332 - 554 |
| Beryllium | 207 | 197 | 5.86 | 164 - 229 | 148 - 246 |
| Boron | 213 | 174 | 12.6 | 127 - 221 | 105 - 244 |
| Cadmium | 224 | 204 | 6.65 | 169 - 240 | 153 - 256 |
| Calcium | 5190 | 4830 | 9.12 | 3950 - 5700 | 3510 - 6150 |
| Chromium | 138 | 132 | 8.56 | 109 - 155 | 92.2 - 171 |
| Cobalt | 182 | 179 | 7.93 | 151 - 207 | 134 - 224 |
| Copper | 191 | 184 | 6.72 | 155 - 213 | 138 - 230 |
| Iron | 15000 | 14400 | 10.7 | 8770 - 20000 | 5120 - 23600 |
| Lead | 225 | 216 | 7.72 | 178 - 254 | 159 - 274 |
| Magnesium | 2570 | 2340 | 6.13 | 1780 - 2900 | 1460 - 3230 |
| Manganese | 331 | 323 | 6.71 | 266 - 380 | 242 - 404 |
| Mercury | 16.8 | 13.2 | 16.0 | 8.64 - 17.7 | 7.89 - 18.5 |
| Molybdenum | 193 | 175 | 2.39 | 141 - 209 | 125 - 226 |
| Nickel | 163 | 152 | 5.95 | 126 - 178 | 106 - 197 |
| Potassium | 2420 | 2050 | 6.31 | 1440 - 2660 | 1210 - 2890 |
| Selenium | 81.9 | 74.9 | 4.13 | 59.3 - 90.5 | 47.0 - 103 |
| Silver | 57.6 | 53.9 | 9.00 | 43.0 - 64.8 | 37.8 - 70.0 |
| Sodium | 161 | 149 | 12.1 | 111 - 188 | 57.7 - 241 |
| Strontium | 100 | 96.2 | 4.04 | 78.1 - 114 | 69.0 - 123 |
| Thallium | 253 | 232 | 3.54 | 188 - 276 | 168 - 296 |



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# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Tin | 146 | 134 | 10.8 | 106 - 163 | 79.5 - 189 |
| Titanium | 449 | 340 | 7.20 | 70.2 - 609 | 44.9 - 711 |
| Uranium | 114 | 113 | 7.10 | 85.5 - 140 | 71.9 - 153 |
| Vanadium | 180 | 172 | 8.85 | 137 - 207 | 126 - 218 |
| Zinc | 217 | 211 | 6.58 | 171 - 250 | 147 - 274 |

## ANALYTICAL VERIFICATION

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Aluminum | 10100 | 8160 | 80.8 | 138 | - | - |
| Antimony | 120 | 60.9 | 50.8 | 135 | - | - |
| Arsenic | 144 | 135 | 93.8 | 184 | - | - |
| Barium | 469 | 443 | 94.5 | 158 | - | - |
| Beryllium | 207 | 197 | 95.0 | 148 | - | - |
| Boron | 213 | 174 | 81.8 | 107 | - | - |
| Cadmium | 224 | 204 | 91.3 | 199 | - | - |
| Calcium | 5190 | 4830 | 93.0 | 122 | - | - |
| Chromium | 138 | 132 | 95.5 | 172 | - | - |
| Cobalt | 182 | 179 | 98.4 | 140 | - | - |
| Copper | 191 | 184 | 96.3 | 183 | - | - |
| Iron | 15000 | 14400 | 95.6 | 133 | - | - |
| Lead | 225 | 216 | 96.2 | 204 | - | - |
| Magnesium | 2570 | 2340 | 91.2 | 122 | - | - |
| Manganese | 331 | 323 | 97.6 | 147 | - | - |
| Mercury | 16.8 | 13.2 | 78.3 | 128 | - | - |
| Molybdenum | 193 | 175 | 90.8 | 143 | - | - |
| Nickel | 163 | 152 | 93.1 | 185 | - | - |
| Potassium | 2420 | 2050 | 84.7 | 121 | - | - |
| Selenium | 81.9 | 74.9 | 91.5 | 163 | - | - |



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| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Silver | 57.6 | 53.9 | 93.6 | 150 | - | - |
| Sodium | 161 | 149 | 92.8 | 105 | - | - |
| Strontium | 100 | 96.2 | 96.2 | 90 | - | - |
| Thallium | 253 | 232 | 91.6 | 147 | - | - |
| Tin | 146 | 134 | 92.0 | 100 | - | - |
| Titanium | 449 | 340 | 75.6 | 93 | - | - |
| Uranium | 114 | 113 | 98.8 | 35 | - | - |
| Vanadium | 180 | 172 | 95.4 | 139 | - | - |
| Zinc | 217 | 211 | 97.0 | 180 | - | - |

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
**Traceability Recovery (%)** = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.**

**Certifying Officer**

**Brian Miller**

**Quality Officer**

**Matthew Seebeck**

ISO/IEC GUIDE 34:2009 ACCREDITED REFERENCE MATERIAL PRODUCER CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005 ACCREDITED CHEMICAL TESTING LABORATORY CERTIFICATE NO. 1539.02



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Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D105-540
**Certificate Issue Date:** March 19, 2019
**Expiration Date:** October 12, 2022
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8800 | 8.32 | 4600 - 13000 | 4470 - 13100 |
| Antimony | 282 | 147 | 7.70 | 6.17 - 289 | 28.2 - 366 |
| Arsenic | 155 | 143 | 6.34 | 119 - 168 | 100 - 186 |
| Barium | 439 | 415 | 5.37 | 343 - 488 | 311 - 519 |
| Beryllium | 192 | 179 | 2.78 | 149 - 210 | 134 - 224 |
| Boron | 216 | 160 | 7.08 | 113 - 208 | 96.1 - 238 |
| Cadmium | 61.5 | 56.2 | 0.528 | 46.6 - 65.9 | 42.2 - 70.3 |
| Calcium | 5190 | 4960 | 6.64 | 4090 - 5840 | 3610 - 6310 |
| Chromium | 104 | 101 | 4.75 | 83.2 - 118 | 70.5 - 131 |
| Cobalt | 196 | 189 | 0.500 | 158 - 219 | 141 - 236 |
| Copper | 65.0 | 63.1 | 2.65 | 53.1 - 73.1 | 47.3 - 78.9 |
| Iron | 15000 | 15700 | 8.94 | 10100 - 21300 | 6000 - 25400 |
| Lead | 126 | 125 | 4.77 | 103 - 146 | 89.3 - 160 |
| Magnesium | 2570 | 2410 | 6.26 | 1860 - 2970 | 1520 - 3310 |
| Manganese | 387 | 382 | 5.37 | 315 - 449 | 290 - 474 |
| Mercury | 7.76 | 7.61 | 13.7 | 5.53 - 9.69 | 4.57 - 10.7 |
| Molybdenum | 120 | 107 | 0.500 | 86.0 - 128 | 75.5 - 139 |
| Nickel | 117 | 108 | 0.514 | 89.5 - 127 | 75.7 - 141 |
| Potassium | 2420 | 2110 | 5.62 | 1500 - 2720 | 1260 - 2960 |
| Selenium | 84.6 | 77.9 | 7.10 | 61.8 - 94.0 | 49.2 - 107 |
| Silver | 34.6 | 34.3 | 8.34 | 27.8 - 40.9 | 23.6 - 45.1 |
| Sodium | 161 | 145 | 6.72 | 106 - 183 | 54.3 - 235 |
| Strontium | 104 | 104 | 3.95 | 85.1 - 123 | 74.8 - 133 |
| Thallium | 123 | 113 | 0.500 | 91.3 - 134 | 77.1 - 149 |



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# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Tin | 118 | 107 | 0.500 | 83.5 - 130 | 61.2 - 152 |
| Titanium | 512 | 421 | 5.80 | 114 - 728 | 0.00 - 854 |
| Uranium | 103 | 104 | 6.18 | 79.1 - 128 | 71.9 - 135 |
| Vanadium | 87.3 | 83.7 | 8.55 | 66.8 - 101 | 54.2 - 113 |
| Zinc | 251 | 240 | 3.98 | 194 - 285 | 168 - 312 |

## ANALYTICAL VERIFICATION

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Aluminum | 10100 | 8800 | 87.1 | 193 | - | - |
| Antimony | 282 | 147 | 52.3 | 216 | - | - |
| Arsenic | 155 | 143 | 92.5 | 240 | - | - |
| Barium | 439 | 415 | 94.6 | 222 | - | - |
| Beryllium | 192 | 179 | 93.4 | 220 | - | - |
| Boron | 216 | 160 | 74.2 | 152 | - | - |
| Cadmium | 61.5 | 56.2 | 91.5 | 239 | - | - |
| Calcium | 5190 | 4960 | 95.6 | 175 | - | - |
| Chromium | 104 | 101 | 96.8 | 237 | - | - |
| Cobalt | 196 | 189 | 96.2 | 215 | - | - |
| Copper | 65.0 | 63.1 | 97.1 | 237 | - | - |
| Iron | 15000 | 15700 | 105 | 195 | - | - |
| Lead | 126 | 125 | 99.0 | 243 | - | - |
| Magnesium | 2570 | 2410 | 93.9 | 177 | - | - |
| Manganese | 387 | 382 | 98.7 | 215 | - | - |
| Mercury | 7.76 | 7.61 | 98.0 | 157 | - | - |
| Molybdenum | 120 | 107 | 89.4 | 216 | - | - |
| Nickel | 117 | 108 | 92.5 | 235 | - | - |
| Potassium | 2420 | 2110 | 87.2 | 181 | - | - |
| Selenium | 84.6 | 77.9 | 92.1 | 231 | - | - |



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Reference Material

# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Silver | 34.6 | 34.3 | 99.3 | 216 | - | - |
| Sodium | 161 | 145 | 89.8 | 166 | - | - |
| Strontium | 104 | 104 | 99.9 | 148 | - | - |
| Thallium | 123 | 113 | 91.8 | 215 | - | - |
| Tin | 118 | 107 | 90.4 | 164 | - | - |
| Titanium | 512 | 421 | 82.2 | 157 | - | - |
| Uranium | 103 | 104 | 101 | 61 | - | - |
| Vanadium | 87.3 | 83.7 | 95.9 | 214 | - | - |
| Zinc | 251 | 240 | 95.5 | 234 | - | - |

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
**Traceability Recovery (%)** = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.**

**Certifying Officer**

**Brian Miller**

Brian Miller

**Quality Officer**

**Matthew Seebeck**



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Certified Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D109-540
**Certificate Issue Date:** March 24, 2020
**Expiration Date:** October 03, 2023
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value[7] | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8130 | 2.54 | 3920 - 12300 | 4060 - 12200 |
| Antimony | 259 | 134 | 5.03 | 4.56 - 264 | 25.9 - 335 |
| Arsenic | 171 | 156 | 3.38 | 129 - 183 | 109 - 203 |
| Barium | 253 | 239 | 4.81 | 197 - 280 | 179 - 298 |
| Beryllium | 179 | 169 | 6.59 | 141 - 198 | 127 - 212 |
| Boron | 114 | 87.5 | 10.3 | 62.5 - 113 | 52.5 - 125 |
| Cadmium | 149 | 137 | 5.43 | 113 - 160 | 103 - 171 |
| Calcium | 5190 | 4760 | 3.48 | 3890 - 5640 | 3460 - 6070 |
| Chromium | 163 | 154 | 3.79 | 126 - 181 | 108 - 200 |
| Cobalt | 127 | 121 | 5.07 | 101 - 141 | 90.8 - 151 |
| Copper | 57.0 | 54.9 | 4.13 | 46.1 - 63.6 | 41.1 - 68.6 |
| Iron | 15000 | 14100 | 6.27 | 8470 - 19700 | 4920 - 23200 |
| Lead | 133 | 130 | 3.00 | 107 - 152 | 93.3 - 167 |
| Magnesium | 2570 | 2320 | 3.32 | 1760 - 2880 | 1440 - 3200 |
| Manganese | 277 | 269 | 2.67 | 221 - 317 | 199 - 340 |
| Mercury | 21.6 | 20.5 | 7.72 | 14.7 - 26.3 | 12.3 - 28.6 |
| Molybdenum | 108 | 95.4 | 2.61 | 76.4 - 114 | 66.9 - 124 |
| Nickel | 58.7 | 53.9 | 4.97 | 44.5 - 63.3 | 37.7 - 70.0 |
| Potassium | 2420 | 2020 | 3.06 | 1410 - 2630 | 1190 - 2850 |
| Selenium | 181 | 167 | 5.63 | 132 - 201 | 113 - 221 |
| Silver | 35.5 | 33.6 | 5.20 | 26.8 - 40.3 | 23.0 - 44.1 |
| Sodium | 161 | 133 | 2.76 | 95.1 - 171 | 46.5 - 220 |
| Strontium | 89.7 | 87.9 | 4.59 | 71.7 - 104 | 62.8 - 113 |
| Thallium | 121 | 112 | 5.19 | 90.3 - 133 | 76.1 - 147 |



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# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Reference Value[7] | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Tin | 83.5 | 74.0 | 5.42 | 57.6 - 90.4 | 39.7 - 108 |
| Titanium | 474 | 333 | 7.17 | 48.6 - 617 | 46.3 - 620 |
| Uranium | 51.9 | 51.9 | 3.36 | 39.6 - 64.3 | 35.9 - 68.0 |
| Vanadium | 68.1 | 62.6 | 6.00 | 49.4 - 75.8 | 37.0 - 88.3 |
| Zinc | 165 | 158 | 2.34 | 128 - 188 | 111 - 205 |



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## ANALYTICAL VERIFICATION

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number[6] | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Aluminum | 10100 | 8130 | 80.5 | 196 | - | - |
| Antimony | 259 | 134 | 51.8 | 217 | - | - |
| Arsenic | 171 | 156 | 91.3 | 243 | - | - |
| Barium | 253 | 239 | 94.3 | 230 | - | - |
| Beryllium | 179 | 169 | 94.6 | 223 | - | - |
| Boron | 114 | 87.5 | 76.7 | 150 | - | - |
| Cadmium | 149 | 137 | 91.8 | 249 | - | - |
| Calcium | 5190 | 4760 | 91.8 | 184 | - | - |
| Chromium | 163 | 154 | 94.4 | 245 | - | - |
| Cobalt | 127 | 121 | 95.3 | 221 | - | - |
| Copper | 57.0 | 54.9 | 96.2 | 243 | - | - |
| Iron | 15000 | 14100 | 93.9 | 199 | - | - |
| Lead | 133 | 130 | 97.7 | 251 | - | - |
| Magnesium | 2570 | 2320 | 90.1 | 182 | - | - |
| Manganese | 277 | 269 | 97.2 | 220 | - | - |
| Mercury | 21.6 | 20.5 | 94.7 | 172 | - | - |
| Molybdenum | 108 | 95.4 | 88.3 | 218 | - | - |
| Nickel | 58.7 | 53.9 | 91.8 | 242 | - | - |
| Potassium | 2420 | 2020 | 83.5 | 187 | - | - |
| Selenium | 181 | 167 | 92.2 | 235 | - | - |
| Silver | 35.5 | 33.6 | 94.5 | 222 | - | - |
| Sodium | 161 | 133 | 82.7 | 177 | - | - |
| Strontium | 89.7 | 87.9 | 98.0 | 151 | - | - |
| Thallium | 121 | 112 | 92.2 | 219 | - | - |
| Tin | 83.5 | 74.0 | 88.6 | 170 | - | - |
| Titanium | 474 | 333 | 70.3 | 157 | - | - |
| Uranium | 51.9 | 51.9 | 100 | 60 | - | - |
| Vanadium | 68.1 | 62.6 | 91.9 | 213 | - | - |
| Zinc | 165 | 158 | 95.8 | 238 | - | - |



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# ▪ Certificate of Analysis ▪

1. The **Certified Values** are the actual gravimetric/volumetric "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$Uexpanded = k * SQRT((Uchar^2) + (Uhomogen^2) + (ULTS^2) + (USTS^2) + (URSS^2))$

Where:

Uexpanded = Expanded uncertainty.
k = Coverage factor.
Uchar = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
Uhomogen = Standard uncertainty of the homogeneity assessment.
ULTS = Standard uncertainty associated with long-term stability.
USTS = Standard uncertainty associated with short-term (transport) stability.
URSS = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this certified reference material alongside USEPA and NELAC compliant PT study materials. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and therefore, the acceptance limits of this certified reference material and any PT study material may differ relative to their difference in concentrations.

5. The **PT Performance Data** include the mean value, percent recovery and number of data points reported by laboratories in our Proficiency Testing study compared to the Certified Values. In the event this lot was not used in a proficiency testing scheme, the data displayed was generated internally by ERA.

6. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

7. The **Reference Values** are equal to the mean recoveries for the parameters as determined in an interlaboratory round robin study. The **Reference Values** represent the expected performance for the analytes in this standard. ERA recommends using the **Reference Values** when assessing or evaluating your results.

8. **Metrological Traceability**. This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

9. For additional information on this product such as intended use, storage information, instructions for use, minimum sample size, and safety information, please refer to the Product Use Instructions provided.

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.**

| Certifying Officer | Quality Officer |
|---|---|
| Brian Miller | Matthew Seebeck |



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ERA
A Waters Company

Certified Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D113-540
**Certificate Issue Date:** March 23, 2021
**Expiration Date:** October 13, 2024
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8630 | 12.0 | 4420 - 12800 | 4370 - 12900 |
| Antimony | 256 | 129 | 16.8 | 0.742 - 257 | 25.6 - 323 |
| Arsenic | 91.6 | 84.5 | 15.1 | 70.0 - 99.0 | 59.2 - 110 |
| Barium | 259 | 249 | 9.94 | 206 - 292 | 187 - 311 |
| Beryllium | 175 | 163 | 3.89 | 135 - 191 | 122 - 204 |
| Boron | 95.7 | 76.7 | 12.8 | 55.7 - 97.7 | 48.0 - 107 |
| Cadmium | 107 | 99.0 | 11.5 | 82.2 - 116 | 74.2 - 124 |
| Calcium | 5190 | 4760 | 11.8 | 3890 - 5640 | 3460 - 6070 |
| Chromium | 129 | 122 | 14.6 | 101 - 144 | 85.7 - 159 |
| Cobalt | 63.6 | 61.7 | 11.5 | 51.9 - 71.6 | 46.3 - 77.2 |
| Copper | 62.3 | 61.5 | 12.3 | 51.9 - 71.0 | 46.1 - 76.8 |
| Iron | 15000 | 14500 | 15.7 | 8860 - 20100 | 5190 - 23800 |
| Lead | 122 | 123 | 13.9 | 103 - 144 | 88.3 - 158 |
| Lithium | 6.42 | 7.30 | 18.7 | 5.13 - 9.48 | 3.20 - 11.4 |
| Magnesium | 2570 | 2360 | 8.87 | 1810 - 2920 | 1480 - 3250 |
| Manganese | 470 | 456 | 13.4 | 375 - 538 | 350 - 563 |
| Mercury | 22.1 | 18.9 | 14.5 | 13.0 - 24.8 | 11.3 - 26.4 |
| Molybdenum | 80.1 | 72.8 | 11.0 | 58.7 - 87.0 | 50.5 - 95.2 |
| Nickel | 143 | 135 | 14.2 | 112 - 158 | 94.7 - 176 |
| Potassium | 2420 | 2090 | 8.21 | 1480 - 2700 | 1240 - 2940 |
| Selenium | 128 | 121 | 11.7 | 96.9 - 146 | 80.4 - 162 |
| Silver | 45.4 | 44.1 | 6.69 | 35.5 - 52.8 | 30.7 - 57.6 |
| Sodium | 161 | 136 | 9.34 | 97.4 - 174 | 48.1 - 223 |
| Strontium | 82.2 | 82.3 | 8.42 | 67.4 - 97.1 | 58.6 - 106 |



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# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Thallium | 154 | 144 | 7.54 | 117 - 171 | 101 - 187 |
| Tin | 89.7 | 79.8 | 14.0 | 62.2 - 97.4 | 43.5 - 116 |
| Titanium | 705 | 546 | 10.3 | 123 - 969 | 118 - 974 |
| Uranium | 29.5 | 30.9 | 3.38 | 23.9 - 37.9 | 21.3 - 40.5 |
| Vanadium | 196 | 186 | 14.2 | 148 - 224 | 138 - 235 |
| Zinc | 307 | 295 | 10.4 | 240 - 351 | 207 - 384 |



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# Calculation of 6010B Metals

**Aqueous Samples**

The instrument will calculate the concentration (µg/L). This value is divided by 1000 to convert the units to mg/L. If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

$$\text{Result, mg/L} = C_s \times (1\text{mg}/1000\mu\text{g}) \times (DF)$$

Where:

$C_s$ = Concentration of sample (µg/L)

DF = Dilution Factor

**Soil or Solid Samples**

Soil samples are calculated as follows:

$$\text{Result, mg/Kg} = \frac{C_s \times (1\text{mg}/1000\mu\text{g}) \times (DF)}{A}$$

Where:

$C_s$ = Concentration of sample (µg/L)

DF = Dilution Factor

$$A = \frac{\text{Sample weight (grams)}}{\text{Final Volume (mL)}}$$

**Dry weight correction**

Dry weight correction is calculated as follows:

$$\text{Final concentration in mg/Kg, dry weight} = \frac{\text{Result, mg/Kg}}{\%_{solids}}$$

Where:

$\%_{solids}$ = Percent Solids, as a decimal value

# Sequence Trace 6

3/13/2025 7:06:46 AM

LabBook: WG2039408_03122025T6.imexp

| Index: | Label: | Rack | Vial | Start time: |
|---|---|---|---|---|
| 1 | xBlank DHL Trace6 | 0 | 1 | 3/12/2025 6:28:54 AM |
| 2 | xICAL | 0 | 2 | 3/12/2025 6:36:30 AM |
| 3 | xICV | 0 | 3 | 3/12/2025 6:43:50 AM |
| 4 | xICB | 0 | 4 | 3/12/2025 6:50:09 AM |
| 5 | xICV | 0 | 10 | 3/12/2025 6:56:49 AM |
| 6 | xICB | 0 | 4 | 3/12/2025 7:03:12 AM |
| 7 | Blank DHL Trace6 | 0 | 1 | 3/12/2025 7:07:05 AM |
| 8 | ICAL | 0 | 2 | 3/12/2025 7:13:41 AM |
| 9 | ICV | 0 | 3 | 3/12/2025 7:19:54 AM |
| 10 | ICB | 0 | 4 | 3/12/2025 7:26:14 AM |
| 11 | ICV | 0 | 10 | 3/12/2025 7:32:54 AM |
| 12 | ICB | 0 | 4 | 3/12/2025 7:39:16 AM |
| 13 | LLOQ RL Check | 0 | 5 | 3/12/2025 7:45:56 AM |
| 14 | ICSA | 0 | 6 | 3/12/2025 7:52:35 AM |
| 15 | SIC Cr Mn V Ti | 0 | 7 | 3/12/2025 8:01:35 AM |
| 16 | LDR Check | 0 | 8 | 3/12/2025 8:09:29 AM |
| 17 | LLOQ RL 0.005 | 1 | 1 | 3/12/2025 9:07:36 AM |
| 18 | ZLLOQ RL 0.01 | 1 | 2 | 3/12/2025 9:14:13 AM |
| 19 | CCV | 0 | 3 | 3/12/2025 9:29:40 AM |
| 20 | CCB | 0 | 4 | 3/12/2025 9:36:00 AM |
| 21 | CCV | 0 | 3 | 3/12/2025 9:42:40 AM |
| 22 | CCB | 0 | 4 | 3/12/2025 9:48:59 AM |
| 23 | L2511531-06 WG2038644 | 1 | 3 | 3/12/2025 10:09:07 AM |
| 24 | L2511768-01 WG2038644 | 1 | 4 | 3/12/2025 10:15:47 AM |
| 25 | L2511769-01 WG2038644 | 1 | 5 | 3/12/2025 10:22:30 AM |
| 26 | L2512062-01 WG2038644 | 1 | 6 | 3/12/2025 10:30:16 AM |
| 27 | L2512201-01 WG2038644 | 1 | 7 | 3/12/2025 10:37:04 AM |
| 28 | L2512259-02 WG2038644 | 1 | 8 | 3/12/2025 10:43:43 AM |
| 29 | L2512259-04 WG2038644 | 1 | 9 | 3/12/2025 10:50:28 AM |
| 30 | L2512485-01 WG2038644 | 1 | 10 | 3/12/2025 10:57:13 AM |
| 31 | L2512485-02 WG2038644 | 1 | 11 | 3/12/2025 11:03:55 AM |
| 32 | L2512485-03 WG2038644 | 1 | 12 | 3/12/2025 11:10:39 AM |
| 33 | CCV | 0 | 3 | 3/12/2025 11:17:22 AM |
| 34 | CCB | 0 | 4 | 3/12/2025 11:23:42 AM |
| 35 | L2512486-01 WG2038644 | 1 | 13 | 3/12/2025 11:31:10 AM |
| 36 | L2512752-02 WG2038644 | 1 | 14 | 3/12/2025 11:37:48 AM |
| 37 | CCV | 0 | 3 | 3/12/2025 11:44:29 AM |
| 38 | CCB | 0 | 4 | 3/12/2025 11:50:49 AM |
| 39 | WG2038726-1 WG2038726 | 1 | 15 | 3/12/2025 12:11:26 PM |
| 40 | WG2038726-2 WG2038726 | 1 | 16 | 3/12/2025 12:28:57 PM |
| 41 | WG2038726-2 WG2038726 | 1 | 17 | 3/12/2025 12:35:12 PM |
| 42 | WG2038726-2 WG2038726 | 1 | 18 | 3/12/2025 12:41:50 PM |
| 43 | L2500778-40 WG2038726 | 1 | 19 | 3/12/2025 12:48:26 PM |
| 44 | WG2038726-3 WG2038726 | 1 | 20 | 3/12/2025 12:55:00 PM |
| 45 | WG2038726-4 WG2038726 | 1 | 21 | 3/12/2025 1:01:16 PM |
| 46 | WG2038726-5 WG2038726 | 1 | 22 | 3/12/2025 1:07:50 PM |
| 47 | CCV | 0 | 3 | 3/12/2025 1:14:07 PM |
| 48 | CCB | 0 | 4 | 3/12/2025 1:20:26 PM |
| 49 | NO EXPOSURE | 1 | 25 | 3/12/2025 1:40:13 PM |
| 50 | WG2039059-1 WG2039059 | 1 | 25 | 3/12/2025 1:42:13 PM |
| 51 | WG2039059-2 WG2039059 | 1 | 26 | 3/12/2025 1:48:46 PM |
| 52 | WG2038726-6D5 WG2038726 | 1 | 23 | 3/12/2025 1:55:02 PM |
| 53 | L2511871-01 WG2038726 | 1 | 24 | 3/12/2025 2:01:37 PM |
| 54 | L2512368-10 WG2039059 | 1 | 27 | 3/12/2025 2:08:12 PM |
| 55 | WG2039059-3 WG2039059 | 1 | 28 | 3/12/2025 2:14:45 PM |
| 56 | WG2039059-4 WG2039059 | 1 | 29 | 3/12/2025 2:20:59 PM |
| 57 | WG2039059-5 WG2039059 | 1 | 30 | 3/12/2025 2:27:14 PM |
| 58 | WG2039059-6D5 WG2039059 | 1 | 31 | 3/12/2025 2:33:30 PM |
| 59 | CCV | 0 | 3 | 3/12/2025 2:40:06 PM |
| 60 | CCB | 0 | 4 | 3/12/2025 2:46:25 PM |
| 61 | L2512368-04 WG2039059 | 1 | 37 | 3/12/2025 3:09:34 PM |
| 62 | L2512368-05 WG2039059 | 1 | 38 | 3/12/2025 3:16:07 PM |
| 63 | L2512368-07 WG2039059 | 1 | 39 | 3/12/2025 3:22:40 PM |
| 64 | L2512368-08 WG2039059 | 1 | 40 | 3/12/2025 3:29:13 PM |
| 65 | L2512368-11 WG2039059 | 1 | 41 | 3/12/2025 3:35:46 PM |
| 66 | L2512368-01 WG2039059 | 1 | 32 | 3/12/2025 3:42:20 PM |
| 67 | WG2039059-7 WG2039059 | 1 | 33 | 3/12/2025 3:48:53 PM |
| 68 | WG2039059-8 WG2039059 | 1 | 34 | 3/12/2025 3:55:10 PM |
| 69 | WG2039059-9 WG2039059 | 1 | 35 | 3/12/2025 4:01:45 PM |
| 70 | WG2039059-10d5 WG2039059 | 1 | 36 | 3/12/2025 4:08:02 PM |
| 71 | CCV | 0 | 3 | 3/12/2025 4:14:37 PM |
| 72 | CCB | 0 | 4 | 3/12/2025 4:20:56 PM |

# Sequence Trace 6

3/13/2025 7:06:46 AM

| Index: | Label: | Rack | Vial | Start time: |
|---|---|---|---|---|
| 73 | WG2037871-1 WG2037871 | 1 | 53 | 3/12/2025 4:33:48 PM |
| 74 | WG2037871-2d2 WG2037871 | 1 | 54 | 3/12/2025 4:40:25 PM |
| 75 | L2512075-01d2 WG2037871 | 1 | 55 | 3/12/2025 4:49:52 PM |
| 76 | WG2037871-3d2 WG2037871 | 1 | 56 | 3/12/2025 4:56:22 PM |
| 77 | WG2037871-4d2 WG2037871 | 1 | 57 | 3/12/2025 5:02:47 PM |
| 78 | WG2037871-5d2 WG2037871 | 1 | 58 | 3/12/2025 5:09:19 PM |
| 79 | WG2037871-6d10 WG2037871 | 1 | 59 | 3/12/2025 5:15:44 PM |
| 80 | L2512009-01d2 WG2037871 | 1 | 60 | 3/12/2025 5:22:12 PM |
| 81 | xno exposure | 2 | 1 | 3/12/2025 5:29:06 PM |
| 82 | CCV | 0 | 3 | 3/12/2025 5:35:35 PM |
| 83 | CCB | 0 | 4 | 3/12/2025 5:41:55 PM |
| 84 | L2512075-07d2 WG2037871 | 2 | 1 | 3/12/2025 5:48:35 PM |
| 85 | L2512075-11d2 WG2037871 | 2 | 2 | 3/12/2025 5:55:09 PM |
| 86 | eL2512075-12d2 WG2037871 | 2 | 3 | 3/12/2025 6:01:41 PM |
| 87 | LDR 500 Fe fails | 2 | 4 | 3/12/2025 6:08:13 PM |
| 88 | LDR 400 Fe fails | 2 | 5 | 3/12/2025 6:19:59 PM |
| 89 | CCV | 0 | 3 | 3/12/2025 6:30:06 PM |
| 90 | CCB | 0 | 4 | 3/12/2025 6:36:26 PM |
| 91 | L2512075-01d4 WG2037871 | 2 | 6 | 3/12/2025 6:54:20 PM |
| 92 | WG2037871-3d4 WG2037871 | 2 | 7 | 3/12/2025 7:00:46 PM |
| 93 | WG2037871-4d4 WG2037871 | 2 | 8 | 3/12/2025 7:07:04 PM |
| 94 | WG2037871-5d4 WG2037871 | 2 | 9 | 3/12/2025 7:13:30 PM |
| 95 | WG2037871-6d20 WG2037871 | 2 | 10 | 3/12/2025 7:19:52 PM |
| 96 | L2512075-07d4 WG2037871 | 2 | 11 | 3/12/2025 7:26:24 PM |
| 97 | L2512075-11d4 WG2037871 | 2 | 12 | 3/12/2025 7:32:56 PM |
| 98 | L2512075-12d10 WG2037871 | 2 | 13 | 3/12/2025 7:39:21 PM |
| 99 | CCV | 0 | 3 | 3/12/2025 7:45:47 PM |
| 100 | CCB | 0 | 4 | 3/12/2025 7:52:06 PM |
| 101 | L2512368-13 WG2039059 | 1 | 42 | 3/12/2025 8:35:53 PM |
| 102 | L2512368-14 WG2039059 | 1 | 43 | 3/12/2025 8:42:26 PM |
| 103 | L2512368-16 WG2039059 | 1 | 44 | 3/12/2025 8:49:01 PM |
| 104 | L2512368-17 WG2039059 | 1 | 45 | 3/12/2025 8:55:35 PM |
| 105 | L2512368-19 WG2039059 | 1 | 46 | 3/12/2025 9:02:10 PM |
| 106 | L2512607-01 WG2039059 | 1 | 47 | 3/12/2025 9:08:46 PM |
| 107 | L2512607-02 WG2039059 | 1 | 48 | 3/12/2025 9:15:21 PM |
| 108 | L2512607-03 WG2039059 | 1 | 49 | 3/12/2025 9:21:57 PM |
| 109 | L2512607-04 WG2039059 | 1 | 50 | 3/12/2025 9:28:33 PM |
| 110 | L2512607-05 WG2039059 | 1 | 51 | 3/12/2025 9:35:06 PM |
| 111 | CCV | 0 | 3 | 3/12/2025 9:41:40 PM |
| 112 | CCB | 0 | 4 | 3/12/2025 9:48:00 PM |
| 113 | XWRONG SPOT | 1 | 14 | 3/12/2025 9:54:39 PM |
| 114 | XWRONG SPOT | 1 | 15 | 3/12/2025 10:01:21 PM |
| 115 | WG2039569-1 WG2039569 | 2 | 14 | 3/12/2025 10:10:24 PM |
| 116 | WG2039569-2 WG2039569 | 2 | 15 | 3/12/2025 10:17:03 PM |
| 117 | WG2039569-2 WG2039569 | 2 | 16 | 3/12/2025 10:23:24 PM |
| 118 | L2512805-01 WG2039569 | 2 | 17 | 3/12/2025 10:30:01 PM |
| 119 | WG2039569-3 WG2039569 | 2 | 18 | 3/12/2025 10:36:36 PM |
| 120 | WG2039569-4 WG2039569 | 2 | 19 | 3/12/2025 10:42:52 PM |
| 121 | WG2039569-5 WG2039569 | 2 | 20 | 3/12/2025 10:49:26 PM |
| 122 | WG2039569-6d5 WG2039569 | 2 | 21 | 3/12/2025 10:55:43 PM |
| 123 | CCV | 0 | 3 | 3/12/2025 11:02:21 PM |
| 124 | CCB | 0 | 4 | 3/12/2025 11:08:40 PM |
| 125 | L2512207-01 WG2039569 | 2 | 22 | 3/12/2025 11:15:20 PM |
| 126 | L2512805-02 WG2039569 | 2 | 23 | 3/12/2025 11:21:54 PM |
| 127 | L2512805-03 WG2039569 | 2 | 24 | 3/12/2025 11:28:29 PM |
| 128 | L2512805-04 WG2039569 | 2 | 25 | 3/12/2025 11:35:04 PM |
| 129 | CCV | 0 | 3 | 3/12/2025 11:41:39 PM |
| 130 | CCB | 0 | 4 | 3/12/2025 11:47:59 PM |
| 131 | CCV | 0 | 3 | 3/12/2025 11:54:38 PM |
| 132 | CCB | 0 | 4 | 3/13/2025 12:01:01 AM |
| 133 | LLOQ RL check | 0 | 5 | 3/13/2025 12:07:41 AM |

# Sequence Trace 5

3/13/2025 10:58:52 AM

LabBook: WG2039392_03122025T5.imexp

| Index: | Label: | Rack | Vial | Start time: |
|---|---|---|---|---|
| 1 | Blank DMC Trace5 | 0 | 1 | 3/12/2025 5:40:15 AM |
| 2 | ICAL | 0 | 2 | 3/12/2025 5:46:41 AM |
| 3 | ICV | 0 | 3 | 3/12/2025 5:52:43 AM |
| 4 | ICB | 0 | 4 | 3/12/2025 5:58:50 AM |
| 5 | ICV | 0 | 10 | 3/12/2025 6:09:22 AM |
| 6 | ICB | 0 | 4 | 3/12/2025 6:15:31 AM |
| 7 | LLOQ RL | 0 | 5 | 3/12/2025 6:21:57 AM |
| 8 | ICSA | 0 | 6 | 3/12/2025 6:28:19 AM |
| 9 | SIC Multi | 0 | 7 | 3/12/2025 6:50:29 AM |
| 10 | LDR Check | 0 | 8 | 3/12/2025 6:57:18 AM |
| 11 | LLOQ 0.005 AS PASS | 1 | 1 | 3/12/2025 7:22:46 AM |
| 12 | LLOQ 0.01 SE PASS | 1 | 2 | 3/12/2025 7:29:08 AM |
| 13 | IEC 20PPM SN SB+ | 1 | 3 | 3/12/2025 7:35:29 AM |
| 14 | LDR 200PPM FE PASS | 1 | 5 | 3/12/2025 7:41:52 AM |
| 15 | LDR 250PPM NA PASS | 1 | 4 | 3/12/2025 7:48:21 AM |
| 16 | IEC 20PPM CR SB+ | 1 | 6 | 3/12/2025 7:54:54 AM |
| 17 | CCV | 0 | 3 | 3/12/2025 8:33:31 AM |
| 18 | CCB | 0 | 4 | 3/12/2025 8:39:37 AM |
| 19 | L2513465-01 WG2039008 | 1 | 26 | 3/12/2025 8:56:42 AM |
| 20 | eL2512350-01 WG2039008 | 1 | 25 | 3/12/2025 9:03:06 AM |
| 21 | L2512121-01 WG2039008 | 1 | 12 | 3/12/2025 9:09:26 AM |
| 22 | L2512121-02 WG2039008 | 1 | 13 | 3/12/2025 9:15:48 AM |
| 23 | L2512121-03 WG2039008 | 1 | 14 | 3/12/2025 9:22:06 AM |
| 24 | L2512167-03 WG2039008 | 1 | 7 | 3/12/2025 9:28:23 AM |
| 25 | WG2039008-7 WG2039008 | 1 | 8 | 3/12/2025 9:34:42 AM |
| 26 | WG2039008-8 WG2039008 | 1 | 9 | 3/12/2025 9:40:48 AM |
| 27 | WG2039008-9 WG2039008 | 1 | 10 | 3/12/2025 9:46:54 AM |
| 28 | WG2039008-10D5 WG2039008 | 1 | 11 | 3/12/2025 9:53:00 AM |
| 29 | CCV | 0 | 3 | 3/12/2025 9:59:22 AM |
| 30 | CCB | 0 | 4 | 3/12/2025 10:05:28 AM |
| 31 | L2512167-02 WG2039008 | 1 | 15 | 3/12/2025 10:21:29 AM |
| 32 | L2512167-04 WG2039008 | 1 | 16 | 3/12/2025 10:27:44 AM |
| 33 | L2512167-05 WG2039008 | 1 | 17 | 3/12/2025 10:34:01 AM |
| 34 | L2512167-06 WG2039008 | 1 | 18 | 3/12/2025 10:40:18 AM |
| 35 | L2512176-01 WG2039008 | 1 | 19 | 3/12/2025 10:46:33 AM |
| 36 | L2512176-02 WG2039008 | 1 | 20 | 3/12/2025 10:53:00 AM |
| 37 | L2512176-03 WG2039008 | 1 | 21 | 3/12/2025 10:59:25 AM |
| 38 | L2512176-04 WG2039008 | 1 | 22 | 3/12/2025 11:05:54 AM |
| 39 | L2512176-05 WG2039008 | 1 | 23 | 3/12/2025 11:12:21 AM |
| 40 | L2512176-06 WG2039008 | 1 | 24 | 3/12/2025 11:18:50 AM |
| 41 | CCV | 0 | 3 | 3/12/2025 11:25:16 AM |
| 42 | CCB | 0 | 4 | 3/12/2025 11:31:22 AM |
| 43 | L2512350-01d2 WG2039008 | 1 | 27 | 3/12/2025 11:37:48 AM |
| 44 | CCV | 0 | 3 | 3/12/2025 11:44:00 AM |
| 45 | CCB | 0 | 4 | 3/12/2025 11:50:05 AM |
| 46 | WG2038617-1 WG2038617 | 1 | 28 | 3/12/2025 1:00:59 PM |
| 47 | WG2038617-2d2 WG2038617 | 1 | 29 | 3/12/2025 1:07:20 PM |
| 48 | WG2038617-3d2 WG2038617 | 1 | 30 | 3/12/2025 1:13:23 PM |
| 49 | eL2510636-02 WG2036123 | 1 | 31 | 3/12/2025 1:20:19 PM |
| 50 | eL2510636-03 WG2036123 | 1 | 32 | 3/12/2025 1:26:47 PM |
| 51 | L2512325-05 WG2039056 | 1 | 43 | 3/12/2025 1:33:14 PM |
| 52 | L2512325-06 WG2039056 | 1 | 44 | 3/12/2025 1:39:34 PM |
| 53 | L2512325-07 WG2039056 | 1 | 45 | 3/12/2025 1:45:54 PM |
| 54 | L2512325-08 WG2039056 | 1 | 46 | 3/12/2025 1:52:14 PM |
| 55 | L2512325-09 WG2039056 | 1 | 47 | 3/12/2025 1:58:35 PM |
| 56 | CCV | 0 | 3 | 3/12/2025 2:10:42 PM |
| 57 | CCB | 0 | 4 | 3/12/2025 2:16:47 PM |
| 58 | WG2039056-1 WG2039056 | 1 | 33 | 3/12/2025 2:23:14 PM |
| 59 | WG2039056-2 WG2039056 | 1 | 34 | 3/12/2025 2:29:38 PM |
| 60 | L2512325-01 WG2039056 | 1 | 40 | 3/12/2025 2:35:45 PM |
| 61 | L2512325-03 WG2039056 | 1 | 41 | 3/12/2025 2:42:04 PM |
| 62 | L2512325-04 WG2039056 | 1 | 42 | 3/12/2025 2:48:23 PM |
| 63 | L2512325-02 WG2039056 | 1 | 35 | 3/12/2025 2:54:42 PM |
| 64 | WG2039056-3 WG2039056 | 1 | 36 | 3/12/2025 3:01:02 PM |
| 65 | WG2039056-4 WG2039056 | 1 | 37 | 3/12/2025 3:07:08 PM |
| 66 | WG2039056-5 WG2039056 | 1 | 38 | 3/12/2025 3:13:12 PM |
| 67 | WG2039056-6D5 WG2039056 | 1 | 39 | 3/12/2025 3:19:15 PM |
| 68 | CCV | 0 | 3 | 3/12/2025 3:25:35 PM |
| 69 | CCB | 0 | 4 | 3/12/2025 3:31:42 PM |
| 70 | WG2039065-1 WG2039065 | 1 | 50 | 3/12/2025 3:42:13 PM |
| 71 | WG2039065-2 WG2039065 | 1 | 51 | 3/12/2025 3:48:37 PM |
| 72 | WG2039065-3 WG2039065 | 1 | 52 | 3/12/2025 3:54:49 PM |

# Sequence Trace 5

3/13/2025 10:58:52 AM

| Index: | Label: | Rack | Vial | Start time: |
|---|---|---|---|---|
| 73 | L2512018-01 WG2039065 | 1 | 53 | 3/12/2025 4:00:54 PM |
| 74 | L2510636-02D5 WG2036123 | 1 | 48 | 3/12/2025 4:07:16 PM |
| 75 | L2510636-03D5 WG2036123 | 1 | 49 | 3/12/2025 4:13:46 PM |
| 76 | xL2512069-04d2 WG2037739 | 1 | 56 | 3/12/2025 4:23:17 PM |
| 77 | L2512069-04d2 WG2037739 | 1 | 57 | 3/12/2025 4:24:11 PM |
| 78 | L2512166-01d2 WG2037739 | 1 | 58 | 3/12/2025 4:30:28 PM |
| 79 | CCV | 0 | 3 | 3/12/2025 4:36:41 PM |
| 80 | XINSTRUEMNT ISSUE | 0 | 4 | 3/12/2025 4:42:48 PM |
| 81 | CCB | 0 | 4 | 3/12/2025 4:53:42 PM |
| 82 | zWG2038617-1 WG2038617 | 1 | 54 | 3/12/2025 5:11:52 PM |
| 83 | OB SCAN 2325-06 DIS | 1 | 56 | 3/12/2025 5:18:32 PM |
| 84 | xwrong spot | 1 | 57 | 3/12/2025 5:24:53 PM |
| 85 | CCV | 0 | 3 | 3/12/2025 5:31:26 PM |
| 86 | CCB | 0 | 4 | 3/12/2025 5:37:34 PM |
| 87 | OB SCAN 2325-06 TOT | 1 | 55 | 3/12/2025 5:43:59 PM |
| 88 | WG2039428-1 WG2039428 | 1 | 59 | 3/12/2025 6:21:23 PM |
| 89 | WG2039428-2 WG2039428 | 1 | 60 | 3/12/2025 6:27:49 PM |
| 90 | L2512189-01 WG2039428 | 2 | 1 | 3/12/2025 6:33:56 PM |
| 91 | WG2039428-3 WG2039428 | 2 | 2 | 3/12/2025 6:40:17 PM |
| 92 | WG2039428-4 WG2039428 | 2 | 3 | 3/12/2025 6:46:21 PM |
| 93 | WG2039428-5 WG2039428 | 2 | 4 | 3/12/2025 6:52:41 PM |
| 94 | WG2039428-6d5 WG2039428 | 2 | 5 | 3/12/2025 6:58:46 PM |
| 95 | L2512189-02 WG2039428 | 2 | 6 | 3/12/2025 7:05:06 PM |
| 96 | L2512189-03 WG2039428 | 2 | 7 | 3/12/2025 7:11:25 PM |
| 97 | CCV | 0 | 3 | 3/12/2025 7:17:41 PM |
| 98 | CCB | 0 | 4 | 3/12/2025 7:23:49 PM |
| 99 | WG2039054-1 WG2039054 | 2 | 8 | 3/12/2025 7:37:31 PM |
| 100 | WG2039054-2 WG2039054 | 2 | 9 | 3/12/2025 7:43:57 PM |
| 101 | L2512368-10 WG2039054 | 2 | 10 | 3/12/2025 7:50:04 PM |
| 102 | WG2039054-3 WG2039054 | 2 | 11 | 3/12/2025 7:56:25 PM |
| 103 | WG2039054-4 WG2039054 | 2 | 12 | 3/12/2025 8:02:31 PM |
| 104 | WG2039054-5 WG2039054 | 2 | 13 | 3/12/2025 8:08:37 PM |
| 105 | WG2039054-6d5 WG2039054 | 2 | 14 | 3/12/2025 8:14:42 PM |
| 106 | L2512368-01 WG2039054 | 2 | 15 | 3/12/2025 8:21:03 PM |
| 107 | WG2039054-7 WG2039054 | 2 | 16 | 3/12/2025 8:27:23 PM |
| 108 | WG2039054-8 WG2039054 | 2 | 17 | 3/12/2025 8:33:28 PM |
| 109 | CCV | 0 | 3 | 3/12/2025 8:39:48 PM |
| 110 | CCB | 0 | 4 | 3/12/2025 8:45:55 PM |
| 111 | WG2039054-9 WG2039054 | 2 | 18 | 3/12/2025 8:53:06 PM |
| 112 | WG2039054-10d5 WG2039054 | 2 | 19 | 3/12/2025 8:59:10 PM |
| 113 | L2512368-02 WG2039054 | 2 | 20 | 3/12/2025 9:05:31 PM |
| 114 | L2512368-04 WG2039054 | 2 | 21 | 3/12/2025 9:11:52 PM |
| 115 | L2512368-05 WG2039054 | 2 | 22 | 3/12/2025 9:18:10 PM |
| 116 | L2512368-07 WG2039054 | 2 | 23 | 3/12/2025 9:24:29 PM |
| 117 | L2512368-08 WG2039054 | 2 | 24 | 3/12/2025 9:30:50 PM |
| 118 | L2512368-11 WG2039054 | 2 | 25 | 3/12/2025 9:37:12 PM |
| 119 | L2512368-13 WG2039054 | 2 | 26 | 3/12/2025 9:43:30 PM |
| 120 | L2512368-14 WG2039054 | 2 | 27 | 3/12/2025 9:49:51 PM |
| 121 | CCV | 0 | 3 | 3/12/2025 9:56:12 PM |
| 122 | CCB | 0 | 4 | 3/12/2025 10:02:20 PM |
| 123 | L2512368-16 WG2039054 | 2 | 28 | 3/12/2025 10:08:46 PM |
| 124 | L2512368-17 WG2039054 | 2 | 29 | 3/12/2025 10:15:05 PM |
| 125 | L2512368-19 WG2039054 | 2 | 30 | 3/12/2025 10:21:25 PM |
| 126 | L2512607-01 WG2039054 | 2 | 31 | 3/12/2025 10:27:45 PM |
| 127 | L2512607-02 WG2039054 | 2 | 32 | 3/12/2025 10:34:06 PM |
| 128 | L2512607-03 WG2039054 | 2 | 33 | 3/12/2025 10:40:27 PM |
| 129 | L2512607-04 WG2039054 | 2 | 34 | 3/12/2025 10:46:48 PM |
| 130 | L2512607-05 WG2039054 | 2 | 35 | 3/12/2025 10:53:10 PM |
| 131 | L2512607-06 WG2039054 | 2 | 36 | 3/12/2025 10:59:31 PM |
| 132 | CCV | 0 | 3 | 3/12/2025 11:05:56 PM |
| 133 | CCB | 0 | 4 | 3/12/2025 11:12:03 PM |
| 134 | CCV | 0 | 10 | 3/12/2025 11:18:29 PM |
| 135 | CCB | 0 | 4 | 3/12/2025 11:25:11 PM |
| 136 | LLOQ RL | 0 | 5 | 3/12/2025 11:31:36 PM |

# Sequence Trace 9

3/13/2025 2:59:05 PM

LabBook: WG2039956_03132025T9.imexp

## Summary

| Index | Label | Rack | Vial | Started at |
|---|---|---|---|---|
| 1 | Blank JMF Trace9 | 0 | 1 | 3/13/2025 8:15:45 AM |
| 2 | ICAL | 0 | 2 | 3/13/2025 8:19:25 AM |
| 3 | ICV | 0 | 3 | 3/13/2025 8:22:51 AM |
| 4 | ICB | 0 | 4 | 3/13/2025 8:26:18 AM |
| 5 | ICV | 0 | 10 | 3/13/2025 8:29:46 AM |
| 6 | ICB | 0 | 4 | 3/13/2025 8:33:17 AM |
| 7 | LLOQ | 0 | 5 | 3/13/2025 8:41:45 AM |
| 8 | ICSA | 0 | 6 | 3/13/2025 8:45:20 AM |
| 9 | SIC Multi | 0 | 7 | 3/13/2025 8:50:50 AM |
| 10 | LDR Check | 0 | 8 | 3/13/2025 8:55:23 AM |
| 11 | LLOQ 0.005ppm As | 1 | 1 | 3/13/2025 9:30:48 AM |
| 12 | zLLOQ 0.01ppm | 1 | 2 | 3/13/2025 9:34:26 AM |
| 13 | CCV | 0 | 3 | 3/13/2025 9:49:03 AM |
| 14 | CCB | 0 | 4 | 3/13/2025 9:52:43 AM |
| 15 | WG2039414-1 WG2039414 | 1 | 3 | 3/13/2025 10:12:16 AM |
| 16 | WG2039414-2 WG2039414 | 1 | 4 | 3/13/2025 10:15:48 AM |
| 17 | L2512967-01 WG2039414 | 1 | 30 | 3/13/2025 10:19:14 AM |
| 18 | L2513762-01 WG2039414 | 1 | 31 | 3/13/2025 10:22:40 AM |
| 19 | L2513762-02 WG2039414 | 1 | 32 | 3/13/2025 10:26:07 AM |
| 20 | L2512572-01 WG2039414 | 1 | 5 | 3/13/2025 10:29:35 AM |
| 21 | WG2039414-3 WG2039414 | 1 | 6 | 3/13/2025 10:33:01 AM |
| 22 | WG2039414-4 WG2039414 | 1 | 7 | 3/13/2025 10:36:28 AM |
| 23 | WG2039414-5 WG2039414 | 1 | 8 | 3/13/2025 10:39:55 AM |
| 24 | WG2039414-6D5 WG2039414 | 1 | 9 | 3/13/2025 10:43:23 AM |
| 25 | CCV | 0 | 3 | 3/13/2025 10:46:51 AM |
| 26 | CCB | 0 | 4 | 3/13/2025 10:50:18 AM |
| 27 | WG2039767-1 WG2039767 | 1 | 33 | 3/13/2025 11:19:02 AM |
| 28 | WG2039729-1 WG2039729 | 1 | 38 | 3/13/2025 11:22:45 AM |
| 29 | WG2039767-2 WG2039767 | 1 | 34 | 3/13/2025 11:26:11 AM |
| 30 | WG2039767-3 WG2039767 | 1 | 35 | 3/13/2025 11:29:39 AM |
| 31 | WG2039729-2 WG2039729 | 1 | 39 | 3/13/2025 11:33:07 AM |
| 32 | L2512663-01 WG2039767 | 1 | 36 | 3/13/2025 11:36:33 AM |
| 33 | L2513444-01 WG2039729 | 1 | 40 | 3/13/2025 11:40:01 AM |
| 34 | WG2039729-3 WG2039729 | 1 | 41 | 3/13/2025 11:43:28 AM |
| 35 | WG2039729-4 WG2039729 | 1 | 42 | 3/13/2025 11:46:54 AM |
| 36 | L2513238-01 WG2039729 | 1 | 43 | 3/13/2025 11:50:21 AM |
| 37 | CCV | 0 | 3 | 3/13/2025 11:53:49 AM |
| 38 | CCB | 0 | 4 | 3/13/2025 11:57:17 AM |
| 39 | L2512679-01 WG2039767 | 1 | 37 | 3/13/2025 12:04:05 PM |
| 40 | L2512572-03 WG2039414 | 1 | 15 | 3/13/2025 12:07:45 PM |
| 41 | L2512572-04 WG2039414 | 1 | 16 | 3/13/2025 12:11:12 PM |
| 42 | L2512572-05 WG2039414 | 1 | 17 | 3/13/2025 12:14:38 PM |
| 43 | L2512572-06 WG2039414 | 1 | 18 | 3/13/2025 12:18:05 PM |
| 44 | L2512572-02 WG2039414 | 1 | 10 | 3/13/2025 12:21:32 PM |
| 45 | WG2039414-7 WG2039414 | 1 | 11 | 3/13/2025 12:25:00 PM |
| 46 | WG2039414-8 WG2039414 | 1 | 12 | 3/13/2025 12:28:29 PM |
| 47 | WG2039414-9 WG2039414 | 1 | 13 | 3/13/2025 12:31:57 PM |
| 48 | WG2039414-10D5 WG2039414 | 1 | 14 | 3/13/2025 12:35:23 PM |
| 49 | CCV | 0 | 3 | 3/13/2025 12:38:49 PM |
| 50 | CCB | 0 | 4 | 3/13/2025 12:42:17 PM |
| 51 | L2512522-11 WG2038451 | 1 | 46 | 3/13/2025 12:57:11 PM |
| 52 | L2512607-06 WG2039059 | 1 | 45 | 3/13/2025 1:00:53 PM |
| 53 | L2512368-02 WG2039059 | 1 | 44 | 3/13/2025 1:04:21 PM |
| 54 | L2512625-01 WG2039414 | 1 | 20 | 3/13/2025 1:07:50 PM |
| 55 | L2512634-01 WG2039414 | 1 | 21 | 3/13/2025 1:11:17 PM |
| 56 | L2512637-01 WG2039414 | 1 | 22 | 3/13/2025 1:14:46 PM |
| 57 | xL2512598-01D2 WG2039414 | 1 | 19 | 3/13/2025 1:18:14 PM |
| 58 | L2512638-01 WG2039414 | 1 | 23 | 3/13/2025 1:21:41 PM |
| 59 | L2512647-01 WG2039414 | 1 | 25 | 3/13/2025 1:25:10 PM |
| 60 | L2512681-01 WG2039414 | 1 | 28 | 3/13/2025 1:28:36 PM |
| 61 | CCV | 0 | 3 | 3/13/2025 1:32:02 PM |
| 62 | CCB | 0 | 4 | 3/13/2025 1:35:30 PM |
| 63 | WG2039613-1 WG2039613 | 1 | 48 | 3/13/2025 2:03:00 PM |
| 64 | WG2039613-2 WG2039613 | 1 | 49 | 3/13/2025 2:06:45 PM |
| 65 | L2512644-01 WG2039414 | 1 | 24 | 3/13/2025 2:10:12 PM |
| 66 | L2512657-01 WG2039414 | 1 | 26 | 3/13/2025 2:13:41 PM |
| 67 | L2512678-01 WG2039414 | 1 | 27 | 3/13/2025 2:17:07 PM |
| 68 | L2512691-01 WG2039414 | 1 | 29 | 3/13/2025 2:20:33 PM |

# Sequence Trace 9

3/13/2025 2:59:05 PM

| Index | Label | Rack | Vial | Started at |
|---|---|---|---|---|
| 69 | L2512598-01 WG2039414 | 1 | 47 | 3/13/2025 2:24:01 PM |
| 70 | L2512805-02 WG2039613 | 1 | 55 | 3/13/2025 2:27:29 PM |
| 71 | L2512805-03 WG2039613 | 1 | 56 | 3/13/2025 2:30:57 PM |
| 72 | L2512805-04 WG2039613 | 1 | 57 | 3/13/2025 2:34:25 PM |
| 73 | CCV | 0 | 3 | 3/13/2025 2:37:53 PM |
| 74 | CCB | 0 | 4 | 3/13/2025 2:41:21 PM |
| 75 | L2512805-01 WG2039613 | 1 | 50 | |
| 76 | WG2039613-3 WG2039613 | 1 | 51 | |
| 77 | WG2039613-4 WG2039613 | 1 | 52 | |
| 78 | WG2039613-5 WG2039613 | 1 | 53 | |
| 79 | WG2039613-6D5 WG2039613 | 1 | 54 | |
| 80 | CCV | 0 | 3 | |
| 81 | CCB | 0 | 4 | |
| 82 | | 1 | 58 | |
| 83 | | 1 | 59 | |
| 84 | CCV | 0 | 3 | |
| 85 | CCB | 0 | 4 | |
| 86 | CCV | 0 | 3 | |
| 87 | CCB | 0 | 4 | |
| 88 | LLOQ | 0 | 5 | |

# METALS ELN REPORT

**Workgroup: WG2039054**

## Digestion

| Prep Method | Acid Type 1 | Acid 1 Lot | Acid Type 2 | Acid 2 Lot | Spike Type | Lims Spike Lot | Spike Lot | Post Spike Spikelot | Spike Lot | Pipette Id |
|---|---|---|---|---|---|---|---|---|---|---|
| EPA 3005A | 1:1 HNO3 | tHNO3250821324AJT | 1:1 HCl | tHCL2510100813ARM | METALS | METSPIKE2 | IPS,FPS,MIX | METSPIKE2 | IPS,FPS,MIX | 140, 326 |

**Additional Reagent/Std**

| Sample/ Type | Digestion Date | Analyst | Lab Filtration Date | Sample Vol | Ph | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol ml | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L2512368-01 SAMP | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | |
| L2512368-02 SAMP | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | |
| L2512368-04 SAMP | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | |
| L2512368-05 SAMP | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | |
| L2512368-07 SAMP | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | |
| L2512368-08 SAMP | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | |
| L2512368-10 SAMP | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | |
| L2512368-11 SAMP | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | |
| L2512368-13 SAMP | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | |
| L2512368-14 SAMP | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | |



Reported: 13-MAR-25 03:27 PM

# METALS ELN REPORT

**Workgroup: WG2039054**

| Sample/ Type | Digestion Date | Analyst | Lab Filtration Date | Sample Vol | Ph | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol ml | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L2512368-16 SAMP | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | |
| L2512368-17 SAMP | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | |
| L2512368-19 SAMP | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | |
| L2512607-01 SAMP | 03/11/25 17:26 | Maisie Mcqueen | NA | 50 | <2 | | 03/11/25 17:26 | 10 | 95 | 03/11/25 20:26 | 50 | |
| L2512607-02 SAMP | 03/11/25 17:26 | Maisie Mcqueen | NA | 50 | <2 | | 03/11/25 17:26 | 10 | 95 | 03/11/25 20:26 | 50 | |
| L2512607-03 SAMP | 03/11/25 17:26 | Maisie Mcqueen | NA | 50 | <2 | | 03/11/25 17:26 | 10 | 95 | 03/11/25 20:26 | 50 | |
| L2512607-04 SAMP | 03/11/25 17:26 | Maisie Mcqueen | NA | 50 | <2 | | 03/11/25 17:26 | 10 | 95 | 03/11/25 20:26 | 50 | |
| L2512607-05 SAMP | 03/11/25 17:26 | Maisie Mcqueen | NA | 50 | <2 | | 03/11/25 17:26 | 10 | 95 | 03/11/25 20:26 | 50 | |
| L2512607-06 SAMP | 03/11/25 17:26 | Maisie Mcqueen | NA | 50 | <2 | | 03/11/25 17:26 | 10 | 95 | 03/11/25 20:26 | 50 | |
| WG2039054-1 BLANK | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | ELN: ADG |
| WG2039054-2 LCS | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | 0.5 | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | IPS2507180833AJT |
| WG2039054-3 MS | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | 0.5 | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | |



Reported: 13-MAR-25 03:27 PM

# METALS ELN REPORT

**Workgroup: WG2039054**

| Sample/ Type | Digestion Date | Analyst | Lab Filtration Date | Sample Vol | Ph | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol ml | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WG2039054-4 MSD | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | 0.5 | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | |
| WG2039054-5 PS | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | |
| WG2039054-6 SERDIL | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | |
| WG2039054-7 MS | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | 0.5 | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | |
| WG2039054-8 DUP | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | |
| WG2039054-9 PS | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | |
| WG2039054-10 SERDIL | 03/11/25 12:59 | Aidan Martin | NA | 50 | <2 | | 03/11/25 12:59 | 10 | 95 | 03/11/25 15:59 | 50 | FM2509051006 AJT |

| Reagent | Actual Volume | Units |
|---|---|---|
| 1:1 Hydrochloric Acid (H | .5 | ml |
| 1:1 Nitric Acid (HNO3) | 1 | ml |



Reported: 13-MAR-25 03:27 PM

# METALS ELN REPORT

**Workgroup: WG2039059**

## Digestion

| Prep Method | Acid Type 1 | Acid 1 Lot | Acid Type 2 | Acid 2 Lot | Spike Type | Lims Spike Lot | Spike Lot | Post Spike Spikelot | Spike Lot | Pipette Id |
|---|---|---|---|---|---|---|---|---|---|---|
| EPA 3005A | 1:1 HNO3 | tHNO3250906080 8ADG | 1:1 HCl | tHCL2508280920JDH | METALS | METSPIKE2 | IPS,FPS,MIX | METSPIKE2 | IPS,FPS,MIX | 140, 326 |

**Additional Reagent/Std**

| Sample/ Type | Digestion Date | Analyst | Sample Vol ml | Ph | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| L2512368-01 SAMP | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | |
| L2512368-02 SAMP | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | |
| L2512368-04 SAMP | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | |
| L2512368-05 SAMP | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | |
| L2512368-07 SAMP | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | |
| L2512368-08 SAMP | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | |
| L2512368-10 SAMP | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | |
| L2512368-11 SAMP | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | |
| L2512368-13 SAMP | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | |
| L2512368-14 SAMP | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | |



Reported: 13-MAR-25 03:27 PM

# METALS ELN REPORT

**Workgroup: WG2039059**

| Sample/ Type | Digestion Date | Analyst | Sample Vol ml | Ph | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| L2512368-16 SAMP | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | |
| L2512368-17 SAMP | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | |
| L2512368-19 SAMP | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | |
| L2512607-01 SAMP | 03/11/25 12:59 | Maisie Mcqueen | 50 | <2 | | 03/11/25 12:59 | 10 | 95.0 | 03/11/25 15:59 | 50 | |
| L2512607-02 SAMP | 03/11/25 12:59 | Maisie Mcqueen | 50 | <2 | | 03/11/25 12:59 | 10 | 95.0 | 03/11/25 15:59 | 50 | |
| L2512607-03 SAMP | 03/11/25 12:59 | Maisie Mcqueen | 50 | <2 | | 03/11/25 12:59 | 10 | 95.0 | 03/11/25 15:59 | 50 | |
| L2512607-04 SAMP | 03/11/25 12:59 | Maisie Mcqueen | 50 | <2 | | 03/11/25 12:59 | 10 | 95.0 | 03/11/25 15:59 | 50 | |
| L2512607-05 SAMP | 03/11/25 12:59 | Maisie Mcqueen | 50 | <2 | | 03/11/25 12:59 | 10 | 95.0 | 03/11/25 15:59 | 50 | |
| L2512607-06 SAMP | 03/11/25 12:59 | Maisie Mcqueen | 50 | <2 | | 03/11/25 12:59 | 10 | 95.0 | 03/11/25 15:59 | 50 | |
| WG2039059-1 BLANK | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | FM2509051006 AJT |
| WG2039059-2 LCS | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | 0.5 | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | ELN: ndd |
| WG2039059-3 MS | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | 0.5 | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | |



Reported: 13-MAR-25 03:27 PM

# METALS ELN REPORT

**Workgroup: WG2039059**

| Sample/ Type | Digestion Date | Analyst | Sample Vol ml | Ph | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WG2039059-4 MSD | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | 0.5 | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | |
| WG2039059-5 PS | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | |
| WG2039059-6 SERDIL | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | |
| WG2039059-7 MS | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | 0.5 | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | |
| WG2039059-8 DUP | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | |
| WG2039059-9 PS | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | |
| WG2039059-10 SERDIL | 03/11/25 17:26 | Maisie Mcqueen | 50 | <2 | | 03/11/25 17:26 | 10 | 95.0 | 03/11/25 20:26 | 50 | IPS2507180833AJT |

| Reagent | Actual Volume | Units |
|---|---|---|
| 1:1 Hydrochloric Acid (H | .5 | ml |
| 1:1 Nitric Acid (HNO3) | 1 | ml |



Reported: 13-MAR-25 03:27 PM

# Inorganic Data
# (Mercury Analysis)

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-01 | Date Collected | : 03/05/25 11:20 |
| Client ID | : 5A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 10:26 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : CME |
| Lab File ID | : WG2039402.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-02 | Date Collected | : 03/05/25 11:25 |
| Client ID | : 5B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 10:16 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : CME |
| Lab File ID | : WG2039402.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-04 | Date Collected | : 03/05/25 09:25 |
| Client ID | : 6A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 10:29 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : CME |
| Lab File ID | : WG2039402.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-05 | Date Collected | : 03/05/25 09:27 |
| Client ID | : 6B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 10:32 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : CME |
| Lab File ID | : WG2039402.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-07 | Date Collected | : 03/05/25 08:15 |
| Client ID | : 7A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 10:42 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : CME |
| Lab File ID | : WG2039402.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-08 | Date Collected | : 03/05/25 08:13 |
| Client ID | : 7B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 10:46 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : CME |
| Lab File ID | : WG2039402.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-10 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 10:06 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : CME |
| Lab File ID | : WG2039402.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-11 | Date Collected | : 03/05/25 16:45 |
| Client ID | : 8B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 10:49 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : CME |
| Lab File ID | : WG2039402.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-13 | Date Collected | : 03/05/25 14:10 |
| Client ID | : 9A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 10:52 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : CME |
| Lab File ID | : WG2039402.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-14 | Date Collected | : 03/05/25 15:15 |
| Client ID | : 9B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 10:56 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : CME |
| Lab File ID | : WG2039402.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-16 | Date Collected | : 03/05/25 12:45 |
| Client ID | : 10A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 10:59 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : CME |
| Lab File ID | : WG2039402.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-17 | Date Collected | : 03/05/25 12:55 |
| Client ID | : 10B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 11:02 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : CME |
| Lab File ID | : WG2039402.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-19 | Date Collected | : 03/05/25 00:00 |
| Client ID | : DUP001 | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 11:05 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : CME |
| Lab File ID | : WG2039402.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2039060-1 | Date Collected | : NA |
| Client ID | : WG2039060-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/12/25 09:53 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : CME |
| Lab File ID | : WG2039402.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2039060-6 | Date Collected | : 03/05/25 11:25 |
| Client ID | : 5BDUP | Date Received | : 03/05/25 |
| Sample Location | : | Date Analyzed | : 03/12/25 10:23 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : CME |
| Lab File ID | : WG2039402.pdf | Instrument ID | : NIC3 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Total | ND | 0.00020 | 0.0001 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-01 | Date Collected | : 03/05/25 11:20 |
| Client ID | : 5A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 12:02 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039404.pdf | Instrument ID | : NIC2 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-02 | Date Collected | : 03/05/25 11:25 |
| Client ID | : 5B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 11:52 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039404.pdf | Instrument ID | : NIC2 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-04 | Date Collected | : 03/05/25 09:25 |
| Client ID | : 6A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 12:05 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039404.pdf | Instrument ID | : NIC2 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-05 | Date Collected | : 03/05/25 09:27 |
| Client ID | : 6B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 12:08 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039404.pdf | Instrument ID | : NIC2 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-07 | Date Collected | : 03/05/25 08:15 |
| Client ID | : 7A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 12:12 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039404.pdf | Instrument ID | : NIC2 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-08 | Date Collected | : 03/05/25 08:13 |
| Client ID | : 7B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 12:15 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039404.pdf | Instrument ID | : NIC2 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-10 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 11:35 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039404.pdf | Instrument ID | : NIC2 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-11 | Date Collected | : 03/05/25 16:45 |
| Client ID | : 8B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 12:18 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039404.pdf | Instrument ID | : NIC2 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-13 | Date Collected | : 03/05/25 14:10 |
| Client ID | : 9A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 12:21 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039404.pdf | Instrument ID | : NIC2 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-14 | Date Collected | : 03/05/25 15:15 |
| Client ID | : 9B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 12:31 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039404.pdf | Instrument ID | : NIC2 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-16 | Date Collected | : 03/05/25 12:45 |
| Client ID | : 10A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 12:35 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039404.pdf | Instrument ID | : NIC2 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-17 | Date Collected | : 03/05/25 12:55 |
| Client ID | : 10B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 12:38 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039404.pdf | Instrument ID | : NIC2 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-19 | Date Collected | : 03/05/25 00:00 |
| Client ID | : DUP001 | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 12:41 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039404.pdf | Instrument ID | : NIC2 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2039058-1 | Date Collected | : NA |
| Client ID | : WG2039058-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/12/25 11:29 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039404.pdf | Instrument ID | : NIC2 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.00009 | U |

# Form 1
# METALS

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2039058-6 | Date Collected | : 03/05/25 11:25 |
| Client ID | : 5BDUP | Date Received | : 03/05/25 |
| Sample Location | : | Date Analyzed | : 03/12/25 11:58 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 3,245.1 | Analyst | : JWN |
| Lab File ID | : WG2039404.pdf | Instrument ID | : NIC2 |
| Sample Amount | : 25ml | %Solids | : N/A |
| Digestion Method | : EPA 245.1 | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7439-97-6 | Mercury, Dissolved | ND | 0.00020 | 0.0001 | U |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC3 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939519-1 | | | R1939519-3 | | | R1939519-5 | | R1939519-7 | |
| Date Analyzed : | 03/12/25 06:38 | | | 03/12/25 07:29 | | | 03/12/25 08:08 | | 03/12/25 08:48 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Mercury | 0.00300 | 0.0029 | 97 | 0.0050 | 0.00500 | 100 | 0.00500 | 100 | 0.00500 | 101 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC3 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1939519-9 | | | R1939519-11 | | R1939519-13 | |
| Date Analyzed : | | | | 03/12/25 09:56 | | | 03/12/25 10:36 | | 03/12/25 11:15 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Mercury | | | | 0.0050 | 0.00490 | 98 | 0.00500 | 100 | 0.00500 | 101 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC2 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939524-1 | | | R1939524-3 | | | R1939524-5 | | R1939524-7 | |
| Date Analyzed : | 03/12/25 06:48 | | | 03/12/25 07:53 | | | 03/12/25 08:33 | | 03/12/25 10:02 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Mercury | 0.00300 | 0.0029 | 95 | 0.0050 | 0.00510 | 101 | 0.00510 | 102 | 0.00510 | 101 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC2 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1939524-9 | | | R1939524-11 | | R1939524-13 | |
| Date Analyzed : | | | | 03/12/25 11:05 | | | 03/12/25 11:45 | | 03/12/25 12:25 | |
| Parameter | True | Found | %R | True | Found | %R | Found | %R | Found | %R |
| Mercury | | | | 0.0050 | 0.00500 | 100 | 0.00510 | 101 | 0.00510 | 101 |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 2A
# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC2 | **Units** | : mg/l |

| | Initial Calibration | | | Continuing Calibration(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | | R1939524-15 | | | | | | |
| Date Analyzed : | | | | 03/12/25 13:05 | | | | | | |
| **Parameter** | **True** | **Found** | **%R** | **True** | **Found** | **%R** | **Found** | **%R** | **Found** | **%R** |
| Mercury | | | | 0.0050 | 0.00500 | 100 | | | | |

**Acceptance Criteria:**

| | | |
|---|---|---|
| ICV: | 95-105% | (Methods 200.7, 245.1) |
| | 90-110% | (Methods 200.8, 6010, 6020, 7470, 7471, 7474) |
| | 85-115% | (Method 1631) |
| CCV: | 90-110% | (Methods 200.7, 245.1, 6010, 6020, 7474) |
| | 85-115% | (Methods 200.8, 1631) |
| | 80-120% | (Methods 7470, 7471) |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC3 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939519-2 | | R1939519-4 | | R1939519-6 | | R1939519-8 | | WG2039060-1 | |
| Date Analyzed : | 03/12/25 06:41 | | 03/12/25 07:32 | | 03/12/25 08:12 | | 03/12/25 08:52 | | 03/12/25 09:53 | |
| **Parameter** | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q |
| Mercury | 0.0000910 | U | 0.0000910 | U | 0.0000910 | U | 0.0000910 | U | 0.00009 | U |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC3 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939519-10 | | R1939519-12 | | R1939519-14 | | | |
| Date Analyzed : | | | 03/12/25 09:59 | | 03/12/25 10:39 | | 03/12/25 11:19 | | | |
| **Parameter** | **mg/l** | **Q** | **mg/l** | **Q** | **mg/l** | **Q** | **mg/l** | **Q** | | **Q** |
| Mercury | | | 0.0000910 | U | 0.0000910 | U | 0.0000910 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC2 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | R1939524-2 | | R1939524-4 | | R1939524-6 | | R1939524-8 | | WG2039058-1 | |
| Date Analyzed : | 03/12/25 06:51 | | 03/12/25 07:57 | | 03/12/25 08:36 | | 03/12/25 10:05 | | 03/12/25 11:29 | |
| **Parameter** | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q | mg/l | Q |
| Mercury | 0.0000910 | U | 0.0000910 | U | 0.0000910 | U | 0.0000910 | U | 0.00009 | U |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC2 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939524-10 | | R1939524-12 | | R1939524-14 | | | |
| Date Analyzed : | | | 03/12/25 11:09 | | 03/12/25 11:49 | | 03/12/25 12:28 | | | |
| **Parameter** | **mg/l** | **Q** | **mg/l** | **Q** | **mg/l** | **Q** | **mg/l** | **Q** | | **Q** |
| Mercury | | | 0.0000910 | U | 0.0000910 | U | 0.0000910 | U | | |

# Form 3
# Blanks

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC2 | | |

| | Initial Calibration Blank | | Continuing Calibration Blank(s) | | | | | | Preparation Blank | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID : | | | R1939524-16 | | | | | | | |
| Date Analyzed : | | | 03/12/25 13:08 | | | | | | | |
| **Parameter** | **mg/l** | **Q** | **mg/l** | **Q** | **mg/l** | **Q** | **mg/l** | **Q** | | **Q** |
| Mercury | | | 0.0000910 | U | | | | | | |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 8A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-10 | | |
| **Matrix Spike** | : WG2039060-3 | **MS Analysis Date** | : 03/12/25 10:09 |
| **Matrix Spike Dup** | : WG2039060-4 | **MSD Analysis Date** | : 03/12/25 10:13 |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Mercury, Total | ND | 0.005 | 0.00470 | 94 | 0.005 | 0.00458 | 92 | 3 | 70-130 | 20 |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 5B | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-02 | | |
| **Matrix Spike** | : WG2039060-5 | **MS Analysis Date** | : 03/12/25 10:19 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Mercury, Total | ND | 0.005 | 0.00463 | 93 | | | | | 70-130 | 20 |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 8A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-10 | | |
| **Matrix Spike** | : WG2039058-3 | **MS Analysis Date** | : 03/12/25 11:39 |
| **Matrix Spike Dup** | : WG2039058-4 | **MSD Analysis Date** | : 03/12/25 11:42 |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Mercury, Dissolved | ND | 0.005 | 0.00492 | 98 | 0.005 | 0.00480 | 96 | 2 | 75-125 | 20 |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 5B | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-02 | | |
| **Matrix Spike** | : WG2039058-5 | **MS Analysis Date** | : 03/12/25 11:55 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Mercury, Dissolved | ND | 0.005 | 0.00406 | 81 | | | | | 75-125 | 20 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 5B | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-02 | **Analysis Date** | : 03/12/25 10:16 |
| **Dup Sample ID** | : WG2039060-6 | **DUP Analysis Date** | : 03/12/25 10:23 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Mercury, Total | ND | ND | NC | 20 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 5B | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-02 | **Analysis Date** | : 03/12/25 11:52 |
| **Dup Sample ID** | : WG2039058-6 | **DUP Analysis Date** | : 03/12/25 11:58 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Mercury, Dissolved | ND | ND | NC | 20 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2039060-2 | **LCS Analysis Date** | : 03/12/25 10:03 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Mercury, Total | 0.00100 | 0.000930 | 94. | | | | | 85-115 | 20 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2039058-2 | **LCS Analysis Date** | : 03/12/25 11:32 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Mercury, Dissolved | 0.00100 | 0.000930 | 94. | | | | | 85-115 | 20 |

# Form 12
# Preparation Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Matrix** | : WATER | **Prep Method** | : EPA 245.1 |

| Sample Number | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| L2512368-01 | 03/11/25 20:37 | - | 25 |
| L2512368-02 | 03/11/25 20:37 | - | 25 |
| L2512368-04 | 03/11/25 20:37 | - | 25 |
| L2512368-05 | 03/11/25 20:37 | - | 25 |
| L2512368-07 | 03/11/25 20:37 | - | 25 |
| L2512368-08 | 03/11/25 20:37 | - | 25 |
| L2512368-10 | 03/11/25 20:37 | - | 25 |
| L2512368-11 | 03/11/25 20:37 | - | 25 |
| L2512368-13 | 03/11/25 20:37 | - | 25 |
| L2512368-14 | 03/11/25 20:37 | - | 25 |
| L2512368-16 | 03/11/25 20:37 | - | 25 |
| L2512368-17 | 03/11/25 20:37 | - | 25 |
| L2512368-19 | 03/11/25 20:37 | - | 25 |
| WG2039060-1 | 03/11/25 20:37 | - | 25 |
| WG2039060-2 | 03/11/25 20:37 | - | 25 |
| WG2039060-3 | 03/11/25 20:37 | - | 25 |
| WG2039060-4 | 03/11/25 20:37 | - | 25 |
| WG2039060-5 | 03/11/25 20:37 | - | 25 |
| WG2039060-6 | 03/11/25 20:37 | - | 25 |

# Form 12
# Preparation Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Matrix** | : WATER | **Prep Method** | : EPA 245.1 |

| Sample Number | Preparation Date | Weight (gram) | Volume (mL) |
|---|---|---|---|
| L2512368-01 | 03/11/25 12:04 | - | 25 |
| L2512368-02 | 03/11/25 12:04 | - | 25 |
| L2512368-04 | 03/11/25 12:04 | - | 25 |
| L2512368-05 | 03/11/25 12:04 | - | 25 |
| L2512368-07 | 03/11/25 12:04 | - | 25 |
| L2512368-08 | 03/11/25 12:04 | - | 25 |
| L2512368-10 | 03/11/25 12:04 | - | 25 |
| L2512368-11 | 03/11/25 12:04 | - | 25 |
| L2512368-13 | 03/11/25 12:04 | - | 25 |
| L2512368-14 | 03/11/25 12:04 | - | 25 |
| L2512368-16 | 03/11/25 12:04 | - | 25 |
| L2512368-17 | 03/11/25 12:04 | - | 25 |
| L2512368-19 | 03/11/25 12:04 | - | 25 |
| WG2039058-1 | 03/11/25 12:04 | - | 25 |
| WG2039058-2 | 03/11/25 12:04 | - | 25 |
| WG2039058-3 | 03/11/25 12:04 | - | 25 |
| WG2039058-4 | 03/11/25 12:04 | - | 25 |
| WG2039058-5 | 03/11/25 12:04 | - | 25 |
| WG2039058-6 | 03/11/25 12:04 | - | 25 |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : NIC3 | Analysis Method | : 3,245.1 |
| Start Date | : 03/12/25 06:38 | End Date | : 03/12/25 11:19 |

| Sample Number | Dilution Factor | Analysis Time | Mercury, Total |
|---|---|---|---|
| R1939519-1 ICV | 1 | 06:38:12 | X |
| R1939519-2 ICB | 1 | 06:41:32 | X |
| R1939519-3 CCV | 1 | 07:29:15 | X |
| R1939519-4 CCB | 1 | 07:32:35 | X |
| R1939519-5 CCV | 1 | 08:08:55 | X |
| R1939519-6 CCB | 1 | 08:12:13 | X |
| R1939519-7 CCV | 1 | 08:48:48 | X |
| R1939519-8 CCB | 1 | 08:52:06 | X |
| WG2039060-1 BLANK | 1 | 09:53:18 | X |
| R1939519-9 CCV | 1 | 09:56:36 | X |
| R1939519-10 CCB | 1 | 09:59:53 | X |
| WG2039060-2 LCS | 1 | 10:03:11 | X |
| L2512368-10 | 1 | 10:06:29 | X |
| WG2039060-3 MS | 1 | 10:09:47 | X |
| WG2039060-4 MSD | 1 | 10:13:05 | X |
| L2512368-02 | 1 | 10:16:23 | X |
| WG2039060-5 MS | 1 | 10:19:44 | X |
| WG2039060-6 DUP | 1 | 10:23:02 | X |
| L2512368-01 | 1 | 10:26:20 | X |
| L2512368-04 | 1 | 10:29:38 | X |
| L2512368-05 | 1 | 10:32:56 | X |
| R1939519-11 CCV | 1 | 10:36:14 | X |
| R1939519-12 CCB | 1 | 10:39:32 | X |
| L2512368-07 | 1 | 10:42:50 | X |
| L2512368-08 | 1 | 10:46:08 | X |
| L2512368-11 | 1 | 10:49:27 | X |
| L2512368-13 | 1 | 10:52:45 | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC3 | **Analysis Method** | : 3,245.1 |
| **Start Date** | : 03/12/25 06:38 | **End Date** | : 03/12/25 11:19 |

| Sample Number | Dilution Factor | Analysis Time | Mercury, Total |
|---|---|---|---|
| L2512368-14 | 1 | 10:56:03 | X |
| L2512368-16 | 1 | 10:59:21 | X |
| L2512368-17 | 1 | 11:02:39 | X |
| L2512368-19 | 1 | 11:05:57 | X |
| R1939519-13 CCV | 1 | 11:15:51 | X |
| R1939519-14 CCB | 1 | 11:19:09 | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Instrument ID | : NIC2 | Analysis Method | : 3,245.1 |
| Start Date | : 03/12/25 06:48 | End Date | : 03/12/25 13:08 |

| Sample Number | Dilution Factor | Analysis Time | Mercury, Dissolved |
|---|---|---|---|
| R1939524-1 ICV | 1 | 06:48:13 | X |
| R1939524-2 ICB | 1 | 06:51:33 | X |
| R1939524-3 CCV | 1 | 07:53:51 | X |
| R1939524-4 CCB | 1 | 07:57:11 | X |
| R1939524-5 CCV | 1 | 08:33:32 | X |
| R1939524-6 CCB | 1 | 08:36:49 | X |
| R1939524-7 CCV | 1 | 10:02:11 | X |
| R1939524-8 CCB | 1 | 10:05:27 | X |
| R1939524-9 CCV | 1 | 11:05:54 | X |
| R1939524-10 CCB | 1 | 11:09:12 | X |
| WG2039058-1 BLANK | 1 | 11:29:14 | X |
| WG2039058-2 LCS | 1 | 11:32:32 | X |
| L2512368-10 | 1 | 11:35:50 | X |
| WG2039058-3 MS | 1 | 11:39:08 | X |
| WG2039058-4 MSD | 1 | 11:42:25 | X |
| R1939524-11 CCV | 1 | 11:45:44 | X |
| R1939524-12 CCB | 1 | 11:49:00 | X |
| L2512368-02 | 1 | 11:52:18 | X |
| WG2039058-5 MS | 1 | 11:55:36 | X |
| WG2039058-6 DUP | 1 | 11:58:54 | X |
| L2512368-01 | 1 | 12:02:12 | X |
| L2512368-04 | 1 | 12:05:30 | X |
| L2512368-05 | 1 | 12:08:48 | X |
| L2512368-07 | 1 | 12:12:06 | X |
| L2512368-08 | 1 | 12:15:23 | X |
| L2512368-11 | 1 | 12:18:41 | X |
| L2512368-13 | 1 | 12:21:59 | X |

# Form 13
# Analysis Run Log

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Instrument ID** | : NIC2 | **Analysis Method** | : 3,245.1 |
| **Start Date** | : 03/12/25 06:48 | **End Date** | : 03/12/25 13:08 |

| Sample Number | Dilution Factor | Analysis Time | Mercury, Dissolved |
|---|---|---|---|
| R1939524-13 CCV | 1 | 12:25:17 | X |
| R1939524-14 CCB | 1 | 12:28:34 | X |
| L2512368-14 | 1 | 12:31:55 | X |
| L2512368-16 | 1 | 12:35:14 | X |
| L2512368-17 | 1 | 12:38:34 | X |
| L2512368-19 | 1 | 12:41:54 | X |
| R1939524-15 CCV | 1 | 13:05:11 | X |
| R1939524-16 CCB | 1 | 13:08:30 | X |

**Date Created:** 03/19/18
**Created By:** Jason Hebert
**File:** PM4631-1
**Page:** 1

**MERCURY by 7470A, 245.1 (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury, Total | 7439-97-6 | 0.0002 | 0.0000915 | mg/l | 80-120 | 20 | 75-125 | 20 | 20 | | 28 days | 1 - Plastic 500ml HNO3 preserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

**Date Created:** 01/22/21
**Created By:** Jason Hebert
**File:** PM9836-1
**Page:** 1

**METALS by 7470A (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury, Total | 7439-97-6 | 0.0002 | 0.0000915 | mg/l | 80-120 | | 75-125 | 20 | 20 | | 28 days | 1 - Plastic 500ml HNO3 preserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

**Date Created:** 01/22/21
**Created By:** Jason Hebert
**File:** PM9837-1
**Page:** 1

**METALS by 7471B (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Surrogate Criteria | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury, Total | 7439-97-6 | 0.08 | 0.05216 | mg/kg | 72-128 | | 80-120 | 20 | 20 | | 28 days | Metals Only-Glass 60mL/2oz unpreserv |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

Title :
Date : 3/12/2025
Name :

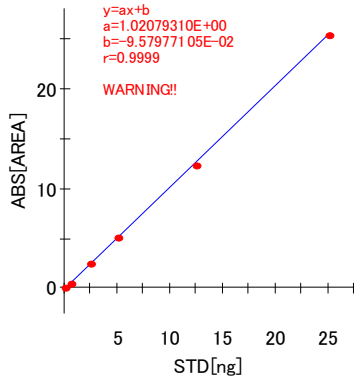
Method

STD
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

SMP
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

Measurement Time(sec) : 120sec

Calib




STD

| No. | STD [ug/L] | SVOL [mL] | CVOL [mL] | DVOL [mL] | STD [ng] | AREA [ON] | MEAS [ng] | Dev [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.000 | 2.500 | 2.500 | 2.500 | 0.000 | -0.0029 | 0.0910 | - | 03/12/2025 06:20 | JWN,NIC2 |
| 2 | 0.200 | 2.500 | 2.500 | 2.500 | 0.500 | 0.5031 | 0.5867 | 17.3 | 03/12/2025 06:24 | JWN,NIC2 |
| 3 | 1.000 | 2.500 | 2.500 | 2.500 | 2.500 | 2.4023 | 2.4472 | 2.1 | 03/12/2025 06:27 | JWN,NIC2 |
| 4 | 2.000 | 2.500 | 2.500 | 2.500 | 5.000 | 5.0262 | 5.0177 | 0.4 | 03/12/2025 06:30 | JWN,NIC2 |
| 5 | 5.000 | 2.500 | 2.500 | 2.500 | 12.500 | 12.3730 | 12.2148 | 2.3 | 03/12/2025 06:34 | JWN,NIC2 |
| 6 | 10.000 | 2.500 | 2.500 | 2.500 | 25.000 | 25.5696 | 25.1426 | 0.6 | 03/12/2025 06:37 | JWN,NIC2 |

SMP

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ICV | 2.500 | 2.500 | 2.500 | 7.2055 | 7.1526 | 2.861 | - | 03/12/2025 06:48 | JWN,NIC2 |
| 2 | ICB | 2.500 | 2.500 | 2.500 | 0.0006 | 0.0944 | 0.038 | - | 03/12/2025 06:51 | JWN,NIC2 |
| 3 | WG2039137-1 WG2039137 | 2.500 | 2.500 | 2.500 | -0.0066 | 0.0874 | 0.035 | - | 03/12/2025 07:20 | JWN,NIC2 |
| 4 | WG2039137-2 WG2039137 | 2.500 | 2.500 | 2.500 | 2.4079 | 2.4527 | 0.981 | - | 03/12/2025 07:23 | JWN,NIC2 |
| 5 | L2512193-03 WG2039137 | 2.500 | 2.500 | 2.500 | -0.0004 | 0.0935 | 0.037 | - | 03/12/2025 07:27 | JWN,NIC2 |
| 6 | WG2039137-3 WG2039137 | 2.500 | 2.500 | 2.500 | 11.8416 | 11.6942 | 4.678 | - | 03/12/2025 07:30 | JWN,NIC2 |





NIC NIPPON INSTRUMENTS CORPORATION

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 7 | WG2039137-4 WG2039137 | 2.500 | 2.500 | 2.500 | 0.0039 | 0.0977 | 0.039 | - | 03/12/2025 07:33 | JWN,NIC2 |
| 8 | L2512193-04 WG2039137 | 2.500 | 2.500 | 2.500 | 0.0111 | 0.1047 | 0.042 | - | 03/12/2025 07:37 | JWN,NIC2 |
| 9 | WG2039137-5 WG2039137 | 2.500 | 2.500 | 2.500 | 12.9162 | 12.7469 | 5.099 | - | 03/12/2025 07:40 | JWN,NIC2 |
| 10 | WG2039137-6 WG2039137 | 2.500 | 2.500 | 2.500 | 0.0178 | 0.1113 | 0.045 | - | 03/12/2025 07:43 | JWN,NIC2 |
| 11 | L2512193-01 WG2039137 | 2.500 | 2.500 | 2.500 | 0.0203 | 0.1137 | 0.045 | - | 03/12/2025 07:47 | JWN,NIC2 |
| 12 | L2512193-02 WG2039137 | 2.500 | 2.500 | 2.500 | 0.0199 | 0.1133 | 0.045 | - | 03/12/2025 07:50 | JWN,NIC2 |
| 13 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.8086 | 12.6415 | 5.057 | 101.1 | 03/12/2025 07:53 | JWN,NIC2 |
| 14 | Check Blank | 2.500 | 2.500 | 2.500 | -0.0004 | 0.0935 | 0.037 | - | 03/12/2025 07:57 | JWN,NIC2 |
| 15 | L2512193-05 WG2039137 | 2.500 | 2.500 | 2.500 | 0.0213 | 0.1147 | 0.046 | - | 03/12/2025 08:00 | JWN,NIC2 |
| 16 | L2512193-06 WG2039137 | 2.500 | 2.500 | 2.500 | 0.0114 | 0.1050 | 0.042 | - | 03/12/2025 08:03 | JWN,NIC2 |
| 17 | L2512193-07 WG2039137 | 2.500 | 2.500 | 2.500 | 0.0067 | 0.1004 | 0.040 | - | 03/12/2025 08:07 | JWN,NIC2 |
| 18 | L2512193-08 WG2039137 | 2.500 | 2.500 | 2.500 | 0.0041 | 0.0979 | 0.039 | - | 03/12/2025 08:10 | JWN,NIC2 |
| 19 | L2512193-09 WG2039137 | 2.500 | 2.500 | 2.500 | 0.0005 | 0.0943 | 0.038 | - | 03/12/2025 08:13 | JWN,NIC2 |
| 20 | L2512193-10 WG2039137 | 2.500 | 2.500 | 2.500 | 0.0002 | 0.0940 | 0.038 | - | 03/12/2025 08:17 | JWN,NIC2 |
| 21 | L2512193-11 WG2039137 | 2.500 | 2.500 | 2.500 | 0.0006 | 0.0944 | 0.038 | - | 03/12/2025 08:20 | JWN,NIC2 |
| 22 | L2512193-12 WG2039137 | 2.500 | 2.500 | 2.500 | 0.0025 | 0.0963 | 0.039 | - | 03/12/2025 08:23 | JWN,NIC2 |
| 23 | L2512193-13 WG2039137 | 2.500 | 2.500 | 2.500 | -0.0011 | 0.0928 | 0.037 | - | 03/12/2025 08:26 | JWN,NIC2 |
| 24 | L2512193-14 WG2039137 | 2.500 | 2.500 | 2.500 | 0.0040 | 0.0978 | 0.039 | - | 03/12/2025 08:30 | JWN,NIC2 |
| 25 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.9024 | 12.7334 | 5.093 | 101.9 | 03/12/2025 08:33 | JWN,NIC2 |
| 26 | Check Blank | 2.500 | 2.500 | 2.500 | -0.0021 | 0.0918 | 0.037 | - | 03/12/2025 08:36 | JWN,NIC2 |
| 27 | L2512193-15 WG2039137 | 2.500 | 2.500 | 2.500 | 0.0119 | 0.1055 | 0.042 | - | 03/12/2025 08:40 | JWN,NIC2 |
| 28 | L2512193-16 WG2039137 | 2.500 | 2.500 | 2.500 | 0.0032 | 0.0970 | 0.039 | - | 03/12/2025 08:43 | JWN,NIC2 |
| 29 | WG2039159-1 WG2039159 | 2.500 | 2.500 | 2.500 | -0.0085 | 0.0855 | 0.034 | - | 03/12/2025 09:35 | JWN,NIC2 |
| 30 | WG2039159-2 WG2039159 | 2.500 | 2.500 | 2.500 | 2.2046 | 2.2535 | 0.901 | - | 03/12/2025 09:39 | JWN,NIC2 |
| 31 | L2512325-02 WG2039159 | 2.500 | 2.500 | 2.500 | 2.5655 | 2.6071 | 1.043 | - | 03/12/2025 09:42 | JWN,NIC2 |
| 32 | WG2039159-3 WG2039159 | 2.500 | 2.500 | 2.500 | 13.6233 | 13.4396 | 5.376 | - | 03/12/2025 09:45 | JWN,NIC2 |
| 33 | WG2039159-4 WG2039159 | 2.500 | 2.500 | 2.500 | 13.8504 | 13.6621 | 5.465 | - | 03/12/2025 09:48 | JWN,NIC2 |
| 34 | L2510781-02 WG2039159 | 2.500 | 2.500 | 2.500 | -0.0037 | 0.0902 | 0.036 | - | 03/12/2025 09:52 | JWN,NIC2 |
| 35 | L2512325-01 WG2039159 | 2.500 | 2.500 | 2.500 | -0.0056 | 0.0884 | 0.035 | - | 03/12/2025 09:55 | JWN,NIC2 |
| 36 | L2512325-03 WG2039159 | 2.500 | 2.500 | 2.500 | -0.0036 | 0.0903 | 0.036 | - | 03/12/2025 09:58 | JWN,NIC2 |
| 37 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.8236 | 12.6562 | 5.062 | 101.2 | 03/12/2025 10:02 | JWN,NIC2 |
| 38 | Check Blank | 2.500 | 2.500 | 2.500 | -0.0008 | 0.0931 | 0.037 | - | 03/12/2025 10:05 | JWN,NIC2 |

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 39 | L2512325-04 WG2039159 | 2.500 | 2.500 | 2.500 | -0.0005 | 0.0934 | 0.037 | - | 03/12/2025 10:08 | JWN,NIC2 |
| 40 | L2512325-05 WG2039159 | 2.500 | 2.500 | 2.500 | -0.0038 | 0.0901 | 0.036 | - | 03/12/2025 10:12 | JWN,NIC2 |
| 41 | L2512325-06 WG2039159 | 2.500 | 2.500 | 2.500 | -0.0042 | 0.0897 | 0.036 | - | 03/12/2025 10:15 | JWN,NIC2 |
| 42 | L2512325-07 WG2039159 | 2.500 | 2.500 | 2.500 | -0.0004 | 0.0935 | 0.037 | - | 03/12/2025 10:18 | JWN,NIC2 |
| 43 | L2512325-08 WG2039159 | 2.500 | 2.500 | 2.500 | -0.0065 | 0.0875 | 0.035 | - | 03/12/2025 10:21 | JWN,NIC2 |
| 44 | L2512325-09 WG2039159 | 2.500 | 2.500 | 2.500 | 2.5576 | 2.5993 | 1.040 | - | 03/12/2025 10:25 | JWN,NIC2 |
| 45 | WG2039055-1 WG2039055 | 2.500 | 2.500 | 2.500 | -0.0075 | 0.0865 | 0.035 | - | 03/12/2025 10:52 | JWN,NIC2 |
| 46 | WG2039055-2 WG2039055 | 2.500 | 2.500 | 2.500 | 2.3674 | 2.4130 | 0.965 | - | 03/12/2025 10:55 | JWN,NIC2 |
| 47 | L2512256-05 WG2039055 | 2.500 | 2.500 | 2.500 | 0.0021 | 0.0959 | 0.038 | - | 03/12/2025 10:59 | JWN,NIC2 |
| 48 | WG2039055-3 WG2039055 | 2.500 | 2.500 | 2.500 | 12.0023 | 11.8517 | 4.741 | - | 03/12/2025 11:02 | JWN,NIC2 |
| 49 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.6989 | 12.5341 | 5.014 | 100.3 | 03/12/2025 11:05 | JWN,NIC2 |
| 50 | Check Blank | 2.500 | 2.500 | 2.500 | -0.0033 | 0.0906 | 0.036 | - | 03/12/2025 11:09 | JWN,NIC2 |
| 51 | WG2039055-4 WG2039055 | 2.500 | 2.500 | 2.500 | -0.0040 | 0.0899 | 0.036 | - | 03/12/2025 11:12 | JWN,NIC2 |
| 52 | L2512256-01 WG2039055 | 2.500 | 2.500 | 2.500 | -0.0040 | 0.0899 | 0.036 | - | 03/12/2025 11:15 | JWN,NIC2 |
| 53 | L2512256-02 WG2039055 | 2.500 | 2.500 | 2.500 | 0.0037 | 0.0975 | 0.039 | - | 03/12/2025 11:19 | JWN,NIC2 |
| 54 | L2512256-03 WG2039055 | 2.500 | 2.500 | 2.500 | -0.0059 | 0.0881 | 0.035 | - | 03/12/2025 11:22 | JWN,NIC2 |
| 55 | L2512256-04 WG2039055 | 2.500 | 2.500 | 2.500 | -0.0046 | 0.0893 | 0.036 | - | 03/12/2025 11:25 | JWN,NIC2 |
| 56 | WG2039058-1 WG2039058 | 2.500 | 2.500 | 2.500 | -0.0120 | 0.0821 | 0.033 | - | 03/12/2025 11:29 | JWN,NIC2 |
| 57 | WG2039058-2 WG2039058 | 2.500 | 2.500 | 2.500 | 2.2948 | 2.3419 | 0.937 | - | 03/12/2025 11:32 | JWN,NIC2 |
| 58 | L2512368-10 WG2039058 | 2.500 | 2.500 | 2.500 | 0.0018 | 0.0956 | 0.038 | - | 03/12/2025 11:35 | JWN,NIC2 |
| 59 | WG2039058-3 WG2039058 | 2.500 | 2.500 | 2.500 | 12.4656 | 12.3055 | 4.922 | - | 03/12/2025 11:39 | JWN,NIC2 |
| 60 | WG2039058-4 WG2039058 | 2.500 | 2.500 | 2.500 | 12.1592 | 12.0054 | 4.802 | - | 03/12/2025 11:42 | JWN,NIC2 |
| 61 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.8240 | 12.6566 | 5.063 | 101.3 | 03/12/2025 11:45 | JWN,NIC2 |
| 62 | Check Blank | 2.500 | 2.500 | 2.500 | -0.0044 | 0.0895 | 0.036 | - | 03/12/2025 11:49 | JWN,NIC2 |
| 63 | L2512368-02 WG2039058 | 2.500 | 2.500 | 2.500 | 0.0061 | 0.0998 | 0.040 | - | 03/12/2025 11:52 | JWN,NIC2 |
| 64 | WG2039058-5 WG2039058 | 2.500 | 2.500 | 2.500 | 10.2678 | 10.1525 | 4.061 | - | 03/12/2025 11:55 | JWN,NIC2 |
| 65 | WG2039058-6 WG2039058 | 2.500 | 2.500 | 2.500 | -0.0011 | 0.0928 | 0.037 | - | 03/12/2025 11:58 | JWN,NIC2 |
| 66 | L2512368-01 WG2039058 | 2.500 | 2.500 | 2.500 | -0.0077 | 0.0863 | 0.035 | - | 03/12/2025 12:02 | JWN,NIC2 |
| 67 | L2512368-04 WG2039058 | 2.500 | 2.500 | 2.500 | -0.0074 | 0.0866 | 0.035 | - | 03/12/2025 12:05 | JWN,NIC2 |
| 68 | L2512368-05 WG2039058 | 2.500 | 2.500 | 2.500 | -0.0007 | 0.0932 | 0.037 | - | 03/12/2025 12:08 | JWN,NIC2 |
| 69 | L2512368-07 WG2039058 | 2.500 | 2.500 | 2.500 | -0.0033 | 0.0906 | 0.036 | - | 03/12/2025 12:12 | JWN,NIC2 |
| 70 | L2512368-08 WG2039058 | 2.500 | 2.500 | 2.500 | -0.0079 | 0.0861 | 0.034 | - | 03/12/2025 12:15 | JWN,NIC2 |

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 71 | L2512368-11 WG2039058 | 2.500 | 2.500 | 2.500 | -0.0102 | 0.0839 | 0.034 | - | 03/12/2025 12:18 | JWN,NIC2 |
| 72 | L2512368-13 WG2039058 | 2.500 | 2.500 | 2.500 | -0.0057 | 0.0883 | 0.035 | - | 03/12/2025 12:21 | JWN,NIC2 |
| 73 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.8209 | 12.6536 | 5.061 | 101.2 | 03/12/2025 12:25 | JWN,NIC2 |
| 74 | Check Blank | 2.500 | 2.500 | 2.500 | -0.0123 | 0.0818 | 0.033 | - | 03/12/2025 12:28 | JWN,NIC2 |
| 75 | L2512368-14 WG2039058 | 2.500 | 2.500 | 2.500 | -0.0119 | 0.0822 | 0.033 | - | 03/12/2025 12:31 | JWN,NIC2 |
| 76 | L2512368-16 WG2039058 | 2.500 | 2.500 | 2.500 | -0.0124 | 0.0817 | 0.033 | - | 03/12/2025 12:35 | JWN,NIC2 |
| 77 | L2512368-17 WG2039058 | 2.500 | 2.500 | 2.500 | -0.0139 | 0.0802 | 0.032 | - | 03/12/2025 12:38 | JWN,NIC2 |
| 78 | L2512368-19 WG2039058 | 2.500 | 2.500 | 2.500 | -0.0130 | 0.0811 | 0.032 | - | 03/12/2025 12:41 | JWN,NIC2 |
| 79 | L2512607-01 WG2039058 | 2.500 | 2.500 | 2.500 | -0.0170 | 0.0772 | 0.031 | - | 03/12/2025 12:45 | JWN,NIC2 |
| 80 | L2512607-02 WG2039058 | 2.500 | 2.500 | 2.500 | -0.0145 | 0.0796 | 0.032 | - | 03/12/2025 12:48 | JWN,NIC2 |
| 81 | L2512607-03 WG2039058 | 2.500 | 2.500 | 2.500 | -0.0140 | 0.0801 | 0.032 | - | 03/12/2025 12:51 | JWN,NIC2 |
| 82 | L2512607-04 WG2039058 | 2.500 | 2.500 | 2.500 | -0.0189 | 0.0753 | 0.030 | - | 03/12/2025 12:55 | JWN,NIC2 |
| 83 | L2512607-05 WG2039058 | 2.500 | 2.500 | 2.500 | -0.0171 | 0.0771 | 0.031 | - | 03/12/2025 12:58 | JWN,NIC2 |
| 84 | L2512607-06 WG2039058 | 2.500 | 2.500 | 2.500 | -0.0152 | 0.0790 | 0.032 | - | 03/12/2025 13:01 | JWN,NIC2 |
| 85 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.7124 | 12.5473 | 5.019 | 100.4 | 03/12/2025 13:05 | JWN,NIC2 |
| 86 | Check Blank | 2.500 | 2.500 | 2.500 | -0.0141 | 0.0800 | 0.032 | - | 03/12/2025 13:08 | JWN,NIC2 |
| 87 | WG2039480-1 WG2039480 | 2.500 | 2.500 | 2.500 | -0.0223 | 0.0720 | 0.029 | - | 03/12/2025 13:14 | JWN,NIC2 |
| 88 | WG2039480-2 WG2039480 | 2.500 | 2.500 | 2.500 | 2.4539 | 2.4978 | 0.999 | - | 03/12/2025 13:17 | JWN,NIC2 |
| 89 | L2512180-01 WG2039480 | 2.500 | 2.500 | 2.500 | -0.0167 | 0.0775 | 0.031 | - | 03/12/2025 13:20 | JWN,NIC2 |
| 90 | WG2039480-3 WG2039480 | 2.500 | 2.500 | 2.500 | 12.1836 | 12.0293 | 4.812 | - | 03/12/2025 13:23 | JWN,NIC2 |
| 91 | WG2039480-4 WG2039480 | 2.500 | 2.500 | 2.500 | -0.0185 | 0.0757 | 0.030 | - | 03/12/2025 13:27 | JWN,NIC2 |
| 92 | WG2039339-1 WG2039339 | 2.500 | 2.500 | 2.500 | -0.0200 | 0.0743 | 0.030 | - | 03/12/2025 13:30 | JWN,NIC2 |
| 93 | WG2039339-2 WG2039339 | 2.500 | 2.500 | 2.500 | 2.4217 | 2.4662 | 0.986 | - | 03/12/2025 13:33 | JWN,NIC2 |
| 94 | I2512267-01 WG2039339 | 2.500 | 2.500 | 2.500 | 0.7021 | 0.7816 | 0.313 | - | 03/12/2025 13:37 | JWN,NIC2 |
| 95 | WG2039339-3 WG2039339 | 2.500 | 2.500 | 2.500 | 12.7385 | 12.5729 | 5.029 | - | 03/12/2025 13:40 | JWN,NIC2 |
| 96 | WG2039339-4 WG2039339 | 2.500 | 2.500 | 2.500 | 0.6030 | 0.6846 | 0.274 | - | 03/12/2025 13:43 | JWN,NIC2 |
| 97 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.7177 | 12.5525 | 5.021 | 100.4 | 03/12/2025 13:47 | JWN,NIC2 |
| 98 | Check Blank | 2.500 | 2.500 | 2.500 | -0.0136 | 0.0805 | 0.032 | - | 03/12/2025 13:50 | JWN,NIC2 |
| 99 | I2512182-01 WG2039339 | 2.500 | 2.500 | 2.500 | 0.0205 | 0.1139 | 0.046 | - | 03/12/2025 13:53 | JWN,NIC2 |
| 100 | I2512248-01 WG2039339 | 2.500 | 2.500 | 2.500 | 0.0046 | 0.0984 | 0.039 | - | 03/12/2025 13:57 | JWN,NIC2 |
| 101 | I2512261-01 WG2039339 | 2.500 | 2.500 | 2.500 | 0.2570 | 0.3456 | 0.138 | - | 03/12/2025 14:00 | JWN,NIC2 |
| 102 | I2512265-01 WG2039339 | 2.500 | 2.500 | 2.500 | 0.0060 | 0.0997 | 0.040 | - | 03/12/2025 14:03 | JWN,NIC2 |

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 103 | I2512272-01 WG2039339 | 2.500 | 2.500 | 2.500 | -0.0145 | 0.0796 | 0.032 | - | 03/12/2025 14:07 | JWN,NIC2 |
| 104 | I2512288-02 WG2039339 | 2.500 | 2.500 | 2.500 | -0.0107 | 0.0834 | 0.033 | - | 03/12/2025 14:10 | JWN,NIC2 |
| 105 | I2512439-01 WG2039339 | 2.500 | 2.500 | 2.500 | -0.0092 | 0.0848 | 0.034 | - | 03/12/2025 14:13 | JWN,NIC2 |
| 106 | I2512628-01 WG2039339 | 2.500 | 2.500 | 2.500 | -0.0179 | 0.0763 | 0.031 | - | 03/12/2025 14:16 | JWN,NIC2 |
| 107 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.7869 | 12.6203 | 5.048 | 101.0 | 03/12/2025 14:20 | JWN,NIC2 |
| 108 | Check Blank | 2.500 | 2.500 | 2.500 | -0.0137 | 0.0804 | 0.032 | - | 03/12/2025 14:23 | JWN,NIC2 |

Title :
Date : 03/12/2025
Name :

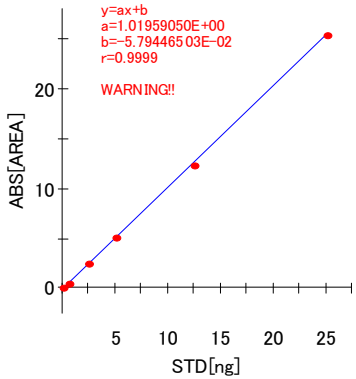
Method

STD
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

SMP
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

Measurement Time(sec) : 120sec

Calib




STD

| No. | STD [ug/L] | SVOL [mL] | CVOL [mL] | DVOL [mL] | STD [ng] | AREA [ON] | MEAS [ng] | Dev [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.000 | 2.500 | 2.500 | 2.500 | 0.000 | 0.0134 | 0.0700 | - | 03/12/2025 06:17 | CME,NIC3 |
| 2 | 0.200 | 2.500 | 2.500 | 2.500 | 0.500 | 0.5249 | 0.5716 | 14.3 | 03/12/2025 06:21 | CME,NIC3 |
| 3 | 1.000 | 2.500 | 2.500 | 2.500 | 2.500 | 2.4195 | 2.4298 | 2.8 | 03/12/2025 06:24 | CME,NIC3 |
| 4 | 2.000 | 2.500 | 2.500 | 2.500 | 5.000 | 5.0889 | 5.0480 | 1.0 | 03/12/2025 06:27 | CME,NIC3 |
| 5 | 5.000 | 2.500 | 2.500 | 2.500 | 12.500 | 12.4516 | 12.2692 | 1.8 | 03/12/2025 06:31 | CME,NIC3 |
| 6 | 10.000 | 2.500 | 2.500 | 2.500 | 25.000 | 25.5454 | 25.1114 | 0.4 | 03/12/2025 06:34 | CME,NIC3 |

SMP

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ICV | 2.500 | 2.500 | 2.500 | 7.3836 | 7.2986 | 2.919 | - | 03/12/2025 06:38 | CME,NIC3 |
| 2 | ICB | 2.500 | 2.500 | 2.500 | 0.0235 | 0.0799 | 0.032 | - | 03/12/2025 06:41 | CME,NIC3 |
| 3 | wg2038635-1 wg2038635 | 2.500 | 2.500 | 2.500 | 0.0318 | 0.0880 | 0.035 | - | 03/12/2025 06:55 | CME,NIC3 |
| 4 | wg2038635-2 wg2038635 | 2.500 | 2.500 | 2.500 | 2.4433 | 2.4532 | 0.981 | - | 03/12/2025 06:59 | CME,NIC3 |
| 5 | I2512195-07 wg2038635 | 2.500 | 2.500 | 2.500 | 0.0395 | 0.0956 | 0.038 | - | 03/12/2025 07:02 | CME,NIC3 |
| 6 | wg2038635-3 wg2038635 | 2.500 | 2.500 | 2.500 | 11.7960 | 11.6262 | 4.650 | - | 03/12/2025 07:05 | CME,NIC3 |





NIC NIPPON INSTRUMENTS CORPORATION

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 7 | wg2038635-4 wg2038635 | 2.500 | 2.500 | 2.500 | 0.0345 | 0.0907 | 0.036 | - | 03/12/2025 07:09 | CME,NIC3 |
| 8 | I2512195-08 wg2038635 | 2.500 | 2.500 | 2.500 | 0.0367 | 0.0928 | 0.037 | - | 03/12/2025 07:12 | CME,NIC3 |
| 9 | I2512925-09 wg2038635 | 2.500 | 2.500 | 2.500 | 0.0386 | 0.0947 | 0.038 | - | 03/12/2025 07:15 | CME,NIC3 |
| 10 | wg2039057-1 wg2039057 | 2.500 | 2.500 | 2.500 | 0.0160 | 0.0725 | 0.029 | - | 03/12/2025 07:22 | CME,NIC3 |
| 11 | wg2039057-2 wg2039057 | 2.500 | 2.500 | 2.500 | 2.3883 | 2.3992 | 0.960 | - | 03/12/2025 07:25 | CME,NIC3 |
| 12 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.6690 | 12.4824 | 4.993 | 99.9 | 03/12/2025 07:29 | CME,NIC3 |
| 13 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0202 | 0.0766 | 0.031 | - | 03/12/2025 07:32 | CME,NIC3 |
| 14 | I2512325-02 wg2039057 | 2.500 | 2.500 | 2.500 | 1.1518 | 1.1865 | 0.475 | - | 03/12/2025 07:35 | CME,NIC3 |
| 15 | wg2039057-3 wg2039057 | 2.500 | 2.500 | 2.500 | 13.2107 | 13.0137 | 5.205 | - | 03/12/2025 07:39 | CME,NIC3 |
| 16 | wg2039057-4 wg2039057 | 2.500 | 2.500 | 2.500 | 13.1091 | 12.9141 | 5.166 | - | 03/12/2025 07:42 | CME,NIC3 |
| 17 | I2512325-01 wg2039057 | 2.500 | 2.500 | 2.500 | 0.0220 | 0.0784 | 0.031 | - | 03/12/2025 07:45 | CME,NIC3 |
| 18 | I2512325-03 wg2039057 | 2.500 | 2.500 | 2.500 | 0.0265 | 0.0828 | 0.033 | - | 03/12/2025 07:49 | CME,NIC3 |
| 19 | I2512325-04 wg2039057 | 2.500 | 2.500 | 2.500 | 0.0284 | 0.0847 | 0.034 | - | 03/12/2025 07:52 | CME,NIC3 |
| 20 | I2512325-05 wg2039057 | 2.500 | 2.500 | 2.500 | 0.0228 | 0.0792 | 0.032 | - | 03/12/2025 07:55 | CME,NIC3 |
| 21 | I2512325-06 wg2039057 | 2.500 | 2.500 | 2.500 | 0.0252 | 0.0815 | 0.033 | - | 03/12/2025 07:59 | CME,NIC3 |
| 22 | I2512325-07 wg2039057 | 2.500 | 2.500 | 2.500 | 0.0342 | 0.0904 | 0.036 | - | 03/12/2025 08:02 | CME,NIC3 |
| 23 | I2512325-08 wg2039057 | 2.500 | 2.500 | 2.500 | 0.0188 | 0.0753 | 0.030 | - | 03/12/2025 08:05 | CME,NIC3 |
| 24 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.6314 | 12.4455 | 4.978 | 99.6 | 03/12/2025 08:08 | CME,NIC3 |
| 25 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0228 | 0.0792 | 0.032 | - | 03/12/2025 08:12 | CME,NIC3 |
| 26 | I2512325-09 wg2039057 | 2.500 | 2.500 | 2.500 | 1.8379 | 1.8594 | 0.744 | - | 03/12/2025 08:15 | CME,NIC3 |
| 27 | WG2039179-1 WG2039179 | 2.500 | 2.500 | 2.500 | 0.0221 | 0.0785 | 0.031 | - | 03/12/2025 08:19 | CME,NIC3 |
| 28 | WG2039179-2 WG2039179 | 2.500 | 2.500 | 2.500 | 2.3248 | 2.3370 | 0.935 | - | 03/12/2025 08:22 | CME,NIC3 |
| 29 | L2512316-01 WG2039179 | 2.500 | 2.500 | 2.500 | 0.0419 | 0.0979 | 0.039 | - | 03/12/2025 08:25 | CME,NIC3 |
| 30 | WG2039179-3 WG2039179 | 2.500 | 2.500 | 2.500 | 12.0463 | 11.8717 | 4.749 | - | 03/12/2025 08:28 | CME,NIC3 |
| 31 | WG2039179-4 WG2039179 | 2.500 | 2.500 | 2.500 | 0.0363 | 0.0924 | 0.037 | - | 03/12/2025 08:32 | CME,NIC3 |
| 32 | L2512316-02 WG2039179 | 2.500 | 2.500 | 2.500 | 0.0245 | 0.0809 | 0.032 | - | 03/12/2025 08:35 | CME,NIC3 |
| 33 | L2512316-03 WG2039179 | 2.500 | 2.500 | 2.500 | 0.0183 | 0.0748 | 0.030 | - | 03/12/2025 08:38 | CME,NIC3 |
| 34 | L2512316-04 WG2039179 | 2.500 | 2.500 | 2.500 | 0.0163 | 0.0728 | 0.029 | - | 03/12/2025 08:42 | CME,NIC3 |
| 35 | L2512316-05 WG2039179 | 2.500 | 2.500 | 2.500 | 0.0170 | 0.0735 | 0.029 | - | 03/12/2025 08:45 | CME,NIC3 |
| 36 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.7985 | 12.6094 | 5.044 | 100.9 | 03/12/2025 08:48 | CME,NIC3 |
| 37 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0178 | 0.0743 | 0.030 | - | 03/12/2025 08:52 | CME,NIC3 |
| 38 | L2512316-06 WG2039179 | 2.500 | 2.500 | 2.500 | 0.0176 | 0.0741 | 0.030 | - | 03/12/2025 08:55 | CME,NIC3 |

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 39 | wg2039031-1 wg2039031 | 2.500 | 2.500 | 2.500 | 0.0161 | 0.0726 | 0.029 | - | 03/12/2025 08:58 | CME,NIC3 |
| 40 | wg2039031-2 wg2039031 | 2.500 | 2.500 | 2.500 | 2.4109 | 2.4214 | 0.969 | - | 03/12/2025 09:02 | CME,NIC3 |
| 41 | I2512218-03 wg2039031 | 2.500 | 2.500 | 2.500 | 0.0241 | 0.0805 | 0.032 | - | 03/12/2025 09:05 | CME,NIC3 |
| 42 | wg2039031-3 wg2039031 | 2.500 | 2.500 | 2.500 | 11.9968 | 11.8231 | 4.729 | - | 03/12/2025 09:08 | CME,NIC3 |
| 43 | wg2039031-4 wg2039031 | 2.500 | 2.500 | 2.500 | 0.0298 | 0.0861 | 0.034 | - | 03/12/2025 09:11 | CME,NIC3 |
| 44 | I2512117-01 wg2039031 | 2.500 | 2.500 | 2.500 | 0.0853 | 0.1405 | 0.056 | - | 03/12/2025 09:15 | CME,NIC3 |
| 45 | I2512218-02 wg2039031 | 2.500 | 2.500 | 2.500 | 0.0147 | 0.0712 | 0.028 | - | 03/12/2025 09:18 | CME,NIC3 |
| 46 | I2512218-04 wg2039031 | 2.500 | 2.500 | 2.500 | 0.0166 | 0.0731 | 0.029 | - | 03/12/2025 09:21 | CME,NIC3 |
| 47 | wg2039060-1 wg2039060 | 2.500 | 2.500 | 2.500 | 0.0088 | 0.0655 | 0.026 | - | 03/12/2025 09:53 | CME,NIC3 |
| 48 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.4296 | 12.2476 | 4.899 | 98.0 | 03/12/2025 09:56 | CME,NIC3 |
| 49 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0195 | 0.0760 | 0.030 | - | 03/12/2025 09:59 | CME,NIC3 |
| 50 | wg2039060-2 wg2039060 | 2.500 | 2.500 | 2.500 | 2.3248 | 2.3370 | 0.935 | - | 03/12/2025 10:03 | CME,NIC3 |
| 51 | I2512368-10 wg2039060 | 2.500 | 2.500 | 2.500 | 0.0159 | 0.0724 | 0.029 | - | 03/12/2025 10:06 | CME,NIC3 |
| 52 | wg2039060-3 wg2039060 | 2.500 | 2.500 | 2.500 | 11.9364 | 11.7639 | 4.706 | - | 03/12/2025 10:09 | CME,NIC3 |
| 53 | wg2039060-4 wg2039060 | 2.500 | 2.500 | 2.500 | 11.6151 | 11.4488 | 4.580 | - | 03/12/2025 10:13 | CME,NIC3 |
| 54 | I2512368-02 wg2039060 | 2.500 | 2.500 | 2.500 | 0.0293 | 0.0856 | 0.034 | - | 03/12/2025 10:16 | CME,NIC3 |
| 55 | wg2039060-5 wg2039060 | 2.500 | 2.500 | 2.500 | 11.7592 | 11.5901 | 4.636 | - | 03/12/2025 10:19 | CME,NIC3 |
| 56 | wg2039060-6 wg2039060 | 2.500 | 2.500 | 2.500 | 0.0313 | 0.0875 | 0.035 | - | 03/12/2025 10:23 | CME,NIC3 |
| 57 | I2512368-01 wg2039060 | 2.500 | 2.500 | 2.500 | 0.0151 | 0.0716 | 0.029 | - | 03/12/2025 10:26 | CME,NIC3 |
| 58 | I2512368-04 wg2039060 | 2.500 | 2.500 | 2.500 | 0.0150 | 0.0715 | 0.029 | - | 03/12/2025 10:29 | CME,NIC3 |
| 59 | I2512368-05 wg2039060 | 2.500 | 2.500 | 2.500 | 0.0281 | 0.0844 | 0.034 | - | 03/12/2025 10:32 | CME,NIC3 |
| 60 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.6768 | 12.4901 | 4.996 | 99.9 | 03/12/2025 10:36 | CME,NIC3 |
| 61 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0223 | 0.0787 | 0.031 | - | 03/12/2025 10:39 | CME,NIC3 |
| 62 | I2512368-07 wg2039060 | 2.500 | 2.500 | 2.500 | 0.0210 | 0.0774 | 0.031 | - | 03/12/2025 10:42 | CME,NIC3 |
| 63 | I2512368-08 wg2039060 | 2.500 | 2.500 | 2.500 | 0.0147 | 0.0712 | 0.028 | - | 03/12/2025 10:46 | CME,NIC3 |
| 64 | I2512368-11 wg2039060 | 2.500 | 2.500 | 2.500 | 0.0110 | 0.0676 | 0.027 | - | 03/12/2025 10:49 | CME,NIC3 |
| 65 | I2512368-13 wg2039060 | 2.500 | 2.500 | 2.500 | 0.0189 | 0.0754 | 0.030 | - | 03/12/2025 10:52 | CME,NIC3 |
| 66 | I2512368-14 wg2039060 | 2.500 | 2.500 | 2.500 | 0.0133 | 0.0699 | 0.028 | - | 03/12/2025 10:56 | CME,NIC3 |
| 67 | I2512368-16 wg2039060 | 2.500 | 2.500 | 2.500 | 0.0167 | 0.0732 | 0.029 | - | 03/12/2025 10:59 | CME,NIC3 |
| 68 | I2512368-17 wg2039060 | 2.500 | 2.500 | 2.500 | 0.0160 | 0.0725 | 0.029 | - | 03/12/2025 11:02 | CME,NIC3 |
| 69 | I2512368-19 wg2039060 | 2.500 | 2.500 | 2.500 | 0.0168 | 0.0733 | 0.029 | - | 03/12/2025 11:05 | CME,NIC3 |
| 70 | I2512607-01 wg2039060 | 2.500 | 2.500 | 2.500 | 0.0137 | 0.0703 | 0.028 | - | 03/12/2025 11:09 | CME,NIC3 |

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 71 | I2512607-02 wg2039060 | 2.500 | 2.500 | 2.500 | 0.0165 | 0.0730 | 0.029 | - | 03/12/2025 11:12 | CME,NIC3 |
| 72 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.7993 | 12.6102 | 5.044 | 100.9 | 03/12/2025 11:15 | CME,NIC3 |
| 73 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0165 | 0.0730 | 0.029 | - | 03/12/2025 11:19 | CME,NIC3 |
| 74 | I2512607-03 wg2039060 | 2.500 | 2.500 | 2.500 | 0.0200 | 0.0764 | 0.031 | - | 03/12/2025 11:22 | CME,NIC3 |
| 75 | I2512607-04 wg2039060 | 2.500 | 2.500 | 2.500 | 0.0162 | 0.0727 | 0.029 | - | 03/12/2025 11:25 | CME,NIC3 |
| 76 | I2512607-05 wg2039060 | 2.500 | 2.500 | 2.500 | 0.0161 | 0.0726 | 0.029 | - | 03/12/2025 11:29 | CME,NIC3 |
| 77 | I2512607-06 wg2039060 | 2.500 | 2.500 | 2.500 | 0.0213 | 0.0777 | 0.031 | - | 03/12/2025 11:32 | CME,NIC3 |
| 78 | wg2039087-1 wg2039087 | 2.500 | 2.500 | 2.500 | 0.0153 | 0.0718 | 0.029 | - | 03/12/2025 11:35 | CME,NIC3 |
| 79 | wg2039087-2 wg2039087 | 2.500 | 2.500 | 2.500 | 2.2237 | 2.2378 | 0.895 | - | 03/12/2025 11:39 | CME,NIC3 |
| 80 | L2510194-04 wg2039087 | 2.500 | 2.500 | 2.500 | 3.2217 | 3.2166 | 1.287 | - | 03/12/2025 11:42 | CME,NIC3 |
| 81 | wg2039087-3 wg2039087 | 2.500 | 2.500 | 2.500 | 15.5305 | 15.2889 | 6.116 | - | 03/12/2025 11:45 | CME,NIC3 |
| 82 | wg2039087-4 wg2039087 | 2.500 | 2.500 | 2.500 | 3.2441 | 3.2386 | 1.295 | - | 03/12/2025 11:49 | CME,NIC3 |
| 83 | L2510194-01 wg2039087 | 2.500 | 2.500 | 2.500 | 1.2935 | 1.3255 | 0.530 | - | 03/12/2025 11:52 | CME,NIC3 |
| 84 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.8895 | 12.6987 | 5.079 | 101.6 | 03/12/2025 11:55 | CME,NIC3 |
| 85 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0186 | 0.0751 | 0.030 | - | 03/12/2025 11:59 | CME,NIC3 |
| 86 | L2510194-05 wg2039087 | 2.500 | 2.500 | 2.500 | 2.2950 | 2.3077 | 0.923 | - | 03/12/2025 12:02 | CME,NIC3 |
| 87 | L2510194-08 wg2039087 | 2.500 | 2.500 | 2.500 | 0.4649 | 0.5128 | 0.205 | - | 03/12/2025 12:05 | CME,NIC3 |
| 88 | WG2039473-1 WG2039473 | 2.500 | 2.500 | 2.500 | 0.0074 | 0.0641 | 0.026 | - | 03/12/2025 12:40 | CME,NIC3 |
| 89 | WG2039473-2 WG2039473 | 2.500 | 2.500 | 2.500 | 2.2842 | 2.2971 | 0.919 | - | 03/12/2025 12:43 | CME,NIC3 |
| 90 | L2511511-03 WG2039473 | 2.500 | 2.500 | 2.500 | 0.0132 | 0.0698 | 0.028 | - | 03/12/2025 12:46 | CME,NIC3 |
| 91 | WG2039473-3 WG2039473 | 2.500 | 2.500 | 2.500 | 11.5747 | 11.4091 | 4.564 | - | 03/12/2025 12:50 | CME,NIC3 |
| 92 | WG2039473-4 WG2039473 | 2.500 | 2.500 | 2.500 | 0.0134 | 0.0700 | 0.028 | - | 03/12/2025 12:53 | CME,NIC3 |
| 93 | WG2039477-1 WG2039477 | 2.500 | 2.500 | 2.500 | 0.0129 | 0.0695 | 0.028 | - | 03/12/2025 12:56 | CME,NIC3 |
| 94 | WG2039477-2 WG2039477 | 2.500 | 2.500 | 2.500 | 2.3824 | 2.3935 | 0.957 | - | 03/12/2025 12:59 | CME,NIC3 |
| 95 | I2513345-01 WG2039477 | 2.500 | 2.500 | 2.500 | 0.0141 | 0.0707 | 0.028 | - | 03/12/2025 13:03 | CME,NIC3 |
| 96 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.4066 | 12.2250 | 4.890 | 97.8 | 03/12/2025 13:06 | CME,NIC3 |
| 97 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0179 | 0.0744 | 0.030 | - | 03/12/2025 13:09 | CME,NIC3 |
| 98 | WG2039477-3 WG2039477 | 2.500 | 2.500 | 2.500 | 11.3128 | 11.1523 | 4.461 | - | 03/12/2025 13:13 | CME,NIC3 |
| 99 | WG2039477-4 WG2039477 | 2.500 | 2.500 | 2.500 | 0.0164 | 0.0729 | 0.029 | - | 03/12/2025 13:16 | CME,NIC3 |
| 100 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.2899 | 12.1106 | 4.844 | 96.9 | 03/12/2025 13:26 | CME,NIC3 |
| 101 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0182 | 0.0747 | 0.030 | - | 03/12/2025 13:29 | CME,NIC3 |
| 102 | wg2039529-1 wg2039529 | 2.500 | 2.500 | 2.500 | 0.0488 | 0.1047 | 0.042 | - | 03/12/2025 13:34 | CME,NIC3 |

| No. | NAME | SVOL [mL] | CVOL [mL] | DVOL [mL] | AREA [ON] | MEAS [ng] | CONC [ug/L] | Recovery [%] | M. TIME | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| 103 | wg2039529-2 wg2039529 | 2.500 | 2.500 | 2.500 | 2.3958 | 2.4066 | 0.963 | - | 03/12/2025 13:38 | CME,NIC3 |
| 104 | I2512738-01 wg2039529 | 2.500 | 2.500 | 2.500 | 0.0981 | 0.1530 | 0.061 | - | 03/12/2025 13:41 | CME,NIC3 |
| 105 | wg2039529-3 wg2039529 | 2.500 | 2.500 | 2.500 | 11.9425 | 11.7699 | 4.708 | - | 03/12/2025 13:44 | CME,NIC3 |
| 106 | wg2039529-4 wg2039529 | 2.500 | 2.500 | 2.500 | 0.2008 | 0.2538 | 0.102 | - | 03/12/2025 13:48 | CME,NIC3 |
| 107 | I2513827-01 wg2039529 | 2.500 | 2.500 | 2.500 | 0.0429 | 0.0989 | 0.040 | - | 03/12/2025 13:51 | CME,NIC3 |
| 108 | Check STD(5ug/L) | 2.500 | 2.500 | 2.500 | 12.8282 | 12.6385 | 5.055 | 101.1 | 03/12/2025 13:54 | CME,NIC3 |
| 109 | Check Blank | 2.500 | 2.500 | 2.500 | 0.0184 | 0.0749 | 0.030 | - | 03/12/2025 13:57 | CME,NIC3 |
| 110 | I2512738-02 wg2039529 | 2.500 | 2.500 | 2.500 | 0.1326 | 0.1869 | 0.075 | - | 03/12/2025 14:01 | CME,NIC3 |
| 111 | I2512738-03 wg2039529 | 2.500 | 2.500 | 2.500 | 0.3420 | 0.3923 | 0.157 | - | 03/12/2025 14:04 | CME,NIC3 |
| 112 | I2513174-10 wg2039529 | 2.500 | 2.500 | 2.500 | 0.0634 | 0.1190 | 0.048 | - | 03/12/2025 14:07 | CME,NIC3 |
| 113 | I2513372-01 wg2039529 | 2.500 | 2.500 | 2.500 | 0.6314 | 0.6761 | 0.270 | - | 03/12/2025 14:11 | CME,NIC3 |

MERCURY TRUE VALUE CRITERIA

| | |
|---|---|
| ICV | 3 ug/l |
| LCSW | 1 ug/l |
| MS | 1 ug/l |
| CCV | 5 ug/l |

As of 6/1/13, Mercury True Value criteria is as follows:

| | |
|---|---|
| ICV | 3 ug/l |
| LCSW | 1 ug/l |
| MS(aq) | 5 ug/l |
| MS(soil) | 1 ug/l |
| CCV | 10 ug/l |

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D102-540
**Certificate Issue Date:** June 22, 2018
**Expiration Date:** January 31, 2022
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8160 | 6.36 | 3960 - 12400 | 4080 - 12200 |
| Antimony | 120 | 60.9 | 9.42 | 0.822 - 121 | 12.0 - 166 |
| Arsenic | 144 | 135 | 5.08 | 112 - 158 | 94.6 - 176 |
| Barium | 469 | 443 | 6.77 | 366 - 521 | 332 - 554 |
| Beryllium | 207 | 197 | 5.86 | 164 - 229 | 148 - 246 |
| Boron | 213 | 174 | 12.6 | 127 - 221 | 105 - 244 |
| Cadmium | 224 | 204 | 6.65 | 169 - 240 | 153 - 256 |
| Calcium | 5190 | 4830 | 9.12 | 3950 - 5700 | 3510 - 6150 |
| Chromium | 138 | 132 | 8.56 | 109 - 155 | 92.2 - 171 |
| Cobalt | 182 | 179 | 7.93 | 151 - 207 | 134 - 224 |
| Copper | 191 | 184 | 6.72 | 155 - 213 | 138 - 230 |
| Iron | 15000 | 14400 | 10.7 | 8770 - 20000 | 5120 - 23600 |
| Lead | 225 | 216 | 7.72 | 178 - 254 | 159 - 274 |
| Magnesium | 2570 | 2340 | 6.13 | 1780 - 2900 | 1460 - 3230 |
| Manganese | 331 | 323 | 6.71 | 266 - 380 | 242 - 404 |
| Mercury | 16.8 | 13.2 | 16.0 | 8.64 - 17.7 | 7.89 - 18.5 |
| Molybdenum | 193 | 175 | 2.39 | 141 - 209 | 125 - 226 |
| Nickel | 163 | 152 | 5.95 | 126 - 178 | 106 - 197 |
| Potassium | 2420 | 2050 | 6.31 | 1440 - 2660 | 1210 - 2890 |
| Selenium | 81.9 | 74.9 | 4.13 | 59.3 - 90.5 | 47.0 - 103 |
| Silver | 57.6 | 53.9 | 9.00 | 43.0 - 64.8 | 37.8 - 70.0 |
| Sodium | 161 | 149 | 12.1 | 111 - 188 | 57.7 - 241 |
| Strontium | 100 | 96.2 | 4.04 | 78.1 - 114 | 69.0 - 123 |
| Thallium | 253 | 232 | 3.54 | 188 - 276 | 168 - 296 |



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# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Tin | 146 | 134 | 10.8 | 106 - 163 | 79.5 - 189 |
| Titanium | 449 | 340 | 7.20 | 70.2 - 609 | 44.9 - 711 |
| Uranium | 114 | 113 | 7.10 | 85.5 - 140 | 71.9 - 153 |
| Vanadium | 180 | 172 | 8.85 | 137 - 207 | 126 - 218 |
| Zinc | 217 | 211 | 6.58 | 171 - 250 | 147 - 274 |

## ANALYTICAL VERIFICATION

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Aluminum | 10100 | 8160 | 80.8 | 138 | - | - |
| Antimony | 120 | 60.9 | 50.8 | 135 | - | - |
| Arsenic | 144 | 135 | 93.8 | 184 | - | - |
| Barium | 469 | 443 | 94.5 | 158 | - | - |
| Beryllium | 207 | 197 | 95.0 | 148 | - | - |
| Boron | 213 | 174 | 81.8 | 107 | - | - |
| Cadmium | 224 | 204 | 91.3 | 199 | - | - |
| Calcium | 5190 | 4830 | 93.0 | 122 | - | - |
| Chromium | 138 | 132 | 95.5 | 172 | - | - |
| Cobalt | 182 | 179 | 98.4 | 140 | - | - |
| Copper | 191 | 184 | 96.3 | 183 | - | - |
| Iron | 15000 | 14400 | 95.6 | 133 | - | - |
| Lead | 225 | 216 | 96.2 | 204 | - | - |
| Magnesium | 2570 | 2340 | 91.2 | 122 | - | - |
| Manganese | 331 | 323 | 97.6 | 147 | - | - |
| Mercury | 16.8 | 13.2 | 78.3 | 128 | - | - |
| Molybdenum | 193 | 175 | 90.8 | 143 | - | - |
| Nickel | 163 | 152 | 93.1 | 185 | - | - |
| Potassium | 2420 | 2050 | 84.7 | 121 | - | - |
| Selenium | 81.9 | 74.9 | 91.5 | 163 | - | - |



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# ▪ Certificate of Analysis ▪

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Silver | 57.6 | 53.9 | 93.6 | 150 | - | - |
| Sodium | 161 | 149 | 92.8 | 105 | - | - |
| Strontium | 100 | 96.2 | 96.2 | 90 | - | - |
| Thallium | 253 | 232 | 91.6 | 147 | - | - |
| Tin | 146 | 134 | 92.0 | 100 | - | - |
| Titanium | 449 | 340 | 75.6 | 93 | - | - |
| Uranium | 114 | 113 | 98.8 | 35 | - | - |
| Vanadium | 180 | 172 | 95.4 | 139 | - | - |
| Zinc | 217 | 211 | 97.0 | 180 | - | - |

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
**Traceability Recovery (%)** = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.**

**Certifying Officer**

**Brian Miller**

**Quality Officer**

**Matthew Seebeck**

ISO/IEC GUIDE 34:2009 ACCREDITED REFERENCE MATERIAL PRODUCER CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005 ACCREDITED CHEMICAL TESTING LABORATORY CERTIFICATE NO. 1539.02



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ERA
A Waters Company

Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D105-540
**Certificate Issue Date:** March 19, 2019
**Expiration Date:** October 12, 2022
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8800 | 8.32 | 4600 - 13000 | 4470 - 13100 |
| Antimony | 282 | 147 | 7.70 | 6.17 - 289 | 28.2 - 366 |
| Arsenic | 155 | 143 | 6.34 | 119 - 168 | 100 - 186 |
| Barium | 439 | 415 | 5.37 | 343 - 488 | 311 - 519 |
| Beryllium | 192 | 179 | 2.78 | 149 - 210 | 134 - 224 |
| Boron | 216 | 160 | 7.08 | 113 - 208 | 96.1 - 238 |
| Cadmium | 61.5 | 56.2 | 0.528 | 46.6 - 65.9 | 42.2 - 70.3 |
| Calcium | 5190 | 4960 | 6.64 | 4090 - 5840 | 3610 - 6310 |
| Chromium | 104 | 101 | 4.75 | 83.2 - 118 | 70.5 - 131 |
| Cobalt | 196 | 189 | 0.500 | 158 - 219 | 141 - 236 |
| Copper | 65.0 | 63.1 | 2.65 | 53.1 - 73.1 | 47.3 - 78.9 |
| Iron | 15000 | 15700 | 8.94 | 10100 - 21300 | 6000 - 25400 |
| Lead | 126 | 125 | 4.77 | 103 - 146 | 89.3 - 160 |
| Magnesium | 2570 | 2410 | 6.26 | 1860 - 2970 | 1520 - 3310 |
| Manganese | 387 | 382 | 5.37 | 315 - 449 | 290 - 474 |
| Mercury | 7.76 | 7.61 | 13.7 | 5.53 - 9.69 | 4.57 - 10.7 |
| Molybdenum | 120 | 107 | 0.500 | 86.0 - 128 | 75.5 - 139 |
| Nickel | 117 | 108 | 0.514 | 89.5 - 127 | 75.7 - 141 |
| Potassium | 2420 | 2110 | 5.62 | 1500 - 2720 | 1260 - 2960 |
| Selenium | 84.6 | 77.9 | 7.10 | 61.8 - 94.0 | 49.2 - 107 |
| Silver | 34.6 | 34.3 | 8.34 | 27.8 - 40.9 | 23.6 - 45.1 |
| Sodium | 161 | 145 | 6.72 | 106 - 183 | 54.3 - 235 |
| Strontium | 104 | 104 | 3.95 | 85.1 - 123 | 74.8 - 133 |
| Thallium | 123 | 113 | 0.500 | 91.3 - 134 | 77.1 - 149 |



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| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Tin | 118 | 107 | 0.500 | 83.5 - 130 | 61.2 - 152 |
| Titanium | 512 | 421 | 5.80 | 114 - 728 | 0.00 - 854 |
| Uranium | 103 | 104 | 6.18 | 79.1 - 128 | 71.9 - 135 |
| Vanadium | 87.3 | 83.7 | 8.55 | 66.8 - 101 | 54.2 - 113 |
| Zinc | 251 | 240 | 3.98 | 194 - 285 | 168 - 312 |

## ANALYTICAL VERIFICATION

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Aluminum | 10100 | 8800 | 87.1 | 193 | - | - |
| Antimony | 282 | 147 | 52.3 | 216 | - | - |
| Arsenic | 155 | 143 | 92.5 | 240 | - | - |
| Barium | 439 | 415 | 94.6 | 222 | - | - |
| Beryllium | 192 | 179 | 93.4 | 220 | - | - |
| Boron | 216 | 160 | 74.2 | 152 | - | - |
| Cadmium | 61.5 | 56.2 | 91.5 | 239 | - | - |
| Calcium | 5190 | 4960 | 95.6 | 175 | - | - |
| Chromium | 104 | 101 | 96.8 | 237 | - | - |
| Cobalt | 196 | 189 | 96.2 | 215 | - | - |
| Copper | 65.0 | 63.1 | 97.1 | 237 | - | - |
| Iron | 15000 | 15700 | 105 | 195 | - | - |
| Lead | 126 | 125 | 99.0 | 243 | - | - |
| Magnesium | 2570 | 2410 | 93.9 | 177 | - | - |
| Manganese | 387 | 382 | 98.7 | 215 | - | - |
| Mercury | 7.76 | 7.61 | 98.0 | 157 | - | - |
| Molybdenum | 120 | 107 | 89.4 | 216 | - | - |
| Nickel | 117 | 108 | 92.5 | 235 | - | - |
| Potassium | 2420 | 2110 | 87.2 | 181 | - | - |
| Selenium | 84.6 | 77.9 | 92.1 | 231 | - | - |



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| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Silver | 34.6 | 34.3 | 99.3 | 216 | - | - |
| Sodium | 161 | 145 | 89.8 | 166 | - | - |
| Strontium | 104 | 104 | 99.9 | 148 | - | - |
| Thallium | 123 | 113 | 91.8 | 215 | - | - |
| Tin | 118 | 107 | 90.4 | 164 | - | - |
| Titanium | 512 | 421 | 82.2 | 157 | - | - |
| Uranium | 103 | 104 | 101 | 61 | - | - |
| Vanadium | 87.3 | 83.7 | 95.9 | 214 | - | - |
| Zinc | 251 | 240 | 95.5 | 234 | - | - |

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
**Traceability Recovery (%)** = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.**

**Certifying Officer**

**Brian Miller**

Brian Miller

**Quality Officer**

**Matthew Seebeck**



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Certified Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D109-540
**Certificate Issue Date:** March 24, 2020
**Expiration Date:** October 03, 2023
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value[7] | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8130 | 2.54 | 3920 - 12300 | 4060 - 12200 |
| Antimony | 259 | 134 | 5.03 | 4.56 - 264 | 25.9 - 335 |
| Arsenic | 171 | 156 | 3.38 | 129 - 183 | 109 - 203 |
| Barium | 253 | 239 | 4.81 | 197 - 280 | 179 - 298 |
| Beryllium | 179 | 169 | 6.59 | 141 - 198 | 127 - 212 |
| Boron | 114 | 87.5 | 10.3 | 62.5 - 113 | 52.5 - 125 |
| Cadmium | 149 | 137 | 5.43 | 113 - 160 | 103 - 171 |
| Calcium | 5190 | 4760 | 3.48 | 3890 - 5640 | 3460 - 6070 |
| Chromium | 163 | 154 | 3.79 | 126 - 181 | 108 - 200 |
| Cobalt | 127 | 121 | 5.07 | 101 - 141 | 90.8 - 151 |
| Copper | 57.0 | 54.9 | 4.13 | 46.1 - 63.6 | 41.1 - 68.6 |
| Iron | 15000 | 14100 | 6.27 | 8470 - 19700 | 4920 - 23200 |
| Lead | 133 | 130 | 3.00 | 107 - 152 | 93.3 - 167 |
| Magnesium | 2570 | 2320 | 3.32 | 1760 - 2880 | 1440 - 3200 |
| Manganese | 277 | 269 | 2.67 | 221 - 317 | 199 - 340 |
| Mercury | 21.6 | 20.5 | 7.72 | 14.7 - 26.3 | 12.3 - 28.6 |
| Molybdenum | 108 | 95.4 | 2.61 | 76.4 - 114 | 66.9 - 124 |
| Nickel | 58.7 | 53.9 | 4.97 | 44.5 - 63.3 | 37.7 - 70.0 |
| Potassium | 2420 | 2020 | 3.06 | 1410 - 2630 | 1190 - 2850 |
| Selenium | 181 | 167 | 5.63 | 132 - 201 | 113 - 221 |
| Silver | 35.5 | 33.6 | 5.20 | 26.8 - 40.3 | 23.0 - 44.1 |
| Sodium | 161 | 133 | 2.76 | 95.1 - 171 | 46.5 - 220 |
| Strontium | 89.7 | 87.9 | 4.59 | 71.7 - 104 | 62.8 - 113 |
| Thallium | 121 | 112 | 5.19 | 90.3 - 133 | 76.1 - 147 |



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| Parameter | Certified Value[1] | Reference Value[7] | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Tin | 83.5 | 74.0 | 5.42 | 57.6 - 90.4 | 39.7 - 108 |
| Titanium | 474 | 333 | 7.17 | 48.6 - 617 | 46.3 - 620 |
| Uranium | 51.9 | 51.9 | 3.36 | 39.6 - 64.3 | 35.9 - 68.0 |
| Vanadium | 68.1 | 62.6 | 6.00 | 49.4 - 75.8 | 37.0 - 88.3 |
| Zinc | 165 | 158 | 2.34 | 128 - 188 | 111 - 205 |



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## ANALYTICAL VERIFICATION

| Parameter | Certified Value[1] | Proficiency Testing Study | | | NIST Traceability | |
|---|---|---|---|---|---|---|
| | | Mean | Recovery[5] | n | SRM Number[6] | Recovery |
| | mg/kg | mg/kg | % | | | % |
| Aluminum | 10100 | 8130 | 80.5 | 196 | - | - |
| Antimony | 259 | 134 | 51.8 | 217 | - | - |
| Arsenic | 171 | 156 | 91.3 | 243 | - | - |
| Barium | 253 | 239 | 94.3 | 230 | - | - |
| Beryllium | 179 | 169 | 94.6 | 223 | - | - |
| Boron | 114 | 87.5 | 76.7 | 150 | - | - |
| Cadmium | 149 | 137 | 91.8 | 249 | - | - |
| Calcium | 5190 | 4760 | 91.8 | 184 | - | - |
| Chromium | 163 | 154 | 94.4 | 245 | - | - |
| Cobalt | 127 | 121 | 95.3 | 221 | - | - |
| Copper | 57.0 | 54.9 | 96.2 | 243 | - | - |
| Iron | 15000 | 14100 | 93.9 | 199 | - | - |
| Lead | 133 | 130 | 97.7 | 251 | - | - |
| Magnesium | 2570 | 2320 | 90.1 | 182 | - | - |
| Manganese | 277 | 269 | 97.2 | 220 | - | - |
| Mercury | 21.6 | 20.5 | 94.7 | 172 | - | - |
| Molybdenum | 108 | 95.4 | 88.3 | 218 | - | - |
| Nickel | 58.7 | 53.9 | 91.8 | 242 | - | - |
| Potassium | 2420 | 2020 | 83.5 | 187 | - | - |
| Selenium | 181 | 167 | 92.2 | 235 | - | - |
| Silver | 35.5 | 33.6 | 94.5 | 222 | - | - |
| Sodium | 161 | 133 | 82.7 | 177 | - | - |
| Strontium | 89.7 | 87.9 | 98.0 | 151 | - | - |
| Thallium | 121 | 112 | 92.2 | 219 | - | - |
| Tin | 83.5 | 74.0 | 88.6 | 170 | - | - |
| Titanium | 474 | 333 | 70.3 | 157 | - | - |
| Uranium | 51.9 | 51.9 | 100 | 60 | - | - |
| Vanadium | 68.1 | 62.6 | 91.9 | 213 | - | - |
| Zinc | 165 | 158 | 95.8 | 238 | - | - |



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1. The **Certified Values** are the actual gravimetric/volumetric "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$Uexpanded = k * SQRT((Uchar^2) + (Uhomogen^2) + (ULTS^2) + (USTS^2) + (URSS^2))$

Where:

Uexpanded = Expanded uncertainty.
k = Coverage factor.
Uchar = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
Uhomogen = Standard uncertainty of the homogeneity assessment.
ULTS = Standard uncertainty associated with long-term stability.
USTS = Standard uncertainty associated with short-term (transport) stability.
URSS = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this certified reference material alongside USEPA and NELAC compliant PT study materials. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and therefore, the acceptance limits of this certified reference material and any PT study material may differ relative to their difference in concentrations.

5. The **PT Performance Data** include the mean value, percent recovery and number of data points reported by laboratories in our Proficiency Testing study compared to the Certified Values. In the event this lot was not used in a proficiency testing scheme, the data displayed was generated internally by ERA.

6. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

7. The **Reference Values** are equal to the mean recoveries for the parameters as determined in an interlaboratory round robin study. The **Reference Values** represent the expected performance for the analytes in this standard. ERA recommends using the **Reference Values** when assessing or evaluating your results.

8. **Metrological Traceability**. This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

9. For additional information on this product such as intended use, storage information, instructions for use, minimum sample size, and safety information, please refer to the Product Use Instructions provided.

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.**

| Certifying Officer | Quality Officer |
|---|---|
| Brian Miller | Matthew Seebeck |



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Certified Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Metals in Soil
**Catalog Number:** 540
**Lot No.** D113-540
**Certificate Issue Date:** March 23, 2021
**Expiration Date:** October 13, 2024
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.*

## CERTIFICATION

| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Aluminum | 10100 | 8630 | 12.0 | 4420 - 12800 | 4370 - 12900 |
| Antimony | 256 | 129 | 16.8 | 0.742 - 257 | 25.6 - 323 |
| Arsenic | 91.6 | 84.5 | 15.1 | 70.0 - 99.0 | 59.2 - 110 |
| Barium | 259 | 249 | 9.94 | 206 - 292 | 187 - 311 |
| Beryllium | 175 | 163 | 3.89 | 135 - 191 | 122 - 204 |
| Boron | 95.7 | 76.7 | 12.8 | 55.7 - 97.7 | 48.0 - 107 |
| Cadmium | 107 | 99.0 | 11.5 | 82.2 - 116 | 74.2 - 124 |
| Calcium | 5190 | 4760 | 11.8 | 3890 - 5640 | 3460 - 6070 |
| Chromium | 129 | 122 | 14.6 | 101 - 144 | 85.7 - 159 |
| Cobalt | 63.6 | 61.7 | 11.5 | 51.9 - 71.6 | 46.3 - 77.2 |
| Copper | 62.3 | 61.5 | 12.3 | 51.9 - 71.0 | 46.1 - 76.8 |
| Iron | 15000 | 14500 | 15.7 | 8860 - 20100 | 5190 - 23800 |
| Lead | 122 | 123 | 13.9 | 103 - 144 | 88.3 - 158 |
| Lithium | 6.42 | 7.30 | 18.7 | 5.13 - 9.48 | 3.20 - 11.4 |
| Magnesium | 2570 | 2360 | 8.87 | 1810 - 2920 | 1480 - 3250 |
| Manganese | 470 | 456 | 13.4 | 375 - 538 | 350 - 563 |
| Mercury | 22.1 | 18.9 | 14.5 | 13.0 - 24.8 | 11.3 - 26.4 |
| Molybdenum | 80.1 | 72.8 | 11.0 | 58.7 - 87.0 | 50.5 - 95.2 |
| Nickel | 143 | 135 | 14.2 | 112 - 158 | 94.7 - 176 |
| Potassium | 2420 | 2090 | 8.21 | 1480 - 2700 | 1240 - 2940 |
| Selenium | 128 | 121 | 11.7 | 96.9 - 146 | 80.4 - 162 |
| Silver | 45.4 | 44.1 | 6.69 | 35.5 - 52.8 | 30.7 - 57.6 |
| Sodium | 161 | 136 | 9.34 | 97.4 - 174 | 48.1 - 223 |
| Strontium | 82.2 | 82.3 | 8.42 | 67.4 - 97.1 | 58.6 - 106 |



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| Parameter | Certified Value[1] | Reference Value | Uncertainty[2] | QC Performance Acceptance Limits[3] | PT Performance Acceptance Limits[4] |
|---|---|---|---|---|---|
| | mg/kg | mg/kg | % | mg/kg | mg/kg |
| Thallium | 154 | 144 | 7.54 | 117 - 171 | 101 - 187 |
| Tin | 89.7 | 79.8 | 14.0 | 62.2 - 97.4 | 43.5 - 116 |
| Titanium | 705 | 546 | 10.3 | 123 - 969 | 118 - 974 |
| Uranium | 29.5 | 30.9 | 3.38 | 23.9 - 37.9 | 21.3 - 40.5 |
| Vanadium | 196 | 186 | 14.2 | 148 - 224 | 138 - 235 |
| Zinc | 307 | 295 | 10.4 | 240 - 351 | 207 - 384 |



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# Calculation of 7470A Mercury

Calculate Mercury concentration from the daily calibration curve. The curve is generated utilizing a straight-line equation defined as:

$$A = k1 + k2C$$

Where:

A = Average peak height of the sample/standard integrations
C = Sample/Standard Concentration, µg/L
k1 = y-intercept
k2 = slope

The instrument will plot peak height against concentration (µg/L). The result is generated in µg/L . This value is divided by 1000 to convert the units to mg/L. If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

Result, mg/L = (concentration, µg/L) x ( 1mg/1000µg) x (DF)

# Calculation of 7471B Mercury

Calculate Mercury concentration from the daily calibration curve. The curve is generated utilizing a straight-line equation defined as:

$$A = k1 + k2C$$

Where:

A = Average peak height of the sample/standard integrations
C = Sample/Standard Concentration, µg/L
k1 = y-intercept
k2 = slope

The instrument will plot peak height against concentration (µg/L). The result is generated in µg/L . This value is divided by 1000 to convert the units to mg/L. If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

Result, mg/L = (concentration, µg/L) x ( 1mg/1000µg) x (DF)

The result in mg/kg is calculated on a dry weight basis using the sample weight digested(Wt), the final volume of the digestate(FV), and the percent total solids(%TS).

Result, mg/kg, wet = ((result, mg/L) x (FV)) /Wt

Result, mg/kg, dry wt = (Result, mg/kg wet)/(%TS)

| No. | Sample No. | NAME curve: WG2038787 |
|---|---|---|
| 1 | 1 | STD |
| 2 | 2 | STD |
| 3 | 3 | STD |
| 4 | 4 | STD |
| 5 | 5 | STD |
| 6 | 6 | STD |
| 1 | 7 | ICV |
| 2 | 8 | ICB |
| 3 | 9 | WG2039137-1 WG2039137 |
| 4 | 10 | WG2039137-2 WG2039137 |
| 5 | 11 | L2512193-03 WG2039137 |
| 6 | 12 | WG2039137-3 WG2039137 |
| 7 | 13 | WG2039137-4 WG2039137 |
| 8 | 14 | L2512193-04 WG2039137 |
| 9 | 15 | WG2039137-5 WG2039137 |
| 10 | 16 | WG2039137-6 WG2039137 |
| 11 | 17 | L2512193-01 WG2039137 |
| 12 | 18 | L2512193-02 WG2039137 |
| 13 | 19 | Check STD(5ug/L) |
| 14 | 20 | Check Blank |
| 15 | 21 | L2512193-05 WG2039137 |
| 16 | 22 | L2512193-06 WG2039137 |
| 17 | 23 | L2512193-07 WG2039137 |
| 18 | 24 | L2512193-08 WG2039137 |
| 19 | 25 | L2512193-09 WG2039137 |
| 20 | 26 | L2512193-10 WG2039137 |
| 21 | 27 | L2512193-11 WG2039137 |
| 22 | 28 | L2512193-12 WG2039137 |
| 23 | 29 | L2512193-13 WG2039137 |
| 24 | 30 | L2512193-14 WG2039137 |
| 25 | 31 | Check STD(5ug/L) |
| 26 | 32 | Check Blank |
| 27 | 33 | L2512193-15 WG2039137 |
| 28 | 34 | L2512193-16 WG2039137 |
| 29 | 35 | WG2039159-1 WG2039159 |
| 30 | 36 | WG2039159-2 WG2039159 |
| 31 | 37 | L2512325-02 WG2039159 |
| 32 | 38 | WG2039159-3 WG2039159 |
| 33 | 39 | WG2039159-4 WG2039159 |
| 34 | 40 | L2510781-02 WG2039159 |
| 35 | 41 | L2512325-01 WG2039159 |
| 36 | 42 | L2512325-03 WG2039159 |
| 37 | 43 | Check STD(5ug/L) |

| | | |
|---|---|---|
| 38 | 44 | Check Blank |
| 39 | 45 | L2512325-04 WG2039159 |
| 40 | 46 | L2512325-05 WG2039159 |
| 41 | 47 | L2512325-06 WG2039159 |
| 42 | 48 | L2512325-07 WG2039159 |
| 43 | 49 | L2512325-08 WG2039159 |
| 44 | 50 | L2512325-09 WG2039159 |
| 45 | 51 | WG2039055-1 WG2039055 |
| 46 | 52 | WG2039055-2 WG2039055 |
| 47 | 53 | L2512256-05 WG2039055 |
| 48 | 54 | WG2039055-3 WG2039055 |
| 49 | 55 | Check STD(5ug/L) |
| 50 | 56 | Check Blank |
| 51 | 57 | WG2039055-4 WG2039055 |
| 52 | 58 | L2512256-01 WG2039055 |
| 53 | 59 | L2512256-02 WG2039055 |
| 54 | 60 | L2512256-03 WG2039055 |
| 55 | 61 | L2512256-04 WG2039055 |
| 56 | 62 | WG2039058-1 WG2039058 |
| 57 | 63 | WG2039058-2 WG2039058 |
| 58 | 64 | L2512368-10 WG2039058 |
| 59 | 65 | WG2039058-3 WG2039058 |
| 60 | 66 | WG2039058-4 WG2039058 |
| 61 | 67 | Check STD(5ug/L) |
| 62 | 68 | Check Blank |
| 63 | 69 | L2512368-02 WG2039058 |
| 64 | 70 | WG2039058-5 WG2039058 |
| 65 | 71 | WG2039058-6 WG2039058 |
| 66 | 72 | L2512368-01 WG2039058 |
| 67 | 73 | L2512368-04 WG2039058 |
| 68 | 74 | L2512368-05 WG2039058 |
| 69 | 75 | L2512368-07 WG2039058 |
| 70 | 76 | L2512368-08 WG2039058 |
| 71 | 77 | L2512368-11 WG2039058 |
| 72 | 78 | L2512368-13 WG2039058 |
| 73 | 79 | Check STD(5ug/L) |
| 74 | 80 | Check Blank |
| 75 | 1 | L2512368-14 WG2039058 |
| 76 | 2 | L2512368-16 WG2039058 |
| 77 | 3 | L2512368-17 WG2039058 |
| 78 | 4 | L2512368-19 WG2039058 |
| 79 | 5 | L2512607-01 WG2039058 |
| 80 | 6 | L2512607-02 WG2039058 |
| 81 | 7 | L2512607-03 WG2039058 |

| | | |
|---|---|---|
| 82 | 8 | L2512607-04 WG2039058 |
| 83 | 9 | L2512607-05 WG2039058 |
| 84 | 10 | L2512607-06 WG2039058 |
| 85 | 11 | Check STD(5ug/L) |
| 86 | 12 | Check Blank |
| 87 | 13 | WG2039480-1 WG2039480 |
| 88 | 14 | WG2039480-2 WG2039480 |
| 89 | 15 | L2512180-01 WG2039480 |
| 90 | 16 | WG2039480-3 WG2039480 |
| 91 | 17 | WG2039480-4 WG2039480 |
| 92 | 18 | WG2039339-1 WG2039339 |
| 93 | 19 | WG2039339-2 WG2039339 |
| 94 | 20 | l2512267-01 WG2039339 |
| 95 | 21 | WG2039339-3 WG2039339 |
| 96 | 22 | WG2039339-4 WG2039339 |
| 97 | 23 | Check STD(5ug/L) |
| 98 | 24 | Check Blank |
| 99 | 25 | l2512182-01 WG2039339 |
| 100 | 26 | l2512248-01 WG2039339 |
| 101 | 27 | l2512261-01 WG2039339 |
| 102 | 28 | l2512265-01 WG2039339 |
| 103 | 29 | l2512272-01 WG2039339 |
| 104 | 30 | l2512288-02 WG2039339 |
| 105 | 31 | l2512439-01 WG2039339 |
| 106 | 32 | l2512628-01 WG2039339 |
| 107 | 35 | Check STD(5ug/L) |
| 108 | 36 | Check Blank |

| No. | Sample No. | NAME CURVE:WG2038787 |
|---|---|---|
| 1 | 1 | STD |
| 2 | 2 | STD |
| 3 | 3 | STD |
| 4 | 4 | STD |
| 5 | 5 | STD |
| 6 | 6 | STD |
| 1 | 7 | ICV |
| 2 | 8 | ICB |
| 3 | 9 | wg2038635-1 wg2038635 |
| 4 | 10 | wg2038635-2 wg2038635 |
| 5 | 11 | l2512195-07 wg2038635 |
| 6 | 12 | wg2038635-3 wg2038635 |
| 7 | 13 | wg2038635-4 wg2038635 |
| 8 | 14 | l2512195-08 wg2038635 |
| 9 | 15 | l2512925-09 wg2038635 |
| 10 | 17 | wg2039057-1 wg2039057 |
| 11 | 18 | wg2039057-2 wg2039057 |
| 12 | 19 | Check STD(5ug/L) |
| 13 | 20 | Check Blank |
| 14 | 21 | l2512325-02 wg2039057 |
| 15 | 22 | wg2039057-3 wg2039057 |
| 16 | 23 | wg2039057-4 wg2039057 |
| 17 | 24 | l2512325-01 wg2039057 |
| 18 | 25 | l2512325-03 wg2039057 |
| 19 | 26 | l2512325-04 wg2039057 |
| 20 | 27 | l2512325-05 wg2039057 |
| 21 | 28 | l2512325-06 wg2039057 |
| 22 | 29 | l2512325-07 wg2039057 |
| 23 | 30 | l2512325-08 wg2039057 |
| 24 | 31 | Check STD(5ug/L) |
| 25 | 32 | Check Blank |
| 26 | 33 | l2512325-09 wg2039057 |
| 27 | 34 | WG2039179-1 WG2039179 |
| 28 | 35 | WG2039179-2 WG2039179 |
| 29 | 36 | L2512316-01 WG2039179 |
| 30 | 37 | WG2039179-3 WG2039179 |
| 31 | 38 | WG2039179-4 WG2039179 |
| 32 | 39 | L2512316-02 WG2039179 |
| 33 | 40 | L2512316-03 WG2039179 |
| 34 | 41 | L2512316-04 WG2039179 |
| 35 | 42 | L2512316-05 WG2039179 |
| 36 | 43 | Check STD(5ug/L) |
| 37 | 44 | Check Blank |

| | | |
|---|---|---|
| 38 | 45 | L2512316-06 WG2039179 |
| 39 | 46 | wg2039031-1 wg2039031 |
| 40 | 47 | wg2039031-2 wg2039031 |
| 41 | 48 | l2512218-03 wg2039031 |
| 42 | 49 | wg2039031-3 wg2039031 |
| 43 | 50 | wg2039031-4 wg2039031 |
| 44 | 51 | l2512117-01 wg2039031 |
| 45 | 52 | l2512218-02 wg2039031 |
| 46 | 53 | l2512218-04 wg2039031 |
| 47 | 54 | wg2039060-1 wg2039060 |
| 48 | 55 | Check STD(5ug/L) |
| 49 | 56 | Check Blank |
| 50 | 57 | wg2039060-2 wg2039060 |
| 51 | 58 | l2512368-10 wg2039060 |
| 52 | 59 | wg2039060-3 wg2039060 |
| 53 | 60 | wg2039060-4 wg2039060 |
| 54 | 61 | l2512368-02 wg2039060 |
| 55 | 62 | wg2039060-5 wg2039060 |
| 56 | 63 | wg2039060-6 wg2039060 |
| 57 | 64 | l2512368-01 wg2039060 |
| 58 | 65 | l2512368-04 wg2039060 |
| 59 | 66 | l2512368-05 wg2039060 |
| 60 | 67 | Check STD(5ug/L) |
| 61 | 68 | Check Blank |
| 62 | 69 | l2512368-07 wg2039060 |
| 63 | 70 | l2512368-08 wg2039060 |
| 64 | 71 | l2512368-11 wg2039060 |
| 65 | 72 | l2512368-13 wg2039060 |
| 66 | 73 | l2512368-14 wg2039060 |
| 67 | 74 | l2512368-16 wg2039060 |
| 68 | 75 | l2512368-17 wg2039060 |
| 69 | 76 | l2512368-19 wg2039060 |
| 70 | 77 | l2512607-01 wg2039060 |
| 71 | 78 | l2512607-02 wg2039060 |
| 72 | 79 | Check STD(5ug/L) |
| 73 | 80 | Check Blank |
| 74 | 1 | l2512607-03 wg2039060 |
| 75 | 2 | l2512607-04 wg2039060 |
| 76 | 3 | l2512607-05 wg2039060 |
| 77 | 4 | l2512607-06 wg2039060 |
| 78 | 5 | wg2039087-1 wg2039087 |
| 79 | 6 | wg2039087-2 wg2039087 |
| 80 | 7 | L2510194-04 wg2039087 |
| 81 | 8 | wg2039087-3 wg2039087 |

| | | |
|---|---|---|
| 82 | 9 | wg2039087-4 wg2039087 |
| 83 | 10 | L2510194-01 wg2039087 |
| 84 | 11 | Check STD(5ug/L) |
| 85 | 12 | Check Blank |
| 86 | 13 | L2510194-05 wg2039087 |
| 87 | 14 | L2510194-08 wg2039087 |
| 88 | 15 | WG2039473-1 WG2039473 |
| 89 | 16 | WG2039473-2 WG2039473 |
| 90 | 17 | L2511511-03 WG2039473 |
| 91 | 18 | WG2039473-3 WG2039473 |
| 92 | 19 | WG2039473-4 WG2039473 |
| 93 | 20 | WG2039477-1 WG2039477 |
| 94 | 21 | WG2039477-2 WG2039477 |
| 95 | 22 | l2513345-01 WG2039477 |
| 96 | 23 | Check STD(5ug/L) |
| 97 | 24 | Check Blank |
| 98 | 25 | WG2039477-3 WG2039477 |
| 99 | 26 | WG2039477-4 WG2039477 |
| 100 | 27 | Check STD(5ug/L) |
| 101 | 28 | Check Blank |
| 102 | 29 | wg2039529-1 wg2039529 |
| 103 | 30 | wg2039529-2 wg2039529 |
| 104 | 31 | l2512738-01 wg2039529 |
| 105 | 32 | wg2039529-3 wg2039529 |
| 106 | 33 | wg2039529-4 wg2039529 |
| 107 | 34 | l2513827-01 wg2039529 |
| 108 | 35 | Check STD(5ug/L) |
| 109 | 36 | Check Blank |
| 110 | 37 | l2512738-02 wg2039529 |
| 111 | 38 | l2512738-03 wg2039529 |
| 112 | 39 | l2513174-10 wg2039529 |
| 113 | 40 | l2513372-01 wg2039529 |

# METALS ELN REPORT

**Workgroup: WG2039058**

## Digestion

| Prep Method | Acid Type 1 | Acid 1 Lot | Acid Type 2 | Acid 2 Lot | Spike Type | Lims Spike Lot | Spike Lot | Post Spike Spikelot | Spike Lot | Pipette Id |
|---|---|---|---|---|---|---|---|---|---|---|
| EPA 245.1 | HNO3 | 24015917 | H2SO4 | 24016430 | METALS | METSPIKE | HG25080616 10NRS | METSPIKE | HG25080616 10NRS | 320, 344 |

| | | |
|---|---|---|
| **Additional Reagent/Std** | K2O8S2 | PS2509061645NRS |
| | KMnO4 | PP25010101205NRS |
| | NaCl-NH2OH.HCl | HH2509071510MJR |
| | | ICV2508241205CME |

| **Sample/ Type** | Digestion Date | Analyst | Lab Filtration Date | Sample Vol **ml** | Spike Amt | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | **Comments** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| L2512368-01 SAMP | 03/11/25 12:04 | Aidan Martin | NA | 25 | | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| L2512368-02 SAMP | 03/11/25 12:04 | Aidan Martin | NA | 25 | | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| L2512368-04 SAMP | 03/11/25 12:04 | Aidan Martin | NA | 25 | | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| L2512368-05 SAMP | 03/11/25 12:04 | Aidan Martin | NA | 25 | | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| L2512368-07 SAMP | 03/11/25 12:04 | Aidan Martin | NA | 25 | | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| L2512368-08 SAMP | 03/11/25 12:04 | Aidan Martin | NA | 25 | | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| L2512368-10 SAMP | 03/11/25 12:04 | Aidan Martin | NA | 25 | | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| L2512368-11 SAMP | 03/11/25 12:04 | Aidan Martin | NA | 25 | | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |



Reported: 12-MAR-25 02:59 PM

# METALS ELN REPORT

**Workgroup: WG2039058**

| Sample/ Type | Digestion Date | Analyst | Lab Filtration Date | Sample Vol Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| L2512368-13 SAMP | 03/11/25 12:04 | Aidan Martin | NA | 25 | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| L2512368-14 SAMP | 03/11/25 12:04 | Aidan Martin | NA | 25 | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| L2512368-16 SAMP | 03/11/25 12:04 | Aidan Martin | NA | 25 | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| L2512368-17 SAMP | 03/11/25 12:04 | Aidan Martin | NA | 25 | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| L2512368-19 SAMP | 03/11/25 12:04 | Aidan Martin | NA | 25 | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| L2512607-01 SAMP | 03/11/25 20:37 | Maisie Mcqueen | NA | 25 | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| L2512607-02 SAMP | 03/11/25 20:37 | Maisie Mcqueen | NA | 25 | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| L2512607-03 SAMP | 03/11/25 20:37 | Maisie Mcqueen | NA | 25 | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| L2512607-04 SAMP | 03/11/25 20:37 | Maisie Mcqueen | NA | 25 | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| L2512607-05 SAMP | 03/11/25 20:37 | Maisie Mcqueen | NA | 25 | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| L2512607-06 SAMP | 03/11/25 20:37 | Maisie Mcqueen | NA | 25 | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| WG2039058-1 BLANK | 03/11/25 12:04 | Aidan Martin | NA | 25 | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | ELN: ADG |



Reported: 12-MAR-25 02:59 PM

# METALS ELN REPORT

**Workgroup: WG2039058**

| Sample/ Type | Digestion Date | Analyst | Lab Filtration Date | Sample Vol | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WG2039058-2 LCS | 03/11/25 12:04 | Aidan Martin | NA | 25 | 0.25 | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| WG2039058-3 MS | 03/11/25 12:04 | Aidan Martin | NA | 25 | 1.25 | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| WG2039058-4 MSD | 03/11/25 12:04 | Aidan Martin | NA | 25 | 1.25 | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| WG2039058-5 MS | 03/11/25 12:04 | Aidan Martin | NA | 25 | 1.25 | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| WG2039058-6 DUP | 03/11/25 12:04 | Aidan Martin | NA | 25 | | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |

| Reagent | Actual Volume | Units |
|---|---|---|
| Sulfuric Acid (H2SO4) | 1.25 | ml |
| Nitric Acid (HNO3) | .625 | ml |
| Potassium Permanganat | 3.75 | ml |
| Potassium Persulfate (K | 2 | ml |
| NaCl-Hydroxylamine Hy | 1.5 | ml |



Reported: 12-MAR-25 02:59 PM

# METALS ELN REPORT

**Workgroup: WG2039060**

## Digestion

| Prep Method | Acid Type 1 | Acid 1 Lot | Acid Type 2 | Acid 2 Lot | Spike Type | Lims Spike Lot | Spike Lot | Post Spike Spikelot | Spike Lot | Pipette Id |
|---|---|---|---|---|---|---|---|---|---|---|
| EPA 245.1 | HNO3 | 24015917 | H2SO4 | 24016430 | METALS | METSPIKE | HG25080616 10NRS | METSPIKE | HG25080616 10NRS | 320, 344 |

| | | |
|---|---|---|
| **Additional Reagent/Std** | K2O8S2 | PS2509061645NRS |
| | KMnO4 | PP25010101205NRS |
| | NaCl-NH2OH.HCl | HH2509071510MJR |
| | | ICV2508241205CME |

| **Sample/ Type** | Digestion Date | Analyst | Sample Vol **ml** | Spike Amt **ml** | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | **Comments** |
|---|---|---|---|---|---|---|---|---|---|---|
| L2512368-01 SAMP | 03/11/25 20:37 | Maisie Mcqueen | 25 | | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| L2512368-02 SAMP | 03/11/25 20:37 | Maisie Mcqueen | 25 | | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| L2512368-04 SAMP | 03/11/25 20:37 | Maisie Mcqueen | 25 | | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| L2512368-05 SAMP | 03/11/25 20:37 | Maisie Mcqueen | 25 | | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| L2512368-07 SAMP | 03/11/25 20:37 | Maisie Mcqueen | 25 | | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| L2512368-08 SAMP | 03/11/25 20:37 | Maisie Mcqueen | 25 | | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| L2512368-10 SAMP | 03/11/25 20:37 | Maisie Mcqueen | 25 | | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| L2512368-11 SAMP | 03/11/25 20:37 | Maisie Mcqueen | 25 | | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |



Reported: 12-MAR-25 02:59 PM

# METALS ELN REPORT

**Workgroup: WG2039060**

| Sample/ Type | Digestion Date | Analyst | Sample Vol ml | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| L2512368-13 SAMP | 03/11/25 20:37 | Maisie Mcqueen | 25 | | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| L2512368-14 SAMP | 03/11/25 20:37 | Maisie Mcqueen | 25 | | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| L2512368-16 SAMP | 03/11/25 20:37 | Maisie Mcqueen | 25 | | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| L2512368-17 SAMP | 03/11/25 20:37 | Maisie Mcqueen | 25 | | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| L2512368-19 SAMP | 03/11/25 20:37 | Maisie Mcqueen | 25 | | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| L2512607-01 SAMP | 03/11/25 12:04 | Maisie Mcqueen | 25 | | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| L2512607-02 SAMP | 03/11/25 12:04 | Maisie Mcqueen | 25 | | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| L2512607-03 SAMP | 03/11/25 12:04 | Maisie Mcqueen | 25 | | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| L2512607-04 SAMP | 03/11/25 12:04 | Maisie Mcqueen | 25 | | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| L2512607-05 SAMP | 03/11/25 12:04 | Maisie Mcqueen | 25 | | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| L2512607-06 SAMP | 03/11/25 12:04 | Maisie Mcqueen | 25 | | 03/11/25 12:04 | 5 | 94.1 | 03/11/25 14:05 | 25 | |
| WG2039060-1 BLANK | 03/11/25 20:37 | Maisie Mcqueen | 25 | | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | ELN: ndd |



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# METALS ELN REPORT

**Workgroup: WG2039060**

| Sample/ Type | Digestion Date | Analyst | Sample Vol ml | Spike Amt ml | Start Date/Time | Hot Block Unit | Temperature (C) | Stop Date/Time | Final Vol | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| WG2039060-2 LCS | 03/11/25 20:37 | Maisie Mcqueen | 25 | 0.25 | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| WG2039060-3 MS | 03/11/25 20:37 | Maisie Mcqueen | 25 | 1.25 | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| WG2039060-4 MSD | 03/11/25 20:37 | Maisie Mcqueen | 25 | 1.25 | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| WG2039060-5 MS | 03/11/25 20:37 | Maisie Mcqueen | 25 | 1.25 | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |
| WG2039060-6 DUP | 03/11/25 20:37 | Maisie Mcqueen | 25 | | 03/11/25 20:37 | 5 | 94.0 | 03/11/25 22:37 | 25 | |

| Reagent | Actual Volume | Units |
|---|---|---|
| Sulfuric Acid (H2SO4) | 1.25 | ml |
| Nitric Acid (HNO3) | .625 | ml |
| Potassium Permanganat | 3.75 | ml |
| Potassium Persulfate (K | 2 | ml |
| NaCl-Hydroxylamine Hy | 1.5 | ml |



Reported: 12-MAR-25 02:59 PM

# ATTACHMENT I


P.W. GROSSER CONSULTING, INC • P.W. GROSSER CONSULTING ENGINEER & HYDROGEOLOGIST, PC
631.589.6353 • WWW.PWGROSSER.COM • PWGC.INFO@PWGROSSER.COM
BOHEMIA • MANHATTAN • SARATOGA SPRINGS • MONTICELLO • SYRACUSE • SHELTON, CT

# Wet Chemistry

# Total Nitrogen Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-01 | Date Collected | : 03/04/25 14:43 |
| Client ID | : 2A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 13:39 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 107,- | Analyst | : JRO |
| Lab File ID | : WG2039178.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Total Nitrogen | 0.51 | 0.30 | 0.30 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-02 | Date Collected | : 03/04/25 14:40 |
| Client ID | : 2B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 13:39 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 107,- | Analyst | : JRO |
| Lab File ID | : WG2039178.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Total Nitrogen | ND | 0.30 | 0.30 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-04 | Date Collected | : 03/04/25 12:25 |
| Client ID | : 3A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 13:39 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 107,- | Analyst | : JRO |
| Lab File ID | : WG2039178.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Total Nitrogen | ND | 0.30 | 0.30 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-05 | Date Collected | : 03/04/25 12:45 |
| Client ID | : 3B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 13:39 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 107,- | Analyst | : JRO |
| Lab File ID | : WG2039178.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Total Nitrogen | ND | 0.30 | 0.30 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-07 | Date Collected | : 03/04/25 09:25 |
| Client ID | : 4A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 13:39 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 107,- | Analyst | : JRO |
| Lab File ID | : WG2039178.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Total Nitrogen | 0.42 | 0.30 | 0.30 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-08 | Date Collected | : 03/04/25 10:10 |
| Client ID | : 4B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 13:39 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 107,- | Analyst | : JRO |
| Lab File ID | : WG2039178.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Total Nitrogen | ND | 0.30 | 0.30 | U |

# Sample Raw Data

PACE ANALYTICAL LABS

# WET CHEMISTRY DEPARTMENT

TOTAL NITROGEN

Last Change 3/5/13 GFF
File tnitrogen.xlt

**Sample #:** _____

**Client:** _____

**Analysis:** **Total Nitrogen**

**Method:** *Calculation from TKN & NO3/NO2*

**Product:** **TNITROGEN**
**Analyte:** **Total Nitrogen,**
**Analysis Date:** 3/11/2025 13:39
**Technician:** JRO
**Work group:** WG2039178
**RL:** **0.3 mg/L**

| | Sample Number | TKN (mg/L) | NO3/NO2 (mg/L) | RL Multiplier | Result (mg/L) |
|---|---|---|---|---|---|
| SAMP | L2511638-02 | 2.14 | 0.2 | 1.0 | 2.34 |
| SAMP | L2511640-01 | 1.33 | 35.16 | 5.0 | 35.16 |
| SAMP | L2511645-01 | 26.6 | 0.69 | 10.0 | 27.29 |
| SAMP | L2511645-02 | 2.39 | 4 | 1.0 | 6.39 |
| | L2511733-01 | 114 | 9.3 | 20.0 | 123.3 |
| | L2511745-01 | 27.9 | 0.066 | 10.0 | 27.9 |
| SAMP | L2511919-01 | 0.508 | 0.084 | 1.0 | 0.508 |
| SAMP | L2511919-02 | 0.108 | 0 | 1.0 | 0.108 |
| SAMP | L2511919-04 | 0.083 | 0 | 1.0 | 0.083 |
| SAMP | L2511919-05 | 0.155 | 0.075 | 1.0 | 0.23 |
| SAMP | L2511919-07 | 0 | 0.42 | 1.0 | 0.42 |
| SAMP | L2511919-08 | 0 | 0.17 | 1.0 | 0.17 |
| SAMP | L2511932-01 | 1.32 | 0.078 | 1.0 | 1.32 |
| SAMP | L2511932-02 | 0.724 | 0.086 | 1.0 | 0.724 |
| | L2511944-01 | 0.131 | 0.37 | 1.0 | 0.37 |
| | L2511944-02 | 0 | 1.2 | 1.0 | 1.2 |
| | L2511944-03 | 0.0849 | 0.048 | 1.0 | 0.1329 |
| | L2511944-04 | 0 | 5.2 | 1.0 | 5.2 |
| | L2511944-05 | 0.0697 | 2.4 | 1.0 | 2.4 |
| | L2511944-06 | 0 | 0.86 | 1.0 | 0.86 |
| | L2511944-07 | 0 | 1.6 | 1.0 | 1.6 |
| | L2511944-08 | 0 | 0.86 | 1.0 | 0.86 |
| | L2511944-09 | 0 | 0 | 1.0 | 0 |
| | | | | | |

# Calculations of Total Nitrogen

Calculate the concentration value based on results for TKN-N and N03/NO2-N.

Aqueous samples:

mgTN-N/L = TKN-N(mg/l) + NO3/NO2-N (mg/l)

Soil samples:

mgTN-N/Kg = TKN-N(mg/Kg) + NO3/NO2-N(mg/Kg)

# Total Kjeldahl Nitrogen Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-01 | Date Collected | : 03/04/25 14:43 |
| Client ID | : 2A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 19:05 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NH3-H | Analyst | : AT |
| Lab File ID | : NH320250310-D | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/08/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | 0.508 | 0.300 | 0.066 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-02 | Date Collected | : 03/04/25 14:40 |
| Client ID | : 2B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 19:06 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NH3-H | Analyst | : AT |
| Lab File ID | : NH320250310-D | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/08/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | 0.108 | 0.300 | 0.066 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-04 | Date Collected | : 03/04/25 12:25 |
| Client ID | : 3A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 19:07 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NH3-H | Analyst | : AT |
| Lab File ID | : NH320250310-D | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/08/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | 0.083 | 0.300 | 0.066 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-05 | Date Collected | : 03/04/25 12:45 |
| Client ID | : 3B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 19:08 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NH3-H | Analyst | : AT |
| Lab File ID | : NH320250310-D | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/08/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | 0.155 | 0.300 | 0.066 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-07 | Date Collected | : 03/04/25 09:25 |
| Client ID | : 4A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 19:09 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NH3-H | Analyst | : AT |
| Lab File ID | : NH320250310-D | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/08/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | ND | 0.300 | 0.066 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-08 | Date Collected | : 03/04/25 10:10 |
| Client ID | : 4B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 19:10 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NH3-H | Analyst | : AT |
| Lab File ID | : NH320250310-D | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/08/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | ND | 0.300 | 0.066 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038099-1 | Date Collected | : NA |
| Client ID | : WG2038099-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/10/25 18:51 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NH3-H | Analyst | : AT |
| Lab File ID | : NH320250310-D | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/08/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | ND | 0.300 | 0.022 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038099-3 | Date Collected | : 03/07/25 03:30 |
| Client ID | : WG2038099-3 DUP | Date Received | : 03/07/25 |
| Sample Location | : | Date Analyzed | : 03/10/25 19:17 |
| Sample Matrix | : WATER | Dilution Factor | : 10 |
| Analytical Method | : 121,4500NH3-H | Analyst | : AT |
| Lab File ID | : NH320250310-D | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/08/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | 44.8 | 3.00 | 0.660 | |

# Sample Raw Data

Author: A1WETCHEMINSTRUMENT

Date : 3/10/2025

Original Run Filename: OM_3-10-2025_09-49-57AM.OMN Created: 3/10/2025 9:49:57 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_3-10-2025_09-49-57AM.OMN Last Modified: 3/10/2025 10:42:13 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY A

| Sample | Rep. | Cup No. | Channel 2 Ammonia (mg N/L) | ADF | MDF | Weight | |
|---|---|---|---|---|---|---|---|
| STD 1 | 1 | S1 | 10.00000 | | | | |
| STD 2 | 1 | S2 | 8.00000 | | | | |
| STD 3 | 1 | S3 | 4.00000 | | | | |
| STD 4 | 1 | S4 | 2.00000 | | | | |
| STD 5 | 1 | S5 | 1.00000 | | | | |
| STD 6 | 1 | S6 | 0.40000 | | | | |
| STD 7 | 1 | S7 | 0.20000 | | | | |
| STD 8 | 1 | S8 | 0.10000 | | | | |
| STD 9 | 1 | S9 | 0.05000 | | | | |
| STD 10 | 1 | S10 | 0.00000 | | | | |
| CCV 0.4000 | 1 | S6 | 0.36122 | | | | 90% |
| | Known Conc: | | 100.00000 | | | | |
| | Calibration: | | Table/Fig. : 1 | | | | |
| CCV 4.0000 | 1 | S3 | 3.92303 | | | | 98% |
| | Known Conc: | | 100.00000 | | | | |
| CCB | 1 | S10 | 0.00524 | | | | |
| | Known Conc: | | 100.00000 | | | | |
| HI ICV 8.0 | 1 | 1 | 8.25082 | | | | 103% |
| LO ICV 1.0 | 1 | 2 | 0.97234 | | | | 97% |
| ICB | 1 | 3 | -0.00376 | | | | |
| WG2037825-1 T | 1 | 4 | 0.06713 | | | | |
| WG2037825-2 T | 1 | 5 | 37.20628 | | 15.00 | | 93% |
| LCS LO T | 1 | 6 | 3.86709 | | 3.00 | | 97% |
| L2511624-02 T | 1 | 7 | 1.38134 | | 3.00 | | |
| WG2037825-3 T | 1 | 8 | 1.20986 | | 3.00 | | RPD=13% |
| WG2037825-4 T | 1 | 9 | 10.16573 | | 3.00 | | 110% |
| L2511668-02 T | 1 | 10 | 0.42637 | | 3.00 | | |
| CCV 0.4000 | 1 | S6 | 0.37854 | | | | 95% |
| | Known Conc: | | 100.00000 | | | | |
| CCV 4.0000 | 1 | S3 | 3.92679 | | | | 98% |
| | Known Conc: | | 100.00000 | | | | |
| CCB | 1 | S10 | 0.00339 | | | | |
| | Known Conc: | | 100.00000 | | | | |
| L2512131-01 T | 1 | 11 | 1.12778 | | 3.00 | | |
| L2512132-01 T | 1 | 12 | 2.64514 | | 3.00 | | |
| L2512155-01 T | 1 | 13 | 1.34928 | | 3.00 | | |
| L2512156-01 T | 1 | 14 | 1.13279 | | 3.00 | | |
| L2512301-01 T | 1 | 15 | 2.63399 | | 3.00 | | |
| L2512301-02 T | 1 | 16 | 4.08135 | | 3.00 | | |
| L2512301-03 T | 1 | 17 | 4.08301 | | 3.00 | | |
| L2512301-04 T | 1 | 18 | 2.24213 | | 3.00 | | |
| L2512347-01 T | 1 | 19 | 0.44099 | | 3.00 | | |
| L2512347-02 T | 1 | 20 | 1.05187 | | 3.00 | | |
| CCV 0.4000 | 1 | S6 | 0.37287 | | | | 93% |
| | Known Conc: | | 100.00000 | | | | |
| CCV 4.0000 | 1 | S3 | 3.92554 | | | | 98% |
| | Known Conc: | | 100.00000 | | | | |
| CCB | 1 | S10 | 0.00226 | | | | |
| | Known Conc: | | 100.00000 | | | | |
| L2512348-01 T | 1 | 21 | 3.27956 | | 3.00 | | |
| X L2512686-01 T | 1 | 22 | 32.79265 | | 3.00 | | |
| ~~sample~~ | ~~1~~ | ~~4~~ | ~~0.09973~~ | | | | |
| L2512686-01 T; 10X | 1 | 22 | 29.44163 | | 30.00 | | |
| CCV 0.4000 | 1 | S6 | 0.37127 | | | | 93% |
| | Known Conc: | | 100.00000 | | | | |
| CCV 4.0000 | 1 | S3 | 3.93923 | | | | 98% |
| | Known Conc: | | 100.00000 | | | | |
| CCB | 1 | S10 | 0.00203 | | | | |
| | Known Conc: | | 100.00000 | | | | |

Channel 2 (Ammonia High) - Current View

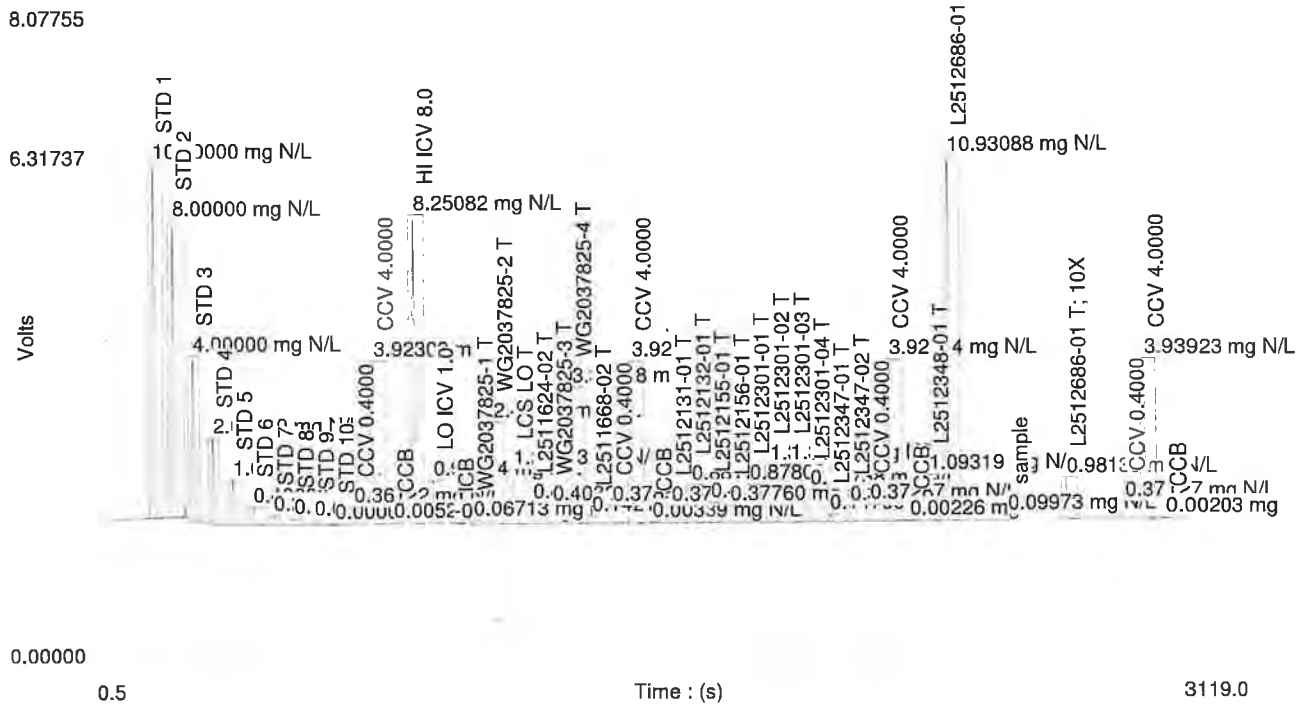


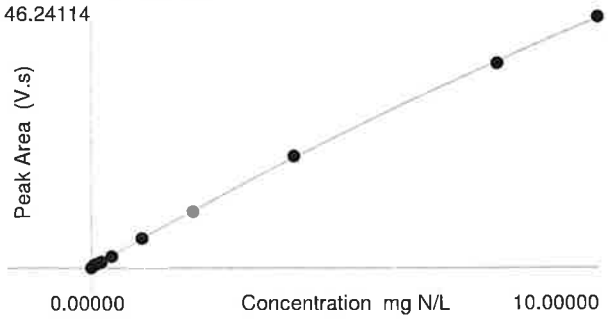

Table : 1 (Ammonia)

| | Known Conc. (mg N/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg N/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10.00000 | 1 | 46.24114 | 4.49297 | 0.0 | -0.4 | 10.02741 | 3/10/2025 | 9:51:57 AM |
| 2 | 8.00000 | 1 | 37.72449 | 3.76252 | 0.0 | 0.9 | 7.94154 | 3/10/2025 | 9:52:54 AM |
| 3 | 4.00000 | 1 | 20.57066 | 2.06206 | 0.0 | -1.4 | 4.06206 | 3/10/2025 | 9:53:52 AM |
| 4 | 2.00000 | 1 | 10.41704 | 1.07860 | 0.0 | 0.9 | 1.96836 | 3/10/2025 | 9:54:49 AM |
| 5 | 1.00000 | 1 | 5.45350 | 0.56359 | 0.0 | -1.0 | 0.99969 | 3/10/2025 | 9:55:46 AM |
| 6 | 0.40000 | 1 | 2.13200 | 0.21788 | 0.0 | 5.6 | 0.37159 | 3/10/2025 | 9:56:44 AM |
| 7 | 0.20000 | 1 | 1.09061 | 0.11140 | 0.0 | 9.0 | 0.17798 | 3/10/2025 | 9:57:42 AM |
| 8 | 0.10000 | 1 | 0.70972 | 0.07158 | 0.0 | -6.4 | 0.10757 | 3/10/2025 | 9:58:41 AM |
| 9 | 0.05000 | 1 | 0.51629 | 0.05112 | 0.0 | -28.9 | 0.07189 | 3/10/2025 | 9:59:39 AM |
| 10 | 0.00000 | 1 | 0.03659 | 0.00390 | | | -0.01636 | 3/10/2025 | 10:00:35 AM |

Author: A1WETCHEMINSTRUMENT

Date : 3/10/2025

Figure : 1 (Ammonia)




Area = - 0.07471 * Conc^2 + 5.33937 * Conc + 0.13369
Conc = 0.00073 * Area^2 + 0.18356 * Area - 0.02308
Correlation Coefficient (r) = 0.99996

Weighting : 1/x

Author: A1WETCHEMINSTRUMENT

Date : 3/10/2025

Original Run Filename: OM_3-10-2025_10-45-18AM.OMN Created: 3/10/2025 10:45:18 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_3-10-2025_10-45-18AM.OMN Last Modified: 3/10/2025 11:15:41 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

| | Sample | Rep. | Cup No. | Channel 2 Ammonia (mg N/L) | ADF | MDF | Weight | TRAY B |
|---|---|---|---|---|---|---|---|---|
| | CCV 0.4000 | 1 | S6 | 0.37354 | | | | 93% |
| | | Known Conc: | | 100.00000 | | | | |
| | | Calibration: | | Table/Fig. : 1 | | | | |
| | CCV 4.0000 | 1 | S3 | 4.00171 | | | | 100% |
| | | Known Conc: | | 100.00000 | | | | |
| | CCB | 1 | S10 | 0.00167 | | | | |
| | | Known Conc: | | 100.00000 | | | | |
| | WG2037968-1 | 1 | 1 | -0.01673 | | 1.50 | | |
| | WG2037968-2 | 1 | 2 | 19.57262 | | 7.50 | | 98% |
| | LCS LO | 1 | 3 | 1.89513 | | 1.50 | | 95% |
| X | L2511150-02 | 1 | 4 | 20.48609 | | 1.50 | | |
| X | L2511152-01 | 1 | 5 | 7.94751 | | 1.50 | | |
| X | L2511912-01 | 1 | 6 | 0.75781 | | 1.50 | | RERUN |
| X | WG2037968-3 | 1 | 7 | 0.59925 | | 1.50 | | RERUN |
| | WG2037968-4 | 1 | 8 | 5.10410 | | 1.50 | | 114% |
| | L2511912-02 | 1 | 9 | 0.30211 | | 1.50 | | |
| | L2511912-03 | 1 | 10 | 0.35309 | | 1.50 | | |
| | CCV 0.4000 | 1 | S6 | 0.38287 | | | | 96% |
| | | Known Conc: | | 100.00000 | | | | |
| | CCV 4.0000 | 1 | S3 | 4.00538 | | | | 100% |
| | | Known Conc: | | 100.00000 | | | | |
| | CCB | 1 | S10 | 0.00465 | | | | |
| | | Known Conc: | | 100.00000 | | | | |
| | L2511912-01 | 1 | 6 | 0.56136 | | 1.50 | | |
| | WG2037968-3 | 1 | 7 | 0.57531 | | 1.50 | | RPD=2% |
| | L2511912-04 | 1 | 11 | 0.03171 | | 1.50 | | |
| | L2511912-05 | 1 | 12 | 0.17800 | | 1.50 | | |
| | L2511912-06 | 1 | 13 | 0.22007 | | 1.50 | | |
| | L2511912-07 | 1 | 14 | -0.00673 | | 1.50 | | |
| | L2511912-08 | 1 | 15 | 0.01879 | | 1.50 | | |
| | L2511152-01 | 1 | 5 | 7.48035 | | 1.50 | | |
| | L2511150-02; 10X | 1 | 4 | 19.91206 | | 15.00 | | |
| | CCV 0.4000 | 1 | S6 | 0.38408 | | | | 96% |
| | | Known Conc: | | 100.00000 | | | | |
| | CCV 4.0000 | 1 | S3 | 3.98329 | | | | 100% |
| | | Known Conc: | | 100.00000 | | | | |
| | CCB | 1 | S10 | 0.00343 | | | | |
| | | Known Conc: | | 100.00000 | | | | |

Author: A1WETCHEMINSTRUMENT

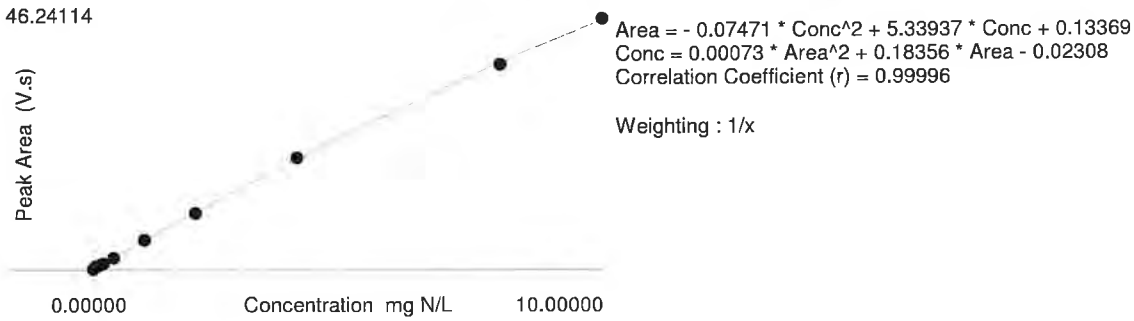
Date : 3/10/2025

Channel 2 (Ammonia High) - Current View

Table : 1 (Ammonia)

| | Known Conc. (mg N/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg N/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10.00000 | 1 | 46.24114 | 4.49297 | 0.0 | -0.4 | 10.02741 | 3/10/2025 | 9:51:57 AM |
| 2 | 8.00000 | 1 | 37.72449 | 3.76252 | 0.0 | 0.9 | 7.94154 | 3/10/2025 | 9:52:54 AM |
| 3 | 4.00000 | 1 | 20.57066 | 2.06206 | 0.0 | -1.4 | 4.06206 | 3/10/2025 | 9:53:52 AM |
| 4 | 2.00000 | 1 | 10.41704 | 1.07860 | 0.0 | 0.9 | 1.96836 | 3/10/2025 | 9:54:49 AM |
| 5 | 1.00000 | 1 | 5.45350 | 0.56359 | 0.0 | -1.0 | 0.99969 | 3/10/2025 | 9:55:46 AM |
| 6 | 0.40000 | 1 | 2.13200 | 0.21788 | 0.0 | 5.6 | 0.37159 | 3/10/2025 | 9:56:44 AM |
| 7 | 0.20000 | 1 | 1.09061 | 0.11140 | 0.0 | 9.0 | 0.17798 | 3/10/2025 | 9:57:42 AM |
| 8 | 0.10000 | 1 | 0.70972 | 0.07158 | 0.0 | -6.4 | 0.10757 | 3/10/2025 | 9:58:41 AM |
| 9 | 0.05000 | 1 | 0.51629 | 0.05112 | 0.0 | -28.9 | 0.07189 | 3/10/2025 | 9:59:39 AM |
| 10 | 0.00000 | 1 | 0.03659 | 0.00390 | | | -0.01636 | 3/10/2025 | 10:00:35 AM |

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT

Date : 3/10/2025

Original Run Filename: OM_3-10-2025_02-05-17PM.OMN Created: 3/10/2025 2:05:17 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_3-10-2025_02-05-17PM.OMN Last Modified: 3/10/2025 2:46:07 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

| | Sample | Rep. | Cup No. | Channel 2 Ammonia (mg N/L) | ADF | MDF | Weight | TRAY C |
|---|---|---|---|---|---|---|---|---|
| | CCV 0.4000 | 1 | S6 | 0.39791 | | | | 99% |
| | | Known Conc: | | 100.00000 | | | | |
| | CCV 4.0000 | 1 | S3 | 4.12600 | | | | 103% |
| | | Known Conc: | | 100.00000 | | | | |
| | | Calibration: | | Table/Fig. : 1 | | | | |
| | CCB | 1 | S10 | 0.00327 | | | | |
| | | Known Conc: | | 100.00000 | | | | |
| WG2038106 | WG2038104-1 | 1 | 1 | -0.01189 | | 1.50 | | |
| | WG2038104-2 | 1 | 2 | 19.97884 | | 7.50 | | 100% |
| | LCS LO | 1 | 3 | 1.95981 | | 1.50 | | 98% |
| | L2511986-01 | 1 | 4 | 0.04174 | | 1.50 | | |
| | L2511986-02 | 1 | 5 | 0.00299 | | 1.50 | | |
| | L2511986-03 | 1 | 6 | -0.01992 | | 1.50 | | |
| | L2511986-04 | 1 | 7 | -0.00744 | | 1.50 | | |
| | L2511992-01 | 1 | 8 | 8.35613 | | 7.50 | | |
| | L2512301-01 | 1 | 9 | 1.32435 | | 1.50 | | |
| | L2512301-02 | 1 | 10 | 0.84183 | | 7.50 | | |
| | CCV 0.4000 | 1 | S6 | 0.38613 | | | | 97% |
| | | Known Conc: | | 100.00000 | | | | |
| | CCV 4.0000 | 1 | S3 | 4.11614 | | | | 103% |
| | | Known Conc: | | 100.00000 | | | | |
| | CCB | 1 | S10 | 0.00807 | | | | |
| | | Known Conc: | | 100.00000 | | | | |
| | L2512301-03 | 1 | 11 | 0.11139 | | 3.00 | | |
| | L2512301-04 | 1 | 12 | 0.98158 | | 3.00 | | |
| | L2512942-02 | 1 | 13 | 2.28196 | | 3.00 | | |
| | WG2038104-3 | 1 | 14 | 2.55440 | | 3.00 | | RPD=11% |
| | WG2038104-4 | 1 | 15 | 12.11812 | | 3.00 | | 123% |
| | L2511911-02 | 1 | 16 | 6.01552 | | 1.50 | | |
| | L2511911-03 | 1 | 17 | 0.56408 | | 7.50 | | |
| | L2512197-01 | 1 | 18 | 0.01881 | | 1.50 | | |
| | L2512197-02 | 1 | 19 | 0.03583 | | 1.50 | | |
| | L2512197-03 | 1 | 20 | 0.01126 | | 1.50 | | |
| | CCV 0.4000 | 1 | S6 | 0.38823 | | | | 97% |
| | | Known Conc: | | 100.00000 | | | | |
| | CCV 4.0000 | 1 | S3 | 4.08344 | | | | 102% |
| | | Known Conc: | | 100.00000 | | | | |
| | CCB | 1 | S10 | 0.00839 | | | | |
| | | Known Conc: | | 100.00000 | | | | |
| | WG2038106-3 | 1 | 26 | 0.02461 | | 1.50 | | |
| | L2512197-08 | 1 | 27 | 0.02518 | | 1.50 | | RPD=NC |
| | WG2038106-4 | 1 | 25 | 4.66327 | | 1.50 | | 117% |
| | L2512197-04 | 1 | 21 | 0.09239 | | 1.50 | | |
| | L2512197-05 | 1 | 22 | -0.01820 | | 1.50 | | |
| | L2512197-06 | 1 | 23 | -0.01568 | | 1.50 | | |
| | L2512197-07 | 1 | 24 | -0.01810 | | 1.50 | | |
| | CCV 0.4000 | 1 | S6 | 0.37782 | | | | 94% |
| | | Known Conc: | | 100.00000 | | | | |
| | CCV 4.0000 | 1 | S3 | 4.08608 | | | | 102% |
| | | Known Conc: | | 100.00000 | | | | |
| | CCB | 1 | S10 | 0.00912 | | | | |
| | | Known Conc: | | 100.00000 | | | | |

Author: A1WETCHEMINSTRUMENT

Date : 3/10/2025

Channel 2 (Ammonia High) - Current View

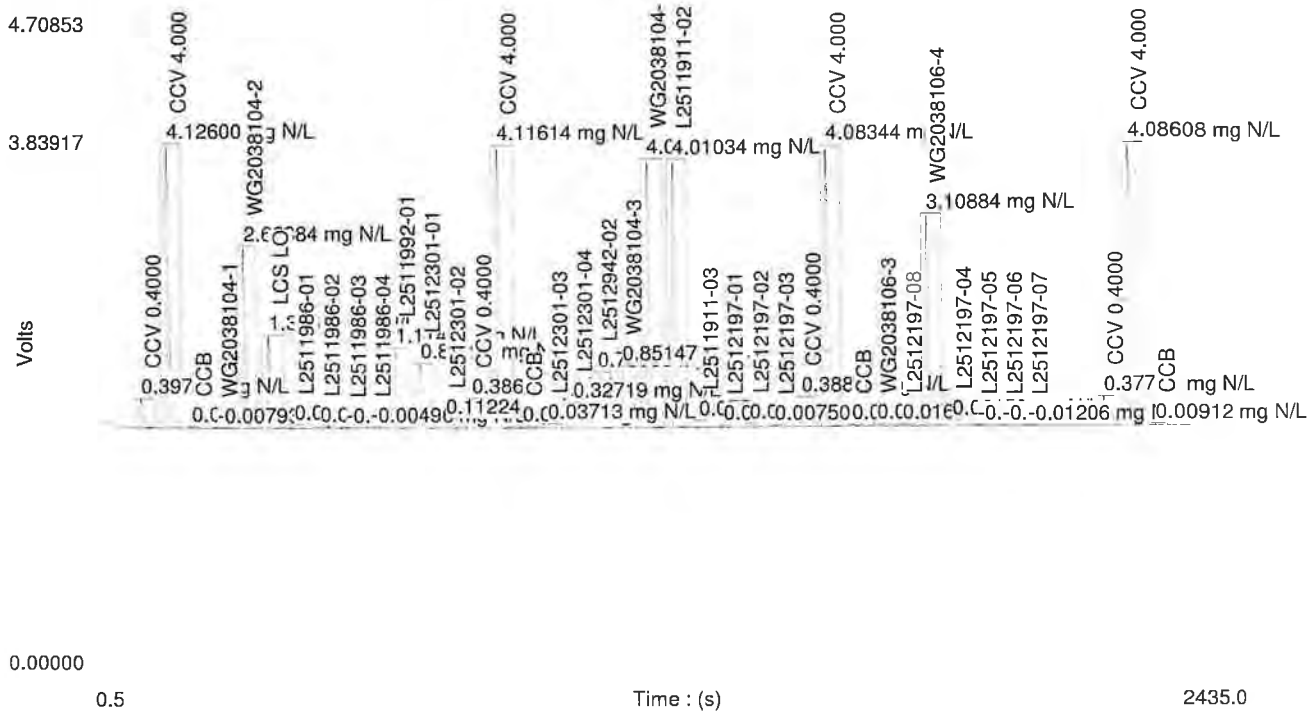
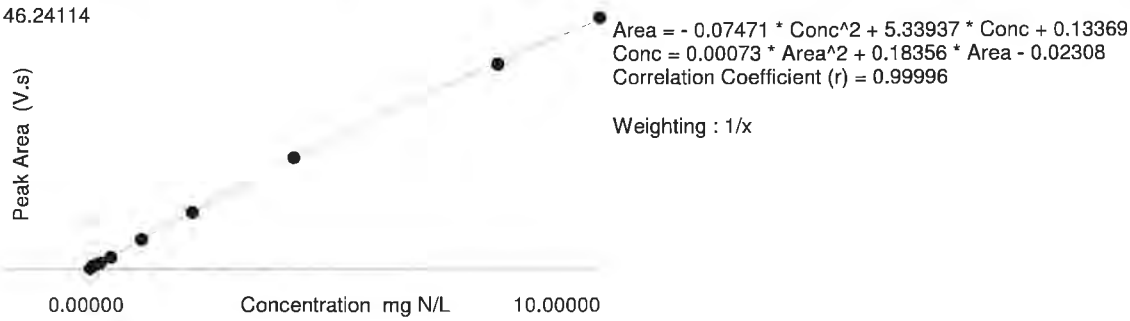



Table : 1 (Ammonia)

| | Known Conc. (mg N/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg N/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10.00000 | 1 | 46.24114 | 4.49297 | 0.0 | -0.4 | 10.02741 | 3/10/2025 | 9:51:57 AM |
| 2 | 8.00000 | 1 | 37.72449 | 3.76252 | 0.0 | 0.9 | 7.94154 | 3/10/2025 | 9:52:54 AM |
| 3 | 4.00000 | 1 | 20.57066 | 2.06206 | 0.0 | -1.4 | 4.06206 | 3/10/2025 | 9:53:52 AM |
| 4 | 2.00000 | 1 | 10.41704 | 1.07860 | 0.0 | 0.9 | 1.96836 | 3/10/2025 | 9:54:49 AM |
| 5 | 1.00000 | 1 | 5.45350 | 0.56359 | 0.0 | -1.0 | 0.99969 | 3/10/2025 | 9:55:46 AM |
| 6 | 0.40000 | 1 | 2.13200 | 0.21788 | 0.0 | 5.6 | 0.37159 | 3/10/2025 | 9:56:44 AM |
| 7 | 0.20000 | 1 | 1.09061 | 0.11140 | 0.0 | 9.0 | 0.17798 | 3/10/2025 | 9:57:42 AM |
| 8 | 0.10000 | 1 | 0.70972 | 0.07158 | 0.0 | -6.4 | 0.10757 | 3/10/2025 | 9:58:41 AM |
| 9 | 0.05000 | 1 | 0.51629 | 0.05112 | 0.0 | -28.9 | 0.07189 | 3/10/2025 | 9:59:39 AM |
| 10 | 0.00000 | 1 | 0.03659 | 0.00390 | | | -0.01636 | 3/10/2025 | 10:00:35 AM |

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT

Date : 3/10/2025

Original Run Filename: OM_3-10-2025_06-47-28PM.OMN Created: 3/10/2025 6:47:28 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_3-10-2025_06-47-28PM.OMN Last Modified: 3/10/2025 7:25:28 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

| Sample | Rep. | Cup No. | Channel 2 Ammonia (mg N/L) | ADF | MDF | Weight |
|---|---|---|---|---|---|---|
| CCV 0.4000 | 1 | S6 | 0.40294 | 101% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 4.02701 | 101% | | |
| | Known Conc: | | 100.00000 | | | |
| | Calibration: | | Table/Fig. : 1 | | | |
| CCB | 1 | S10 | 0.00555 | | | |
| | Known Conc: | | 100.00000 | | | |
| WG2038099-1 T; BLK 3/8 | 1 | 1 | -0.00329 | | | |
| WG2038099-2 T; HI LCS; 5X | 1 | 2 | 41.67816 | | 15.00 | 104% |
| LO LCS T | 1 | 3 | 4.01906 | | 3.00 | 101% |
| L2512942-01 T | ~~1~~ | ~~4~~ | ~~45.45807~~ | | 3.00 | |
| WG2038099-4 T; 12942.1 MS | ~~1~~ | ~~5~~ | ~~53.06847~~ | | 3.00 | w/Dilution. |
| WG2038099-3 T; 12942.1 DUP | ~~1~~ | ~~6~~ | ~~45.45477~~ | | 3.00 | |
| L2511822-01 T | ~~1~~ | ~~7~~ | ~~1.16293~~ | | 3.00 | |
| L2511932-01 T | 1 | 8 | 1.32392 | | 3.00 | |
| L2511932-02 T | 1 | 9 | 0.72451 | | 3.00 | |
| L2511847-01 T | 1 | 10 | 197.95187 | | 150.00 | |
| CCV 0.4000 | 1 | S6 | 0.43143 | 108% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 4.02155 | 101% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.01016 | | | |
| | Known Conc: | | 100.00000 | | | |
| L2511917-01 T | 1 | 11 | 0.94482 | | 3.00 | |
| L2511990-01 T | 1 | 12 | 22.55954 | | 3.00 | |
| L2511919-01 T | 1 | 13 | 0.50771 | | 3.00 | |
| L2511919-02 T | 1 | 14 | 0.10775 | | 3.00 | |
| L2511919-04 T | 1 | 15 | 0.08298 | | 3.00 | |
| L2511919-05 T | 1 | 16 | 0.15520 | | 3.00 | |
| L2511919-07 T | 1 | 17 | 0.00228 | | 3.00 | |
| L2511919-08 T | 1 | 18 | 0.03233 | | 3.00 | |
| L2511972-16 T | 1 | 19 | 0.25302 | | 3.00 | |
| L2511972-17 T | 1 | 20 | 0.58667 | | 3.00 | |
| CCV 0.4000 | 1 | S6 | 0.37801 | 95% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 4.00648 | 100% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.00639 | | | |
| | Known Conc: | | 100.00000 | | | |
| L2512942-01 T; 10X | 1 | 21 | 45.56373 | | 30.00 | 123% (4 + Rule) |
| WG2038099-4 T; 12942.1 MS; 10X | 1 | 22 | 55.40661 | | 30.00 | |
| WG2038099-3 T; 12942.1 DUP; 10X | 1 | 23 | 44.83237 | | 30.00 | 2% |
| L2511822-01 T | 1 | 24 | 0.37569 | | 3.00 | |
| CCV 0.4000 | 1 | S6 | 0.38170 | 96% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 4.00301 | 100% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.00775 | | | |
| | Known Conc: | | 100.00000 | | | |

D

Author: A1WETCHEMINSTRUMENT

Date : 3/10/2025

Channel 2 (Ammonia High) - Current View

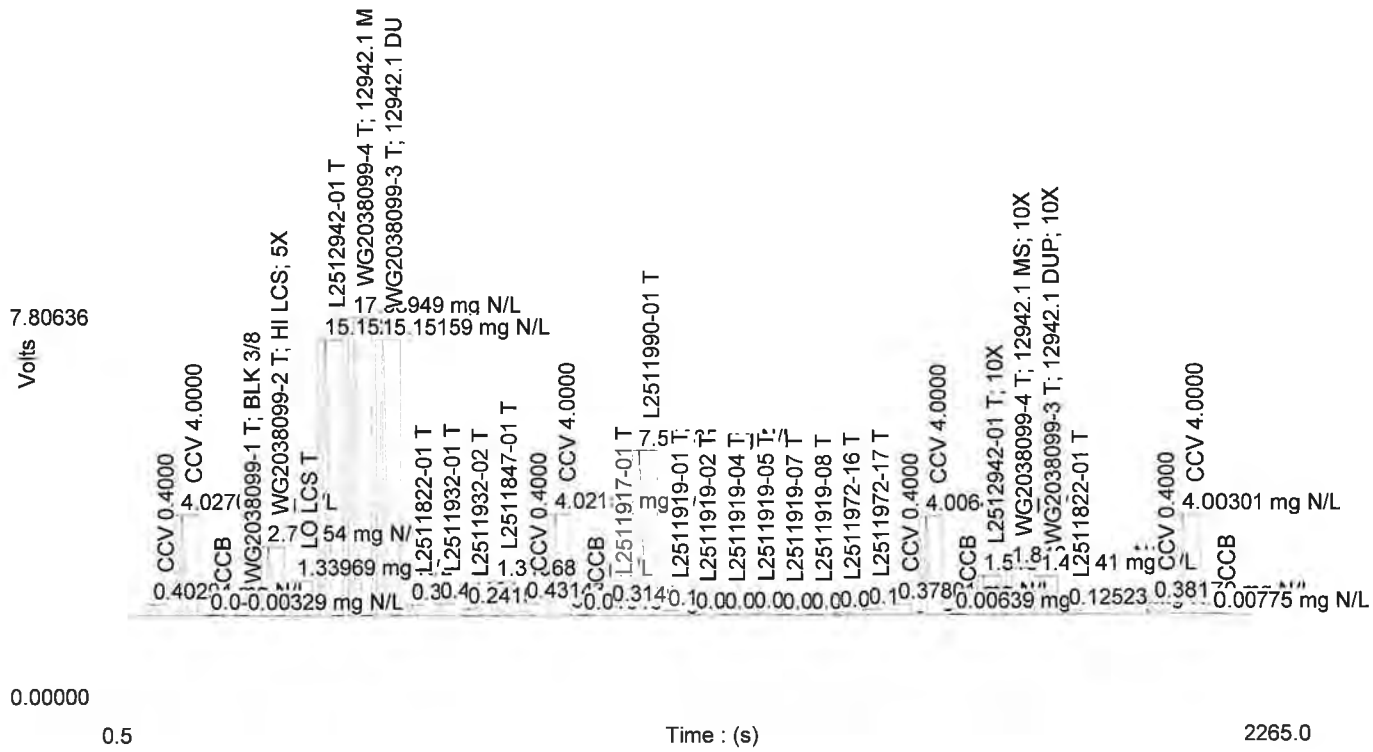
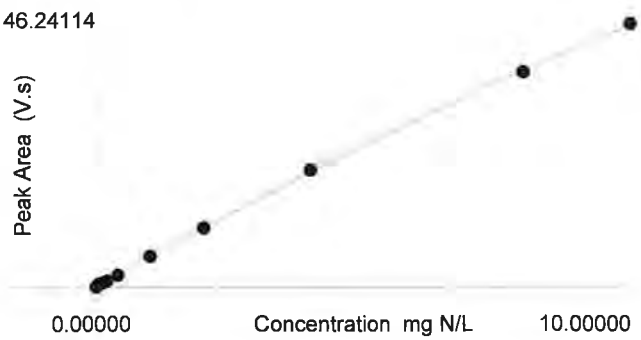



Table : 1 (Ammonia)

| | Known Conc. (mg N/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg N/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10.00000 | 1 | 46.24114 | 4.49297 | 0.0 | -0.4 | 10.02741 | 3/10/2025 | 9:51:57 AM |
| 2 | 8.00000 | 1 | 37.72449 | 3.76252 | 0.0 | 0.9 | 7.94154 | 3/10/2025 | 9:52:54 AM |
| 3 | 4.00000 | 1 | 20.57066 | 2.06206 | 0.0 | -1.4 | 4.06206 | 3/10/2025 | 9:53:52 AM |
| 4 | 2.00000 | 1 | 10.41704 | 1.07860 | 0.0 | 0.9 | 1.96836 | 3/10/2025 | 9:54:49 AM |
| 5 | 1.00000 | 1 | 5.45350 | 0.56359 | 0.0 | -1.0 | 0.99969 | 3/10/2025 | 9:55:46 AM |
| 6 | 0.40000 | 1 | 2.13200 | 0.21788 | 0.0 | 5.6 | 0.37159 | 3/10/2025 | 9:56:44 AM |
| 7 | 0.20000 | 1 | 1.09061 | 0.11140 | 0.0 | 9.0 | 0.17798 | 3/10/2025 | 9:57:42 AM |
| 8 | 0.10000 | 1 | 0.70972 | 0.07158 | 0.0 | -6.4 | 0.10757 | 3/10/2025 | 9:58:41 AM |
| 9 | 0.05000 | 1 | 0.51629 | 0.05112 | 0.0 | -28.9 | 0.07189 | 3/10/2025 | 9:59:39 AM |
| 10 | 0.00000 | 1 | 0.03659 | 0.00390 | | | -0.01636 | 3/10/2025 | 10:00:35 AM |

Figure : 1 (Ammonia)




Area = - 0.07471 * Conc^2 + 5.33937 * Conc + 0.13369
Conc = 0.00073 * Area^2 + 0.18356 * Area - 0.02308
Correlation Coefficient (r) = 0.99996

Weighting : 1/x

Author: A1WETCHEMINSTRUMENT

Date : 3/10/2025

Original Run Filename: OM_3-10-2025_07-56-45PM.OMN Created: 3/10/2025 7:56:45 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_3-10-2025_07-56-45PM.OMN Last Modified: 3/10/2025 8:38:31 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

E

| Sample | Rep. | Cup No. | Channel 2 Ammonia (mg N/L) | ADF | MDF | Weight |
|---|---|---|---|---|---|---|
| CCV 0.4000 | 1 | S6 | 0.37874 | 95% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 4.01781 | 101% | | |
| | Known Conc: | | 100.00000 | | | |
| | Calibration: | | Table/Fig. : 1 | | | |
| CCB | 1 | S10 | 0.00802 | | | |
| | Known Conc: | | 100.00000 | | | |
| WG2037938-1 T; BLK 3/7 | 1 | 1 | -0.00131 | | | |
| WG2037938-2 T; HI LCS; 5X | 1 | 2 | 39.79389 | | 15.00 | 99% |
| LO LCS T | 1 | 3 | 4.13858 | | 3.00 | 104% |
| L2511632-01 T | 1 | 4 | 4.35091 | | 3.00 | |
| WG2037938-4 T; 11632.1 MS | 1 | 5 | 13.94212 | | 3.00 | 120% |
| WG2037938-3 T; 11632.1 DUP | 1 | 6 | 4.50104 | | 3.00 | 3% dilution |
| L2511645-01 T | 1 | ~~7~~ | ~~30.84784~~ | | 3.00 | |
| L2511645-02 T | 1 | ~~8~~ | ~~2.90994~~ | | 3.00 | |
| L2511638-02 T | 1 | 9 | 2.14535 | | 3.00 | |
| L2511635-01 T | 1 | 10 | 1.29276 | | 3.00 | |
| CCV 0.4000 | 1 | S6 | 0.39384 | 99% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 4.00248 | 100% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.00907 | | | |
| | Known Conc: | | 100.00000 | | | |
| L2511777-03 T | 1 | 11 | 0.03243 | | 3.00 | |
| L2511777-08 T | 1 | 12 | 1.77962 | | 3.00 | |
| L2511745-01 T | 1 | ~~13~~ | ~~30.87030~~ | | 3.00 | |
| L2511751-01 T | 1 | ~~14~~ | ~~8.55864~~ | | 3.00 | |
| L2511733-01 T | 1 | ~~15~~ | ~~111.66173~~ | | 6.00 | |
| L2511728-01 T | 1 | ~~16~~ | ~~1.61298~~ | | 3.00 | |
| L2511727-01 T | 1 | 17 | 21.83352 | | 6.00 | |
| L2511646-01 T | 1 | 18 | 26.19359 | | 3.00 | |
| L2511646-02 T | 1 | 19 | 6.87759 | | 3.00 | |
| L2511640-01 T | 1 | 20 | 1.32811 | | 15.00 | |
| CCV 0.4000 | 1 | S6 | 0.38626 | 97% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 3.96816 | 99% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.01311 | | | |
| | Known Conc: | | 100.00000 | | | |
| L2511645-01 T; 10X | 1 | 21 | 26.63688 | | 30.00 | |
| L2511645-02 T | 1 | 22 | 2.38838 | | 3.00 | |
| L2511745-01 T; 10X | 1 | 23 | 27.88057 | | 30.00 | |
| L2511751-01 T | 1 | 24 | 7.98826 | | 3.00 | |
| L2511733-01 T; 10X | 1 | 25 | 113.87128 | | 60.00 | |
| L2511728-01 T | 1 | 26 | 0.77470 | | 3.00 | |
| CCV 0.4000 | 1 | S6 | 0.38275 | 96% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 3.96900 | 99% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.01112 | | | |
| | Known Conc: | | 100.00000 | | | |

Author: A1WETCHEMINSTRUMENT

Date : 3/10/2025

Channel 2 (Ammonia High) - Current View

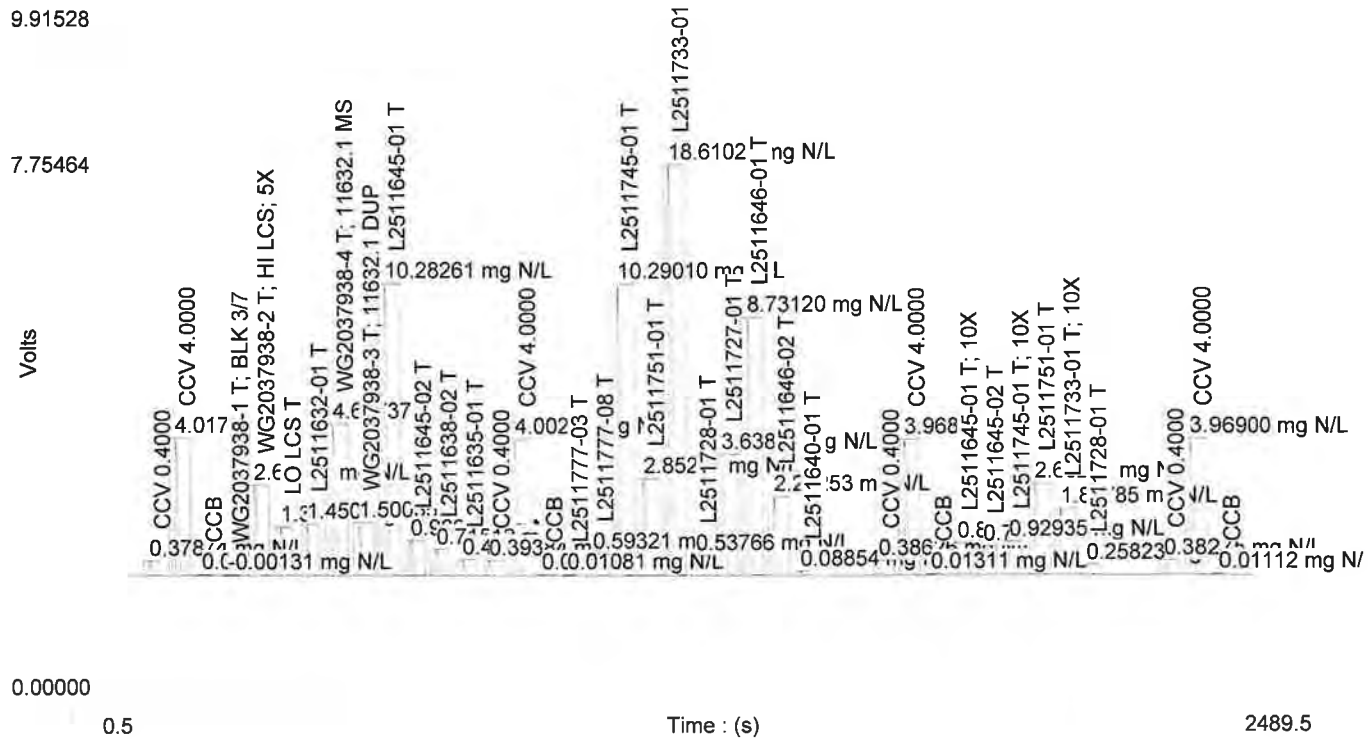
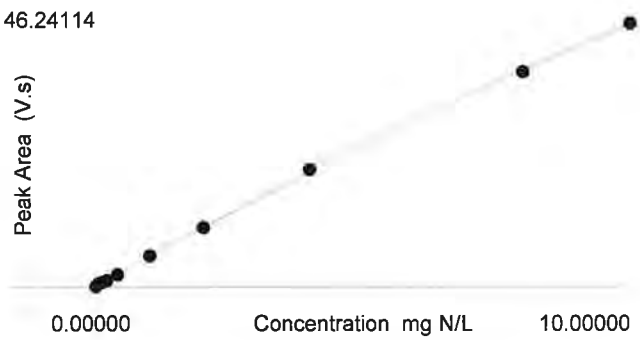



Table : 1 (Ammonia)

| | Known Conc. (mg N/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg N/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10.00000 | 1 | 46.24114 | 4.49297 | 0.0 | -0.4 | 10.02741 | 3/10/2025 | 9:51:57 AM |
| 2 | 8.00000 | 1 | 37.72449 | 3.76252 | 0.0 | 0.9 | 7.94154 | 3/10/2025 | 9:52:54 AM |
| 3 | 4.00000 | 1 | 20.57066 | 2.06206 | 0.0 | -1.4 | 4.06206 | 3/10/2025 | 9:53:52 AM |
| 4 | 2.00000 | 1 | 10.41704 | 1.07860 | 0.0 | 0.9 | 1.96836 | 3/10/2025 | 9:54:49 AM |
| 5 | 1.00000 | 1 | 5.45350 | 0.56359 | 0.0 | -1.0 | 0.99969 | 3/10/2025 | 9:55:46 AM |
| 6 | 0.40000 | 1 | 2.13200 | 0.21788 | 0.0 | 5.6 | 0.37159 | 3/10/2025 | 9:56:44 AM |
| 7 | 0.20000 | 1 | 1.09061 | 0.11140 | 0.0 | 9.0 | 0.17798 | 3/10/2025 | 9:57:42 AM |
| 8 | 0.10000 | 1 | 0.70972 | 0.07158 | 0.0 | -6.4 | 0.10757 | 3/10/2025 | 9:58:41 AM |
| 9 | 0.05000 | 1 | 0.51629 | 0.05112 | 0.0 | -28.9 | 0.07189 | 3/10/2025 | 9:59:39 AM |
| 10 | 0.00000 | 1 | 0.03659 | 0.00390 | | | -0.01636 | 3/10/2025 | 10:00:35 AM |

Figure : 1 (Ammonia)




Area = - 0.07471 * Conc^2 + 5.33937 * Conc + 0.13369
Conc = 0.00073 * Area^2 + 0.18356 * Area - 0.02308
Correlation Coefficient (r) = 0.99996

Weighting : 1/x

Author: A1WETCHEMINSTRUMENT

Date : 3/10/2025

Original Run Filename: OM_3-10-2025_08-39-10PM.OMN Created: 3/10/2025 8:39:10 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_3-10-2025_08-39-10PM.OMN Last Modified: 3/10/2025 9:15:23 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

F

| Sample | Rep. | Cup No. | Channel 2 Ammonia (mg N/L) | ADF | MDF | Weight |
|---|---|---|---|---|---|---|
| CCV 0.4000 | 1 | S6 | 0.37917 | 95% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 3.96554 | 99% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.01033 | | | |
| | Known Conc: | | 100.00000 | | | |
| WG2037940-1; BLK 3/7 | 1 | 1 | -0.00791 | | 1.50 | |
| WG2037940-2; HI LCS; 5X | 1 | 2 | 19.80298 | | 7.50 | 99% |
| LO LCS | 1 | 3 | 1.90993 | | 1.50 | 90% |
| L2511473-01 | 1 | 4 | 14.89727 | | 1.50 | |
| L2511473-02 | 1 | 5 | 0.45880 | | 1.50 | |
| L2511728-01 | 1 | 6 | 0.03247 | | 1.50 | |
| | Calibration: | | Table/Fig. : 1 | | | |
| WG2037940-4; 11728.1 MS | 1 | 7 | 4.58138 | | 1.50 | 115% |
| WG2037940-3; 11728.1 DUP | 1 | 8 | 0.10021 | | 1.50 | NC (<5 times) |
| L2511972-16 | 1 | 9 | 0.04923 | | 1.50 | |
| L2511972-17 | 1 | 10 | 0.00126 | | 1.50 | |
| CCV 0.4000 | 1 | S6 | 0.37740 | 94% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 3.93571 | 99% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.00854 | | | |
| | Known Conc: | | 100.00000 | | | |
| L2511902-01 | 1 | 11 | 0.09185 | | 1.50 | |
| L2511902-02 | 1 | 12 | 0.00080 | | 1.50 | |
| L2511879-01 | 1 | 13 | 26.22628 | | 1.50 | w/ dilution. |
| L2511879-02 | 1 | 14 | 1.26701 | | 1.50 | |
| L2511852-01 | 1 | 15 | 7.77449 | | 1.50 | |
| L2511852-02 | 1 | 16 | 0.27138 | | 1.50 | |
| L2511751-01 | 1 | 17 | 5.99947 | | 1.50 | |
| L2511822-01 | 1 | 18 | 0.39943 | | 1.50 | |
| L2511839-01 | 1 | 19 | 0.21834 | | 1.50 | |
| L2511847-01 | 1 | 20 | 8.84640 | 93% | 1.50 | |
| CCV 0.4000 | 1 | S6 | 0.37012 | | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 3.60045 | 90% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.01383 | | | |
| | Known Conc: | | 100.00000 | | | |
| L2511879-01; 10X | 1 | 21 | 24.18078 | | 15.00 | |
| L2511879-02 | 1 | 22 | 0.87642 | | 1.50 | |
| CCV 0.4000 | 1 | S6 | 0.34734 | | | |
| | Known Conc: | | 100.00000 | | | |

reinject - OK

Author: A1WETCHEMINSTRUMENT

Date : 3/10/2025

Channel 2 (Ammonia High) - Current View

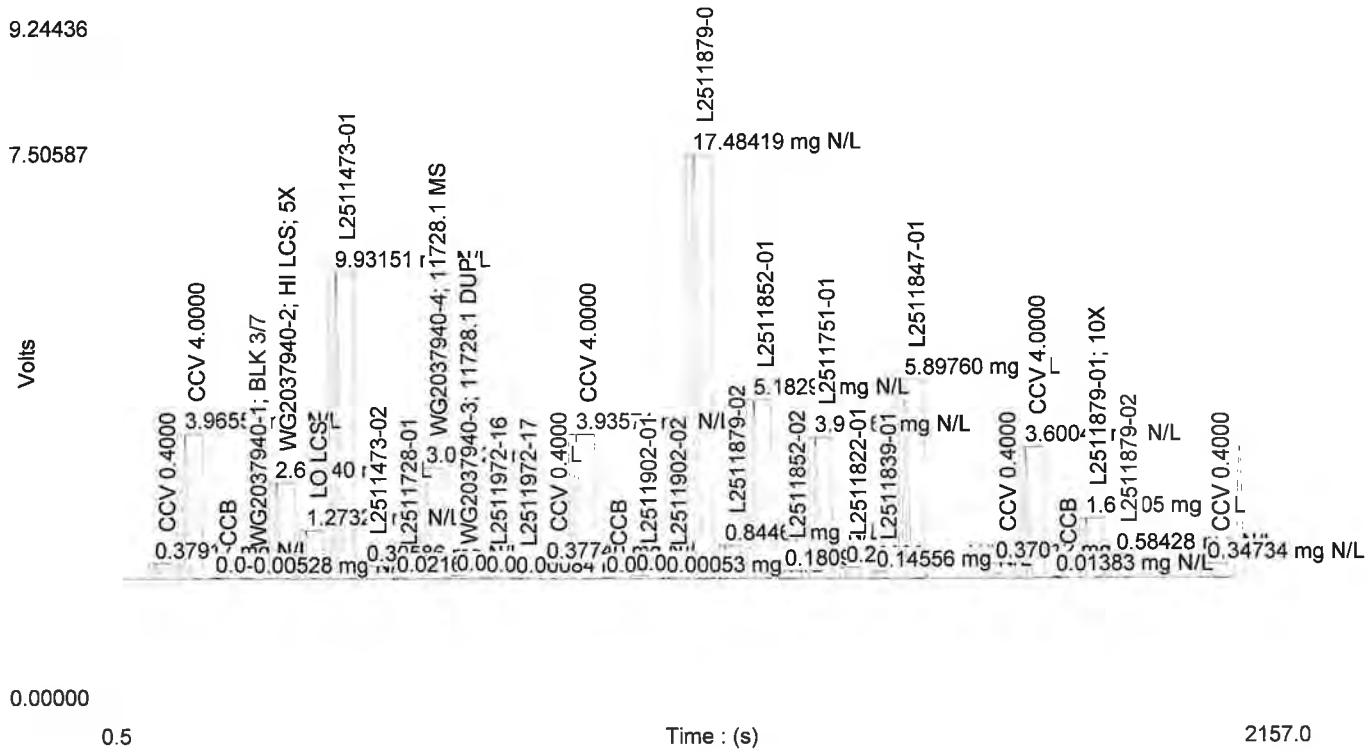
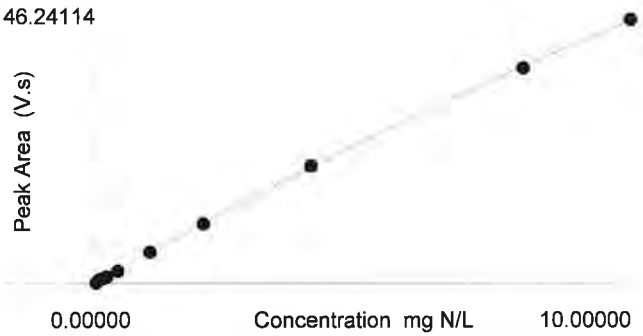



Table : 1 (Ammonia)

| | Known Conc. (mg N/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg N/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10.00000 | 1 | 46.24114 | 4.49297 | 0.0 | -0.4 | 10.02741 | 3/10/2025 | 9:51:57 AM |
| 2 | 8.00000 | 1 | 37.72449 | 3.76252 | 0.0 | 0.9 | 7.94154 | 3/10/2025 | 9:52:54 AM |
| 3 | 4.00000 | 1 | 20.57066 | 2.06206 | 0.0 | -1.4 | 4.06206 | 3/10/2025 | 9:53:52 AM |
| 4 | 2.00000 | 1 | 10.41704 | 1.07860 | 0.0 | 0.9 | 1.96836 | 3/10/2025 | 9:54:49 AM |
| 5 | 1.00000 | 1 | 5.45350 | 0.56359 | 0.0 | -1.0 | 0.99969 | 3/10/2025 | 9:55:46 AM |
| 6 | 0.40000 | 1 | 2.13200 | 0.21788 | 0.0 | 5.6 | 0.37159 | 3/10/2025 | 9:56:44 AM |
| 7 | 0.20000 | 1 | 1.09061 | 0.11140 | 0.0 | 9.0 | 0.17798 | 3/10/2025 | 9:57:42 AM |
| 8 | 0.10000 | 1 | 0.70972 | 0.07158 | 0.0 | -6.4 | 0.10757 | 3/10/2025 | 9:58:41 AM |
| 9 | 0.05000 | 1 | 0.51629 | 0.05112 | 0.0 | -28.9 | 0.07189 | 3/10/2025 | 9:59:39 AM |
| 10 | 0.00000 | 1 | 0.03659 | 0.00390 | | | -0.01636 | 3/10/2025 | 10:00:35 AM |

Figure : 1 (Ammonia)




Area = - 0.07471 * Conc^2 + 5.33937 * Conc + 0.13369
Conc = 0.00073 * Area^2 + 0.18356 * Area - 0.02308
Correlation Coefficient (r) = 0.99996

Weighting : 1/x

Author: A1WETCHEMINSTRUMENT

Date : 3/10/2025

Original Run Filename: OM_3-10-2025_09-17-23PM.OMN Created: 3/10/2025 9:17:23 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_3-10-2025_09-17-23PM.OMN Last Modified: 3/10/2025 9:48:44 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

G

| Sample | Rep. | Cup No. | Channel 2 Ammonia (mg N/L) | ADF | MDF | Weight |
|---|---|---|---|---|---|---|
| CCV 0.4000 | 1 | S6 | 0.36113 | 90% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 3.87734 | 97% | | |
| | Known Conc: | | 100.00000 | | | |
| | Calibration: | | Table/Fig. : 1 | | | |
| CCB | 1 | S10 | 0.01293 | | | |
| | Known Conc: | | 100.00000 | | | |
| WG2038722-1; BLK 3/10 | 1 | 1 | -0.01327 | | 1.50 | |
| WG2038722-2; HI LCS; 5X | 1 | 2 | 16.73845 | | 7.50 | 84% |
| LO LCS | 1 | 3 | 1.74660 | | 1.50 | 88% |
| L2511893-01 | 1 | 4 | 1.67434 | | 6.00 | |
| WG2038722-4; 11893.1 MS | 1 | 5 | 19.74826 | | 6.00 | 113% |
| WG2038722-3; 11893.1 DUP | 1 | 6 | 2.03158 | | 6.00 | 19% |
| L2511893-02 | 1 | 7 | 1.24830 | | 6.00 | |
| L2511893-03 | 1 | 8 | 3.61432 | | 1.50 | |
| L2511893-04 | 1 | 9 | 0.02591 | | 1.50 | |
| L2511483-22 | 1 | 10 | -0.00281 | | 1.50 | |
| CCV 0.4000 | 1 | S6 | 0.37034 | 93% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 3.84400 | 96% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.01040 | | | |
| | Known Conc: | | 100.00000 | | | |
| L2512241-02 | 1 | 11 | 0.06116 | | 1.50 | |
| L2512241-04 | 1 | 12 | 1.54475 | | 1.50 | |
| L2512241-05 | 1 | 13 | 1.45296 | | 1.50 | |
| L2512545-01 | 1 | 14 | 0.12701 | | 1.50 | |
| L2512927-01 | 1 | 15 | 1.48484 | | 1.50 | |
| L2512927-02 | 1 | 16 | 0.75535 | | 1.50 | |
| L2513181-01 | 1 | 17 | 0.05439 | | 1.50 | |
| L2513181-02 | 1 | 18 | 0.00585 | | 1.50 | |
| L2513181-03 | 1 | 19 | 0.04536 | | 1.50 | |
| L2513181-05 | 1 | 20 | -0.02071 | | 1.50 | |
| CCV 0.4000 | 1 | S6 | 0.36689 | 92% | | |
| | Known Conc: | | 100.00000 | | | |
| CCV 4.0000 | 1 | S3 | 3.83158 | 96% | | |
| | Known Conc: | | 100.00000 | | | |
| CCB | 1 | S10 | 0.01219 | | | |
| | Known Conc: | | 100.00000 | | | |

MS-16ppm

Author: A1WETCHEMINSTRUMENT

Date : 3/10/2025

Channel 2 (Ammonia High) - Current View

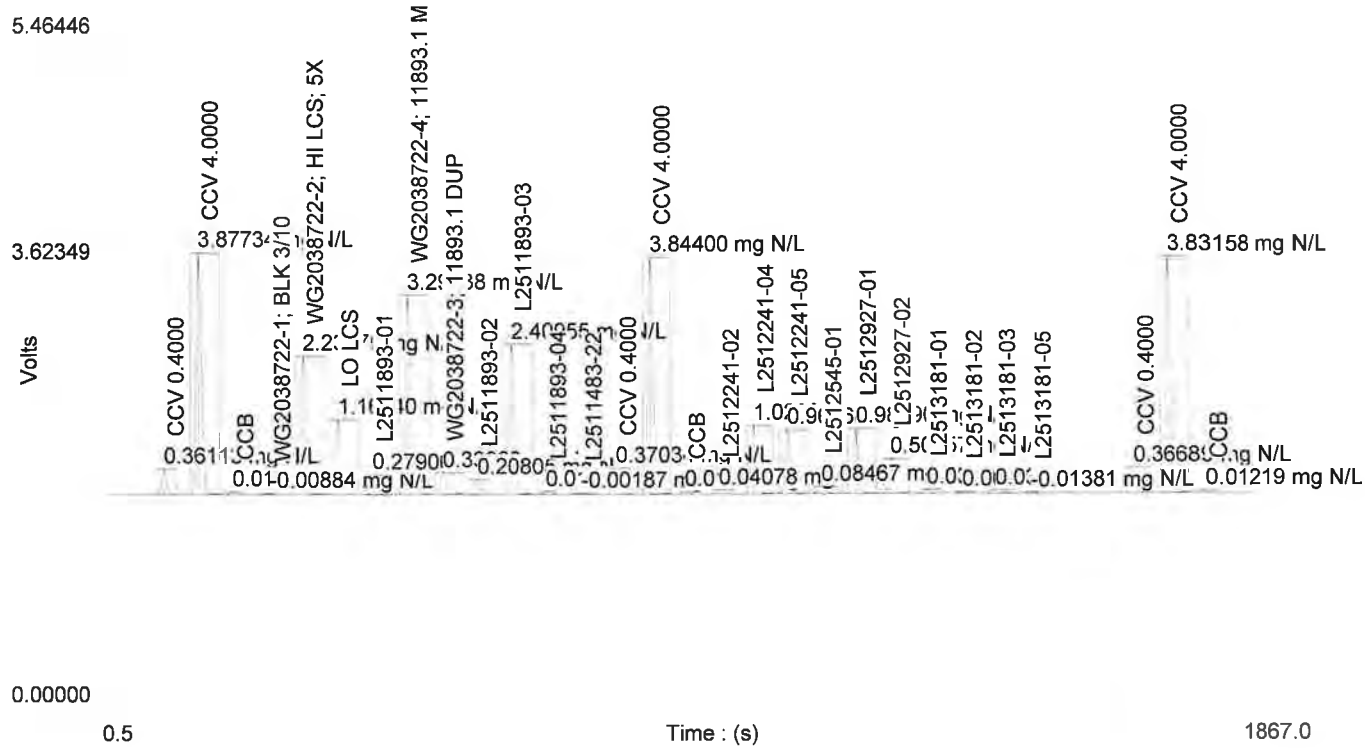
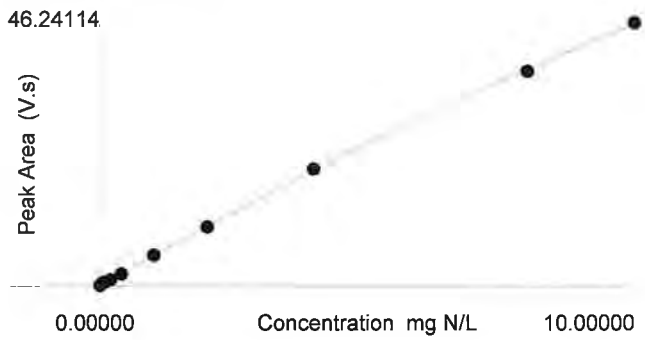



Table : 1 (Ammonia)

| | Known Conc. (mg N/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg N/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10.00000 | 1 | 46.24114 | 4.49297 | 0.0 | -0.4 | 10.02741 | 3/10/2025 | 9:51:57 AM |
| 2 | 8.00000 | 1 | 37.72449 | 3.76252 | 0.0 | 0.9 | 7.94154 | 3/10/2025 | 9:52:54 AM |
| 3 | 4.00000 | 1 | 20.57066 | 2.06206 | 0.0 | -1.4 | 4.06206 | 3/10/2025 | 9:53:52 AM |
| 4 | 2.00000 | 1 | 10.41704 | 1.07860 | 0.0 | 0.9 | 1.96836 | 3/10/2025 | 9:54:49 AM |
| 5 | 1.00000 | 1 | 5.45350 | 0.56359 | 0.0 | -1.0 | 0.99969 | 3/10/2025 | 9:55:46 AM |
| 6 | 0.40000 | 1 | 2.13200 | 0.21788 | 0.0 | 5.6 | 0.37159 | 3/10/2025 | 9:56:44 AM |
| 7 | 0.20000 | 1 | 1.09061 | 0.11140 | 0.0 | 9.0 | 0.17798 | 3/10/2025 | 9:57:42 AM |
| 8 | 0.10000 | 1 | 0.70972 | 0.07158 | 0.0 | -6.4 | 0.10757 | 3/10/2025 | 9:58:41 AM |
| 9 | 0.05000 | 1 | 0.51629 | 0.05112 | 0.0 | -28.9 | 0.07189 | 3/10/2025 | 9:59:39 AM |
| 10 | 0.00000 | 1 | 0.03659 | 0.00390 | | | -0.01636 | 3/10/2025 | 10:00:35 AM |

Figure : 1 (Ammonia)




Area = - 0.07471 * Conc^2 + 5.33937 * Conc + 0.13369
Conc = 0.00073 * Area^2 + 0.18356 * Area - 0.02308
Correlation Coefficient (r) = 0.99996

Weighting : 1/x

# Quality Control

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512942-01 | | |
| **Matrix Spike** | : WG2038099-4 | **MS Analysis Date** | : 03/10/25 19:16 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Nitrogen, Total Kjeldahl | 45.6 | 8 | 55.4 | 122 Q | | | | | 77-111 | 24 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : NA | **Analysis Date** | : 03/10/25 19:15 |
| **Dup Sample ID** | : WG2038099-3 | **DUP Analysis Date** | : 03/10/25 19:17 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Nitrogen, Total Kjeldahl | 45.6 | 44.8 | 2 | 24 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2038099-2 | **LCS Analysis Date** | : 03/10/25 18:52 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Nitrogen, Total Kjeldahl | 40.0 | 41.7 | 104. | | | | | 78-122 | 24 |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, Total Kjeldahl | NONE | 0.3 | 0.066 | mg/l | 78-122 | | 77-111 | 24 | 24 | 4500NH3-H | 28 days | 1 - Plastic 500ml H2SO4 preserved |
| Nitrogen, Total Kjeldahl | NONE | 0.3 | 0.066 | mg/l | 78-122 | | 77-111 | 24 | 24 | 351.1 | 28 days | 1 - Plastic 500ml H2SO4 preserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11468-1
**Page:** 1

**WETCHEM (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, Total Kjeldahl | NONE | 150 | 31.5 | mg/kg | 81-115 | 26 | 43-160 | 26 | 26 | 4500NH3-H | 28 days | 1 - Glass 250ml/8oz unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

# Calculations of Nitrogen in TKN

Aqueous samples:

Compute sample TKN –N concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

If the sample has a concentration of less than 2ppm, calculate results by using the low curve generated on Channel 1.

If the sample concentration is greater than 2ppm, calculate the results by using the high curve generated on Channel 2.

To Compute the final results for aqueous samples, multiply the direct reading by the dilution factor based on the initial preparation volume. (also done using software)

TKN-N mg/L = mg/L direct reading x dilution factor

# Sequence Logs

TITLE $NH_3$ 3/10/25 KEM

Project No.
Book No.

From Page No.

Tray A (09-49-57AM)
prep 3/7/25 @14:45

1 Hi ICV 8.0
2 Lo ICV 1.0
3 ICB
4 KEM WG2037825-1T, Blk
5 -2T, LCS Hi, 5x
6 LCS Lo T
7 11624-02T
8 02T ~~MS~~ Dup
9 02T KEM Dup MS
10 11668 02T
11 12131 01T
12 12132 01T
13 12155 01T
14 12156 01T
15 12301 01T
16 02T
17 03T
18 04T
19 12347-01T
20 02T
21 12348 01T
⊗22 12686 01T; 10x 1↑10

Tray B (10-45-18AM)
prep 3/7/25 @21:30

1 WG2037968-1, Blk
2 -2, LCS Hi, 5x
3 LCS Lo
⊗4 11150 02, 10x 1↑10
⊗5 11152 01
⊗6 11912 01, remn
⊗7 01 Dup, remn
8 01 MS
9 02
10 03
11 04
12 05
13 06
14 07
15 08

Date: 3/10/25
Sodium Phenolate: 3/4/25 R-4161
Sodium Hypochlorate: 3/4/25 stop/stop
Sodium Nitroprusside: 3/4/25 R-3969
Borric Acid Soln.: 3/4/25 R-4019
ICV 1.0:
ICV 8.0: 3/4/25 WC-3495
Cal. Std: 3/6/25 WC-3561
See Front Page for Instructions:

KEM

KEM

To Page

Witnessed & Understood by me, | Date | Invented by: | Date
Recorded by:

Project No.
Book No.
TITLE NH3 3/10/25 KEM cont.

Page No.

by C (02-05-17PM)
ep 3/8/25 @15:05

WG203810D4-1.Blk
(8106)-2; LCS Hi; 5x
LCS Lo
11986-01
02
03
04
11992-01 (5x)
12301-01
02 (5x)
03 (2x)
04 (2x)
12942-02 (2x)
02 Dup (2x)
02 MS (2x)
11911-02
03 (5x)
12197-01
02
03
04
05
06
07
08 MS
08 Dup
08

tg. D (06.47.28PM)
PI 3/8/25 @1450

1 WG-2038099-1 T. Blk 3/8
2 WG-2038099-2 T; Hi ws 5 T
3 Lo ws T
X 4 12942.1 T -10 T
X 5 WG-2038099-4 T - 12942.1 ms -10 T
X 6 WG-2038099-3 T; 12942.1 sp -10 T
X 7 11822.1 T
8 11932.1 T
9 .2 T
10 11847.1 T (50 T)
11 11917.1 T
12 11998.1 T
13 11919.1 T
14 .2 T
15 .4 T
16 .5 T
17 .7 T
18 .8 T
19 11972.16 T
20 .17 T

To Page No.

ssed & Understood by me,
Date
Invented by:
Date
Recorded by:

From Page No.

fig. E (07-56-45pm)
Prop 3/7/25 @2100

| | |
|---|---|
| 1 | wh-2037938-1 T- Blue 3/7 |
| 2 | wh-2037938-2 T- Hi ws T+ |
| 3 | lo ws + |
| 4 | 11632.1 T |
| 5 | wh-2037938-4 T-, 11632.1 ws |
| 6 | wh-2037938-3 T-, 11632.1 bg |
| X 7 | 11645.1 T -10+ |
| X 8 | .2 + |
| 9 | 11658.2 + |
| 10 | 11635.1 T |
| 11 | 11777.3 T |
| 12 | .6 T |
| X 13 | 11745.1 T -10+ |
| X 14 | 11751.1 + |
| X 15 | 11733.1 T (2+) -10+ |
| X 16 | 11728.1 + |
| 17 | 11727.1 + (2T) |
| 18 | 11646.1 T |
| 19 | .2 + |
| 20 | 11640.1 T (5+) |

fig. F (08-39-10pm)
Prop 3/7/25 @1900

| | |
|---|---|
| 1 | wh-2037940-1, Blue 3/7 |
| 2 | wh-2037940-2-, Hi ws T+ |
| 3 | lo ws |
| 4 | 11473.1 |
| 5 | .2 |
| 6 | 11728.1 |
| 7 | wh-2037940-4-, 11728.1 ws |
| 8 | wh-2037940-3-, 11728.1 bg |
| 9 | 11972.16 |
| 10 | .17 |
| 11 | 11902.1 |
| 12 | .2 |
| X 13 | 11879.1 -10+ |
| X 14 | .2 |
| 15 | 11852.1 |
| 16 | .2 |
| 17 | 11751.1 |
| 18 | 11822.1 |
| 19 | 11839.1 |
| 20 | 11847.1 |

To Page N

Witnessed & Understood by me, Date

Invented by: Date

Recorded by:

Project No. _____
Book No. _____ TITLE Nlts 3/10/24 Cont.

Page No. ____

fy.. G (09-17-23 fm)
fy 3/10/24 @ 19w

1 WG 2038722-1. Blu 3/10
2 WG 2038722-2; Hi WS-5 +
3 WG
4 11893.1 (4+)
5 WG 2038722-4; 11893.1 WS (4+)
6 WG 2038722-3; 11893.1 Ny (4+)
7 11893.2 (4+)
8 .3
9 .4
10 11483.22
11 12241.2
12 .4
13 .5
14 12545-1
15 12927-1
16 .2
17 13181.1
18 .2
19 .3
20 .5

To Page No. ____

essed & Understood by me, | Date | Invented by: | Date
Recorded by:

# Sample Preparation

| Sample | Volume | Dilution | Final Vol. |
|---|---|---|---|
| Blank | 50mL | 1x | 150mL |
| Low | | | |
| High | | | |
| L2511822-01 | | | |
| 11847-01 | | 50x(1+50) N=180 | |
| 11917-01 | | 1x | |
| 11919-01 | | | |
| -02 | | | |
| -04 | | | |
| -05 | | | |
| -07 | | | |
| -08 | | | |
| 11932-01 | | | |
| -02 | | | |
| 11972-16 | | | |
| -17 | | | |
| 11990-01 | | | |
| 12942-01 Pt. | | | |
| -01 Dup. | | | |
| -01 MS. | | | |

Same Standards 030825 @ 14:50 SAD

of Reagents

as previous

pg #51

# Nitrate and Nitrite Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-01 | Date Collected | : 03/04/25 14:43 |
| Client ID | : 2A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 06:31 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : KAF |
| Lab File ID | : NO3250306-B1 | Instrument ID | : FIA1 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | 0.084 | 0.10 | 0.046 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-02 | Date Collected | : 03/04/25 14:40 |
| Client ID | : 2B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 06:34 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : KAF |
| Lab File ID | : NO3250306-B1 | Instrument ID | : FIA1 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | ND | 0.10 | 0.046 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-04 | Date Collected | : 03/04/25 12:25 |
| Client ID | : 3A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 06:35 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : KAF |
| Lab File ID | : NO3250306-B1 | Instrument ID | : FIA1 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | ND | 0.10 | 0.046 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-05 | Date Collected | : 03/04/25 12:45 |
| Client ID | : 3B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 06:36 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : KAF |
| Lab File ID | : NO3250306-B1 | Instrument ID | : FIA1 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | 0.075 | 0.10 | 0.046 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-07 | Date Collected | : 03/04/25 09:25 |
| Client ID | : 4A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 06:37 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : KAF |
| Lab File ID | : NO3250306-B1 | Instrument ID | : FIA1 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | 0.42 | 0.10 | 0.046 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-08 | Date Collected | : 03/04/25 10:10 |
| Client ID | : 4B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 06:38 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : KAF |
| Lab File ID | : NO3250306-B1 | Instrument ID | : FIA1 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | 0.17 | 0.10 | 0.046 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2037164-1 | Date Collected | : NA |
| Client ID | : WG2037164-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/06/25 04:07 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : KAF |
| Lab File ID | : NO3250306-A1 | Instrument ID | : FIA1 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | ND | 0.10 | 0.046 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2037164-3 | Date Collected | : 03/04/25 14:43 |
| Client ID | : 2ADUP | Date Received | : 03/04/25 |
| Sample Location | : | Date Analyzed | : 03/06/25 06:32 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : KAF |
| Lab File ID | : NO3250306-B1 | Instrument ID | : FIA1 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | 0.074 | 0.10 | 0.05 | J |

# Sample Raw Data

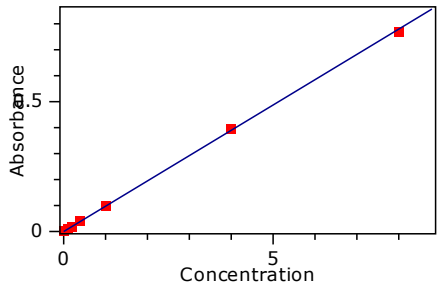
Graphical report generated by FIAsoft v3.1.10
Report generated on 2025-03-06 06:10:46
Data file (.dat): C:\FIAlab\Autosave Data\2025-03-06-061025.dat

Dataset Notes:

| | |
|---|---|
| Analyst | |

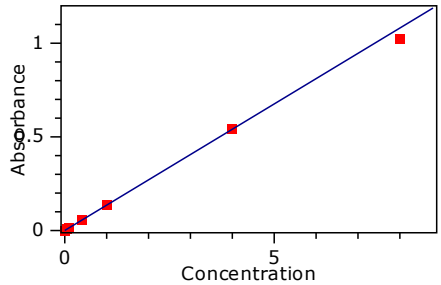
Dataset Notes Table Location: C:\FIAlab\FIAlab User Files\Tables\Dataset Notes\Analyst.csv

Calibrations:




Channel: 1-NOx
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: -0.00021
B: 0.09748
$R^2$: 0.99984
RSE(%): 1.11124
% Max. for OVR: 100

| InjNo | Name | Response | Known Conc. mg/L | Calc. Conc. mg/L | % Error | Time |
|---|---|---|---|---|---|---|
| 2 | NOx 8.0ppm | 0.76910 | 8.00000 | 7.89230 | 1.35 | 2025-03-06T03:14:39 |
| 3 | NOx 4.0ppm | 0.39490 | 4.00000 | 4.05380 | 1.35 | 2025-03-06T03:15:48 |
| 4 | NOx 1.0ppm | 0.09680 | 1.00000 | 0.99550 | 0.45 | 2025-03-06T03:16:55 |
| 5 | NOx 0.4ppm | 0.03920 | 0.40000 | 0.40390 | 0.96 | 2025-03-06T03:18:02 |
| 6 | NOx 0.2ppm | 0.01920 | 0.20000 | 0.19910 | 0.43 | 2025-03-06T03:19:12 |
| 7 | NOx 0.1ppm | 0.00950 | 0.10000 | 0.10000 | 0.01 | 2025-03-06T03:20:22 |
| 8 | NOx 0.0ppm | 0.00010 | 0.00000 | 0.00290 | NA | 2025-03-06T03:21:31 |




Channel: 2-NO2
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00043
B: 0.13507
$R^2$: 0.99905
RSE(%): 3.65935
% Max. for OVR: 100

| InjNo | Name | Response | Known Conc. mg/L | Calc. Conc. mg/L | % Error | Time |
|---|---|---|---|---|---|---|
| 9 | Nitrite 8.0ppm | 1.02100 | 8.00000 | 7.55630 | 5.55 | 2025-03-06T03:22:30 |
| 10 | Nitrite 4.0ppm | 0.54440 | 4.00000 | 4.02730 | 0.68 | 2025-03-06T03:23:40 |
| 11 | Nitrite 1.0ppm | 0.13810 | 1.00000 | 1.01940 | 1.94 | 2025-03-06T03:24:46 |
| 12 | Nitrite 0.4ppm | 0.05650 | 0.40000 | 0.41500 | 3.75 | 2025-03-06T03:25:55 |
| 13 | Nitrite 0.1ppm | 0.01420 | 0.10000 | 0.10160 | 1.62 | 2025-03-06T03:27:05 |
| 14 | Nitrite 0.05ppm | 0.00710 | 0.05000 | 0.04930 | 1.36 | 2025-03-06T03:28:14 |
| 15 | Nitrite 0.0ppm | 0.00020 | 0.00000 | -0.00200 | NA | 2025-03-06T03:29:27 |

Results:

Channel: 1-NOx

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Stabil | 1 | Unknown | ? | 0.0003 | 1 | 1 | 1 | 0.0050 | | 2025-03-06T03:13:26 |
| NOx 8.0ppm | 2 | Standard | 8 | 0.7691 | 1 | 1 | 1 | 7.8923 | | 2025-03-06T03:14:39 |
| NOx 4.0ppm | 3 | Standard | 4 | 0.3949 | 1 | 1 | 1 | 4.0538 | | 2025-03-06T03:15:48 |
| NOx 1.0ppm | 4 | Standard | 1 | 0.0968 | 1 | 1 | 1 | 0.9955 | | 2025-03-06T03:16:55 |
| NOx 0.4ppm | 5 | Standard | 0.4 | 0.0392 | 1 | 1 | 1 | 0.4039 | | 2025-03-06T03:18:02 |
| NOx 0.2ppm | 6 | Standard | 0.2 | 0.0192 | 1 | 1 | 1 | 0.1991 | | 2025-03-06T03:19:12 |
| NOx 0.1ppm | 7 | Standard | 0.1 | 0.0095 | 1 | 1 | 1 | 0.1000 | | 2025-03-06T03:20:22 |
| NOx 0.0ppm | 8 | Standard | 0 | 0.0001 | 1 | 1 | 1 | 0.0029 | | 2025-03-06T03:21:31 |
| Nitrite 8.0ppm | 9 | Standard | ? | 0.7885 | 1 | 1 | 1 | 8.0913 | OVR | 2025-03-06T03:22:42 |
| Nitrite 4.0ppm | 10 | Standard | ? | 0.4090 | 1 | 1 | 1 | 4.1981 | | 2025-03-06T03:23:51 |
| Nitrite 1.0ppm | 11 | Standard | ? | 0.1018 | 1 | 1 | 1 | 1.0466 | | 2025-03-06T03:24:59 |
| Nitrite 0.4ppm | 12 | Standard | ? | 0.0412 | 1 | 1 | 1 | 0.4245 | | 2025-03-06T03:26:07 |
| Nitrite 0.1ppm | 13 | Standard | ? | 0.0103 | 1 | 1 | 1 | 0.1080 | | 2025-03-06T03:27:17 |
| Nitrite 0.05ppm | 14 | Standard | ? | 0.0052 | 1 | 1 | 1 | 0.0550 | | 2025-03-06T03:28:27 |
| Nitrite 0.0ppm | 15 | Standard | ? | 0.0001 | 1 | 1 | 1 | 0.0032 | | 2025-03-06T03:29:38 |
| CCV NO3 | 16 | QC | 1 | 0.0981 | 1 | 1 | 1 | 1.0089 | | 2025-03-06T03:30:43 |
| CCV NO2 | 17 | QC | ? | 0.1019 | 1 | 1 | 1 | 1.0477 | | 2025-03-06T03:31:49 |
| CCB | 18 | QC | 0 | 0.0002 | 1 | 1 | 1 | 0.0046 | | 2025-03-06T03:33:02 |
| ICV NO3 5.0 | 19 | QC | 5 | 0.4896 | 1 | 1 | 1 | 5.0244 | | 2025-03-06T03:34:04 |
| ICV NO2 5.0 | 20 | QC | ? | 0.4644 | 1 | 1 | 1 | 4.7666 | | 2025-03-06T03:35:14 |
| ICV NO3 0.5 | 21 | QC | 0.5 | 0.0473 | 1 | 1 | 1 | 0.4878 | | 2025-03-06T03:36:22 |
| ICV NO2 0.5 | 22 | QC | ? | 0.0519 | 1 | 1 | 1 | 0.5342 | | 2025-03-06T03:37:30 |
| ICB | 23 | QC | 0 | 0.0001 | 1 | 1 | 1 | 0.0034 | | 2025-03-06T03:38:44 |
| Diluter CHK 8PPM | 24 | Unknown | ? | 0.1583 | 1 | 5 | 1 | 8.1302 | | 2025-03-06T03:39:47 |
| BLANK NO3 | 25 | Unknown | ? | 0.0000 | 1 | 1 | 1 | 0.0019 | | 2025-03-06T03:40:29 |
| LCS NO3 | 26 | Unknown | ? | 0.4884 | 1 | 1 | 1 | 5.0130 | | 2025-03-06T03:42:02 |
| BLANK NO2 | 27 | Unknown | ? | -0.0001 | 1 | 1 | 1 | 0.0013 | | 2025-03-06T03:42:41 |
| LCS NO2 | 28 | Unknown | ? | 0.4696 | 1 | 1 | 1 | 4.8193 | | 2025-03-06T03:44:14 |
| CCV NO3 | 29 | QC | 1 | 0.0989 | 1 | 1 | 1 | 1.0163 | | 2025-03-06T03:45:20 |
| CCV NO2 | 30 | QC | ? | 0.1020 | 1 | 1 | 1 | 1.0483 | | 2025-03-06T03:46:25 |
| CCB | 31 | QC | 0 | 0.0002 | 1 | 1 | 1 | 0.0039 | | 2025-03-06T03:47:37 |
| WG2037148-1 | 32 | Unknown | ? | 0.0000 | 1 | 1 | 1 | 0.0022 | | 2025-03-06T03:48:47 |

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| WG2037148-2 | 33 | Unknown | ? | 0.5017 | 1 | 1 | 1 | 5.1492 | | 2025-03-06T03:49:46 |
| WG2037149-1 | 34 | Unknown | ? | -0.0002 | 1 | 1 | 1 | -0.0004 | | 2025-03-06T03:50:23 |
| WG2037149-2 | 35 | Unknown | ? | 0.4649 | 1 | 1 | 1 | 4.7713 | | 2025-03-06T03:51:56 |
| WG2037150-1 | 36 | Unknown | ? | -0.0002 | 1 | 1 | 1 | 0.0001 | | 2025-03-06T03:52:35 |
| WG2037150-2 | 37 | Unknown | ? | 0.4827 | 1 | 1 | 1 | 4.9538 | | 2025-03-06T03:54:08 |
| WG2037157/158-1 | 38 | Unknown | ? | -0.0001 | 1 | 1 | 1 | 0.0012 | | 2025-03-06T03:54:48 |
| WG2037157/158-2 | 39 | Unknown | ? | 0.4874 | 1 | 1 | 1 | 5.0024 | | 2025-03-06T03:56:22 |
| WG2037159-1 | 40 | Unknown | ? | -0.0001 | 1 | 1 | 1 | 0.0012 | | 2025-03-06T03:57:01 |
| WG2037159-2 | 41 | Unknown | ? | 0.4875 | 1 | 1 | 1 | 5.0036 | | 2025-03-06T03:58:34 |
| CCV NO3 | 42 | QC | 1 | 0.0980 | 1 | 1 | 1 | 1.0072 | | 2025-03-06T03:59:40 |
| CCV NO2 | 43 | QC | ? | 0.1024 | 1 | 1 | 1 | 1.0527 | | 2025-03-06T04:00:45 |
| CCB | 44 | QC | 0 | 0.0003 | 1 | 1 | 1 | 0.0052 | | 2025-03-06T04:01:59 |
| WG2037160/161-1 | 45 | Unknown | ? | 0.0000 | 1 | 1 | 1 | 0.0021 | | 2025-03-06T04:03:07 |
| WG2037160/161-2 | 46 | Unknown | ? | 0.4950 | 1 | 1 | 1 | 5.0808 | | 2025-03-06T04:04:12 |
| WG2037162-1 | 47 | Unknown | ? | -0.0001 | 1 | 1 | 1 | 0.0007 | | 2025-03-06T04:04:50 |
| WG2037162-2 | 48 | Unknown | ? | 0.4900 | 1 | 1 | 1 | 5.0289 | | 2025-03-06T04:06:23 |
| WG2037164-1 | 49 | Unknown | ? | -0.0001 | 1 | 1 | 1 | 0.0009 | | 2025-03-06T04:07:00 |
| WG2037164-2 | 50 | Unknown | ? | 0.4889 | 1 | 1 | 1 | 5.0176 | | 2025-03-06T04:08:33 |
| L2511631-01A | 51 | Unknown | ? | 1.3244 | 1 | 1 | 1 | 13.5894 | OVR | 2025-03-06T04:09:53 |
| L2511990-01A | 52 | Unknown | ? | 0.1675 | 1 | 1 | 1 | 1.7204 | | 2025-03-06T04:10:42 |
| WG2037150-3 | 53 | Unknown | ? | 0.2043 | 1 | 1 | 1 | 2.0985 | | 2025-03-06T04:11:46 |
| WG2037150-4 | 54 | Unknown | ? | 0.5727 | 1 | 1 | 1 | 5.8770 | | 2025-03-06T04:12:50 |
| CCV NO3 | 55 | QC | 1 | 0.0979 | 1 | 1 | 1 | 1.0063 | | 2025-03-06T04:13:55 |
| CCV NO2 | 56 | QC | ? | 0.1033 | 1 | 1 | 1 | 1.0616 | | 2025-03-06T04:15:00 |
| CCB | 57 | QC | 0 | 0.0002 | 1 | 1 | 1 | 0.0043 | | 2025-03-06T04:16:13 |
| WG2037148-3 | 58 | Unknown | ? | 0.2057 | 1 | 1 | 1 | 2.1128 | | 2025-03-06T04:17:20 |
| WG2037148-4 | 59 | Unknown | ? | 0.5943 | 1 | 1 | 1 | 6.0986 | | 2025-03-06T04:18:28 |
| L2512005-01K | 60 | Unknown | ? | 0.3767 | 1 | 1 | 1 | 3.8667 | | 2025-03-06T04:19:35 |
| WG2037150-5 | 61 | Unknown | ? | 0.3782 | 1 | 1 | 1 | 3.8816 | | 2025-03-06T04:20:41 |
| WG2037150-6 | 62 | Unknown | ? | 0.7165 | 1 | 1 | 1 | 7.3524 | | 2025-03-06T04:21:48 |
| L2512005-02K | 63 | Unknown | ? | 0.3691 | 1 | 1 | 1 | 3.7887 | | 2025-03-06T04:22:54 |
| L2512005-03K | 64 | Unknown | ? | 0.4372 | 1 | 1 | 1 | 4.4875 | | 2025-03-06T04:24:00 |
| L2512005-04R | 65 | Unknown | ? | 0.3604 | 1 | 1 | 1 | 3.6991 | | 2025-03-06T04:25:05 |

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| L2511986-01C | 66 | Unknown | ? | 0.0723 | 1 | 1 | 1 | 0.7438 | | 2025-03-06T04:26:10 |
| L2511986-02C | 67 | Unknown | ? | 0.0000 | 1 | 1 | 1 | 0.0018 | | 2025-03-06T04:26:47 |
| CCV NO3 | 68 | QC | 1 | 0.0982 | 1 | 1 | 1 | 1.0093 | | 2025-03-06T04:28:20 |
| CCV NO2 | 69 | QC | ? | 0.1034 | 1 | 1 | 1 | 1.0631 | | 2025-03-06T04:29:26 |
| CCB | 70 | QC | 0 | 0.0002 | 1 | 1 | 1 | 0.0045 | | 2025-03-06T04:30:39 |
| L2511986-03C | 71 | Unknown | ? | 0.0000 | 1 | 1 | 1 | 0.0021 | | 2025-03-06T04:31:19 |
| L2511986-04C | 72 | Unknown | ? | 0.0000 | 1 | 1 | 1 | 0.0025 | | 2025-03-06T04:32:51 |
| L2511944-01M | 73 | Unknown | ? | 0.0360 | 1 | 1 | 1 | 0.3718 | | 2025-03-06T04:33:55 |
| L2511944-02M | 74 | Unknown | ? | 0.1191 | 1 | 1 | 1 | 1.2241 | | 2025-03-06T04:35:00 |
| L2511944-03M | 75 | Unknown | ? | 0.0045 | 1 | 1 | 1 | 0.0485 | | 2025-03-06T04:36:04 |
| L2511944-04M | 76 | Unknown | ? | 0.5092 | 1 | 1 | 1 | 5.2258 | | 2025-03-06T04:37:10 |
| L2511944-05M | 77 | Unknown | ? | 0.2386 | 1 | 1 | 1 | 2.4503 | | 2025-03-06T04:38:16 |
| L2511944-06M | 78 | Unknown | ? | 0.0836 | 1 | 1 | 1 | 0.8597 | | 2025-03-06T04:39:23 |
| WG2037157/158-3 | 79 | Unknown | ? | 0.0833 | 1 | 1 | 1 | 0.8565 | | 2025-03-06T04:40:29 |
| WG2037157/158-4 | 80 | Unknown | ? | 0.4658 | 1 | 1 | 1 | 4.7805 | | 2025-03-06T04:41:35 |
| CCV NO3 | 81 | QC | 1 | 0.0981 | 1 | 1 | 1 | 1.0082 | | 2025-03-06T04:42:41 |
| CCV NO2 | 82 | QC | ? | 0.1039 | 1 | 1 | 1 | 1.0677 | | 2025-03-06T04:43:46 |
| CCB | 83 | QC | 0 | 0.0000 | 1 | 1 | 1 | 0.0020 | | 2025-03-06T04:44:58 |
| WG2037149-3 | 84 | Unknown | ? | 0.0830 | 1 | 1 | 1 | 0.8535 | | 2025-03-06T04:46:05 |
| WG2037149-4 | 85 | Unknown | ? | 0.4801 | 1 | 1 | 1 | 4.9275 | | 2025-03-06T04:47:13 |
| L2511944-07M | 86 | Unknown | ? | 0.1549 | 1 | 1 | 1 | 1.5907 | | 2025-03-06T04:48:19 |
| L2511944-08M | 87 | Unknown | ? | 0.0839 | 1 | 1 | 1 | 0.8626 | | 2025-03-06T04:49:24 |
| L2511944-09M | 88 | Unknown | ? | 0.0007 | 1 | 1 | 1 | 0.0094 | | 2025-03-06T04:50:29 |
| L2511757-01A | 89 | Unknown | ? | 0.0316 | 1 | 1 | 1 | 0.3263 | | 2025-03-06T04:51:33 |
| L2511972-16L | 90 | Unknown | ? | 0.0339 | 1 | 1 | 1 | 0.3504 | | 2025-03-06T04:52:38 |
| L2511972-17L | 91 | Unknown | ? | 0.0242 | 1 | 1 | 1 | 0.2505 | | 2025-03-06T04:53:42 |
| L2512154-01E | 92 | Unknown | ? | 0.2263 | 1 | 1 | 1 | 2.3237 | | 2025-03-06T04:54:47 |
| WG2037159-3 | 93 | Unknown | ? | 0.2224 | 1 | 1 | 1 | 2.2838 | | 2025-03-06T04:55:51 |
| CCV NO3 | 94 | QC | 1 | 0.0986 | 1 | 1 | 1 | 1.0136 | | 2025-03-06T04:56:55 |
| CCV NO2 | 95 | QC | ? | 0.1026 | 1 | 1 | 1 | 1.0542 | | 2025-03-06T04:58:01 |
| CCB | 96 | QC | 0 | 0.0000 | 1 | 1 | 1 | 0.0022 | | 2025-03-06T04:59:12 |
| WG2037159-4 | 97 | Unknown | ? | 0.5770 | 1 | 1 | 1 | 5.9213 | | 2025-03-06T05:00:21 |
| L2512154-03E | 98 | Unknown | ? | 0.0324 | 1 | 1 | 1 | 0.3349 | | 2025-03-06T05:01:29 |

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| L2512154-04E | 99 | Unknown | ? | 0.0186 | 1 | 1 | 1 | 0.1931 | | 2025-03-06T05:02:36 |
| L2512154-06E | 100 | Unknown | ? | 0.0419 | 1 | 1 | 1 | 0.4316 | | 2025-03-06T05:03:42 |
| L2512168-01E | 101 | Unknown | ? | 0.0254 | 1 | 1 | 1 | 0.2627 | | 2025-03-06T05:04:48 |
| L2512169-01E | 102 | Unknown | ? | 0.0578 | 1 | 1 | 1 | 0.5947 | | 2025-03-06T05:05:54 |
| L2512169-02E | 103 | Unknown | ? | 0.2741 | 1 | 1 | 1 | 2.8144 | | 2025-03-06T05:07:00 |
| L2511932-01D | 104 | Unknown | ? | 0.0074 | 1 | 1 | 1 | 0.0785 | | 2025-03-06T05:08:05 |
| WG2037162-3 | 105 | Unknown | ? | 0.0069 | 1 | 1 | 1 | 0.0730 | | 2025-03-06T05:09:10 |
| WG2037162-4 | 106 | Unknown | ? | 0.3972 | 1 | 1 | 1 | 4.0775 | | 2025-03-06T05:10:15 |
| CCV NO3 | 107 | QC | 1 | 0.0993 | 1 | 1 | 1 | 1.0203 | | 2025-03-06T05:11:20 |
| CCV NO2 | 108 | QC | ? | 0.1028 | 1 | 1 | 1 | 1.0567 | | 2025-03-06T05:12:26 |
| CCB | 109 | QC | 0 | 0.0003 | 1 | 1 | 1 | 0.0051 | | 2025-03-06T05:13:37 |
| L2511932-02D | 110 | Unknown | ? | 0.0082 | 1 | 1 | 1 | 0.0865 | | 2025-03-06T05:14:44 |
| L2512270-01A | 111 | Unknown | ? | 0.0038 | 1 | 1 | 1 | 0.0409 | | 2025-03-06T05:15:51 |
| L2512270-02A | 112 | Unknown | ? | 0.0045 | 1 | 1 | 1 | 0.0486 | | 2025-03-06T05:16:55 |
| L2512284-01A | 113 | Unknown | ? | 0.0115 | 1 | 1 | 1 | 0.1199 | | 2025-03-06T05:18:00 |
| L2512284-02A | 114 | Unknown | ? | 0.0099 | 1 | 1 | 1 | 0.1036 | | 2025-03-06T05:19:04 |
| L2512289-01A | 115 | Unknown | ? | 0.0042 | 1 | 1 | 1 | 0.0449 | | 2025-03-06T05:20:10 |
| L2512291-01A | 116 | Unknown | ? | 0.0141 | 1 | 1 | 1 | 0.1471 | | 2025-03-06T05:21:16 |
| L2512291-02A | 117 | Unknown | ? | 0.0054 | 1 | 1 | 1 | 0.0572 | | 2025-03-06T05:22:23 |
| L2512293-01C | 118 | Unknown | ? | 0.0028 | 1 | 1 | 1 | 0.0309 | | 2025-03-06T05:23:29 |
| L2512293-02E | 119 | Unknown | ? | 0.0064 | 1 | 1 | 1 | 0.0683 | | 2025-03-06T05:24:35 |
| CCV NO3 | 120 | QC | 1 | 0.1003 | 1 | 1 | 1 | 1.0316 | | 2025-03-06T05:25:40 |
| CCV NO2 | 121 | QC | ? | 0.1027 | 1 | 1 | 1 | 1.0562 | | 2025-03-06T05:26:46 |
| CCB | 122 | QC | 0 | 0.0006 | 1 | 1 | 1 | 0.0079 | | 2025-03-06T05:27:59 |
| L2512294-01A | 123 | Unknown | ? | 0.0029 | 1 | 1 | 1 | 0.0317 | | 2025-03-06T05:29:06 |
| L2512294-02A | 124 | Unknown | ? | 0.0042 | 1 | 1 | 1 | 0.0456 | | 2025-03-06T05:30:14 |
| L2512296-01A | 125 | Unknown | ? | 0.0026 | 1 | 1 | 1 | 0.0291 | | 2025-03-06T05:31:19 |
| L2512296-02A | 126 | Unknown | ? | 0.0038 | 1 | 1 | 1 | 0.0413 | | 2025-03-06T05:32:25 |
| L2512298-01A | 127 | Unknown | ? | 0.0062 | 1 | 1 | 1 | 0.0662 | | 2025-03-06T05:33:30 |
| L2512298-02A | 128 | Unknown | ? | 0.0042 | 1 | 1 | 1 | 0.0456 | | 2025-03-06T05:34:34 |
| L2512299-01A | 129 | Unknown | ? | 0.0109 | 1 | 1 | 1 | 0.1142 | | 2025-03-06T05:35:39 |
| L2512299-02A | 130 | Unknown | ? | 0.0046 | 1 | 1 | 1 | 0.0497 | | 2025-03-06T05:36:45 |
| L2511990-01A | 131 | Unknown | ? | 0.2093 | 1 | 1 | 1 | 2.1489 | | 2025-03-06T05:37:48 |

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| CCV NO3 | 132 | QC | 1 | 0.0980 | 1 | 1 | 1 | 1.0073 | | 2025-03-06T05:38:53 |
| CCV NO2 | 133 | QC | ? | 0.1016 | 1 | 1 | 1 | 1.0440 | | 2025-03-06T05:39:58 |
| CCB | 134 | QC | 0 | 0.0003 | 1 | 1 | 1 | 0.0048 | | 2025-03-06T05:41:12 |
| _spacer_ | 135 | Unknown | ? | 0.0000 | 1 | 1 | 1 | 0.0022 | | 2025-03-06T05:44:48 |
| _spacer_ | 136 | Unknown | ? | 0.0015 | 1 | 1 | 1 | 0.0178 | | 2025-03-06T05:46:22 |
| L2511631-01A | 137 | Unknown | ? | 0.4727 | 1 | 25 | 1 | 121.2769 | | 2025-03-06T05:47:28 |
| CCV NO3 | 138 | QC | 1 | 0.0975 | 1 | 1 | 1 | 1.0024 | | 2025-03-06T05:48:34 |
| CCV NO2 | 139 | QC | ? | 0.1028 | 1 | 1 | 1 | 1.0565 | | 2025-03-06T05:49:39 |
| CCB | 140 | QC | 0 | 0.0005 | 1 | 1 | 1 | 0.0072 | | 2025-03-06T05:50:53 |

Channel: 2-NO2

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Stabil | 1 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0024 | | 2025-03-06T03:13:56 |
| NOx 8.0ppm | 2 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2025-03-06T03:14:26 |
| NOx 4.0ppm | 3 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0026 | | 2025-03-06T03:15:37 |
| NOx 1.0ppm | 4 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0025 | | 2025-03-06T03:16:42 |
| NOx 0.4ppm | 5 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0027 | | 2025-03-06T03:17:50 |
| NOx 0.2ppm | 6 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0026 | | 2025-03-06T03:19:06 |
| NOx 0.1ppm | 7 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0025 | | 2025-03-06T03:20:13 |
| NOx 0.0ppm | 8 | Standard | ? | 0.0001 | 1 | 1 | 1 | -0.0024 | | 2025-03-06T03:21:22 |
| Nitrite 8.0ppm | 9 | Standard | 8 | 1.0210 | 1 | 1 | 1 | 7.5563 | | 2025-03-06T03:22:30 |
| Nitrite 4.0ppm | 10 | Standard | 4 | 0.5444 | 1 | 1 | 1 | 4.0273 | | 2025-03-06T03:23:40 |
| Nitrite 1.0ppm | 11 | Standard | 1 | 0.1381 | 1 | 1 | 1 | 1.0194 | | 2025-03-06T03:24:46 |
| Nitrite 0.4ppm | 12 | Standard | 0.4 | 0.0565 | 1 | 1 | 1 | 0.4150 | | 2025-03-06T03:25:55 |
| Nitrite 0.1ppm | 13 | Standard | 0.1 | 0.0142 | 1 | 1 | 1 | 0.1016 | | 2025-03-06T03:27:05 |
| Nitrite 0.05ppm | 14 | Standard | 0.05 | 0.0071 | 1 | 1 | 1 | 0.0493 | | 2025-03-06T03:28:14 |
| Nitrite 0.0ppm | 15 | Standard | 0 | 0.0002 | 1 | 1 | 1 | -0.0020 | | 2025-03-06T03:29:27 |
| CCV NO3 | 16 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0024 | | 2025-03-06T03:30:56 |
| CCV NO2 | 17 | QC | 1 | 0.1373 | 1 | 1 | 1 | 1.0136 | | 2025-03-06T03:31:35 |
| CCB | 18 | QC | 0 | 0.0005 | 1 | 1 | 1 | 0.0003 | | 2025-03-06T03:32:51 |
| ICV NO3 5.0 | 19 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0023 | | 2025-03-06T03:33:57 |
| ICV NO2 5.0 | 20 | QC | 5 | 0.6225 | 1 | 1 | 1 | 4.6057 | | 2025-03-06T03:35:02 |
| ICV NO3 0.5 | 21 | QC | ? | 0.0013 | 1 | 1 | 1 | 0.0066 | | 2025-03-06T03:36:15 |
| ICV NO2 0.5 | 22 | QC | 0.5 | 0.0701 | 1 | 1 | 1 | 0.5159 | | 2025-03- |

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | 06T03:37:18 |
| ICB | 23 | QC | 0 | 0.0002 | 1 | 1 | 1 | -0.0015 | | 2025-03-06T03:38:31 |
| Diluter CHK 8PPM | 24 | Unknown | ? | 0.0001 | 1 | 5 | 1 | -0.0120 | | 2025-03-06T03:39:38 |
| BLANK NO3 | 25 | Unknown | ? | 0.0000 | 1 | 1 | 1 | -0.0029 | | 2025-03-06T03:40:52 |
| LCS NO3 | 26 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0027 | | 2025-03-06T03:41:49 |
| BLANK NO2 | 27 | Unknown | ? | 0.0000 | 1 | 1 | 1 | -0.0028 | | 2025-03-06T03:43:07 |
| LCS NO2 | 28 | Unknown | ? | 0.6259 | 1 | 1 | 1 | 4.6306 | | 2025-03-06T03:44:02 |
| CCV NO3 | 29 | QC | ? | 0.0018 | 1 | 1 | 1 | 0.0102 | | 2025-03-06T03:45:11 |
| CCV NO2 | 30 | QC | 1 | 0.1381 | 1 | 1 | 1 | 1.0194 | | 2025-03-06T03:46:12 |
| CCB | 31 | QC | 0 | 0.0005 | 1 | 1 | 1 | 0.0008 | | 2025-03-06T03:47:28 |
| WG2037148-1 | 32 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0024 | | 2025-03-06T03:48:33 |
| WG2037148-2 | 33 | Unknown | ? | 0.6738 | 1 | 1 | 1 | 4.9851 | | 2025-03-06T03:49:33 |
| WG2037149-1 | 34 | Unknown | ? | 0.0015 | 1 | 1 | 1 | 0.0080 | | 2025-03-06T03:50:42 |
| WG2037149-2 | 35 | Unknown | ? | 0.6271 | 1 | 1 | 1 | 4.6393 | | 2025-03-06T03:51:43 |
| WG2037150-1 | 36 | Unknown | ? | 0.0017 | 1 | 1 | 1 | 0.0093 | | 2025-03-06T03:52:51 |
| WG2037150-2 | 37 | Unknown | ? | 0.0002 | 1 | 1 | 1 | -0.0018 | | 2025-03-06T03:53:58 |
| WG2037157/158-1 | 38 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0026 | | 2025-03-06T03:55:12 |
| WG2037157/158-2 | 39 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0026 | | 2025-03-06T03:56:09 |
| WG2037159-1 | 40 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0027 | | 2025-03-06T03:57:24 |
| WG2037159-2 | 41 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0027 | | 2025-03-06T03:58:31 |
| CCV NO3 | 42 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2025-03-06T03:59:31 |
| CCV NO2 | 43 | QC | 1 | 0.1375 | 1 | 1 | 1 | 1.0145 | | 2025-03-06T04:00:32 |
| CCB | 44 | QC | 0 | 0.0005 | 1 | 1 | 1 | 0.0008 | | 2025-03-06T04:01:49 |
| WG2037160/161-1 | 45 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0027 | | 2025-03-06T04:02:53 |
| WG2037160/161-2 | 46 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0026 | | 2025-03-06T04:04:03 |
| WG2037162-1 | 47 | Unknown | ? | 0.0000 | 1 | 1 | 1 | -0.0028 | | 2025-03-06T04:05:10 |
| WG2037162-2 | 48 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0027 | | 2025-03-06T04:06:12 |
| WG2037164-1 | 49 | Unknown | ? | 0.0000 | 1 | 1 | 1 | -0.0028 | | 2025-03-06T04:07:15 |
| WG2037164-2 | 50 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2025-03-06T04:08:28 |
| L2511631-01A | 51 | Unknown | ? | 0.0202 | 1 | 1 | 1 | 0.1465 | | 2025-03-06T04:09:24 |
| L2511990-01A | 52 | Unknown | ? | 0.0378 | 1 | 1 | 1 | 0.2770 | | 2025-03-06T04:10:28 |
| WG2037150-3 | 53 | Unknown | ? | 0.0367 | 1 | 1 | 1 | 0.2683 | | 2025-03-06T04:11:32 |
| WG2037150-4 | 54 | Unknown | ? | 0.0360 | 1 | 1 | 1 | 0.2631 | | 2025-03-06T04:12:36 |

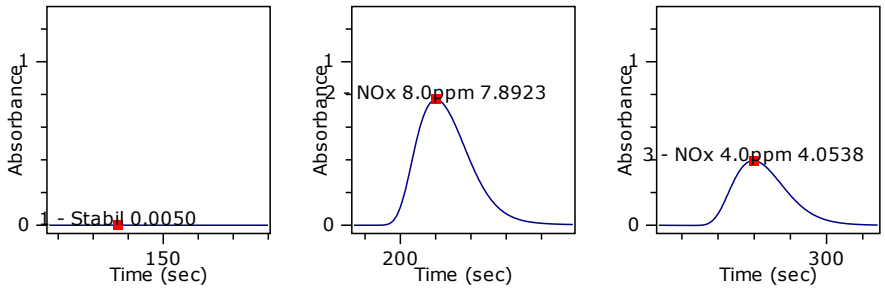
| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| CCV NO3 | 55 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0026 | | 2025-03-06T04:13:38 |
| CCV NO2 | 56 | QC | 1 | 0.1378 | 1 | 1 | 1 | 1.0170 | | 2025-03-06T04:14:47 |
| CCB | 57 | QC | 0 | 0.0004 | 1 | 1 | 1 | -0.0001 | | 2025-03-06T04:16:02 |
| WG2037148-3 | 58 | Unknown | ? | 0.0374 | 1 | 1 | 1 | 0.2740 | | 2025-03-06T04:17:07 |
| WG2037148-4 | 59 | Unknown | ? | 0.5719 | 1 | 1 | 1 | 4.2310 | | 2025-03-06T04:18:15 |
| L2512005-01K | 60 | Unknown | ? | 0.0012 | 1 | 1 | 1 | 0.0054 | | 2025-03-06T04:19:21 |
| WG2037150-5 | 61 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0024 | | 2025-03-06T04:20:28 |
| WG2037150-6 | 62 | Unknown | ? | 0.0036 | 1 | 1 | 1 | 0.0235 | | 2025-03-06T04:21:35 |
| L2512005-02K | 63 | Unknown | ? | 0.0014 | 1 | 1 | 1 | 0.0069 | | 2025-03-06T04:22:41 |
| L2512005-03K | 64 | Unknown | ? | 0.0012 | 1 | 1 | 1 | 0.0061 | | 2025-03-06T04:23:46 |
| L2512005-04R | 65 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0027 | | 2025-03-06T04:24:55 |
| L2511986-01C | 66 | Unknown | ? | 0.0014 | 1 | 1 | 1 | 0.0070 | | 2025-03-06T04:25:57 |
| L2511986-02C | 67 | Unknown | ? | 0.0000 | 1 | 1 | 1 | -0.0031 | | 2025-03-06T04:27:10 |
| CCV NO3 | 68 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0026 | | 2025-03-06T04:28:09 |
| CCV NO2 | 69 | QC | 1 | 0.1374 | 1 | 1 | 1 | 1.0142 | | 2025-03-06T04:29:12 |
| CCB | 70 | QC | 0 | 0.0004 | 1 | 1 | 1 | -0.0003 | | 2025-03-06T04:30:27 |
| L2511986-03C | 71 | Unknown | ? | 0.0000 | 1 | 1 | 1 | -0.0029 | | 2025-03-06T04:31:29 |
| L2511986-04C | 72 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0027 | | 2025-03-06T04:32:46 |
| L2511944-01M | 73 | Unknown | ? | 0.0011 | 1 | 1 | 1 | 0.0049 | | 2025-03-06T04:33:41 |
| L2511944-02M | 74 | Unknown | ? | 0.0010 | 1 | 1 | 1 | 0.0044 | | 2025-03-06T04:34:45 |
| L2511944-03M | 75 | Unknown | ? | 0.0013 | 1 | 1 | 1 | 0.0065 | | 2025-03-06T04:35:50 |
| L2511944-04M | 76 | Unknown | ? | 0.0012 | 1 | 1 | 1 | 0.0054 | | 2025-03-06T04:36:58 |
| L2511944-05M | 77 | Unknown | ? | 0.0012 | 1 | 1 | 1 | 0.0057 | | 2025-03-06T04:38:04 |
| L2511944-06M | 78 | Unknown | ? | 0.0013 | 1 | 1 | 1 | 0.0064 | | 2025-03-06T04:39:10 |
| WG2037157/158-3 | 79 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0024 | | 2025-03-06T04:40:17 |
| WG2037157/158-4 | 80 | Unknown | ? | 0.0002 | 1 | 1 | 1 | -0.0015 | | 2025-03-06T04:41:49 |
| CCV NO3 | 81 | QC | ? | 0.0005 | 1 | 1 | 1 | 0.0003 | | 2025-03-06T04:43:06 |
| CCV NO2 | 82 | QC | 1 | 0.1363 | 1 | 1 | 1 | 1.0058 | | 2025-03-06T04:43:33 |
| CCB | 83 | QC | 0 | 0.0002 | 1 | 1 | 1 | -0.0014 | | 2025-03-06T04:44:46 |
| WG2037149-3 | 84 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0025 | | 2025-03-06T04:45:52 |
| WG2037149-4 | 85 | Unknown | ? | 0.5311 | 1 | 1 | 1 | 3.9291 | | 2025-03-06T04:47:00 |
| L2511944-07M | 86 | Unknown | ? | 0.0013 | 1 | 1 | 1 | 0.0068 | | 2025-03-06T04:48:04 |
| L2511944-08M | 87 | Unknown | ? | 0.0011 | 1 | 1 | 1 | 0.0051 | | 2025-03-06T04:49:11 |

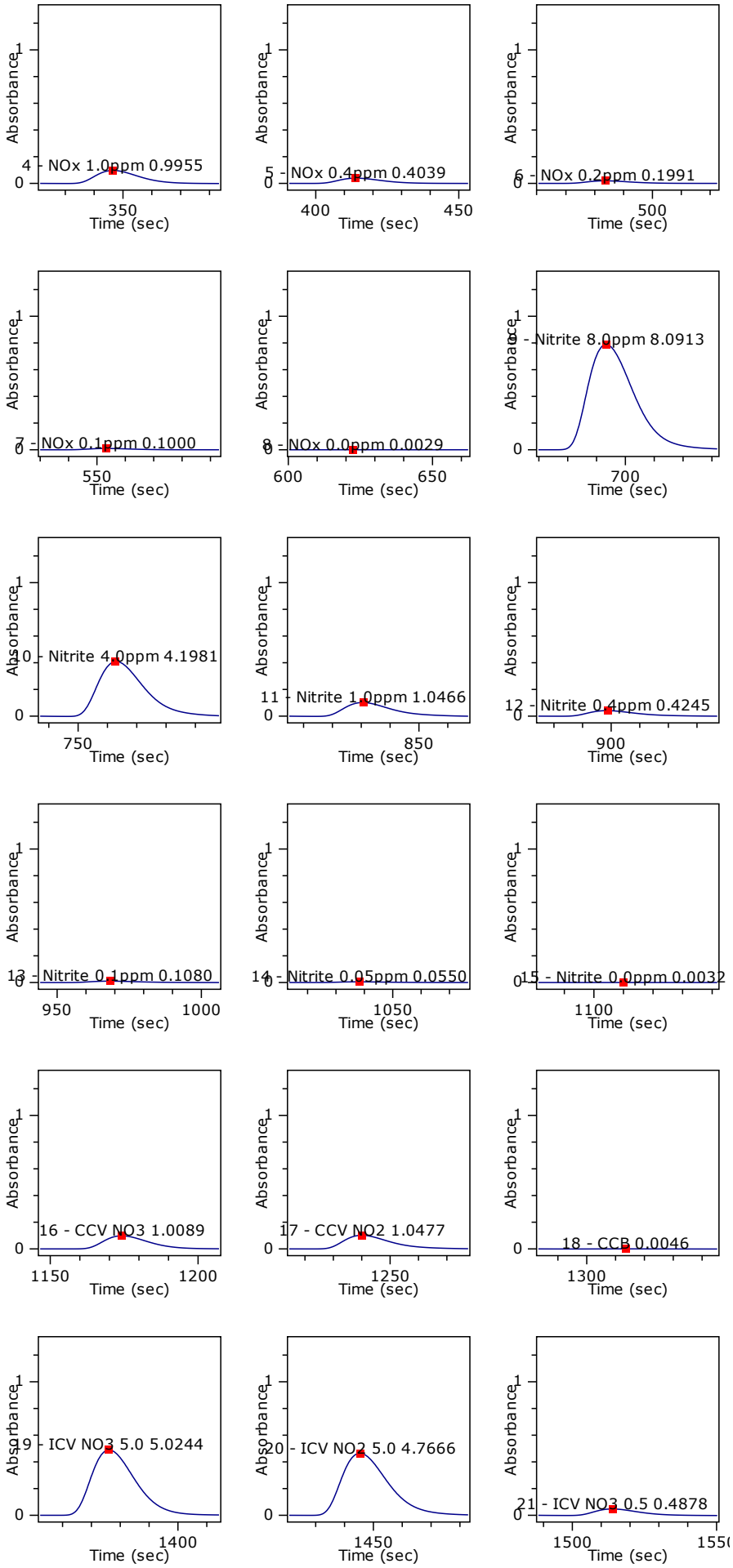
| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| L2511944-09M | 88 | Unknown | ? | 0.0010 | 1 | 1 | 1 | 0.0044 | | 2025-03-06T04:50:16 |
| L2511757-01A | 89 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0025 | | 2025-03-06T04:51:19 |
| L2511972-16L | 90 | Unknown | ? | 0.0012 | 1 | 1 | 1 | 0.0054 | | 2025-03-06T04:52:24 |
| L2511972-17L | 91 | Unknown | ? | 0.0011 | 1 | 1 | 1 | 0.0051 | | 2025-03-06T04:53:28 |
| L2512154-01E | 92 | Unknown | ? | 0.0036 | 1 | 1 | 1 | 0.0233 | | 2025-03-06T04:54:33 |
| WG2037159-3 | 93 | Unknown | ? | 0.0024 | 1 | 1 | 1 | 0.0148 | | 2025-03-06T04:55:37 |
| CCV NO3 | 94 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0026 | | 2025-03-06T04:56:43 |
| CCV NO2 | 95 | QC | 1 | 0.1358 | 1 | 1 | 1 | 1.0023 | | 2025-03-06T04:57:48 |
| CCB | 96 | QC | 0 | 0.0003 | 1 | 1 | 1 | -0.0012 | | 2025-03-06T04:59:01 |
| WG2037159-4 | 97 | Unknown | ? | 0.0045 | 1 | 1 | 1 | 0.0302 | | 2025-03-06T05:00:08 |
| L2512154-03E | 98 | Unknown | ? | 0.0013 | 1 | 1 | 1 | 0.0063 | | 2025-03-06T05:01:17 |
| L2512154-04E | 99 | Unknown | ? | 0.0021 | 1 | 1 | 1 | 0.0126 | | 2025-03-06T05:02:23 |
| L2512154-06E | 100 | Unknown | ? | 0.0023 | 1 | 1 | 1 | 0.0139 | | 2025-03-06T05:03:29 |
| L2512168-01E | 101 | Unknown | ? | 0.0017 | 1 | 1 | 1 | 0.0092 | | 2025-03-06T05:04:35 |
| L2512169-01E | 102 | Unknown | ? | 0.0030 | 1 | 1 | 1 | 0.0187 | | 2025-03-06T05:05:40 |
| L2512169-02E | 103 | Unknown | ? | 0.0022 | 1 | 1 | 1 | 0.0133 | | 2025-03-06T05:06:47 |
| L2511932-01D | 104 | Unknown | ? | 0.0028 | 1 | 1 | 1 | 0.0179 | | 2025-03-06T05:07:51 |
| WG2037162-3 | 105 | Unknown | ? | 0.0015 | 1 | 1 | 1 | 0.0080 | | 2025-03-06T05:08:57 |
| WG2037162-4 | 106 | Unknown | ? | 0.0015 | 1 | 1 | 1 | 0.0083 | | 2025-03-06T05:10:02 |
| CCV NO3 | 107 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0026 | | 2025-03-06T05:11:09 |
| CCV NO2 | 108 | QC | 1 | 0.1357 | 1 | 1 | 1 | 1.0014 | | 2025-03-06T05:12:12 |
| CCB | 109 | QC | 0 | 0.0002 | 1 | 1 | 1 | -0.0018 | | 2025-03-06T05:13:25 |
| L2511932-02D | 110 | Unknown | ? | 0.0014 | 1 | 1 | 1 | 0.0070 | | 2025-03-06T05:14:31 |
| L2512270-01A | 111 | Unknown | ? | 0.0041 | 1 | 1 | 1 | 0.0275 | | 2025-03-06T05:15:36 |
| L2512270-02A | 112 | Unknown | ? | 0.0044 | 1 | 1 | 1 | 0.0296 | | 2025-03-06T05:16:40 |
| L2512284-01A | 113 | Unknown | ? | 0.0122 | 1 | 1 | 1 | 0.0871 | | 2025-03-06T05:17:45 |
| L2512284-02A | 114 | Unknown | ? | 0.0106 | 1 | 1 | 1 | 0.0752 | | 2025-03-06T05:18:49 |
| L2512289-01A | 115 | Unknown | ? | 0.0045 | 1 | 1 | 1 | 0.0302 | | 2025-03-06T05:19:56 |
| L2512291-01A | 116 | Unknown | ? | 0.0142 | 1 | 1 | 1 | 0.1018 | | 2025-03-06T05:21:03 |
| L2512291-02A | 117 | Unknown | ? | 0.0036 | 1 | 1 | 1 | 0.0236 | | 2025-03-06T05:22:10 |
| L2512293-01C | 118 | Unknown | ? | 0.0024 | 1 | 1 | 1 | 0.0144 | | 2025-03-06T05:23:16 |
| L2512293-02E | 119 | Unknown | ? | 0.0016 | 1 | 1 | 1 | 0.0088 | | 2025-03-06T05:24:22 |
| CCV NO3 | 120 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0027 | | 2025-03-06T05:25:27 |

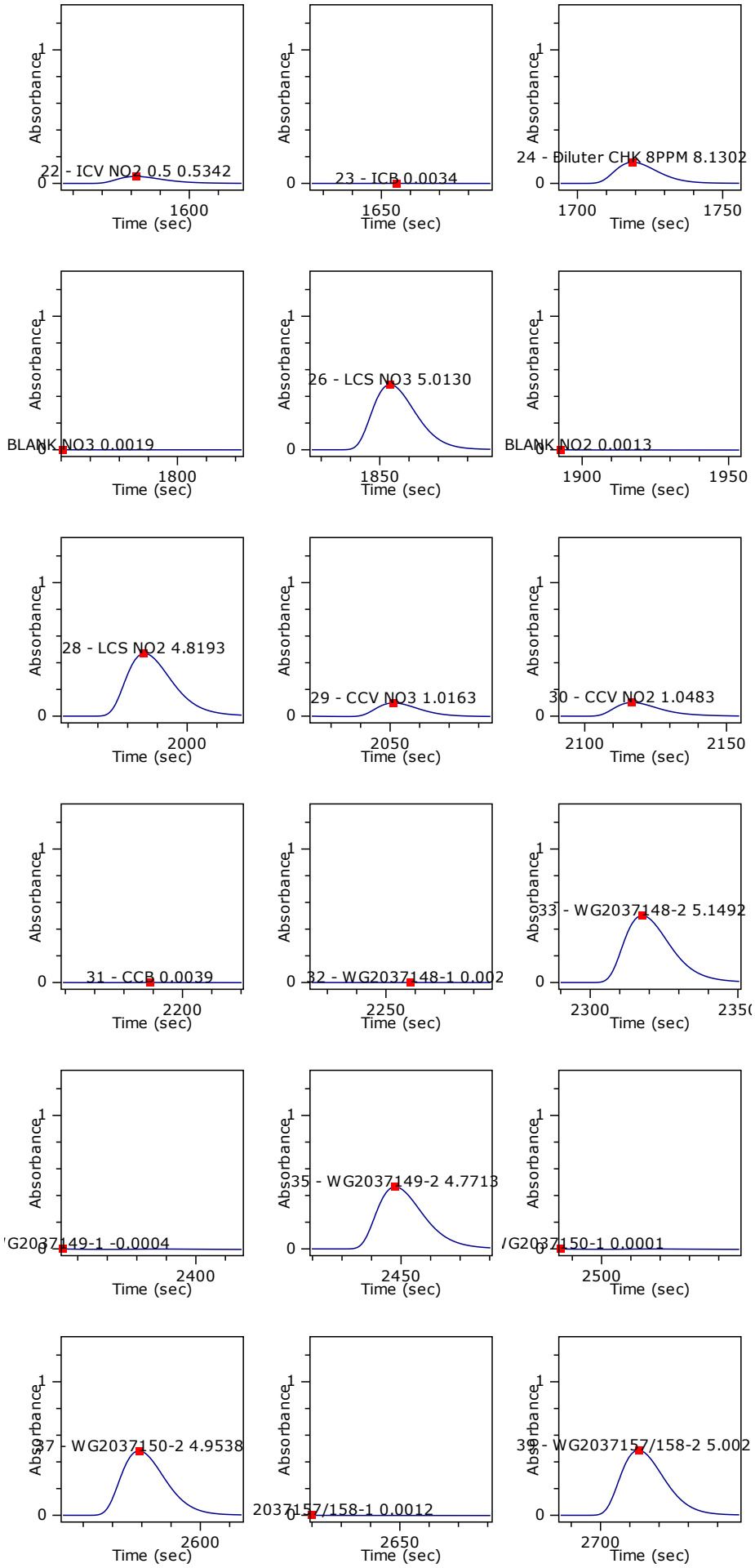
| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| CCV NO2 | 121 | QC | 1 | 0.1351 | 1 | 1 | 1 | 0.9969 | | 2025-03-06T05:26:33 |
| CCB | 122 | QC | 0 | 0.0002 | 1 | 1 | 1 | -0.0015 | | 2025-03-06T05:27:48 |
| L2512294-01A | 123 | Unknown | ? | 0.0023 | 1 | 1 | 1 | 0.0135 | | 2025-03-06T05:28:52 |
| L2512294-02A | 124 | Unknown | ? | 0.0034 | 1 | 1 | 1 | 0.0219 | | 2025-03-06T05:30:00 |
| L2512296-01A | 125 | Unknown | ? | 0.0035 | 1 | 1 | 1 | 0.0226 | | 2025-03-06T05:31:06 |
| L2512296-02A | 126 | Unknown | ? | 0.0050 | 1 | 1 | 1 | 0.0339 | | 2025-03-06T05:32:10 |
| L2512298-01A | 127 | Unknown | ? | 0.0067 | 1 | 1 | 1 | 0.0464 | | 2025-03-06T05:33:16 |
| L2512298-02A | 128 | Unknown | ? | 0.0032 | 1 | 1 | 1 | 0.0208 | | 2025-03-06T05:34:20 |
| L2512299-01A | 129 | Unknown | ? | 0.0123 | 1 | 1 | 1 | 0.0876 | | 2025-03-06T05:35:25 |
| L2512299-02A | 130 | Unknown | ? | 0.0051 | 1 | 1 | 1 | 0.0348 | | 2025-03-06T05:36:30 |
| L2511990-01A | 131 | Unknown | ? | 0.0375 | 1 | 1 | 1 | 0.2747 | | 2025-03-06T05:37:34 |
| CCV NO3 | 132 | QC | ? | 0.0000 | 1 | 1 | 1 | -0.0028 | | 2025-03-06T05:38:39 |
| CCV NO2 | 133 | QC | 1 | 0.1351 | 1 | 1 | 1 | 0.9971 | | 2025-03-06T05:39:45 |
| CCB | 134 | QC | 0 | 0.0003 | 1 | 1 | 1 | -0.0009 | | 2025-03-06T05:41:01 |
| _spacer_ | 135 | Unknown | ? | 0.0000 | 1 | 1 | 1 | -0.0030 | | 2025-03-06T05:45:12 |
| _spacer_ | 136 | Unknown | ? | 0.0004 | 1 | 1 | 1 | -0.0005 | | 2025-03-06T05:46:08 |
| L2511631-01A | 137 | Unknown | ? | 0.0008 | 1 | 25 | 1 | 0.0681 | | 2025-03-06T05:47:16 |
| CCV NO3 | 138 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0028 | | 2025-03-06T05:48:24 |
| CCV NO2 | 139 | QC | 1 | 0.1347 | 1 | 1 | 1 | 0.9944 | | 2025-03-06T05:49:26 |
| CCB | 140 | QC | 0 | 0.0027 | 1 | 1 | 1 | 0.0169 | | 2025-03-06T05:51:12 |

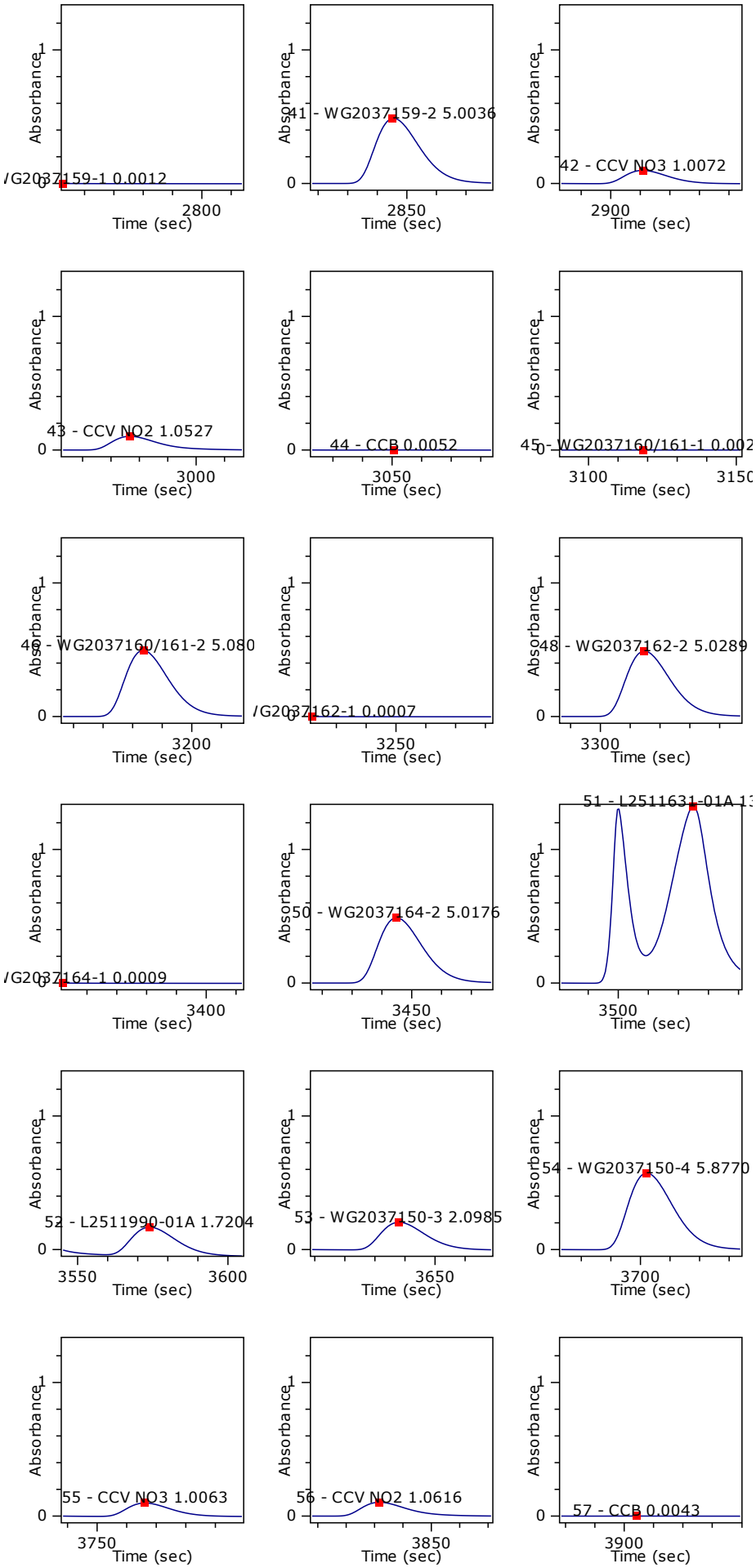
Peaks:

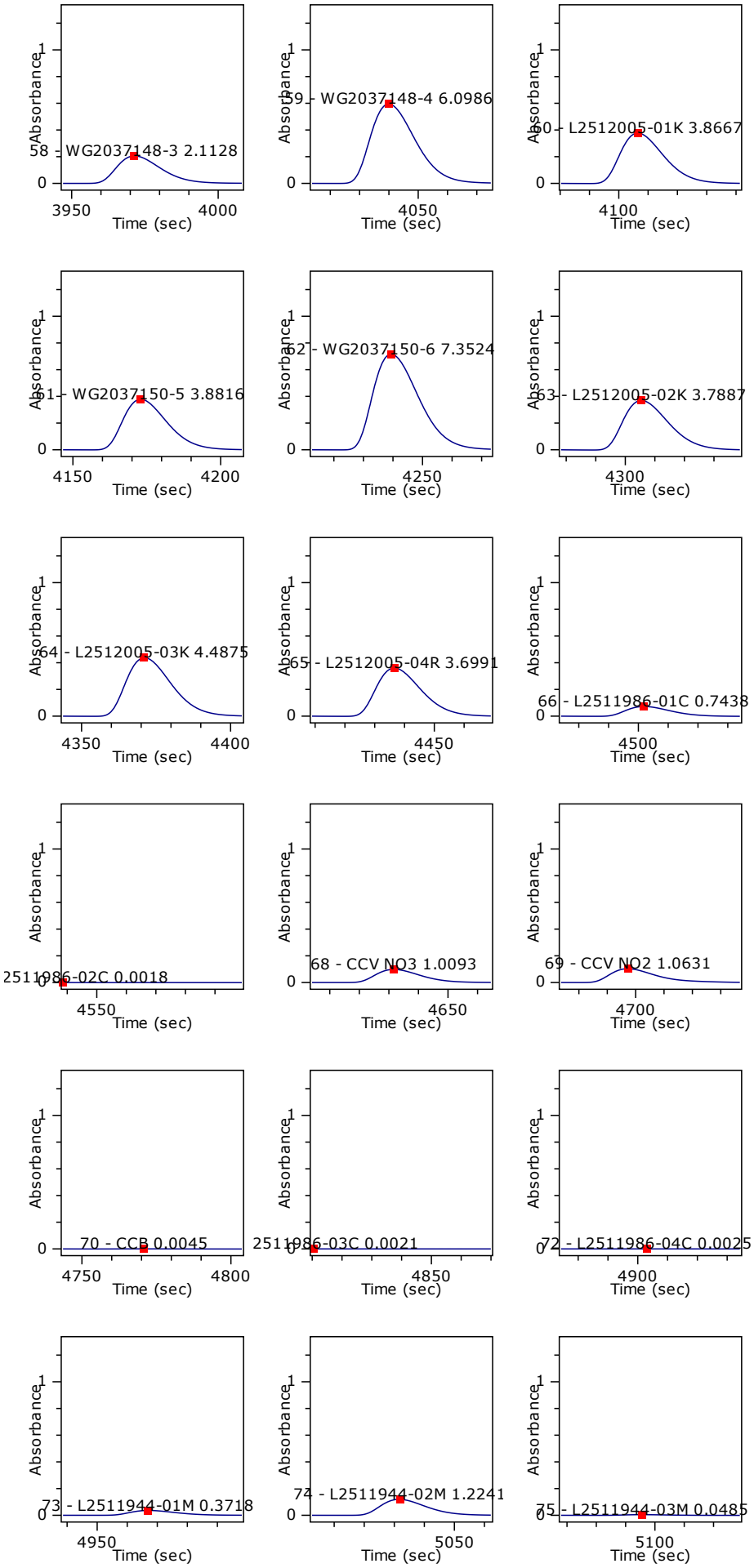
Channel: 1-NOx

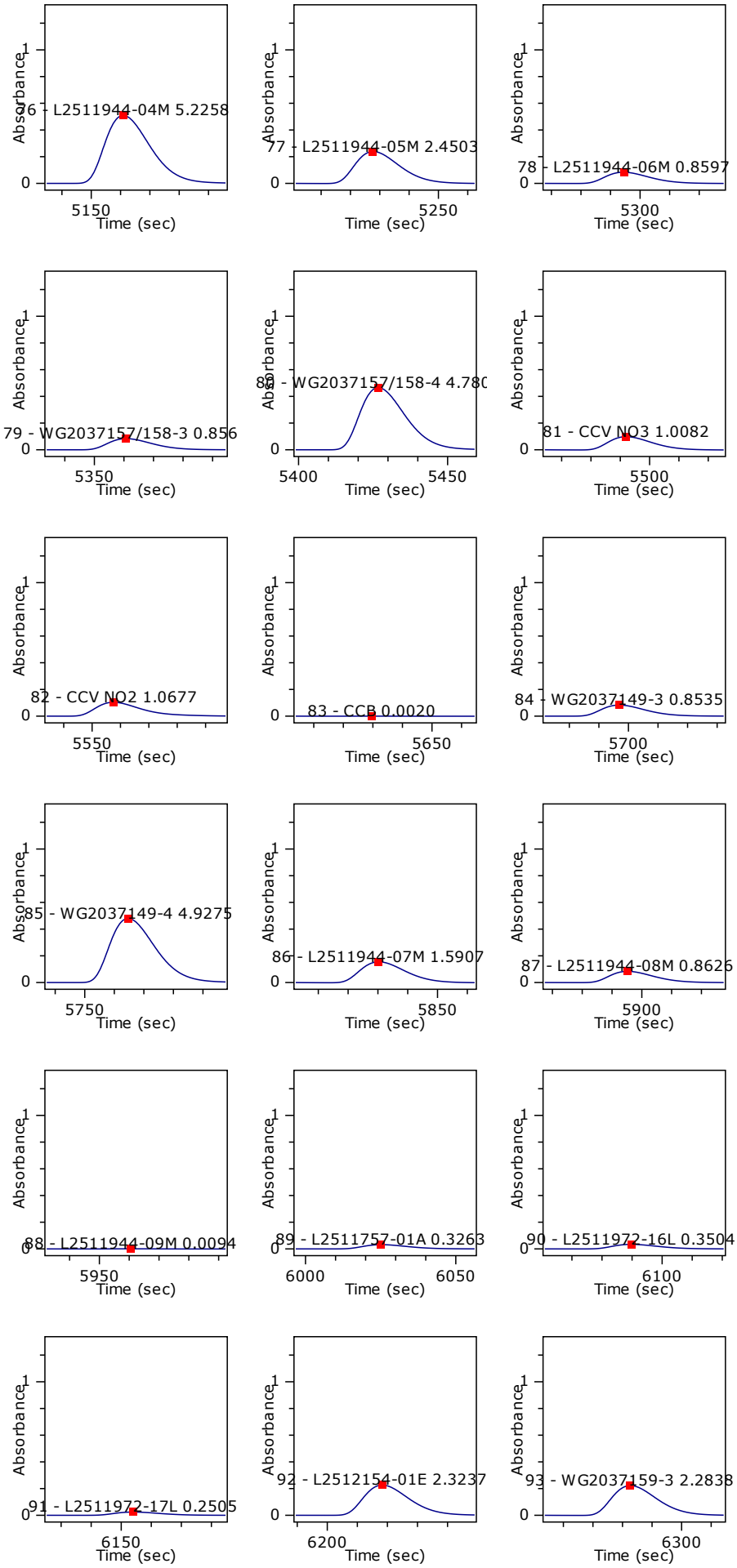


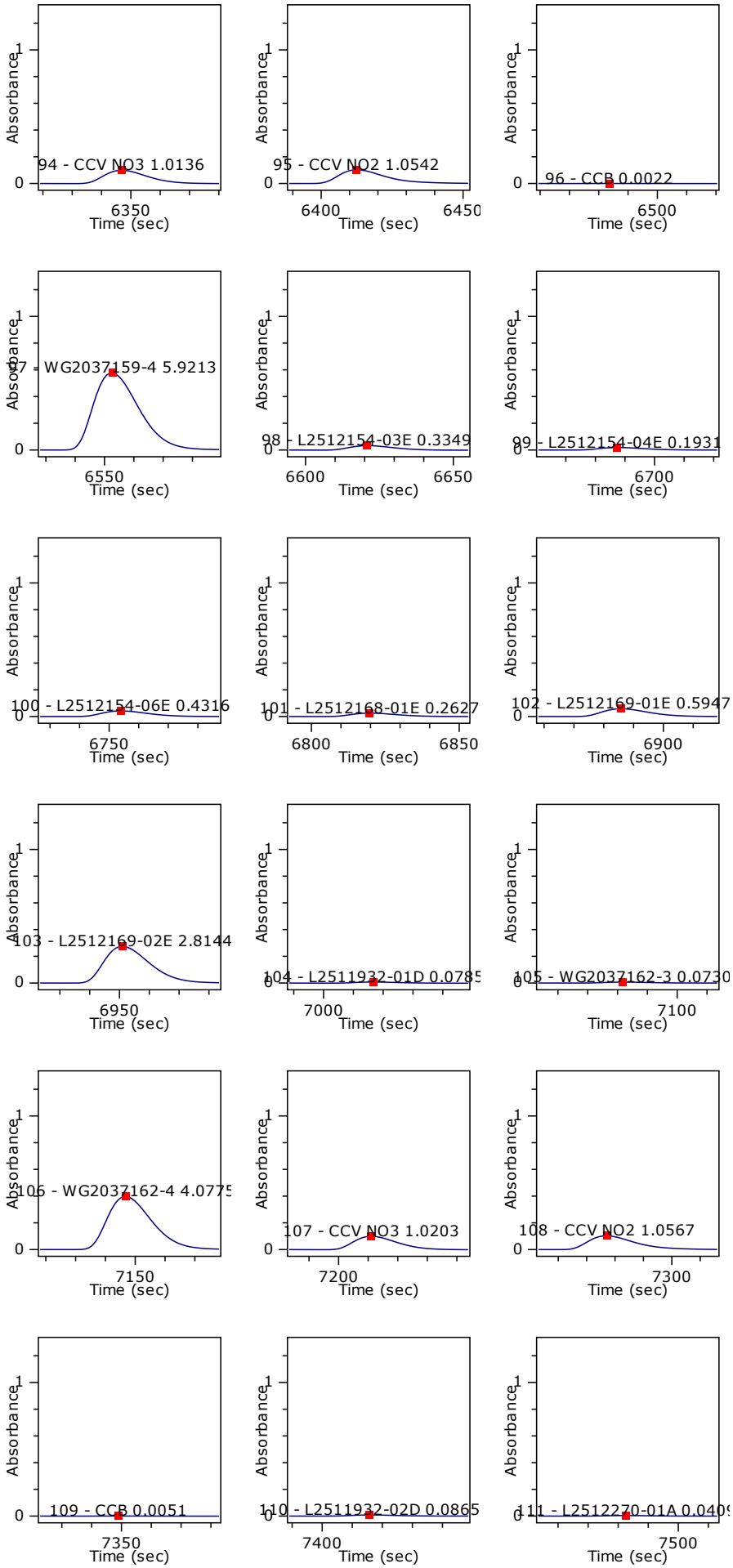

4 - NOx 1.0ppm 0.9955
5 - NOx 0.4ppm 0.4039
6 - NOx 0.2ppm 0.1991
7 - NOx 0.1ppm 0.1000
8 - NOx 0.0ppm 0.0029
9 - Nitrite 8.0ppm 8.0913
10 - Nitrite 4.0ppm 4.1981
11 - Nitrite 1.0ppm 1.0466
12 - Nitrite 0.4ppm 0.4245
13 - Nitrite 0.1ppm 0.1080
14 - Nitrite 0.05ppm 0.0550
15 - Nitrite 0.0ppm 0.0032
16 - CCV NO3 1.0089
17 - CCV NO2 1.0477
18 - CCB 0.0046
19 - ICV NO3 5.0 5.0244
20 - ICV NO2 5.0 4.7666
21 - ICV NO3 0.5 0.4878
Absorbance
Time (sec)

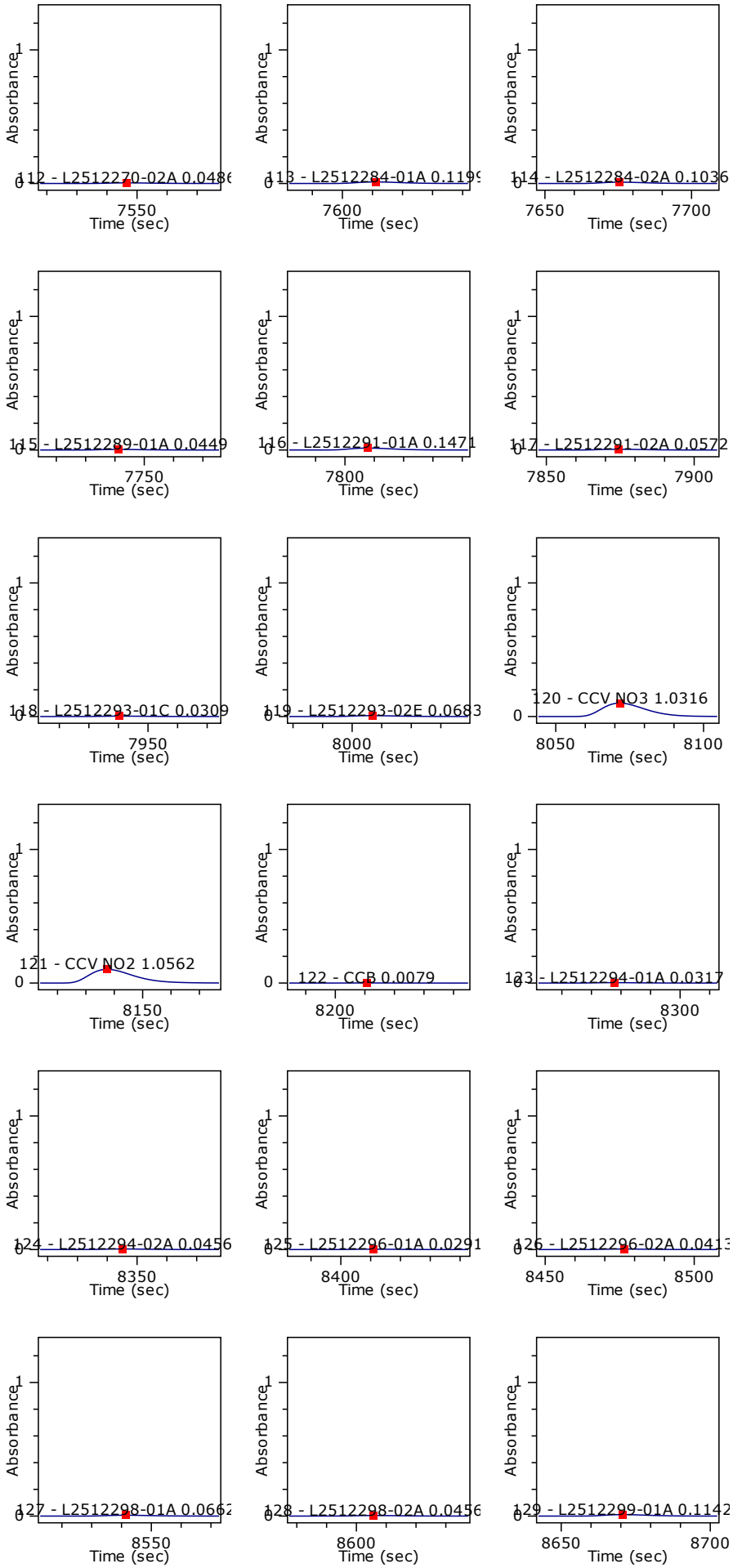

22 - ICV NO2 0.5 0.5342
23 - ICB 0.0034
24 - Diluter CHK 8PPM 8.1302
BLANK NO3 0.0019
26 - LCS NO3 5.0130
BLANK NO2 0.0013
28 - LCS NO2 4.8193
29 - CCV NO3 1.0163
30 - CCV NO2 1.0483
31 - CCB 0.0039
32 - WG2037148-1 0.002
33 - WG2037148-2 5.1492
G2037149-1 -0.0004
35 - WG2037149-2 4.7713
/G2037150-1 0.0001
37 - WG2037150-2 4.9538
2037157/158-1 0.0012
38 - WG2037157/158-2 5.002
Absorbance
Time (sec)

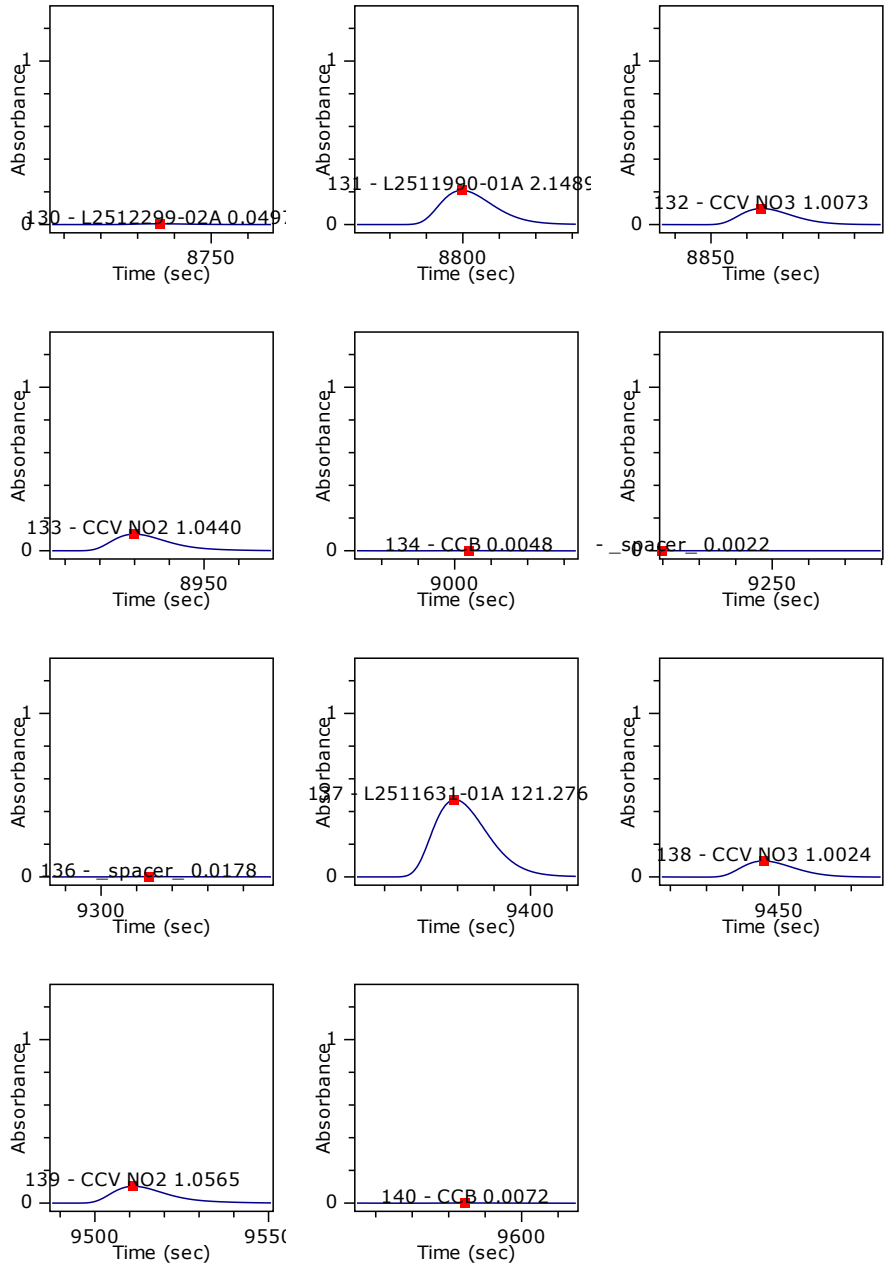

/G2037159-1 0.0012
41 - WG2037159-2 5.0036
42 - CCV NO3 1.0072
43 - CCV NO2 1.0527
44 - CCB 0.0052
45 - WG2037160/161-1 0.002
46 - WG2037160/161-2 5.080
/G2037162-1 0.0007
48 - WG2037162-2 5.0289
/G2037164-1 0.0009
50 - WG2037164-2 5.0176
51 - L2511631-01A 1
52 - L2511990-01A 1.7204
53 - WG2037150-3 2.0985
54 - WG2037150-4 5.8770
55 - CCV NO3 1.0063
56 - CCV NO2 1.0616
57 - CCB 0.0043
Absorbance
Time (sec)


58 - WG2037148-3 2.1128
59 - WG2037148-4 6.0986
60 - L2512005-01K 3.8667
61 - WG2037150-5 3.8816
62 - WG2037150-6 7.3524
63 - L2512005-02K 3.7887
64 - L2512005-03K 4.4875
65 - L2512005-04R 3.6991
66 - L2511986-01C 0.7438
2511986-02C 0.0018
68 - CCV NO3 1.0093
69 - CCV NO2 1.0631
70 - CCB 0.0045
2511986-03C 0.0021
72 - L2511986-04C 0.0025
73 - L2511944-01M 0.3718
74 - L2511944-02M 1.2241
75 - L2511944-03M 0.0485
Absorbance
Time (sec)

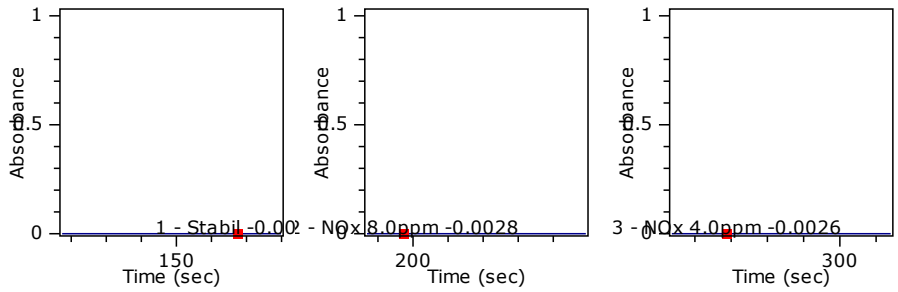

76 - L2511944-04M 5.2258
77 - L2511944-05M 2.4503
78 - L2511944-06M 0.8597
79 - WG2037157/158-3 0.856
80 - WG2037157/158-4 4.780
81 - CCV NO3 1.0082
82 - CCV NO2 1.0677
83 - CCB 0.0020
84 - WG2037149-3 0.8535
85 - WG2037149-4 4.9275
86 - L2511944-07M 1.5907
87 - L2511944-08M 0.8626
88 - L2511944-09M 0.0094
89 - L2511757-01A 0.3263
90 - L2511972-16L 0.3504
91 - L2511972-17L 0.2505
92 - L2512154-01E 2.3237
93 - WG2037159-3 2.2838
Absorbance
Time (sec)

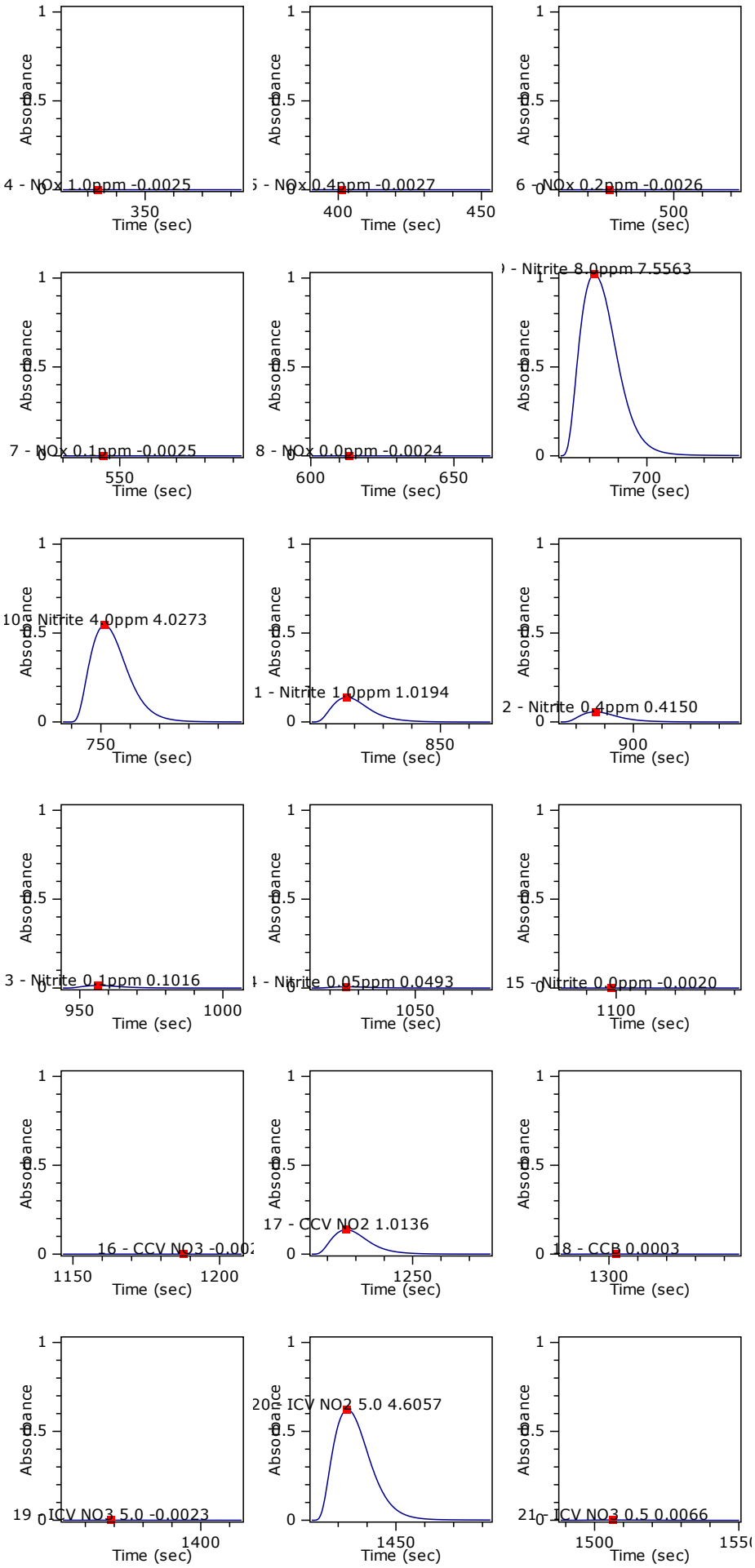

94 - CCV NO3 1.0136
95 - CCV NO2 1.0542
96 - CCB 0.0022
97 - WG2037159-4 5.9213
98 - L2512154-03E 0.3349
99 - L2512154-04E 0.1931
100 - L2512154-06E 0.4316
101 - L2512168-01E 0.2627
102 - L2512169-01E 0.5947
103 - L2512169-02E 2.8144
104 - L2511932-01D 0.0785
105 - WG2037162-3 0.0730
106 - WG2037162-4 4.0775
107 - CCV NO3 1.0203
108 - CCV NO2 1.0567
109 - CCB 0.0051
110 - L2511932-02D 0.0865
111 - L2512270-01A 0.0409
Absorbance
Time (sec)

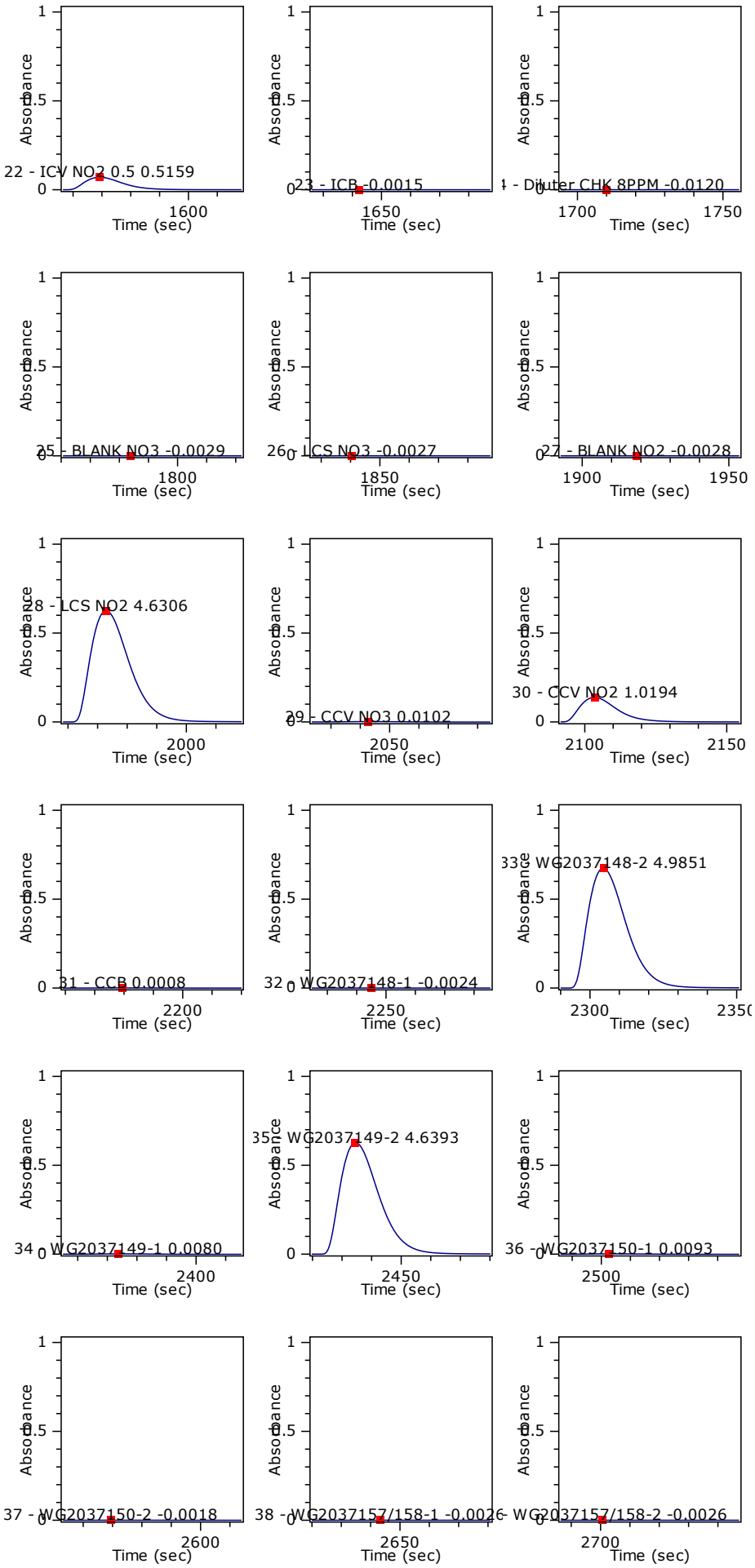

112 - L2512270-02A 0.0486
113 - L2512284-01A 0.1199
114 - L2512284-02A 0.1036
115 - L2512289-01A 0.0449
116 - L2512291-01A 0.1471
117 - L2512291-02A 0.0572
118 - L2512293-01C 0.0309
119 - L2512293-02E 0.0683
120 - CCV NO3 1.0316
121 - CCV NO2 1.0562
122 - CCB 0.0079
123 - L2512294-01A 0.0317
124 - L2512294-02A 0.0456
125 - L2512296-01A 0.0291
126 - L2512296-02A 0.0413
127 - L2512298-01A 0.0662
128 - L2512298-02A 0.0456
129 - L2512299-01A 0.1142
Absorbance
Time (sec)

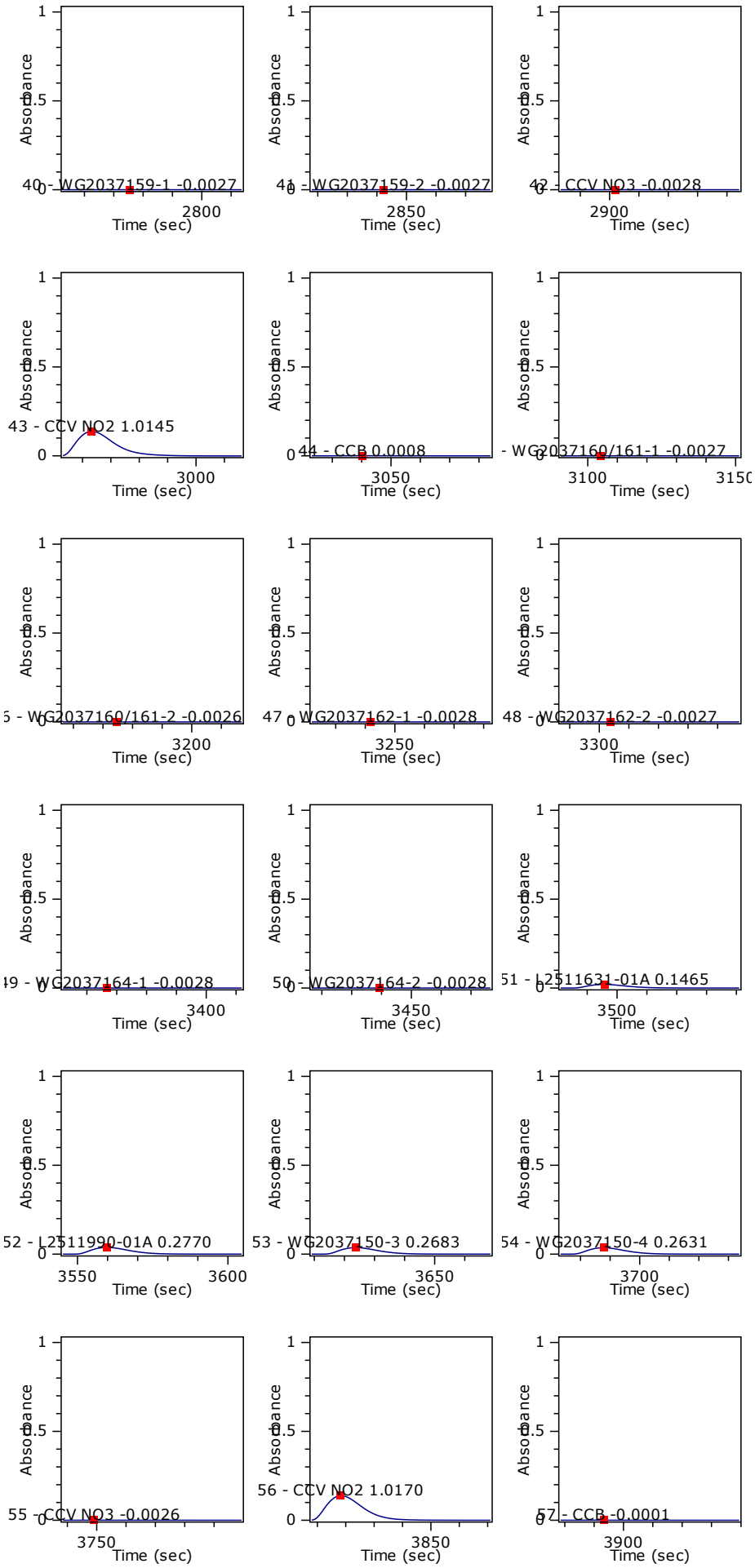


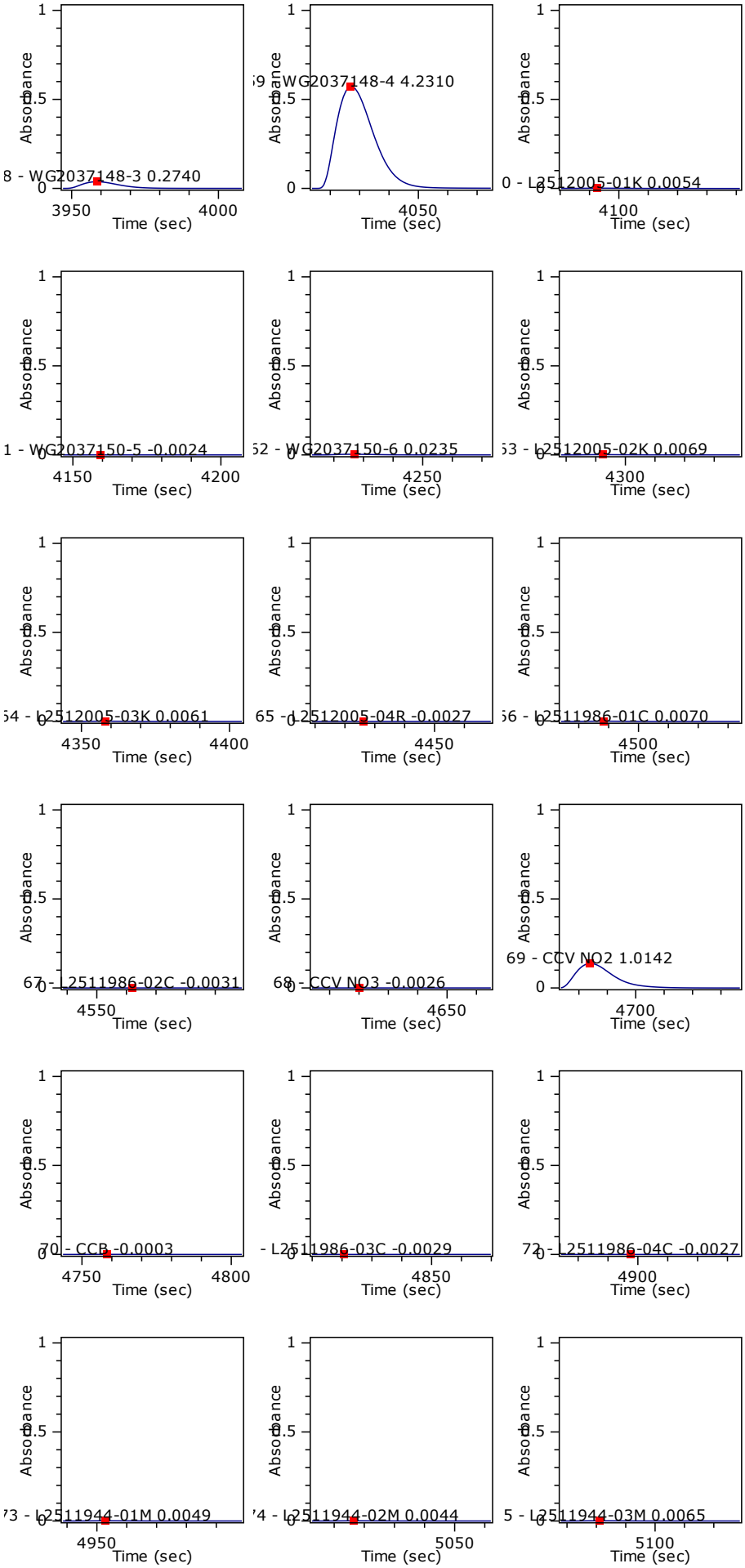

Channel: 2-NO2

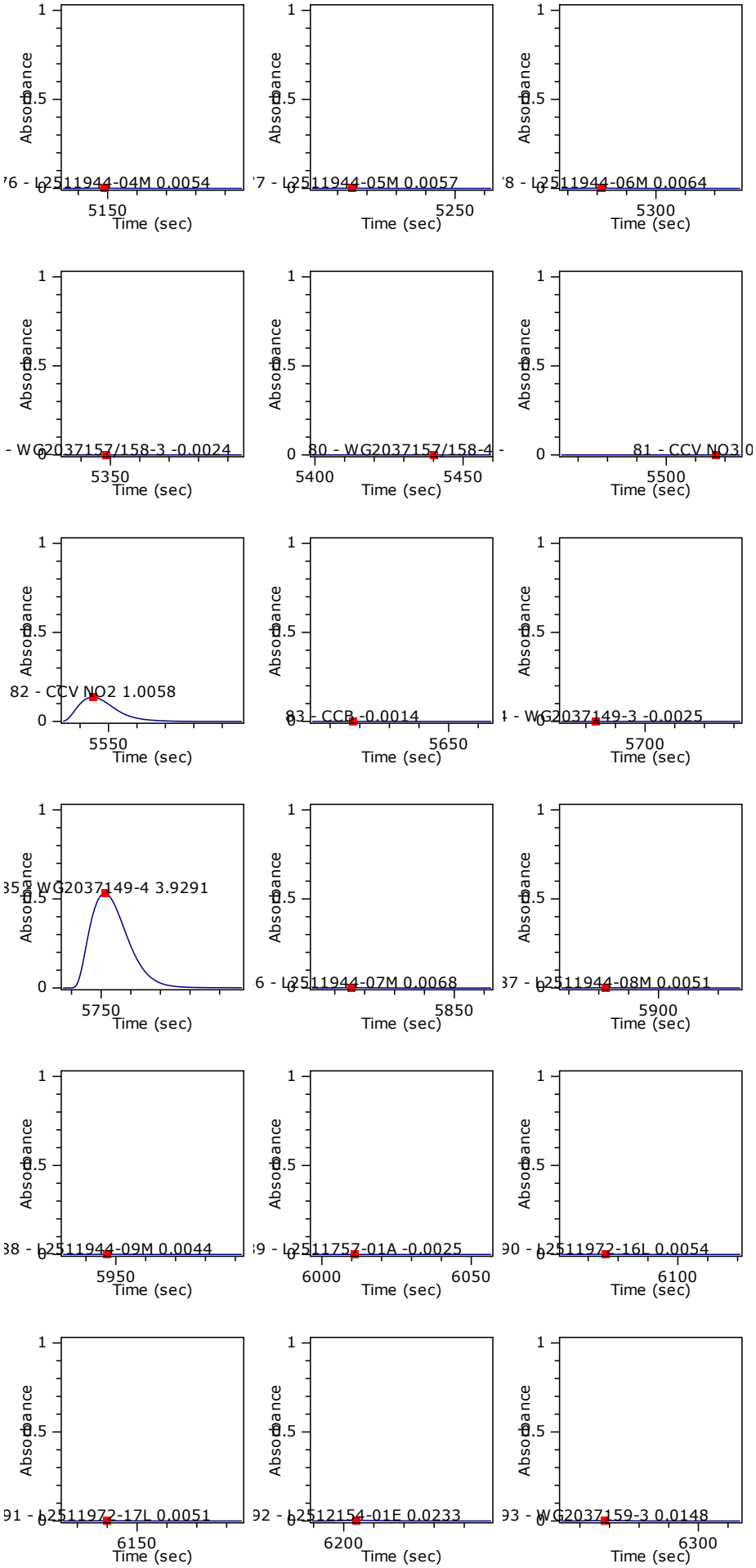


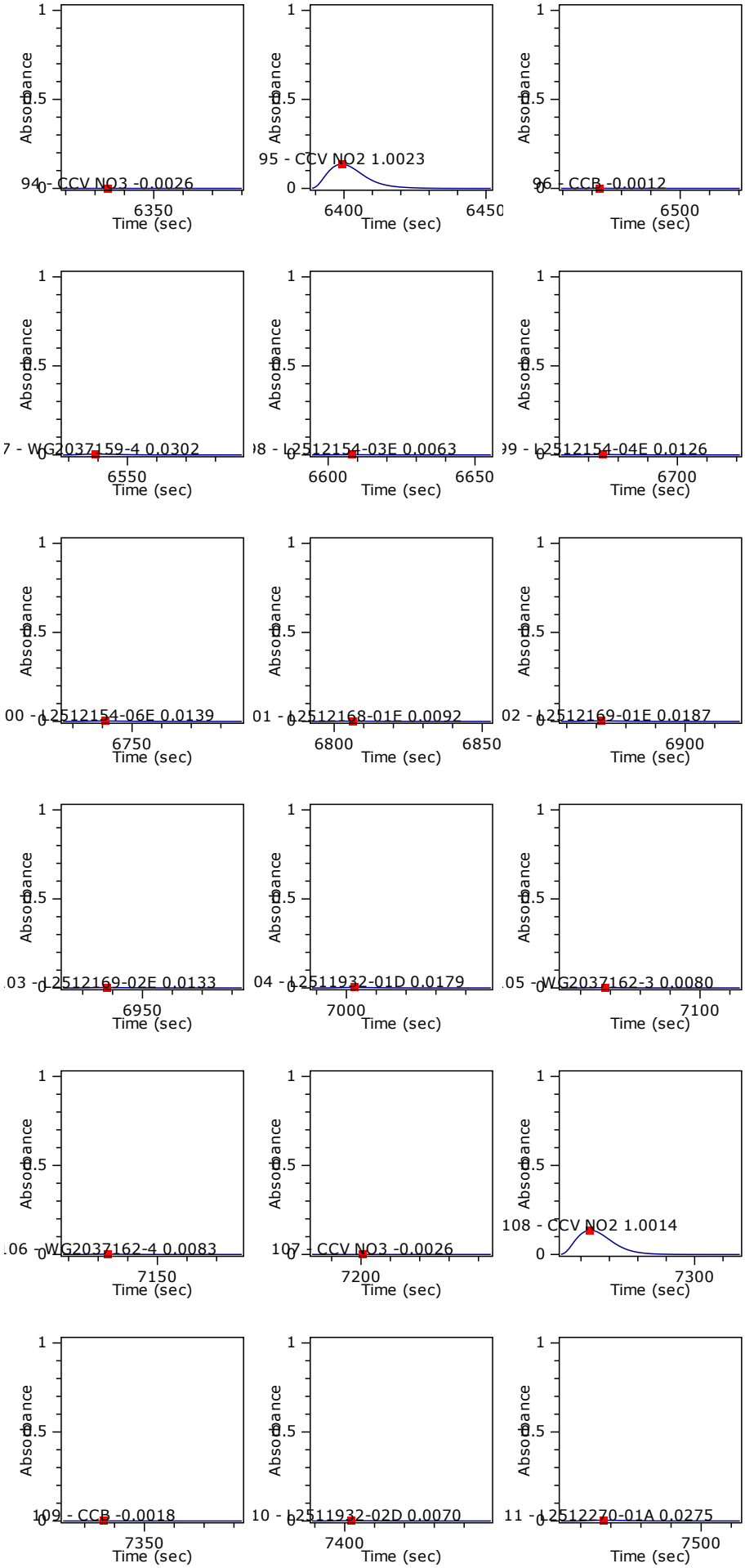

4 - NOx 1.0ppm -0.0025
5 - NOx 0.4ppm -0.0027
6 - NOx 0.2ppm -0.0026
7 - NOx 0.1ppm -0.0025
8 - NOx 0.0ppm -0.0024
9 - Nitrite 8.0ppm 7.5563
10 - Nitrite 4.0ppm 4.0273
11 - Nitrite 1.0ppm 1.0194
12 - Nitrite 0.4ppm 0.4150
13 - Nitrite 0.1ppm 0.1016
14 - Nitrite 0.05ppm 0.0493
15 - Nitrite 0.0ppm -0.0020
16 - CCV NO3 -0.002
17 - CCV NO2 1.0136
18 - CCB 0.0003
19 - ICV NO3 5.0 -0.0023
20 - ICV NO2 5.0 4.6057
21 - ICV NO3 0.5 0.0066
Absorbance
Time (sec)

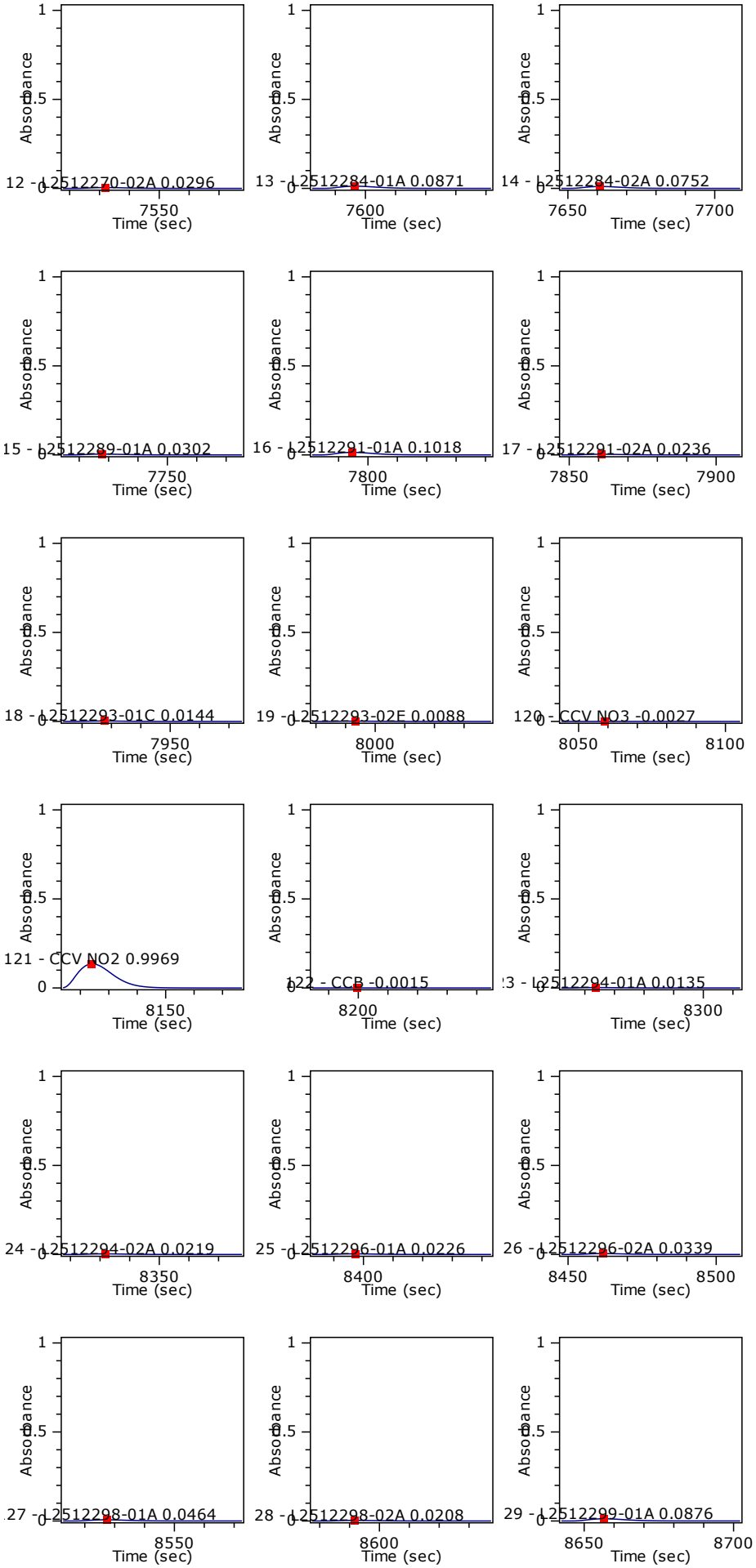

22 - ICV NO2 0.5 0.5159
23 - ICB -0.0015
1 - Diluter CHK 8PPM -0.0120
25 - BLANK NO3 -0.0029
26 - LCS NO3 -0.0027
27 - BLANK NO2 -0.0028
28 - LCS NO2 4.6306
29 - CCV NO3 0.0102
30 - CCV NO2 1.0194
31 - CCB 0.0008
32 - WG2037148-1 -0.0024
33 - WG2037148-2 4.9851
34 - WG2037149-1 0.0080
35 - WG2037149-2 4.6393
36 - WG2037150-1 0.0093
37 - WG2037150-2 -0.0018
38 - WG2037157/158-1 -0.0026
WG2037157/158-2 -0.0026
Absorbance
Time (sec)

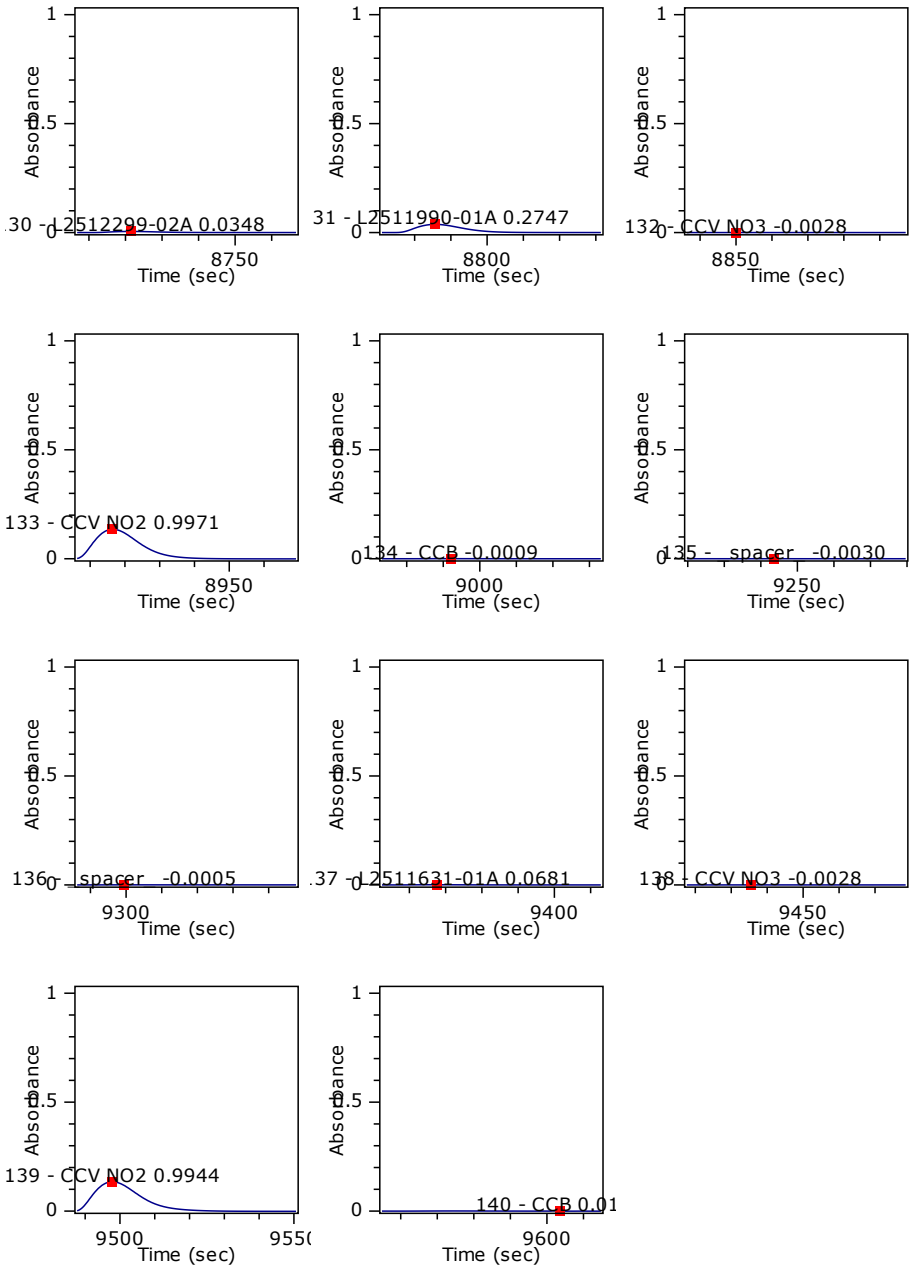

40 - WG2037159-1 -0.0027
41 - WG2037159-2 -0.0027
42 - CCV NO3 -0.0028
43 - CCV NO2 1.0145
44 - CCB 0.0008
- WG2037160/161-1 -0.0027
5 - WG2037160/161-2 -0.0026
47 - WG2037162-1 -0.0028
48 - WG2037162-2 -0.0027
49 - WG2037164-1 -0.0028
50 - WG2037164-2 -0.0028
51 - L2511631-01A 0.1465
52 - L2511990-01A 0.2770
53 - WG2037150-3 0.2683
54 - WG2037150-4 0.2631
55 - CCV NO3 -0.0026
56 - CCV NO2 1.0170
57 - CCB -0.0001
Absorbance
Time (sec)


8 - WG2037148-3 0.2740
9 - WG2037148-4 4.2310
0 - L2512005-01K 0.0054
1 - WG2037150-5 -0.0024
52 - WG2037150-6 0.0235
53 - L2512005-02K 0.0069
54 - L2512005-03K 0.0061
65 - L2512005-04R -0.0027
56 - L2511986-01C 0.0070
67 - L2511986-02C -0.0031
68 - CCV NO3 -0.0026
69 - CCV NO2 1.0142
70 - CCB -0.0003
- L2511986-03C -0.0029
72 - L2511986-04C -0.0027
73 - L2511944-01M 0.0049
74 - L2511944-02M 0.0044
5 - L2511944-03M 0.0065
Absorbance
Time (sec)


76 - L2511944-04M 0.0054
77 - L2511944-05M 0.0057
78 - L2511944-06M 0.0064
- WG2037157/158-3 -0.0024
80 - WG2037157/158-4 -
81 - CCV NO3 0
82 - CCV NO2 1.0058
83 - CCB -0.0014
4 - WG2037149-3 -0.0025
85 - WG2037149-4 3.9291
6 - L2511944-07M 0.0068
87 - L2511944-08M 0.0051
88 - L2511944-09M 0.0044
89 - L2511757-01A -0.0025
90 - L2511972-16L 0.0054
91 - L2511972-17L 0.0051
92 - L2512154-01E 0.0233
93 - WG2037159-3 0.0148
Absorbance
Time (sec)


94 - CCV NO3 -0.0026
95 - CCV NO2 1.0023
96 - CCB -0.0012
7 - WG2037159-4 0.0302
98 - L2512154-03E 0.0063
99 - L2512154-04E 0.0126
00 - L2512154-06E 0.0139
01 - L2512168-01E 0.0092
02 - L2512169-01E 0.0187
03 - L2512169-02E 0.0133
04 - L2511932-01D 0.0179
05 - WG2037162-3 0.0080
06 - WG2037162-4 0.0083
107 - CCV NO3 -0.0026
108 - CCV NO2 1.0014
109 - CCB -0.0018
10 - L2511932-02D 0.0070
11 - L2512270-01A 0.0275
Absorbance
Time (sec)


12 - L2512270-02A 0.0296
13 - L2512284-01A 0.0871
14 - L2512284-02A 0.0752
15 - L2512289-01A 0.0302
16 - L2512291-01A 0.1018
17 - L2512291-02A 0.0236
18 - L2512293-01C 0.0144
19 - L2512293-02E 0.0088
120 - CCV NO3 -0.0027
121 - CCV NO2 0.9969
122 - CCB -0.0015
3 - L2512294-01A 0.0135
24 - L2512294-02A 0.0219
25 - L2512296-01A 0.0226
26 - L2512296-02A 0.0339
27 - L2512298-01A 0.0464
28 - L2512298-02A 0.0208
29 - L2512299-01A 0.0876
Absorbance
Time (sec)




Data Processing Parameters:

Channel: 1-NOx

| | |
|---|---|
| Response parameter | Peak Height |
| Filter Type | None |
| Filter Window | 3 |
| Enable Peak Window | False |
| Peak Window Start | 0 |
| Peak Window Stop | 0 |
| Enable Baseline Correction | False |
| Enable 2 Point Correction | False |
| Baseline Start | 0 |
| Baseline Stop | 0 |
| Point 2 Baseline Start | 0 |
| Point 2 Baseline Stop | 0 |
| Background Correction | Single Wavelength |
| Ref Wavelength 1 | 600 |
| Ref Wavelength 2 | 0 |

Channel: 2-NO2

| | |
|---|---|
| Response parameter | Peak Height |
| Filter Type | None |
| Filter Window | 3 |
| Enable Peak Window | False |
| Peak Window Start | 0 |
| Peak Window Stop | 0 |
| Enable Baseline Correction | False |
| Enable 2 Point Correction | False |
| Baseline Start | 0 |
| Baseline Stop | 0 |
| Point 2 Baseline Start | 0 |
| Point 2 Baseline Stop | 0 |
| Background Correction | Single Wavelength |
| Ref Wavelength 1 | 600 |
| Ref Wavelength 2 | 0 |

Method Log:

```
FIAsoft FIAsoft v3.1.10

FIAlyzer Settings
------------
FIAlab1 Serial Number: FIA31428
FIAlab2 Serial Number: FIA31429
Pump: Connected on COM8

Spectrometer Settings
Spectrometer1
------------
Spectrometer Type: tec5
Integration Time: 2.4
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Spectrometer2
------------
Spectrometer Type: tec5
Integration Time: 1.9
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Start Time
------------
2025-03-06T03:11:09

Method
------------
' Method Script for NOx-NO2

Autosave Data C:\FIAlab\Autosave Data\DateTime
FIAlab Injection Valve Sample Load
Message Cadmium Column on for NOx
FIAlab Peristaltic Pump Clockwise(%) 55

Autosampler Wash
Delay (sec) 2
Next Sample
Delay (sec) 35  'StartDelay2 - Controls initial sample introduction.
```

```
FIAlab1 Injection Valve Sample Inject
Autosampler Probe Up
Delay (sec) 2
Autosampler Position (#) Rinse
FIAlab2 Injection Valve Sample Inject
Delay (sec) 15   'StartDelay3 - Should be set equal to LoopDelay3

Autosampler Probe Up
Delay (sec) 5   'StartDelay4 - Should be set equal to LoopDelay4

Loop Start

   Analyte New Sample
   Delay (sec) 1
   Next Sample
   Autosampler Probe Force Down

   Spectrometer Reference Scan
   Spectrometer Absorbance Scanning

   Delay (sec) 3   ' LoopDelay1 - Controls sample transit & loop empty. Controls back baseline.

   FIAlab Injection Valve Sample Load

   Delay (sec) 35   ' LoopDelay2 - Controls sample transit & loop fill. Controls back baseline.

   FIAlab1 Injection Valve Sample Inject
   Autosampler Probe Up
   Delay (sec) 5
   Autosampler Position (#) Rinse
   FIAlab2 Injection Valve Sample Inject

   Delay (sec) 10   ' LoopDelay3 - Controls loop empty & probe rinse time. Inverse controls front baseline.

   Autosampler Probe Up

   Delay (sec) 3   ' LoopDelay4 - Controls loop empty. Inverse controls front baseline.

   Spectrometer Stop Scanning

Loop End

Autosampler Position (#) Rinse
Delay (sec) 20
Autosampler Probe Up
Delay (sec) 30
FIAlab Peristaltic Pump Clockwise(%) 5
Autoexport Report C:\FIAlab\autoreport\NOxNO2\DateTime
Message Run is Complete
```

Method File Location: C:\FIAlab\FIAlab User Files\Methods\Method_NOx+NO2.fia

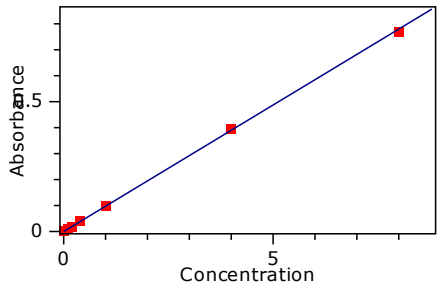
Graphical report generated by FIAsoft v3.1.10
Report generated on 2025-03-06 09:06:20
Data file (.dat): C:\FIAlab\Autosave Data\2025-03-06-090601.dat

Dataset Notes:

| | |
|---|---|
| Analyst | |

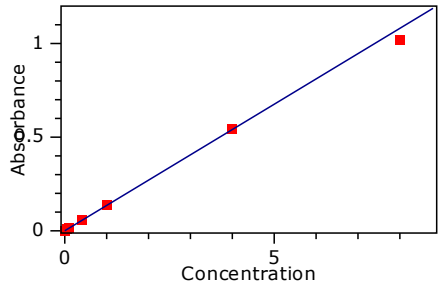
Dataset Notes Table Location: C:\FIAlab\FIAlab User Files\Tables\Dataset Notes\Analyst.csv

Calibrations:




Channel: 1-NOx
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: -0.00021
B: 0.09748
$R^2$: 0.99984
RSE(%): 1.11124
% Max. for OVR: 100

| InjNo | Name | Response | Known Conc. mg/L | Calc. Conc. mg/L | % Error | Time |
|---|---|---|---|---|---|---|
| 10001 | NOx 8.0ppm | 0.76910 | 8.00000 | 7.89230 | 1.35 | N/A |
| 10002 | NOx 4.0ppm | 0.39490 | 4.00000 | 4.05380 | 1.35 | N/A |
| 10003 | NOx 1.0ppm | 0.09680 | 1.00000 | 0.99550 | 0.45 | N/A |
| 10004 | NOx 0.4ppm | 0.03920 | 0.40000 | 0.40390 | 0.96 | N/A |
| 10005 | NOx 0.2ppm | 0.01920 | 0.20000 | 0.19910 | 0.43 | N/A |
| 10006 | NOx 0.1ppm | 0.00950 | 0.10000 | 0.10000 | 0.01 | N/A |
| 10007 | NOx 0.0ppm | 0.00010 | 0.00000 | 0.00290 | NA | N/A |




Channel: 2-NO2
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00043
B: 0.13507
$R^2$: 0.99905
RSE(%): 3.65935
% Max. for OVR: 100

| InjNo | Name | Response | Known Conc. mg/L | Calc. Conc. mg/L | % Error | Time |
|---|---|---|---|---|---|---|
| 10001 | Nitrite 8.0ppm | 1.02100 | 8.00000 | 7.55630 | 5.55 | N/A |
| 10002 | Nitrite 4.0ppm | 0.54440 | 4.00000 | 4.02730 | 0.68 | N/A |
| 10003 | Nitrite 1.0ppm | 0.13810 | 1.00000 | 1.01940 | 1.94 | N/A |
| 10004 | Nitrite 0.4ppm | 0.05650 | 0.40000 | 0.41500 | 3.75 | N/A |
| 10005 | Nitrite 0.1ppm | 0.01420 | 0.10000 | 0.10160 | 1.62 | N/A |
| 10006 | Nitrite 0.05ppm | 0.00710 | 0.05000 | 0.04930 | 1.36 | N/A |
| 10007 | Nitrite 0.0ppm | 0.00020 | 0.00000 | -0.00200 | NA | N/A |

Results:

Channel: 1-NOx

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Stabil | 1 | Unknown | ? | 0.0002 | 1 | 1 | 1 | 0.0037 | | 2025-03-06T06:26:54 |
| CCV NO3 | 2 | QC | 1 | 0.0991 | 1 | 1 | 1 | 1.0188 | | 2025-03-06T06:28:04 |
| CCV NO2 | 3 | QC | ? | 0.1019 | 1 | 1 | 1 | 1.0471 | | 2025-03-06T06:29:09 |
| CCB | 4 | QC | 0 | 0.0003 | 1 | 1 | 1 | 0.0048 | | 2025-03-06T06:30:21 |

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| L2511919-01I | 5 | Unknown | ? | 0.0080 | 1 | 1 | 1 | 0.0838 | | 2025-03-06T06:31:25 |
| WG2037164-3 | 6 | Unknown | ? | 0.0070 | 1 | 1 | 1 | 0.0736 | | 2025-03-06T06:32:31 |
| WG2037164-4 | 7 | Unknown | ? | 0.4078 | 1 | 1 | 1 | 4.1854 | | 2025-03-06T06:33:36 |
| L2511919-02I | 8 | Unknown | ? | 0.0043 | 1 | 1 | 1 | 0.0462 | | 2025-03-06T06:34:43 |
| L2511919-04I | 9 | Unknown | ? | 0.0012 | 1 | 1 | 1 | 0.0140 | | 2025-03-06T06:35:49 |
| L2511919-05I | 10 | Unknown | ? | 0.0071 | 1 | 1 | 1 | 0.0754 | | 2025-03-06T06:36:56 |
| L2511919-07I | 11 | Unknown | ? | 0.0412 | 1 | 1 | 1 | 0.4250 | | 2025-03-06T06:38:02 |
| L2511919-08I | 12 | Unknown | ? | 0.0167 | 1 | 1 | 1 | 0.1734 | | 2025-03-06T06:39:08 |
| L2512280-01A | 13 | Unknown | ? | 0.0050 | 1 | 1 | 1 | 0.0534 | | 2025-03-06T06:40:14 |
| L2512280-02A | 14 | Unknown | ? | 0.0053 | 1 | 1 | 1 | 0.0568 | | 2025-03-06T06:41:19 |
| CCV NO3 | 15 | QC | 1 | 0.0990 | 1 | 1 | 1 | 1.0174 | | 2025-03-06T06:42:24 |
| CCV NO2 | 16 | QC | ? | 0.1023 | 1 | 1 | 1 | 1.0518 | | 2025-03-06T06:43:30 |
| CCB | 17 | QC | 0 | 0.0006 | 1 | 1 | 1 | 0.0080 | | 2025-03-06T06:44:44 |
| L2512286-01A | 18 | Unknown | ? | 0.0040 | 1 | 1 | 1 | 0.0432 | | 2025-03-06T06:45:48 |
| L2512286-02A | 19 | Unknown | ? | 0.0045 | 1 | 1 | 1 | 0.0479 | | 2025-03-06T06:46:55 |
| L2511733-01D | 20 | Unknown | ? | 0.8426 | 1 | 1 | 1 | 8.6463 | OVR | 2025-03-06T06:47:59 |
| WG2037160-3 | 21 | Unknown | ? | 0.8405 | 1 | 1 | 1 | 8.6247 | OVR | 2025-03-06T06:49:05 |
| WG2037160-4 | 22 | Unknown | ? | 1.1021 | 1 | 1 | 1 | 11.3084 | OVR | 2025-03-06T06:50:10 |
| L2511745-01C | 23 | Unknown | ? | 0.0037 | 1 | 1 | 1 | 0.0400 | | 2025-03-06T06:51:14 |
| L2511959-01A | 24 | Unknown | ? | 0.8065 | 1 | 1 | 1 | 8.2760 | OVR | 2025-03-06T06:52:20 |
| L2511963-01K | 25 | Unknown | ? | 0.0114 | 1 | 1 | 1 | 0.1195 | | 2025-03-06T06:53:26 |
| WG2037161-3 | 26 | Unknown | ? | 0.0128 | 1 | 1 | 1 | 0.1336 | | 2025-03-06T06:54:33 |
| WG2037161-4 | 27 | Unknown | ? | 0.4080 | 1 | 1 | 1 | 4.1883 | | 2025-03-06T06:55:40 |
| CCV NO3 | 28 | QC | 1 | 0.0985 | 1 | 1 | 1 | 1.0131 | | 2025-03-06T06:56:45 |
| CCV NO2 | 29 | QC | ? | 0.1015 | 1 | 1 | 1 | 1.0430 | | 2025-03-06T06:57:50 |
| CCB | 30 | QC | 0 | 0.0010 | 1 | 1 | 1 | 0.0119 | | 2025-03-06T06:59:04 |
| L2511963-02K | 31 | Unknown | ? | 0.0106 | 1 | 1 | 1 | 0.1111 | | 2025-03-06T07:00:09 |
| L2511963-03K | 32 | Unknown | ? | 0.0018 | 1 | 1 | 1 | 0.0203 | | 2025-03-06T07:01:20 |
| L2511963-04K | 33 | Unknown | ? | 0.1468 | 1 | 1 | 1 | 1.5077 | | 2025-03-06T07:02:23 |
| L2511963-05K | 34 | Unknown | ? | 0.0109 | 1 | 1 | 1 | 0.1144 | | 2025-03-06T07:03:29 |
| L2511963-06K | 35 | Unknown | ? | 0.0074 | 1 | 1 | 1 | 0.0781 | | 2025-03-06T07:04:34 |
| L2511963-07K | 36 | Unknown | ? | 0.0549 | 1 | 1 | 1 | 0.5659 | | 2025-03-06T07:05:40 |
| L2511963-08K | 37 | Unknown | ? | 0.0687 | 1 | 1 | 1 | 0.7065 | | 2025-03-06T07:06:45 |

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| L2512235-02H | 38 | Unknown | ? | 0.3609 | 1 | 1 | 1 | 3.7050 | | 2025-03-06T07:07:51 |
| L2511745-01C | 39 | Unknown | ? | 0.0063 | 1 | 1 | 1 | 0.0664 | | 2025-03-06T07:08:56 |
| L2511963-01K | 40 | Unknown | ? | 0.0128 | 1 | 1 | 1 | 0.1331 | | 2025-03-06T07:10:03 |
| CCV NO3 | 41 | QC | 1 | 0.0987 | 1 | 1 | 1 | 1.0143 | | 2025-03-06T07:11:08 |
| CCV NO2 | 42 | QC | ? | 0.1030 | 1 | 1 | 1 | 1.0585 | | 2025-03-06T07:12:14 |
| CCB | 43 | QC | 0 | 0.0005 | 1 | 1 | 1 | 0.0070 | | 2025-03-06T07:13:28 |
| _spacer_ | 44 | Unknown | ? | 0.0000 | 1 | 1 | 1 | 0.0026 | | 2025-03-06T07:24:21 |
| _spacer_ | 45 | Unknown | ? | 0.0005 | 1 | 1 | 1 | 0.0076 | | 2025-03-06T07:25:51 |
| L2511733-01D | 46 | Unknown | ? | 0.0905 | 1 | 10 | 1 | 9.3078 | | 2025-03-06T07:26:59 |
| WG2037160-3 | 47 | Unknown | ? | 0.0915 | 1 | 10 | 1 | 9.4034 | | 2025-03-06T07:28:07 |
| WG2037160-4 | 48 | Unknown | ? | 0.1309 | 1 | 10 | 1 | 13.4497 | | 2025-03-06T07:29:16 |
| L2511959-01A | 49 | Unknown | ? | 0.0843 | 1 | 10 | 1 | 8.6702 | | 2025-03-06T07:30:24 |
| CCV NO3 | 50 | QC | 1 | 0.0994 | 1 | 1 | 1 | 1.0220 | | 2025-03-06T07:31:30 |
| CCV NO2 | 51 | QC | ? | 0.1021 | 1 | 1 | 1 | 1.0491 | | 2025-03-06T07:32:36 |
| CCB | 52 | QC | 0 | 0.0002 | 1 | 1 | 1 | 0.0042 | | 2025-03-06T07:33:48 |

Channel: 2-NO2

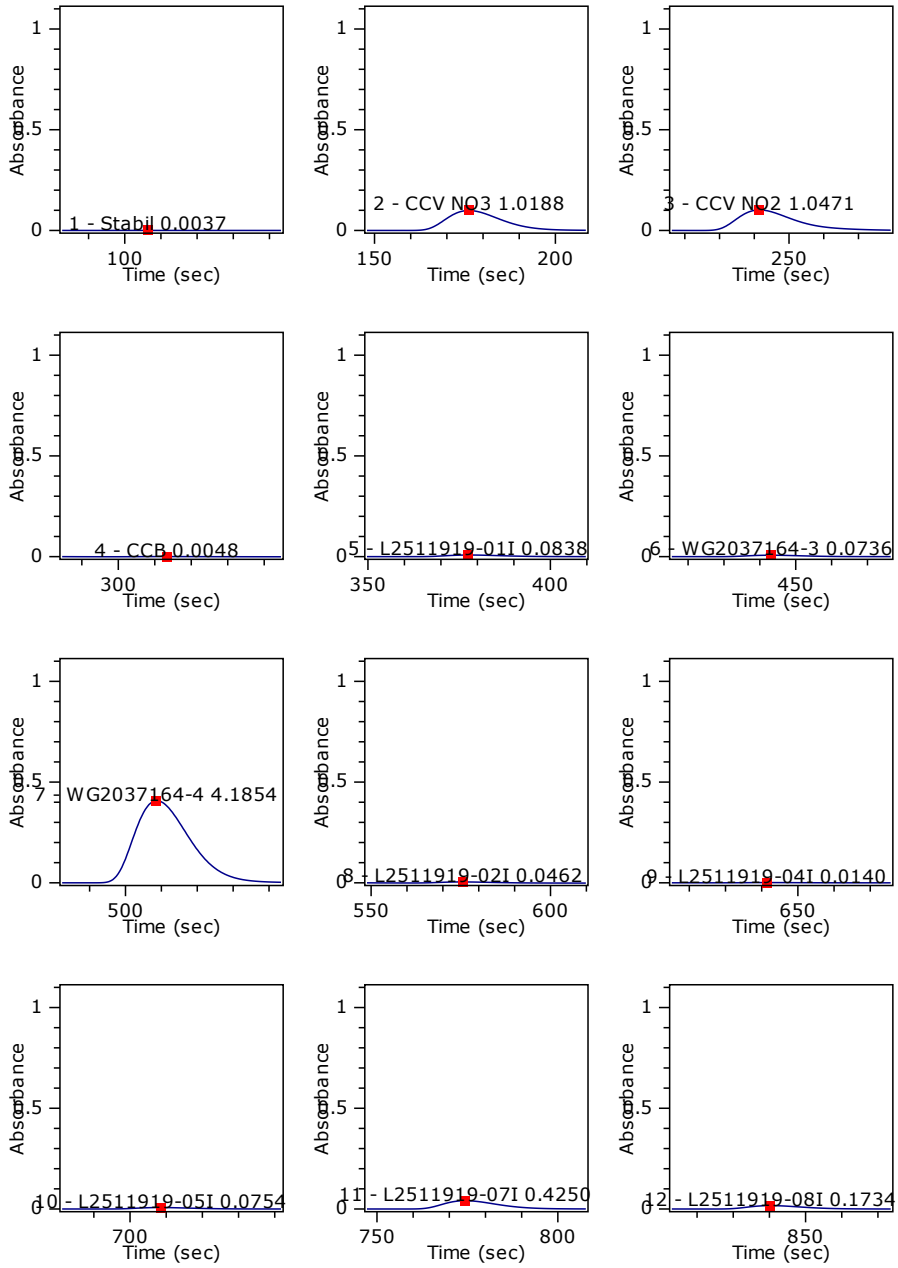
| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Stabil | 1 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0023 | | 2025-03-06T06:26:41 |
| CCV NO3 | 2 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0023 | | 2025-03-06T06:27:55 |
| CCV NO2 | 3 | QC | 1 | 0.1363 | 1 | 1 | 1 | 1.0062 | | 2025-03-06T06:28:55 |
| CCB | 4 | QC | 0 | 0.0004 | 1 | 1 | 1 | 0.0002 | | 2025-03-06T06:30:09 |
| L2511919-01I | 5 | Unknown | ? | 0.0012 | 1 | 1 | 1 | 0.0055 | | 2025-03-06T06:31:11 |
| WG2037164-3 | 6 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0024 | | 2025-03-06T06:32:18 |
| WG2037164-4 | 7 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0025 | | 2025-03-06T06:33:29 |
| L2511919-02I | 8 | Unknown | ? | 0.0013 | 1 | 1 | 1 | 0.0066 | | 2025-03-06T06:34:30 |
| L2511919-04I | 9 | Unknown | ? | 0.0011 | 1 | 1 | 1 | 0.0050 | | 2025-03-06T06:35:36 |
| L2511919-05I | 10 | Unknown | ? | 0.0011 | 1 | 1 | 1 | 0.0051 | | 2025-03-06T06:36:41 |
| L2511919-07I | 11 | Unknown | ? | 0.0032 | 1 | 1 | 1 | 0.0203 | | 2025-03-06T06:37:48 |
| L2511919-08I | 12 | Unknown | ? | 0.0012 | 1 | 1 | 1 | 0.0056 | | 2025-03-06T06:38:55 |
| L2512280-01A | 13 | Unknown | ? | 0.0033 | 1 | 1 | 1 | 0.0214 | | 2025-03-06T06:40:01 |
| L2512280-02A | 14 | Unknown | ? | 0.0033 | 1 | 1 | 1 | 0.0214 | | 2025-03-06T06:41:06 |
| CCV NO3 | 15 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0022 | | 2025-03-06T06:42:40 |
| CCV NO2 | 16 | QC | 1 | 0.1375 | 1 | 1 | 1 | 1.0150 | | 2025-03- |

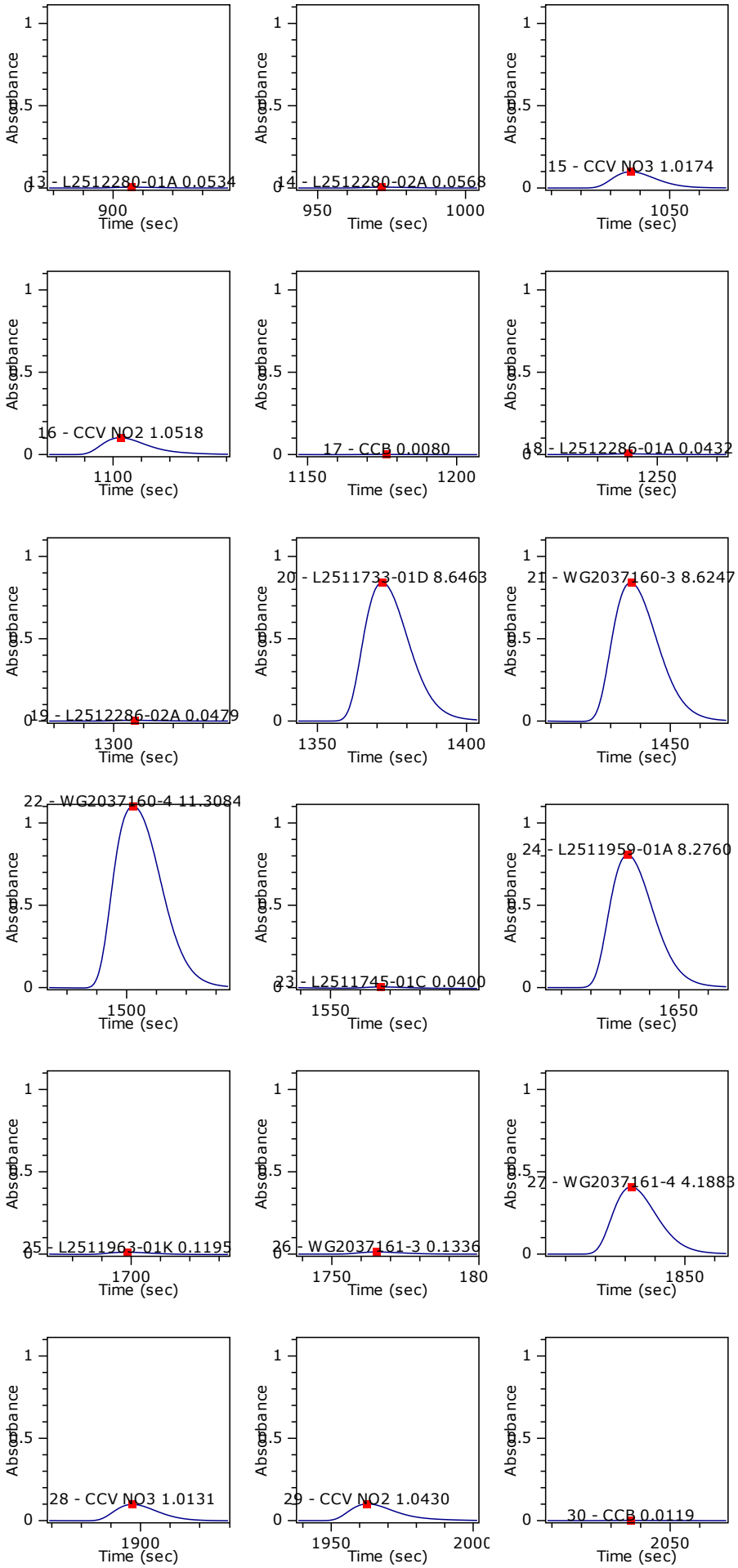
| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | 06T06:43:16 |
| CCB | 17 | QC | 0 | 0.0006 | 1 | 1 | 1 | 0.0010 | | 2025-03-06T06:44:30 |
| L2512286-01A | 18 | Unknown | ? | 0.0049 | 1 | 1 | 1 | 0.0329 | | 2025-03-06T06:45:34 |
| L2512286-02A | 19 | Unknown | ? | 0.0049 | 1 | 1 | 1 | 0.0330 | | 2025-03-06T06:46:40 |
| L2511733-01D | 20 | Unknown | ? | 0.2835 | 1 | 1 | 1 | 2.0960 | | 2025-03-06T06:47:45 |
| WG2037160-3 | 21 | Unknown | ? | 0.2838 | 1 | 1 | 1 | 2.0976 | | 2025-03-06T06:48:51 |
| WG2037160-4 | 22 | Unknown | ? | 0.2784 | 1 | 1 | 1 | 2.0582 | | 2025-03-06T06:49:56 |
| L2511745-01C | 23 | Unknown | ? | 0.0042 | 1 | 1 | 1 | 0.0281 | | 2025-03-06T06:51:01 |
| L2511959-01A | 24 | Unknown | ? | 0.0007 | 1 | 1 | 1 | 0.0023 | | 2025-03-06T06:52:06 |
| L2511963-01K | 25 | Unknown | ? | 0.0041 | 1 | 1 | 1 | 0.0273 | | 2025-03-06T06:53:13 |
| WG2037161-3 | 26 | Unknown | ? | 0.0041 | 1 | 1 | 1 | 0.0274 | | 2025-03-06T06:54:20 |
| WG2037161-4 | 27 | Unknown | ? | 0.0040 | 1 | 1 | 1 | 0.0268 | | 2025-03-06T06:55:27 |
| CCV NO3 | 28 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0025 | | 2025-03-06T06:56:31 |
| CCV NO2 | 29 | QC | 1 | 0.1372 | 1 | 1 | 1 | 1.0125 | | 2025-03-06T06:57:37 |
| CCB | 30 | QC | 0 | 0.0008 | 1 | 1 | 1 | 0.0029 | | 2025-03-06T06:58:52 |
| L2511963-02K | 31 | Unknown | ? | 0.0018 | 1 | 1 | 1 | 0.0099 | | 2025-03-06T06:59:56 |
| L2511963-03K | 32 | Unknown | ? | 0.0037 | 1 | 1 | 1 | 0.0241 | | 2025-03-06T07:01:04 |
| L2511963-04K | 33 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0031 | | 2025-03-06T07:02:09 |
| L2511963-05K | 34 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0031 | | 2025-03-06T07:03:15 |
| L2511963-06K | 35 | Unknown | ? | 0.0009 | 1 | 1 | 1 | 0.0033 | | 2025-03-06T07:04:21 |
| L2511963-07K | 36 | Unknown | ? | 0.0025 | 1 | 1 | 1 | 0.0153 | | 2025-03-06T07:05:26 |
| L2511963-08K | 37 | Unknown | ? | 0.0086 | 1 | 1 | 1 | 0.0607 | | 2025-03-06T07:06:32 |
| L2512235-02H | 38 | Unknown | ? | 0.0027 | 1 | 1 | 1 | 0.0172 | | 2025-03-06T07:07:37 |
| L2511745-01C | 39 | Unknown | ? | 0.0042 | 1 | 1 | 1 | 0.0280 | | 2025-03-06T07:08:42 |
| L2511963-01K | 40 | Unknown | ? | 0.0040 | 1 | 1 | 1 | 0.0268 | | 2025-03-06T07:09:49 |
| CCV NO3 | 41 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0023 | | 2025-03-06T07:11:01 |
| CCV NO2 | 42 | QC | 1 | 0.1368 | 1 | 1 | 1 | 1.0099 | | 2025-03-06T07:12:00 |
| CCB | 43 | QC | 0 | 0.0007 | 1 | 1 | 1 | 0.0023 | | 2025-03-06T07:13:16 |
| _spacer_ | 44 | Unknown | ? | 0.0000 | 1 | 1 | 1 | -0.0028 | | 2025-03-06T07:24:24 |
| _spacer_ | 45 | Unknown | ? | 0.0004 | 1 | 1 | 1 | -0.0004 | | 2025-03-06T07:25:37 |
| L2511733-01D | 46 | Unknown | ? | 0.0285 | 1 | 10 | 1 | 2.0776 | | 2025-03-06T07:26:47 |
| WG2037160-3 | 47 | Unknown | ? | 0.0283 | 1 | 10 | 1 | 2.0634 | | 2025-03-06T07:27:55 |
| WG2037160-4 | 48 | Unknown | ? | 0.0278 | 1 | 10 | 1 | 2.0285 | | 2025-03-06T07:29:03 |

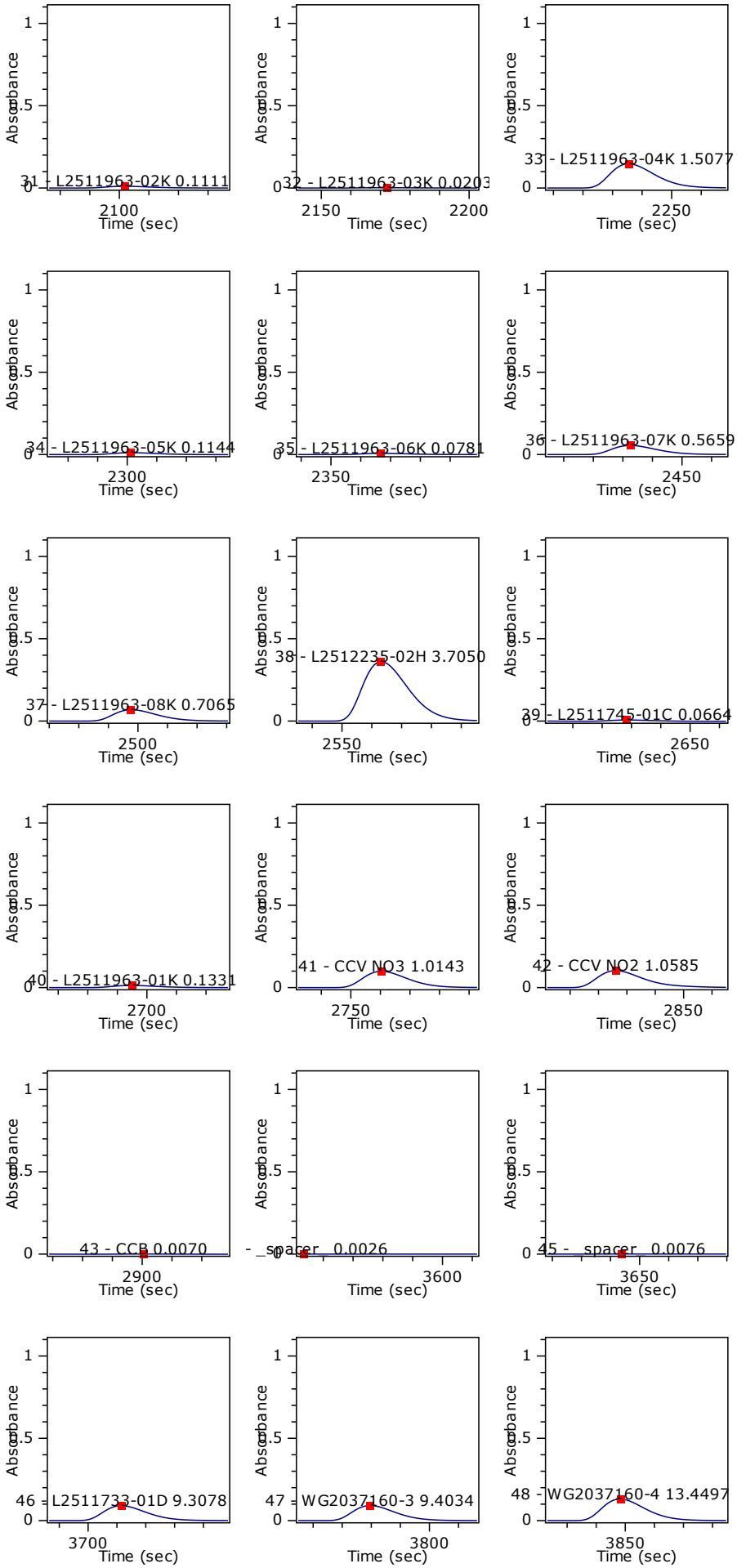
| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| L2511959-01A | 49 | Unknown | ? | 0.0001 | 1 | 10 | 1 | -0.0217 | | 2025-03-06T07:30:11 |
| CCV NO3 | 50 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0025 | | 2025-03-06T07:31:15 |
| CCV NO2 | 51 | QC | 1 | 0.1359 | 1 | 1 | 1 | 1.0027 | | 2025-03-06T07:32:22 |
| CCB | 52 | QC | 0 | 0.0005 | 1 | 1 | 1 | 0.0003 | | 2025-03-06T07:33:37 |

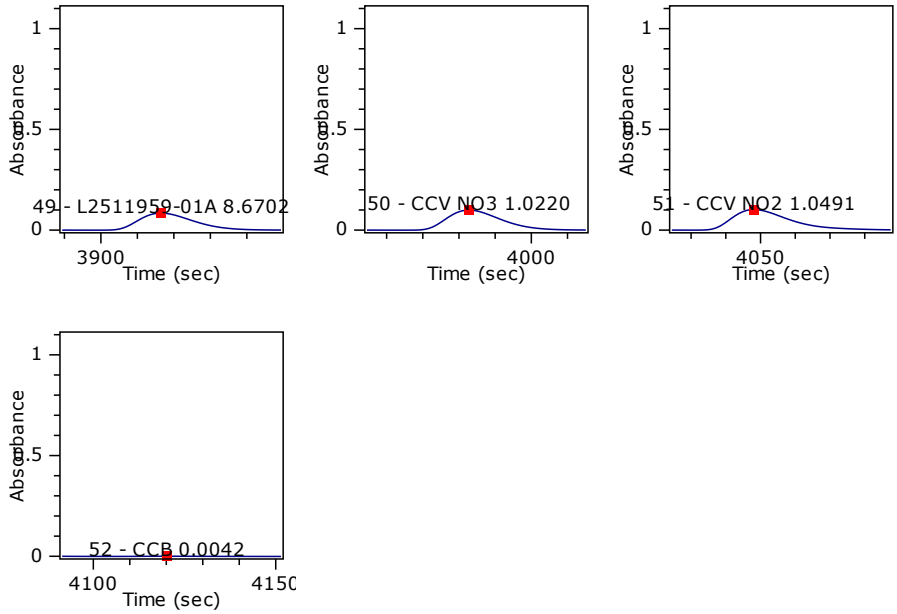
Peaks:

Channel: 1-NOx

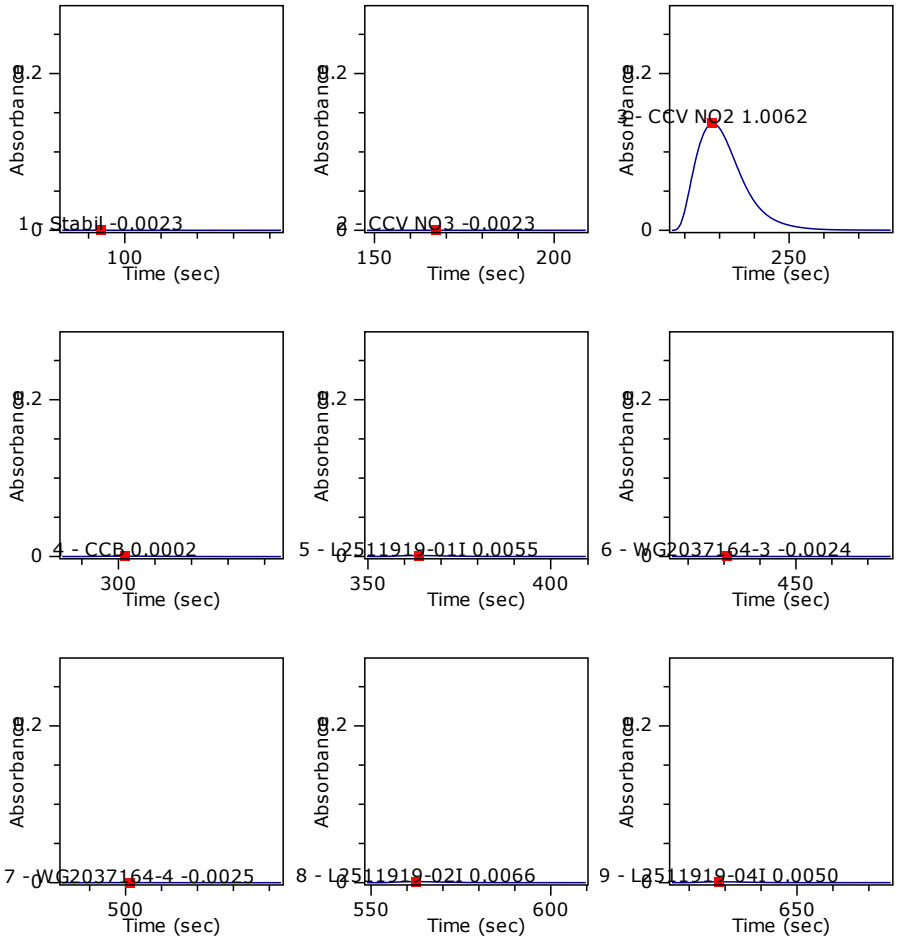


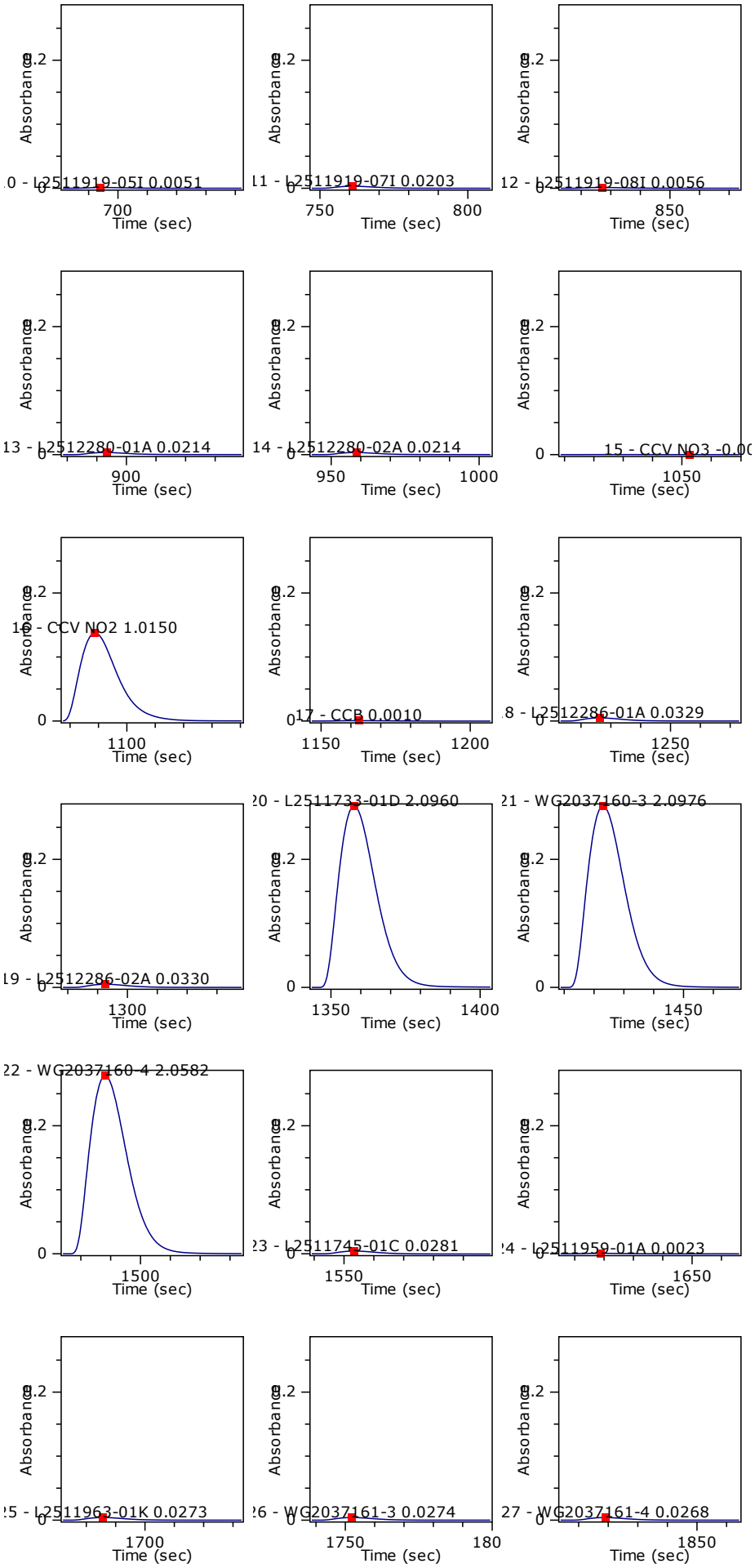

13 - L2512280-01A 0.0534
14 - L2512280-02A 0.0568
15 - CCV NO3 1.0174
16 - CCV NO2 1.0518
17 - CCB 0.0080
18 - L2512286-01A 0.0432
19 - L2512286-02A 0.0479
20 - L2511733-01D 8.6463
21 - WG2037160-3 8.6247
22 - WG2037160-4 11.3084
23 - L2511745-01C 0.0400
24 - L2511959-01A 8.2760
25 - L2511963-01K 0.1195
26 - WG2037161-3 0.1336
27 - WG2037161-4 4.1883
28 - CCV NO3 1.0131
29 - CCV NO2 1.0430
30 - CCB 0.0119
Absorbance
Time (sec)


31 - L2511963-02K 0.1111
32 - L2511963-03K 0.0203
33 - L2511963-04K 1.5077
34 - L2511963-05K 0.1144
35 - L2511963-06K 0.0781
36 - L2511963-07K 0.5659
37 - L2511963-08K 0.7065
38 - L2512235-02H 3.7050
39 - L2511745-01C 0.0664
40 - L2511963-01K 0.1331
41 - CCV NO3 1.0143
42 - CCV NO2 1.0585
43 - CCB 0.0070
- _spacer_ 0.0026
45 - _spacer_ 0.0076
46 - L2511733-01D 9.3078
47 - WG2037160-3 9.4034
48 - WG2037160-4 13.4497
Absorbance
Time (sec)




Channel: 2-NO2

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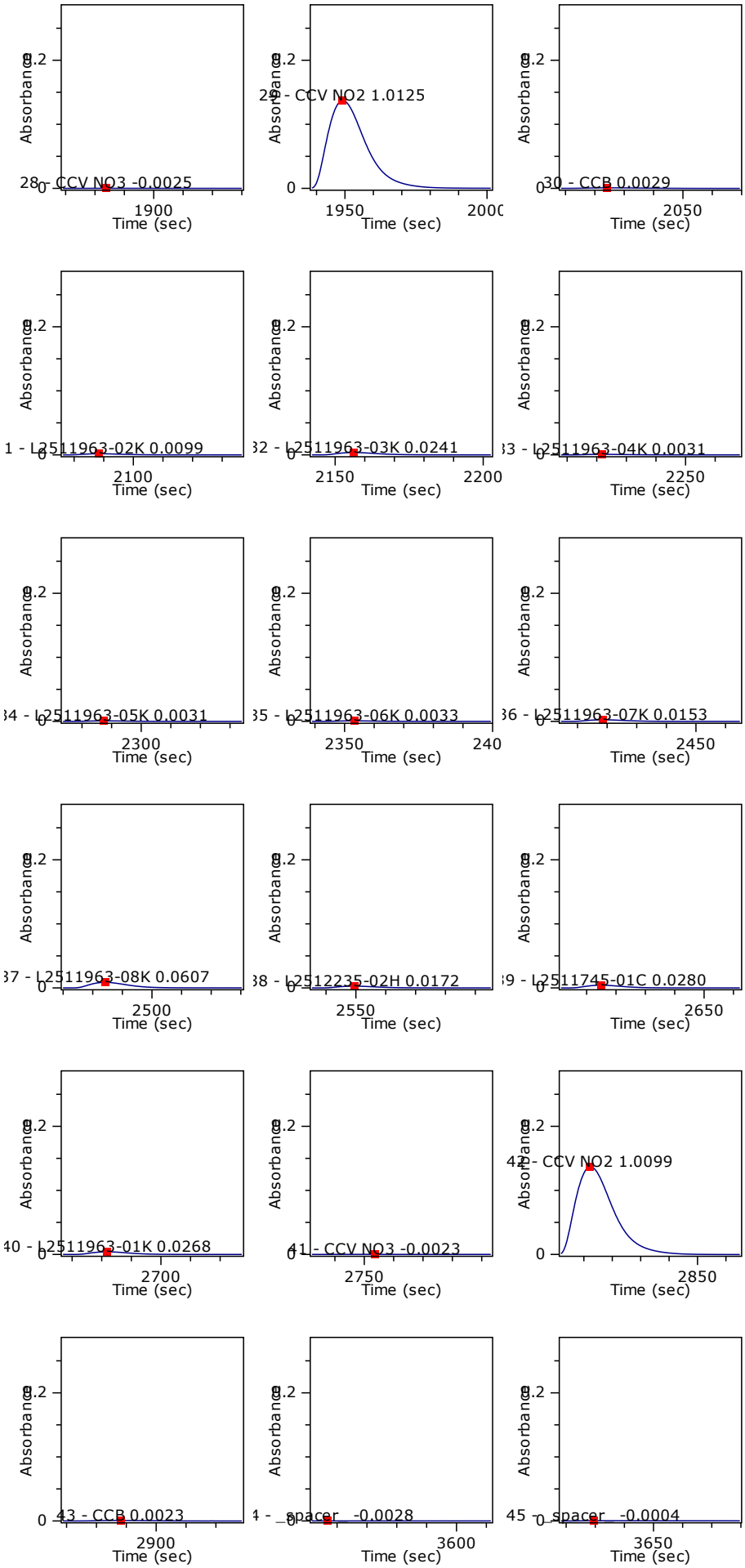
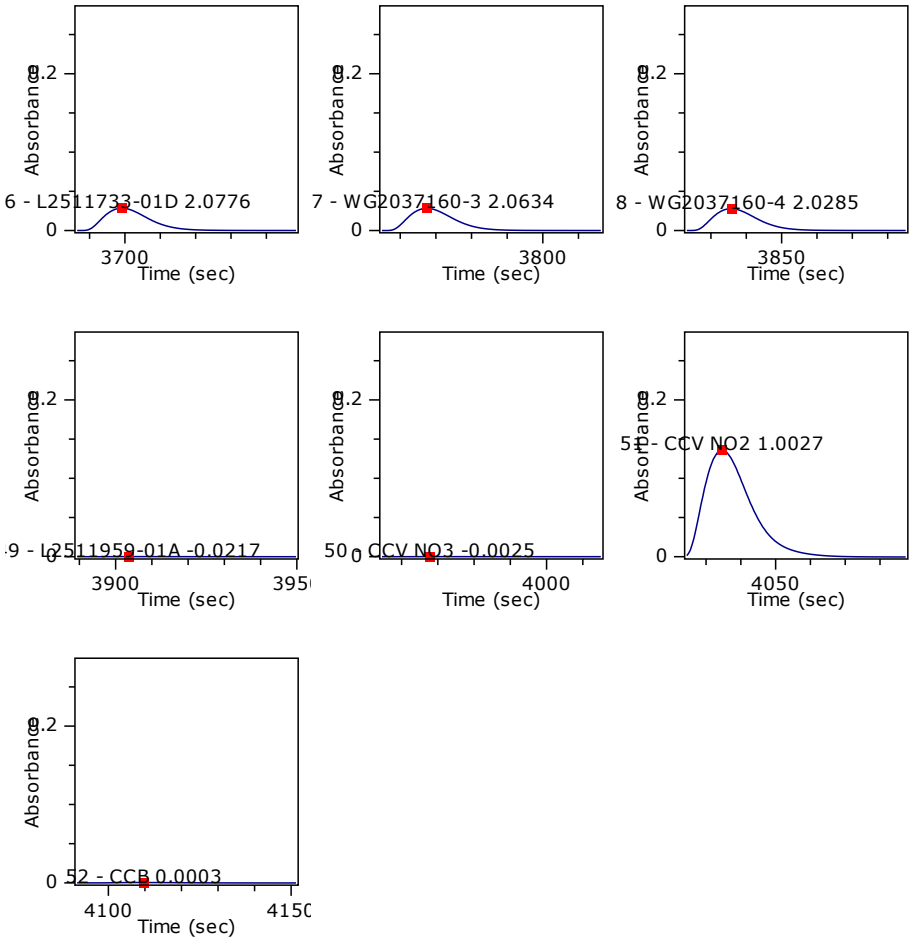
11 - L2511919-07I 0.0203
12 - L2511919-08I 0.0056
13 - L2512280-01A 0.0214
14 - L2512280-02A 0.0214
15 - CCV NO3 -0.0
16 - CCV NO2 1.0150
17 - CCB 0.0010
8 - L2512286-01A 0.0329
19 - L2512286-02A 0.0330
20 - L2511733-01D 2.0960
21 - WG2037160-3 2.0976
22 - WG2037160-4 2.0582
23 - L2511745-01C 0.0281
24 - L2511959-01A 0.0023
25 - L2511963-01K 0.0273
26 - WG2037161-3 0.0274
27 - WG2037161-4 0.0268
Absorbance
Time (sec)


28 - CCV NO3 -0.0025
29 - CCV NO2 1.0125
30 - CCB 0.0029
31 - L2511963-02K 0.0099
32 - L2511963-03K 0.0241
33 - L2511963-04K 0.0031
34 - L2511963-05K 0.0031
35 - L2511963-06K 0.0033
36 - L2511963-07K 0.0153
37 - L2511963-08K 0.0607
38 - L2512235-02H 0.0172
39 - L2511745-01C 0.0280
40 - L2511963-01K 0.0268
41 - CCV NO3 -0.0023
42 - CCV NO2 1.0099
43 - CCB 0.0023
44 - spacer -0.0028
45 - spacer -0.0004
Absorbance
Time (sec)




Data Processing Parameters:

Channel: 1-NOx

| | |
|---|---|
| Response parameter | Peak Height |
| Filter Type | None |
| Filter Window | 3 |
| Enable Peak Window | False |
| Peak Window Start | 0 |
| Peak Window Stop | 0 |
| Enable Baseline Correction | False |
| Enable 2 Point Correction | False |
| Baseline Start | 0 |
| Baseline Stop | 0 |
| Point 2 Baseline Start | 0 |
| Point 2 Baseline Stop | 0 |
| Background Correction | Single Wavelength |
| Ref Wavelength 1 | 600 |
| Ref Wavelength 2 | 0 |

Channel: 2-NO2

| | |
|---|---|
| Response parameter | Peak Height |
| Filter Type | None |
| Filter Window | 3 |
| Enable Peak Window | False |
| Peak Window Start | 0 |
| Peak Window Stop | 0 |
| Enable Baseline Correction | False |
| Enable 2 Point Correction | False |

| | |
|---|---|
| Baseline Start | 0 |
| Baseline Stop | 0 |
| Point 2 Baseline Start | 0 |
| Point 2 Baseline Stop | 0 |
| Background Correction | Single Wavelength |
| Ref Wavelength 1 | 600 |
| Ref Wavelength 2 | 0 |

Method Log:

```
FIAsoft FIAsoft v3.1.10

FIAlyzer Settings
------------
FIAlab1 Serial Number: FIA31428
FIAlab2 Serial Number: FIA31429
Pump: Connected on COM8

Spectrometer Settings
Spectrometer1
------------
Spectrometer Type: tec5
Integration Time: 2.4
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Spectrometer2
------------
Spectrometer Type: tec5
Integration Time: 1.9
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Start Time
------------
2025-03-06T06:25:08

Method
------------
' Method Script for NOx-NO2

Autosave Data C:\FIAlab\Autosave Data\DateTime
FIAlab Injection Valve Sample Load
Message Cadmium Column on for NOx
FIAlab Peristaltic Pump Clockwise(%) 55

Autosampler Wash
Delay (sec) 2
Next Sample
Delay (sec) 35  'StartDelay2 - Controls initial sample introduction.

FIAlab1 Injection Valve Sample Inject
Autosampler Probe Up
Delay (sec) 2
Autosampler Position (#) Rinse
FIAlab2 Injection Valve Sample Inject
Delay (sec) 15   'StartDelay3 - Should be set equal to LoopDelay3

Autosampler Probe Up
Delay (sec) 5   'StartDelay4 - Should be set equal to LoopDelay4

Loop Start

   Analyte New Sample
```

```
    Delay (sec) 1
    Next Sample
    Autosampler Probe Force Down

    Spectrometer Reference Scan
    Spectrometer Absorbance Scanning

    Delay (sec) 3   ' LoopDelay1 - Controls sample transit & loop empty. Controls back baseline.

    FIAlab Injection Valve Sample Load

    Delay (sec) 35   ' LoopDelay2 - Controls sample transit & loop fill. Controls back baseline.

    FIAlab1 Injection Valve Sample Inject
    Autosampler Probe Up
    Delay (sec) 5
    Autosampler Position (#) Rinse
    FIAlab2 Injection Valve Sample Inject

    Delay (sec) 10   ' LoopDelay3 - Controls loop empty & probe rinse time. Inverse controls front baseline.

    Autosampler Probe Up

    Delay (sec) 3   ' LoopDelay4 - Controls loop empty. Inverse controls front baseline.

    Spectrometer Stop Scanning

Loop End

Autosampler Position (#) Rinse
Delay (sec) 20
Autosampler Probe Up
Delay (sec) 30
FIAlab Peristaltic Pump Clockwise(%) 5
Autoexport Report C:\FIAlab\autoreport\NOxNO2\DateTime
Message Run is Complete
```

Method File Location: C:\FIAlab\FIAlab User Files\Methods\Method_NOx+NO2.fia

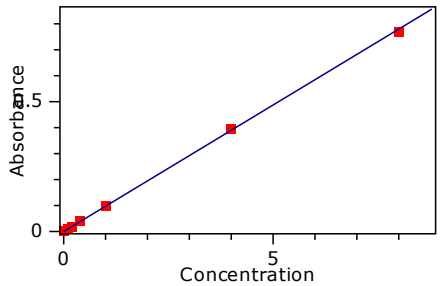
Graphical report generated by FIAsoft v3.1.10
Report generated on 2025-03-06 10:09:21
Data file (.dat): C:\FIAlab\Autosave Data\2025-03-06-100858.dat

Dataset Notes:

| | |
|---|---|
| Analyst | |

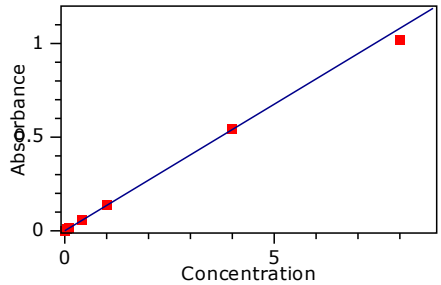
Dataset Notes Table Location: C:\FIAlab\FIAlab User Files\Tables\Dataset Notes\Analyst.csv

Calibrations:




Channel: 1-NOx
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: -0.00021
B: 0.09748
$R^2$: 0.99984
RSE(%): 1.11124
% Max. for OVR: 100

| InjNo | Name | Response | Known Conc. mg/L | Calc. Conc. mg/L | % Error | Time |
|---|---|---|---|---|---|---|
| 10001 | NOx 8.0ppm | 0.76910 | 8.00000 | 7.89230 | 1.35 | N/A |
| 10002 | NOx 4.0ppm | 0.39490 | 4.00000 | 4.05380 | 1.35 | N/A |
| 10003 | NOx 1.0ppm | 0.09680 | 1.00000 | 0.99550 | 0.45 | N/A |
| 10004 | NOx 0.4ppm | 0.03920 | 0.40000 | 0.40390 | 0.96 | N/A |
| 10005 | NOx 0.2ppm | 0.01920 | 0.20000 | 0.19910 | 0.43 | N/A |
| 10006 | NOx 0.1ppm | 0.00950 | 0.10000 | 0.10000 | 0.01 | N/A |
| 10007 | NOx 0.0ppm | 0.00010 | 0.00000 | 0.00290 | NA | N/A |




Channel: 2-NO2
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00043
B: 0.13507
$R^2$: 0.99905
RSE(%): 3.65935
% Max. for OVR: 100

| InjNo | Name | Response | Known Conc. mg/L | Calc. Conc. mg/L | % Error | Time |
|---|---|---|---|---|---|---|
| 10001 | Nitrite 8.0ppm | 1.02100 | 8.00000 | 7.55630 | 5.55 | N/A |
| 10002 | Nitrite 4.0ppm | 0.54440 | 4.00000 | 4.02730 | 0.68 | N/A |
| 10003 | Nitrite 1.0ppm | 0.13810 | 1.00000 | 1.01940 | 1.94 | N/A |
| 10004 | Nitrite 0.4ppm | 0.05650 | 0.40000 | 0.41500 | 3.75 | N/A |
| 10005 | Nitrite 0.1ppm | 0.01420 | 0.10000 | 0.10160 | 1.62 | N/A |
| 10006 | Nitrite 0.05ppm | 0.00710 | 0.05000 | 0.04930 | 1.36 | N/A |
| 10007 | Nitrite 0.0ppm | 0.00020 | 0.00000 | -0.00200 | NA | N/A |

Results:

Channel: 1-NOx

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Stabil | 1 | Unknown | ? | 0.0001 | 1 | 1 | 1 | 0.0037 | | 2025-03-06T09:16:11 |
| CCV NO3 | 2 | QC | 1 | 0.0993 | 1 | 1 | 1 | 1.0213 | | 2025-03-06T09:17:23 |
| CCV NO2 | 3 | QC | ? | 0.1015 | 1 | 1 | 1 | 1.0432 | | 2025-03-06T09:18:29 |
| CCB | 4 | QC | 0 | 0.0003 | 1 | 1 | 1 | 0.0047 | | 2025-03-06T09:19:39 |

| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| L2512085-01J | 5 | Unknown | ? | 1.1963 | 1 | 1 | 1 | 12.2746 | OVR | 2025-03-06T09:20:45 |
| WG2037316-3 | 6 | Unknown | ? | 1.1974 | 1 | 1 | 1 | 12.2859 | OVR | 2025-03-06T09:21:51 |
| WG2037316-4 | 7 | Unknown | ? | 1.2829 | 1 | 1 | 1 | 13.1632 | OVR | 2025-03-06T09:22:56 |
| L2512085-03B | 8 | Unknown | ? | 0.2189 | 1 | 1 | 1 | 2.2477 | | 2025-03-06T09:24:02 |
| L2512086-01J | 9 | Unknown | ? | 0.0021 | 1 | 1 | 1 | 0.0239 | | 2025-03-06T09:25:08 |
| L2512087-01J | 10 | Unknown | ? | 0.5071 | 1 | 1 | 1 | 5.2048 | | 2025-03-06T09:26:15 |
| L2512088-01G | 11 | Unknown | ? | 0.0156 | 1 | 1 | 1 | 0.1620 | | 2025-03-06T09:27:21 |
| L2511984-01A | 12 | Unknown | ? | 0.0230 | 1 | 1 | 1 | 0.2378 | | 2025-03-06T09:28:28 |
| L2511984-02A | 13 | Unknown | ? | 0.0209 | 1 | 1 | 1 | 0.2161 | | 2025-03-06T09:29:34 |
| L2511984-03A | 14 | Unknown | ? | 0.0192 | 1 | 1 | 1 | 0.1989 | | 2025-03-06T09:30:40 |
| CCV NO3 | 15 | QC | 1 | 0.0995 | 1 | 1 | 1 | 1.0231 | | 2025-03-06T09:31:45 |
| CCV NO2 | 16 | QC | ? | 0.1018 | 1 | 1 | 1 | 1.0467 | | 2025-03-06T09:32:51 |
| CCB | 17 | QC | 0 | 0.0002 | 1 | 1 | 1 | 0.0042 | | 2025-03-06T09:34:02 |
| L2511984-04A | 18 | Unknown | ? | 0.0210 | 1 | 1 | 1 | 0.2178 | | 2025-03-06T09:35:08 |
| L2512027-01A | 19 | Unknown | ? | 0.0832 | 1 | 1 | 1 | 0.8561 | | 2025-03-06T09:36:15 |
| L2512027-02A | 20 | Unknown | ? | 1.3270 | 1 | 1 | 1 | 13.6160 | OVR | 2025-03-06T09:37:24 |
| L2512030-01A | 21 | Unknown | ? | -0.0005 | 1 | 1 | 1 | -0.0028 | | 2025-03-06T09:37:59 |
| L2512030-02A | 22 | Unknown | ? | 0.0010 | 1 | 1 | 1 | 0.0127 | | 2025-03-06T09:39:32 |
| L2512370-05H | 23 | Unknown | ? | 0.0043 | 1 | 1 | 1 | 0.0463 | | 2025-03-06T09:40:38 |
| L2512085-03B | 24 | Unknown | ? | 0.2188 | 1 | 1 | 1 | 2.2468 | | 2025-03-06T09:41:44 |
| L2512030-01A | 25 | Unknown | ? | 0.0002 | 1 | 1 | 1 | 0.0043 | | 2025-03-06T09:42:48 |
| CCV NO3 | 26 | QC | 1 | 0.0990 | 1 | 1 | 1 | 1.0179 | | 2025-03-06T09:43:54 |
| CCV NO2 | 27 | QC | ? | 0.1017 | 1 | 1 | 1 | 1.0451 | | 2025-03-06T09:45:00 |
| CCB | 28 | QC | 0 | 0.0001 | 1 | 1 | 1 | 0.0028 | | 2025-03-06T09:46:12 |
| _spacer_ | 29 | Unknown | ? | 0.0000 | 1 | 1 | 1 | 0.0024 | | 2025-03-06T09:58:03 |
| _spacer_ | 30 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0099 | | 2025-03-06T09:59:30 |
| L2512085-01J | 31 | Unknown | ? | 0.2912 | 1 | 5 | 1 | 14.9500 | | 2025-03-06T10:00:35 |
| WG2037316-3 | 32 | Unknown | ? | 0.2932 | 1 | 5 | 1 | 15.0493 | | 2025-03-06T10:01:43 |
| WG2037316-4 | 33 | Unknown | ? | 0.3609 | 1 | 5 | 1 | 18.5239 | | 2025-03-06T10:02:51 |
| L2512027-02A | 34 | Unknown | ? | 0.4827 | 1 | 5 | 1 | 24.7690 | | 2025-03-06T10:04:00 |
| CCV NO3 | 35 | QC | 1 | 0.0983 | 1 | 1 | 1 | 1.0110 | | 2025-03-06T10:05:06 |
| CCV NO2 | 36 | QC | ? | 0.1015 | 1 | 1 | 1 | 1.0437 | | 2025-03-06T10:06:12 |
| CCB | 37 | QC | 0 | -0.0001 | 1 | 1 | 1 | 0.0013 | | 2025-03-06T10:06:54 |

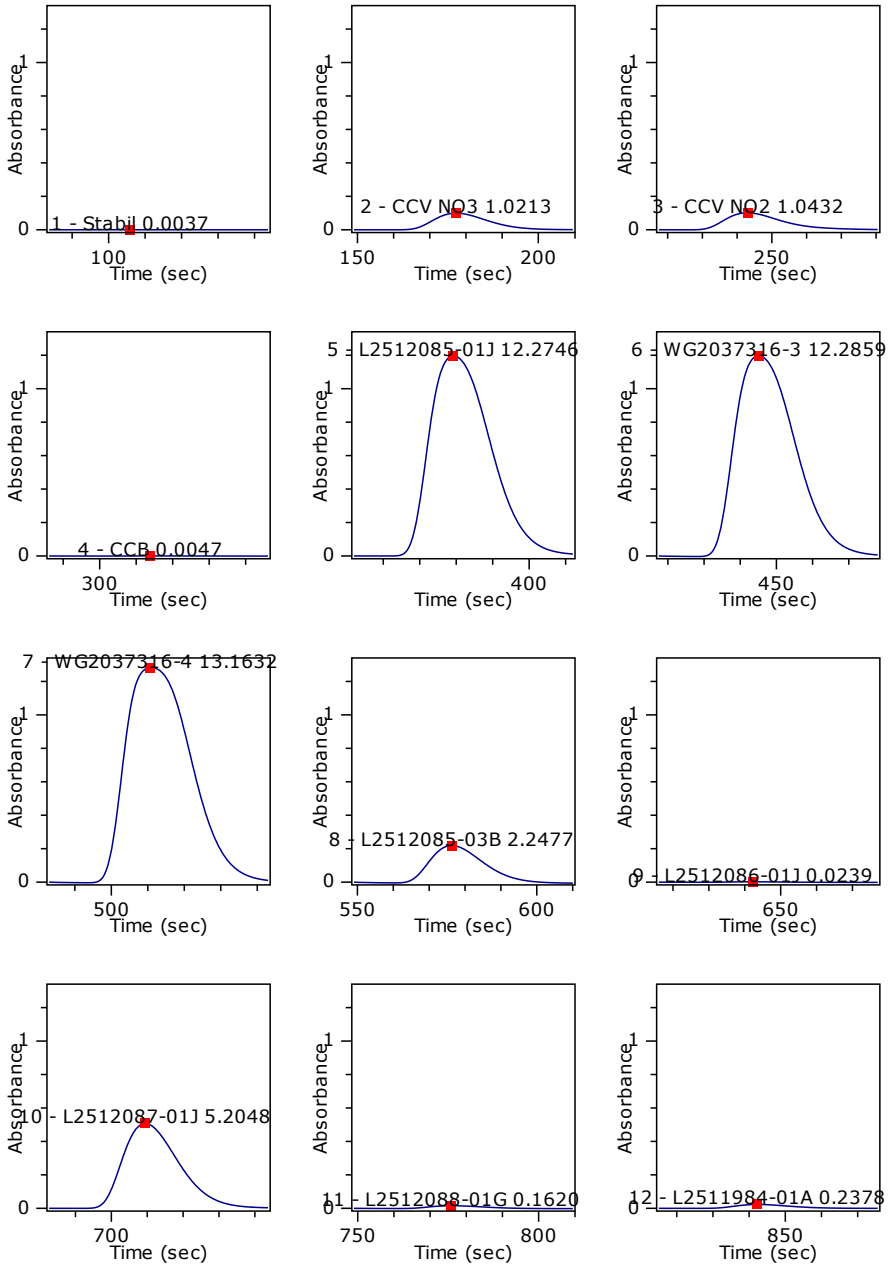
Channel: 2-NO2

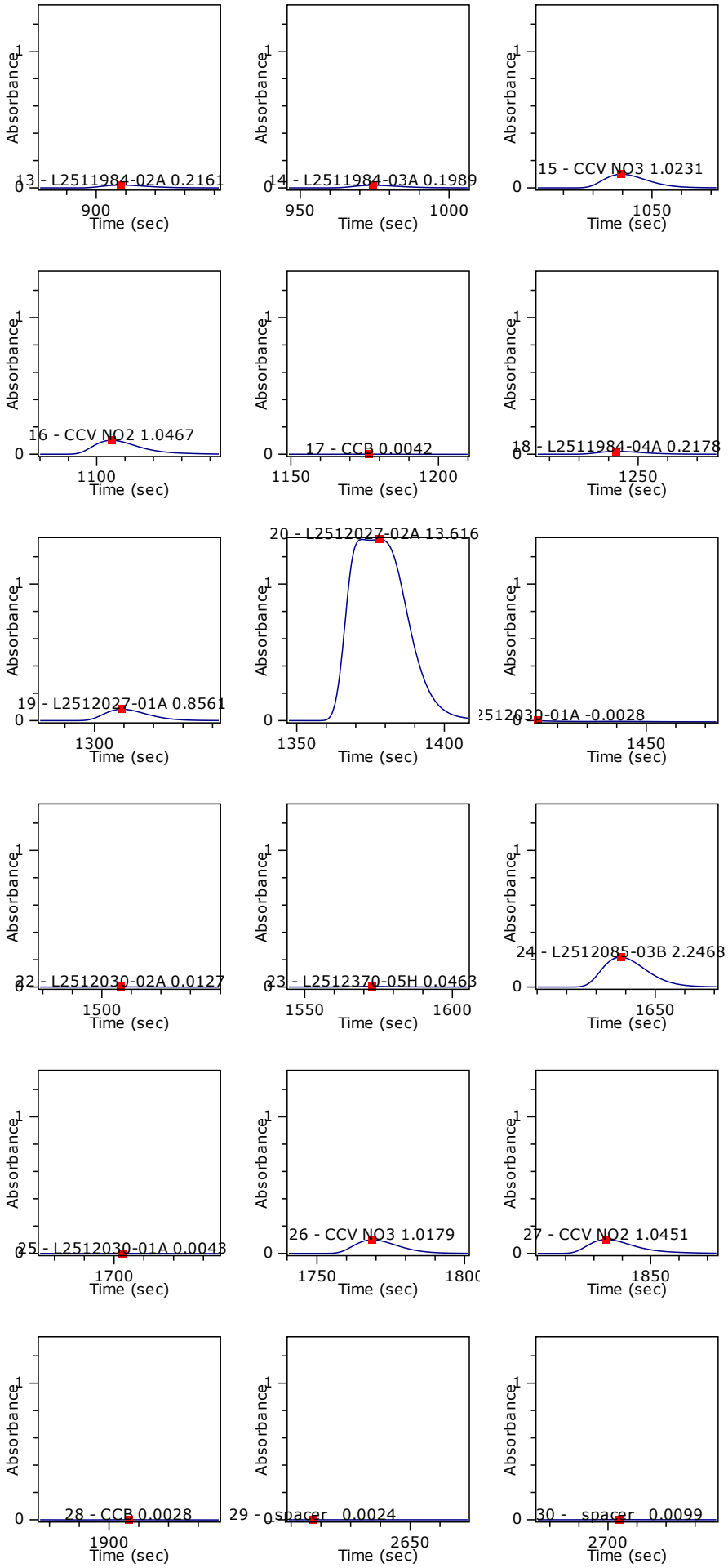
| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Stabil | 1 | Unknown | ? | 0.0002 | 1 | 1 | 1 | -0.0018 | | 2025-03-06T09:15:54 |
| CCV NO3 | 2 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0021 | | 2025-03-06T09:17:15 |
| CCV NO2 | 3 | QC | 1 | 0.1364 | 1 | 1 | 1 | 1.0065 | | 2025-03-06T09:18:15 |
| CCB | 4 | QC | 0 | 0.0004 | 1 | 1 | 1 | -0.0003 | | 2025-03-06T09:19:29 |
| L2512085-01J | 5 | Unknown | ? | 0.0010 | 1 | 1 | 1 | 0.0043 | | 2025-03-06T09:20:32 |
| WG2037316-3 | 6 | Unknown | ? | 0.0003 | 1 | 1 | 1 | -0.0012 | | 2025-03-06T09:21:46 |
| WG2037316-4 | 7 | Unknown | ? | 0.0003 | 1 | 1 | 1 | -0.0012 | | 2025-03-06T09:22:51 |
| L2512085-03B | 8 | Unknown | ? | 0.0009 | 1 | 1 | 1 | 0.0033 | | 2025-03-06T09:23:49 |
| L2512086-01J | 9 | Unknown | ? | 0.0010 | 1 | 1 | 1 | 0.0040 | | 2025-03-06T09:24:55 |
| L2512087-01J | 10 | Unknown | ? | 0.0014 | 1 | 1 | 1 | 0.0071 | | 2025-03-06T09:26:02 |
| L2512088-01G | 11 | Unknown | ? | 0.0009 | 1 | 1 | 1 | 0.0032 | | 2025-03-06T09:27:09 |
| L2511984-01A | 12 | Unknown | ? | 0.0021 | 1 | 1 | 1 | 0.0120 | | 2025-03-06T09:28:14 |
| L2511984-02A | 13 | Unknown | ? | 0.0020 | 1 | 1 | 1 | 0.0118 | | 2025-03-06T09:29:20 |
| L2511984-03A | 14 | Unknown | ? | 0.0020 | 1 | 1 | 1 | 0.0115 | | 2025-03-06T09:30:26 |
| CCV NO3 | 15 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0021 | | 2025-03-06T09:31:31 |
| CCV NO2 | 16 | QC | 1 | 0.1371 | 1 | 1 | 1 | 1.0116 | | 2025-03-06T09:32:37 |
| CCB | 17 | QC | 0 | 0.0002 | 1 | 1 | 1 | -0.0014 | | 2025-03-06T09:33:48 |
| L2511984-04A | 18 | Unknown | ? | 0.0020 | 1 | 1 | 1 | 0.0117 | | 2025-03-06T09:34:55 |
| L2512027-01A | 19 | Unknown | ? | 0.1128 | 1 | 1 | 1 | 0.8318 | | 2025-03-06T09:36:01 |
| L2512027-02A | 20 | Unknown | ? | 0.0823 | 1 | 1 | 1 | 0.6063 | | 2025-03-06T09:37:07 |
| L2512030-01A | 21 | Unknown | ? | 0.0010 | 1 | 1 | 1 | 0.0039 | | 2025-03-06T09:38:12 |
| L2512030-02A | 22 | Unknown | ? | 0.0014 | 1 | 1 | 1 | 0.0070 | | 2025-03-06T09:39:18 |
| L2512370-05H | 23 | Unknown | ? | 0.0033 | 1 | 1 | 1 | 0.0214 | | 2025-03-06T09:40:24 |
| L2512085-03B | 24 | Unknown | ? | 0.0008 | 1 | 1 | 1 | 0.0024 | | 2025-03-06T09:41:29 |
| L2512030-01A | 25 | Unknown | ? | 0.0009 | 1 | 1 | 1 | 0.0036 | | 2025-03-06T09:42:35 |
| CCV NO3 | 26 | QC | ? | 0.0002 | 1 | 1 | 1 | -0.0019 | | 2025-03-06T09:43:42 |
| CCV NO2 | 27 | QC | 1 | 0.1374 | 1 | 1 | 1 | 1.0140 | | 2025-03-06T09:44:46 |
| CCB | 28 | QC | 0 | 0.0003 | 1 | 1 | 1 | -0.0012 | | 2025-03-06T09:45:59 |
| _spacer_ | 29 | Unknown | ? | 0.0001 | 1 | 1 | 1 | -0.0024 | | 2025-03-06T09:58:52 |
| _spacer_ | 30 | Unknown | ? | 0.0004 | 1 | 1 | 1 | -0.0001 | | 2025-03-06T09:59:13 |
| L2512085-01J | 31 | Unknown | ? | 0.0002 | 1 | 5 | 1 | -0.0068 | | 2025-03-06T10:00:22 |
| WG2037316-3 | 32 | Unknown | ? | 0.0001 | 1 | 5 | 1 | -0.0124 | | 2025-03-06T10:01:34 |

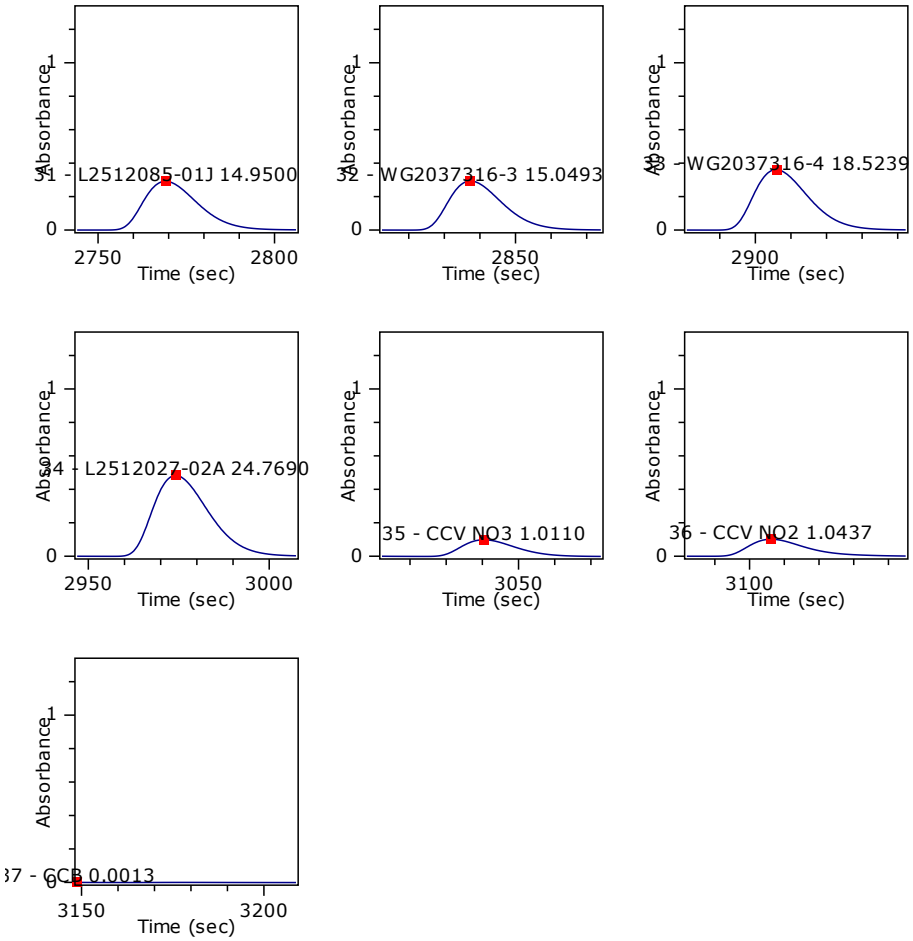
| Name | Inj. No. | Type | Known Conc. mg/L | Response | MDF | ADF | Weight | Calc. Conc. mg/L | Flags | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| WG2037316-4 | 33 | Unknown | ? | 0.0001 | 1 | 5 | 1 | -0.0114 | | 2025-03-06T10:02:46 |
| L2512027-02A | 34 | Unknown | ? | 0.0162 | 1 | 5 | 1 | 0.5824 | | 2025-03-06T10:03:47 |
| CCV NO3 | 35 | QC | ? | 0.0001 | 1 | 1 | 1 | -0.0022 | | 2025-03-06T10:04:53 |
| CCV NO2 | 36 | QC | 1 | 0.1369 | 1 | 1 | 1 | 1.0104 | | 2025-03-06T10:05:58 |
| CCB | 37 | QC | 0 | 0.0003 | 1 | 1 | 1 | -0.0012 | | 2025-03-06T10:07:09 |

Peaks:

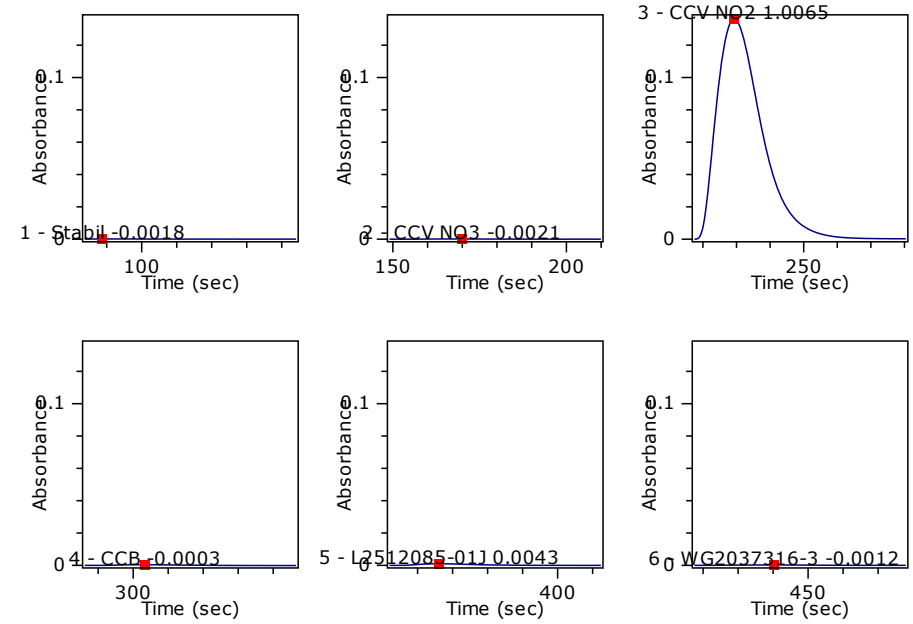
Channel: 1-NOx

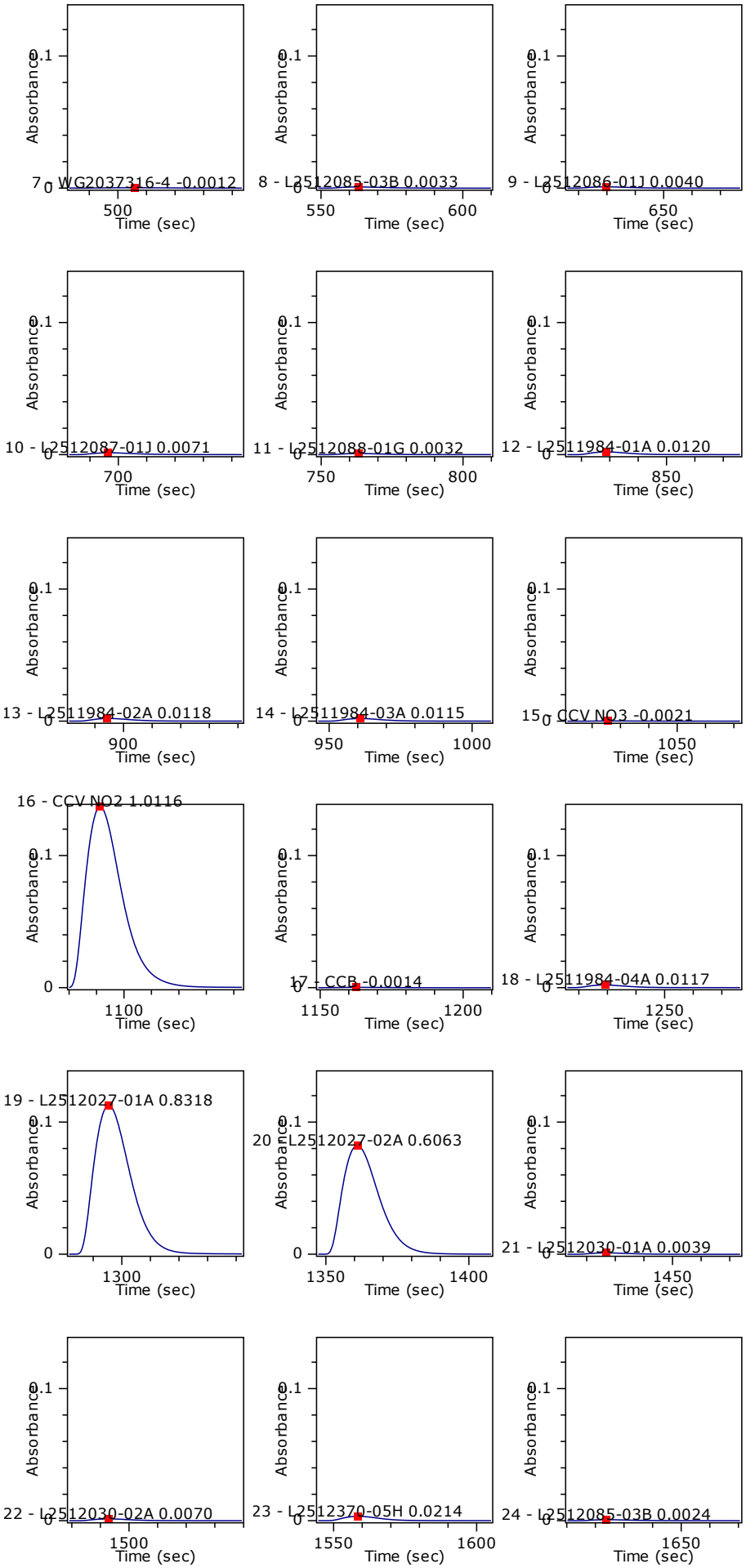


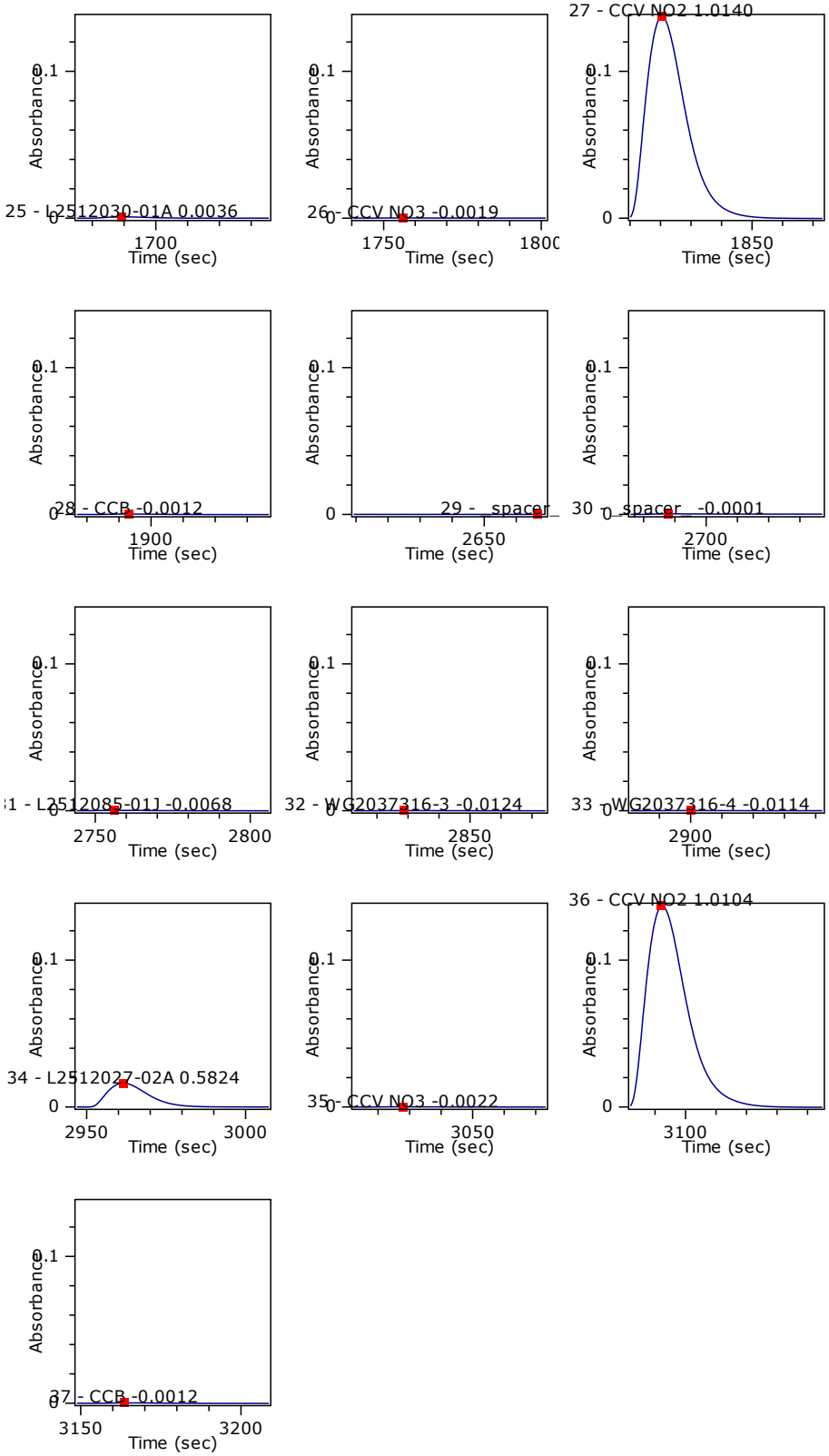

13 - L2511984-02A 0.2161
14 - L2511984-03A 0.1989
15 - CCV NO3 1.0231
16 - CCV NO2 1.0467
17 - CCB 0.0042
18 - L2511984-04A 0.2178
19 - L2512027-01A 0.8561
20 - L2512027-02A 13.616
2512030-01A -0.0028
22 - L2512030-02A 0.0127
23 - L2512370-05H 0.0463
24 - L2512085-03B 2.2468
25 - L2512030-01A 0.0043
26 - CCV NO3 1.0179
27 - CCV NO2 1.0451
28 - CCB 0.0028
29 - spacer 0.0024
30 - spacer 0.0099
Absorbance
Time (sec)




Channel: 2-NO2




7 - WG2037316-4 -0.0012
8 - L2512085-03B 0.0033
9 - L2512086-01J 0.0040
10 - L2512087-01J 0.0071
11 - L2512088-01G 0.0032
12 - L2511984-01A 0.0120
13 - L2511984-02A 0.0118
14 - L2511984-03A 0.0115
15 - CCV NO3 -0.0021
16 - CCV NO2 1.0116
17 - CCB -0.0014
18 - L2511984-04A 0.0117
19 - L2512027-01A 0.8318
20 - L2512027-02A 0.6063
21 - L2512030-01A 0.0039
22 - L2512030-02A 0.0070
23 - L2512370-05H 0.0214
24 - L2512085-03B 0.0024
Absorbance
Time (sec)




Data Processing Parameters:

Channel: 1-NOx

| | |
|---|---|
| Response parameter | Peak Height |
| Filter Type | None |
| Filter Window | 3 |
| Enable Peak Window | False |
| Peak Window Start | 0 |
| Peak Window Stop | 0 |

| | |
|---|---|
| Enable Baseline Correction | False |
| Enable 2 Point Correction | False |
| Baseline Start | 0 |
| Baseline Stop | 0 |
| Point 2 Baseline Start | 0 |
| Point 2 Baseline Stop | 0 |
| Background Correction | Single Wavelength |
| Ref Wavelength 1 | 600 |
| Ref Wavelength 2 | 0 |

Channel: 2-NO2

| | |
|---|---|
| Response parameter | Peak Height |
| Filter Type | None |
| Filter Window | 3 |
| Enable Peak Window | False |
| Peak Window Start | 0 |
| Peak Window Stop | 0 |
| Enable Baseline Correction | False |
| Enable 2 Point Correction | False |
| Baseline Start | 0 |
| Baseline Stop | 0 |
| Point 2 Baseline Start | 0 |
| Point 2 Baseline Stop | 0 |
| Background Correction | Single Wavelength |
| Ref Wavelength 1 | 600 |
| Ref Wavelength 2 | 0 |

Method Log:

```
FIAsoft FIAsoft v3.1.10

FIAlyzer Settings
------------
FIAlab1 Serial Number: FIA31428
FIAlab2 Serial Number: FIA31429
Pump: Connected on COM8

Spectrometer Settings
Spectrometer1
------------
Spectrometer Type: tec5
Integration Time: 2.4
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Spectrometer2
------------
Spectrometer Type: tec5
Integration Time: 1.9
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Start Time
------------
2025-03-06T09:14:26

Method
------------
```

```
' Method Script for NOx-NO2

Autosave Data C:\FIAlab\Autosave Data\DateTime
FIAlab Injection Valve Sample Load
Message Cadmium Column on for NOx
FIAlab Peristaltic Pump Clockwise(%) 55

Autosampler Wash
Delay (sec) 2
Next Sample
Delay (sec) 35  'StartDelay2 - Controls initial sample introduction.

FIAlab1 Injection Valve Sample Inject
Autosampler Probe Up
Delay (sec) 2
Autosampler Position (#) Rinse
FIAlab2 Injection Valve Sample Inject
Delay (sec) 15   'StartDelay3 - Should be set equal to LoopDelay3

Autosampler Probe Up
Delay (sec) 5   'StartDelay4 - Should be set equal to LoopDelay4

Loop Start

   Analyte New Sample
   Delay (sec) 1
   Next Sample
   Autosampler Probe Force Down

   Spectrometer Reference Scan
   Spectrometer Absorbance Scanning

   Delay (sec) 3   ' LoopDelay1 - Controls sample transit & loop empty. Controls back baseline.

   FIAlab Injection Valve Sample Load

   Delay (sec) 35   ' LoopDelay2 - Controls sample transit & loop fill. Controls back baseline.

   FIAlab1 Injection Valve Sample Inject
   Autosampler Probe Up
   Delay (sec) 5
   Autosampler Position (#) Rinse
   FIAlab2 Injection Valve Sample Inject

   Delay (sec) 10   ' LoopDelay3 - Controls loop empty & probe rinse time. Inverse controls front baseline.

   Autosampler Probe Up

   Delay (sec) 3   ' LoopDelay4 - Controls loop empty. Inverse controls front baseline.

   Spectrometer Stop Scanning

Loop End

Autosampler Position (#) Rinse
Delay (sec) 20
Autosampler Probe Up
Delay (sec) 30
FIAlab Peristaltic Pump Clockwise(%) 5
Autoexport Report C:\FIAlab\autoreport\NOxNO2\DateTime
Message Run is Complete
```

Method File Location: C:\FIAlab\FIAlab User Files\Methods\Method_NOx+NO2.fia

# Quality Control

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 2A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2511919-01 | | |
| **Matrix Spike** | : WG2037164-4 | **MS Analysis Date** | : 03/06/25 06:33 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Nitrogen, Nitrate/Nitrite | 0.084J | 4 | 4.2 | 105 | | | | | 80-120 | 20 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 2A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2511919-01 | **Analysis Date** | : 03/06/25 06:31 |
| **Dup Sample ID** | : WG2037164-3 | **DUP Analysis Date** | : 03/06/25 06:32 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Nitrogen, Nitrate/Nitrite | 0.084J | 0.074J | NC | 20 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2037164-2 | **LCS Analysis Date** | : 03/06/25 04:08 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Nitrogen, Nitrate/Nitrite | 5.00 | 5.00 | 100. | | | | | 90-110 | 20 |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, Nitrate | 14797-55-8 | 0.1 | 0.0228 | mg/l | 90-110 | | 83-113 | 6 | 6 | 353.2 | 48 hours | 1 - Plastic 250ml unpreserved |
| Nitrogen, Nitrate | 14797-55-8 | 0.1 | 0.0228 | mg/l | 90-110 | | 83-113 | 17 | 17 | 4500NO3-F | 48 hours | 1 - Plastic 250ml unpreserved |
| Nitrogen, Nitrite | NONE | 0.05 | 0.0143 | mg/l | 90-110 | 20 | 80-120 | 20 | 20 | 353.2 | 48 hours | 1 - Plastic 250ml unpreserved |
| Nitrogen, Nitrite | NONE | 0.05 | 0.0143 | mg/l | 90-110 | 20 | 80-120 | 20 | 20 | 4500NO3-F | 48 hours | 1 - Plastic 250ml unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11468-1
**Page:** 1

**WETCHEM (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, Nitrate | 14797-55-8 | 1 | 0.261 | mg/kg | 90-110 | 20 | 80-120 | 20 | 20 | 4500NO3-F | 48 hours | 1 - Glass 250ml/8oz unpreserved |
| Nitrogen, Nitrite | NONE | 1 | 0.282 | mg/kg | 90-110 | 20 | 80-120 | 20 | 20 | 4500NO3-F | 48 hours | 1 - Glass 250ml/8oz unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

## Calculations of Nitrogen, Nitrate

Aqueous Samples:
Compute sample N in NO3 concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

Calculate results by using reading on Channel 1 (NO3+NO2) and Channel 2 (NO2)

NO3 mg/I = (NO3+NO2) mg/L - (NO2) mg/L

To compute final results for aqueous samples, multiply the direct reading by the dilution factor (also done using software)

(NO3)-N mg/L = mg/L direct reading x dilution factor

## Calculations of Nitrogen, Nitrite

Aqueous Samples:
Compute sample N in NO2 concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

Calculate results by using reading on Channel 2 (NO2)

To compute final results for aqueous samples, multiply the direct reading by the dilution factor (also done using software)

(NO2)-N mg/L = mg/L direct reading x dilution factor

# Sequence Logs

| Date: | Initals: | Syringe Lot: | Syringe Lot: 20230620 |
|---|---|---|---|
| 030625 | KAF | Filter Lot: | Filter Lot: 18048470A |

| Injection # | Rack # | Sample ID: | Comments: |
|---|---|---|---|
| **19** | RA1 | ICV NO3 5 | *Buffer: NO3NO2_022625_BUFFER* |
| **20** | RA2 | ICV NO2 5 | *Color: NO3NO2_021925_COLOR* |
| **21** | RA3 | ICV NO3 0.5 | *NO3 MS: NO3_021425_200PPM_CAL* |
| **22** | RA4 | ICV NO2 0.5 | *NO2 MS: NO2_021425_200PPM_CAL* |
| **23** | RA5 | ICB | *ICV NO3 5: NO3_030625_5PPM_ICV* |
| **24** | RA6 | 5X DILUTER CHECK | *ICV NO2 5: NO2_030625_5PPM_ICV* |
| **25** | RA7 | BLANK NO3 | *ICV NO3 0.5: NO3_030625_0.5PPM_ICV* |
| **26** | RA8 | LCS NO3 | *ICV NO2 0.5: NO2_030625_0.5PPM_ICV* |
| **27** | RA9 | BLANK NO2 | |
| **28** | RA10 | LCS NO2 | *OOH* |
| 32 | RA11 | WG2037148-1; NO2 | *DW* |
| 33 | RA12 | WG2037148-2; NO2 | GOING OOH |
| 34 | RA13 | WG2037149-1; NO2 | FIELD BLANK |
| 35 | RA14 | WG2037149-2; NO2 | |
| 36 | RA15 | WG2037150-1; NO3/316 | |
| 37 | RA16 | WG2037150-2; NO3/316 | |
| 38 | RA17 | WG2037157/158-1; NO3 | |
| 39 | RA18 | WG2037157/158-2; NO3 | |
| 40 | RA19 | WG2037159-1; NO3 | |
| 41 | RA20 | WG2037159-2; NO3 | |
| 45 | RA21 | WG2037160/161-1; CNO3 | |
| 46 | RA22 | WG2037160/161-2; CNO3 | |
| 47 | RA23 | WG2037162-1; CNO3 | |
| 48 | RA24 | WG2037162-2; CNO3 | |
| 49 | RA25 | WG2037164-1; CNO3 | |
| 50 | RA26 | WG2037164-2; CNO3 | |
| 51; 137 | RA27 | L2511631-01 | |
| 52; 131 | RA28 | L2511990-01 | |
| 53 | RA29 | WG2037150-3; NO3 | |
| 54 | RA30 | WG2037150-4; NO3 | |
| 58 | RA31 | WG2037148-3; NO2 | |
| 59 | RA32 | WG2037148-4; NO2 | |
| 60 | RA33 | L2512005-01 | |
| 61 | RA34 | WG2037150-5; NO3 | |
| 62 | RA35 | WG2037150-6; NO3 | |
| 63 | RA36 | L2512005-02 | |
| 64 | RA37 | L2512005-03 | |
| 65 | RA38 | L2512005-04 | |
| 66 | RA39 | L2511986-01 | |
| 67 | RA40 | L2511986-02 | |
| 71 | RA41 | L2511986-03 | |
| 72 | RA42 | L2511986-04 | |
| 73 | RA43 | L2511944-01 | |

| Injection # | Rack # | Sample ID: | Comments: |
|---|---|---|---|
| 74 | RA44 | L2511944-02 | |
| 75 | RA45 | L2511944-03 | |
| 76 | RA46 | L2511944-04 | |
| 77 | RA47 | L2511944-05 | |
| 78 | RA48 | L2511944-06 | |
| 79 | RA49 | WG2037157/158-3; NO3 | |
| 80 | RA50 | WG2037157/158-4; NO3 | |
| 84 | RA51 | WG2037149-3; NO2 | |
| 85 | RA52 | WG2037149-4; NO2 | |
| 86 | RA53 | L2511944-07 | |
| 87 | RA54 | L2511944-08 | |
| 88 | RA55 | L2511944-09 | |
| 89 | RA56 | L2511757-01 | |
| 90 | RA57 | L2511972-16 | |
| 91 | RA58 | L2511972-17 | |
| 92 | RA59 | L2512154-01 | |
| 93 | RA60 | WG2037159-3; NO3 | |
| 97 | RA61 | WG2037159-4; NO3 | |
| 98 | RA62 | L2512154-03 | |
| 99 | RA63 | L2512154-04 | |
| 100 | RA64 | L2512154-06 | |
| 101 | RA65 | L2512168-01 | |
| 102 | RA66 | L2512169-01 | |
| 103 | RA67 | L2512169-02 | |
| 104 | RA68 | L2511932-01 | |
| 105 | RA69 | WG2037162-3; CNO3 | |
| 106 | RA70 | WG2037162-4; CNO3 | |
| 110 | RA71 | L2511932-02 | |
| 111 | RA72 | L2512270-01 | |
| 112 | RA73 | L2512270-02 | |
| 113 | RA74 | L2512284-01 | |
| 114 | RA75 | L2512284-02 | |
| 115 | RA76 | L2512289-01 | |
| 116 | RA77 | L2512291-01 | |
| 117 | RA78 | L2512291-02 | |
| 118 | RA79 | L2512293-01 | |
| 119 | RA80 | L2512293-02 | |
| 123 | RA81 | L2512294-01 | |
| 124 | RA82 | L2512294-02 | |
| 125 | RA83 | L2512296-01 | |
| 126 | RA84 | L2512296-02 | |
| 127 | RA85 | L2512298-01 | |
| 128 | RA86 | L2512298-02 | |
| 129 | RA87 | L2512299-01 | |
| 130 | RA88 | L2512299-02 | |

| Injection # | Rack # | Sample ID: | Comments: |
|---|---|---|---|
| 5 | RA89 | L2511919-01 | |
| 6 | RA90 | WG2037164-3; CNO3 | |
| 7 | RB1 | WG2037164-4; CNO3 | |
| 8 | RB2 | L2511919-02 | |
| 9 | RB3 | L2511919-04 | |
| 10 | RB4 | L2511919-05 | |
| 11 | RB5 | L2511919-07 | |
| 12 | RB6 | L2511919-08 | |
| 13 | RB7 | L2512280-01 | |
| 14 | RB8 | L2512280-02 | |
| 18 | RB9 | L2512286-01 | |
| 19 | RB10 | L2512286-02 | |
| 20; 46 | RB11 | L2511733-01 | |
| 21; 47 | RB12 | WG2037160-3; CNO3 | |
| 22; 48 | RB13 | WG2037160-4; CNO3 | |
| 23; 39 | RB14 | L2511745-01 | |
| 24; 49 | RB15 | L2511959-01 | |
| 25; 40 | RB16 | L2511963-01 | |
| 26 | RB17 | WG2037161-3; CNO3 | |
| 27 | RB18 | WG2037161-4; CNO3 | |
| 31 | RB19 | L2511963-02 | |
| 32 | RB20 | L2511963-03 | |
| 33 | RB21 | L2511963-04 | |
| 34 | RB22 | L2511963-05 | |
| 35 | RB23 | L2511963-06 | |
| 36 | RB24 | L2511963-07 | |
| 37 | RB25 | L2511963-08 | |
| 38 | RB26 | L2512235-02H | |
| | | | |
| 5; 31 | RB27 | L2512085-01 | |
| 6; 32 | RB28 | WG2037316-3; NO3 | |
| 7; 33 | RB29 | WG2037316-4; NO3 | |
| 8; 24 | RB30 | L2512085-03 | |
| 9 | RB31 | L2512086-01 | |
| 10 | RB32 | L2512087-01 | |
| 11 | RB33 | L2512088-01 | |
| 12 | RB34 | L2511984-01A | |
| 13 | RB35 | L2511984-02A | |
| 14 | RB36 | L2511984-03A | |
| 18 | RB37 | L2511984-04A | |
| 19 | RB38 | L2512027-01A | |
| 20 | RB39 | L2512027-02A | |
| 21; 25 | RB40 | L2512030-01A | |
| 22 | RB41 | L2512030-02A | |
| 23 | RB42 | L2512370-05H | |

# Total Dissolved Solids Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-01 | Date Collected | : 03/04/25 14:43 |
| Client ID | : 2A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/07/25 01:01 |
| Sample Matrix | : WATER | Dilution Factor | : 1.3 |
| Analytical Method | : 121,2540C | Analyst | : DEW |
| Lab File ID | : WG2037592.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 110 | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-02 | Date Collected | : 03/04/25 14:40 |
| Client ID | : 2B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/07/25 01:01 |
| Sample Matrix | : WATER | Dilution Factor | : 1.3 |
| Analytical Method | : 121,2540C | Analyst | : DEW |
| Lab File ID | : WG2037592.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 110 | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-04 | Date Collected | : 03/04/25 12:25 |
| Client ID | : 3A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/07/25 01:01 |
| Sample Matrix | : WATER | Dilution Factor | : 1.3 |
| Analytical Method | : 121,2540C | Analyst | : DEW |
| Lab File ID | : WG2037592.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 120 | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-05 | Date Collected | : 03/04/25 12:45 |
| Client ID | : 3B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/07/25 01:01 |
| Sample Matrix | : WATER | Dilution Factor | : 1.3 |
| Analytical Method | : 121,2540C | Analyst | : DEW |
| Lab File ID | : WG2037592.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 130 | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-07 | Date Collected | : 03/04/25 09:25 |
| Client ID | : 4A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/07/25 01:01 |
| Sample Matrix | : WATER | Dilution Factor | : 1.3 |
| Analytical Method | : 121,2540C | Analyst | : DEW |
| Lab File ID | : WG2037592.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 120 | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-08 | Date Collected | : 03/04/25 10:10 |
| Client ID | : 4B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/07/25 01:01 |
| Sample Matrix | : WATER | Dilution Factor | : 1.3 |
| Analytical Method | : 121,2540C | Analyst | : DEW |
| Lab File ID | : WG2037592.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 100 | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2037592-1 | Date Collected | : NA |
| Client ID | : WG2037592-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/07/25 01:01 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2540C | Analyst | : DEW |
| Lab File ID | : WG2037592.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | ND | 10 | 3.1 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2037592-3 | Date Collected | : 03/04/25 12:45 |
| Client ID | : WG2037592-3 DUP | Date Received | : 03/04/25 |
| Sample Location | : | Date Analyzed | : 03/07/25 01:01 |
| Sample Matrix | : WATER | Dilution Factor | : 1.3 |
| Analytical Method | : 121,2540C | Analyst | : DEW |
| Lab File ID | : WG2037592.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 400 | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2037592-4 | Date Collected | : 03/04/25 13:05 |
| Client ID | : WG2037592-4 DUP | Date Received | : 03/04/25 |
| Sample Location | : | Date Analyzed | : 03/07/25 01:01 |
| Sample Matrix | : WATER | Dilution Factor | : 1.3 |
| Analytical Method | : 121,2540C | Analyst | : DEW |
| Lab File ID | : WG2037592.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 420 | 13 | 4.0 | |

# Sample Raw Data

Pace Analytical Services

# Wet Chemistry Gravimetric ELN

Printed: MAR-08-25 22:56:26

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **WorkGroup** | WG2037592 | **Temp In (C)** | 180 | **Temp In (C)** | 180 | **Temp In (C)** | | **Temp In (C)** | | **Temp In (C)** | |
| **Title** | Solids, Total Dissolved | **Temp Out (C)** | 180 | **Temp Out (C)** | 180 | **Temp Out (C)** | | **Temp Out (C)** | | **Temp Out (C)** | |
| **Method** | SM2540C | **Time In** | 08-MAR-25 15:37 | **Time In** | 08-MAR-25 18:58 | **Time In** | | **Time In** | | **Time In** | |
| **Instrument** | BALANCE#22 | **Time Out** | 08-MAR-25 17:57 | **Time Out** | 08-MAR-25 21:40 | **Time Out** | | **Time Out** | | **Time Out** | |
| | | | | | | | | | **LCS Lot #** | **TrueValue** | **Units** |
| | | **Evaporation** | **Temp In (C)** | **Time In** | | | | | 012925D | 500 | mg/l |
| | | | 90 | 07-MAR-25 08:07 | | | | | | | |

| Sample # | Analysis Date | Analyst | Cup ID | Filter Lot | Tare Weight (gm) | Sample Volume (ml) | Net Weight (1) (gm) | Net Weight (2) (gm) | Net Weight (3) (gm) | Net Weight (4) (gm) | Net Weight (5) (gm) | Result mg/L | Dil | Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L2511902-04 | 07-MAR-25 01:01 | DEB WHELAN | BV | 77340422 | 109.3653 | 80 | 109.3963 | 109.3961 | | | | 385.00 | 1.3 | |
| L2511902-05 | 07-MAR-25 01:01 | DEB WHELAN | BK | 77340422 | 101.654 | 80 | 101.6889 | 101.6889 | | | | 436.25 | 1.3 | |
| L2511902-06 | 07-MAR-25 01:01 | DEB WHELAN | B45 | 77340422 | 64.448 | 80 | 64.4751 | 64.4753 | | | | 338.75 | 1.3 | T2 |
| L2511902-07 | 07-MAR-25 01:01 | DEB WHELAN | CA | 77340422 | 58.86 | 80 | 58.887 | 58.8871 | | | | 337.50 | 1.3 | |
| L2511902-08 | 07-MAR-25 01:01 | DEB WHELAN | AA2 | 77340422 | 64.1049 | 80 | 64.1319 | 64.1319 | | | | 337.50 | 1.3 | |
| L2511919-01 | 07-MAR-25 01:01 | DEB WHELAN | V11 | 77340422 | 66.9857 | 80 | 66.9943 | 66.9942 | | | | 106.25 | 1.3 | |
| L2511919-02 | 07-MAR-25 01:01 | DEB WHELAN | R4 | 77340422 | 65.9927 | 80 | 66.0013 | 66.0017 | | | | 107.50 | 1.3 | |
| L2511919-04 | 07-MAR-25 01:01 | DEB WHELAN | L7 | 77340422 | 64.4031 | 80 | 64.4129 | 64.413 | | | | 122.50 | 1.3 | |
| L2511919-05 | 07-MAR-25 01:01 | DEB WHELAN | X4 | 77340422 | 72.4954 | 80 | 72.5056 | 72.5058 | | | | 127.50 | 1.3 | |
| L2511919-07 | 07-MAR-25 01:01 | DEB WHELAN | X3 | 77340422 | 66.7678 | 80 | 66.7774 | 66.7777 | | | | 120.00 | 1.3 | |
| L2511919-08 | 07-MAR-25 01:01 | DEB WHELAN | C5 | 77340422 | 65.1908 | 80 | 65.1995 | 65.1992 | | | | 105.00 | 1.3 | |
| L2511923-01 | 07-MAR-25 01:01 | DEB WHELAN | V12 | 77340422 | 63.1553 | 80 | 63.185 | 63.1848 | | | | 368.75 | 1.3 | |
| L2511972-16 | 07-MAR-25 01:01 | DEB WHELAN | L8 | 77340422 | 72.076 | 80 | 72.0893 | 72.0896 | | | | 166.25 | 1.3 | |
| L2511972-17 | 07-MAR-25 01:01 | DEB WHELAN | V1 | 77340422 | 68.4748 | 80 | 68.48 | 68.4802 | | | | 65.00 | 1.3 | |
| WG2037592-1 | 07-MAR-25 01:01 | DEB WHELAN | CE | 77340422 | 64.7015 | 100 | 64.7015 | 64.7012 | | | | -3.00 | 1 | T1 |
| WG2037592-2 | 07-MAR-25 01:01 | DEB WHELAN | EG | 77340422 | 62.8293 | 50 | 62.8547 | 62.8546 | | | | 506.00 | 2 | |
| WG2037592-3 | 07-MAR-25 01:01 | DEB WHELAN | W4 | 77340422 | 65.1525 | 80 | 65.1845 | 65.1841 | | | | 395.00 | 1.3 | |
| WG2037592-4 | 07-MAR-25 01:01 | DEB WHELAN | S | 77340422 | 69.8915 | 80 | 69.9251 | 69.925 | | | | 418.75 | 1.3 | |

# Quality Control

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : NA | **Analysis Date** | : 03/07/25 01:01 |
| **Dup Sample ID** | : WG2037592-3 | **DUP Analysis Date** | : 03/07/25 01:01 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Solids, Total Dissolved | 380 | 400 | 5 | 10 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : NA | **Analysis Date** | : 03/07/25 01:01 |
| **Dup Sample ID** | : WG2037592-4 | **DUP Analysis Date** | : 03/07/25 01:01 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Solids, Total Dissolved | 440 | 420 | 5 | 10 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2037592-2 | **LCS Analysis Date** | : 03/07/25 01:01 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Solids, Total Dissolved | 500. | 510. | 101. | | | | | 80-120 | 10 |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Solids, Total Dissolved | NONE | 10 | 3.07 | mg/l | 80-120 | | | 10 | 10 | 2540C | 7 days | 1 - Plastic 500ml unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

# Calculations of TDS

$$\text{mgTDS/L} = \frac{(A - B) \times 1000}{\text{Sample volume, (L)}}$$

Where:

A = Final weight (weight of dish + dried residue, g)
B = Initial weight (weight of clean dish, g)

# Sulfate
# Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-01 | Date Collected | : 03/04/25 14:43 |
| Client ID | : 2A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 12:50 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2038583.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 14. | 10 | 1.4 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-02 | Date Collected | : 03/04/25 14:40 |
| Client ID | : 2B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 12:50 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2038583.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 18. | 10 | 1.4 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-04 | Date Collected | : 03/04/25 12:25 |
| Client ID | : 3A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 12:50 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2038583.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 8.5 | 10 | 1.4 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-05 | Date Collected | : 03/04/25 12:45 |
| Client ID | : 3B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 12:50 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2038583.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 16. | 10 | 1.4 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-07 | Date Collected | : 03/04/25 09:25 |
| Client ID | : 4A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 12:50 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2038583.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 17. | 10 | 1.4 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-08 | Date Collected | : 03/04/25 10:10 |
| Client ID | : 4B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 12:50 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2038583.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 15. | 10 | 1.4 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038583-1 | Date Collected | : NA |
| Client ID | : WG2038583-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/10/25 12:50 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2038583.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 2.0 | 10 | 1.4 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038583-3 | Date Collected | : 03/04/25 10:57 |
| Client ID | : WG2038583-3 DUP | Date Received | : 03/04/25 |
| Sample Location | : | Date Analyzed | : 03/10/25 12:50 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2038583.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 9.8 | 10 | 1.4 | J |

# Sample Raw Data

PACE ANALYTICAL LABS

# WET CHEMISTRY DEPARTMENT

## S U L F A T E

Last Change 3/5/13
File SO4-L.xlt

Curve/spike/ccv;R-4295
LCS;R-4296
**Reagent;lot A4320**

**Sample Number:** _____
**Client:** _____
**Analysis:** Sulfate, SO4
**Method:** SM 4500SO4-E
**Instrument:** SPEC6
**Wavelength:** 420 nm
**Spike Volume(ml):** 0.5
**Spike Concentration (mg/l):** 1000

**Product:** SO4-4500
**Curve Calibration Date :** 03/10/25
**Curve Identifier:** 3/10/2025
**Analysis Analyte:** Sulfate
**Analysis Date:** 3/10/2025 12:50
**Preparation Date:** 3/10/2025 12:50
**Technician:** MRW
**Work group:** WG2038583
**RL:** 10 mg/l
**Cell:** 2.5 cm

| Standard ID | Mean signal (pk area) abs | Dilution | Calc-ed Result |
|---|---|---|---|
| 0 | 0.000 | 1.0 | 1.70 |
| 10 | 0.138 | 1.0 | 8.42 |
| 20 | 0.355 | 1.0 | 19.0 |
| 40 | 0.806 | 1.0 | 40.9 |

**Calibration Curve**
Volume: 25 ml

| Slope | y-intercept |
|---|---|
| 0.020557 | -0.035 |

**Correlation Coefficient**
0.995857

**ICV/LCS Concentration (mg/l) =** 20.0000

| | Sample number | Sample Volume (ml) | Final Volume (ml) | Bkgd. Abs. | Gross Abs. | Net Absorbance | RESULT (mg/l) | Dilution Factor | RL Multiplier | FINAL RESULT (mg/l) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | ICB | 25 | 25 | 0 | 0.003 | 0.003 | 1.978 | 1 | 1.0 | 2.0 | Recovery |
| | ICV | 25 | 25 | 0 | 0.371 | 0.371 | 19.731 | 1 | 1.0 | 19.7 | 99% |
| | L2511529-01 | 25 | 25 | 0.056 | 0.601 | 0.545 | 28.125 | 1 | 1.0 | 28.1 | |
| SAMP | L2511919-01 | 25 | 25 | 0.005 | 0.246 | 0.241 | 13.460 | 1 | 1.0 | 13.5 | |
| SAMP | L2511919-02 | 25 | 25 | 0.002 | 0.33 | 0.328 | 17.657 | 1 | 1.0 | 17.7 | |
| SAMP | L2511919-04 | 25 | 25 | 0.004 | 0.142 | 0.138 | 8.491 | 1 | 1.0 | 8.5 | |
| SAMP | L2511919-05 | 25 | 25 | 0.011 | 0.296 | 0.285 | 15.582 | 1 | 1.0 | 15.6 | |
| SAMP | L2511919-07 | 25 | 25 | 0.002 | 0.311 | 0.309 | 16.740 | 1 | 1.0 | 16.7 | |
| SAMP | L2511919-08 | 25 | 25 | 0.008 | 0.285 | 0.277 | 15.196 | 1 | 1.0 | 15.2 | |
| | L2511944-01 | 25 | 25 | 0.005 | 0.13 | 0.125 | 7.864 | 1 | 1.0 | 7.9 | |
| | CCV1 | 25 | 25 | 0 | 0.366 | 0.366 | 19.490 | 1 | 1.0 | 19.5 | |
| | CCB1 | 25 | 25 | 0 | 0.004 | 0.004 | 2.026 | 1 | 1.0 | 2.0 | |
| | L2511944-02 | 25 | 25 | 0.02 | 0.076 | 0.056 | 4.535 | 1 | 1.0 | 4.5 | |
| | L2511944-03 | 25 | 25 | 0.036 | 0.431 | 0.395 | 20.889 | 1 | 1.0 | 20.9 | |
| | L2511944-04 | 25 | 25 | 0.012 | 0.798 | 0.786 | 39.752 | 1 | 1.0 | 39.8 | |
| | L2511944-05 | 25 | 25 | 0.005 | 0.204 | 0.199 | 11.433 | 1 | 1.0 | 11.4 | |
| | L2511944-06 | 25 | 25 | 0.003 | 0.153 | 0.150 | 9.070 | 1 | 1.0 | 9.1 | |
| | L2511944-07 | 25 | 25 | 0.021 | 0.295 | 0.274 | 15.052 | 1 | 1.0 | 15.1 | |
| | L2511944-08 | 25 | 25 | 0.001 | 0.159 | 0.158 | 9.456 | 1 | 1.0 | 9.5 | |
| | L2511944-09 | 25 | 25 | 0 | 0.003 | 0.003 | 1.978 | 1 | 1.0 | 2.0 | |
| SAMP | L2512325-01 | 25 | 25 | 0.003 | 0.29 | 0.287 | 15.679 | 1 | 1.0 | 15.7 | |
| SAMP | L2512325-03 | 25 | 25 | 0.015 | 0.18 | 0.165 | 9.793 | 1 | 1.0 | 9.8 | |
| | CCV2 | 25 | 25 | 0 | 0.359 | 0.359 | 19.152 | 1 | 1.0 | 19.2 | |
| | CCB2 | 25 | 25 | 0 | 0.004 | 0.004 | 2.026 | 1 | 1.0 | 2.0 | |
| SAMP | L2512325-04 | 25 | 25 | 0.005 | 0.659 | 0.654 | 33.384 | 1 | 1.0 | 33.4 | |
| SAMP | L2512325-05 | 25 | 25 | 0.007 | 0.289 | 0.282 | 15.438 | 1 | 1.0 | 15.4 | |
| | CCV3 | 25 | 25 | 0 | 0.354 | 0.354 | 18.911 | 1 | 1.0 | 18.9 | |
| | CCB3 | 25 | 25 | 0 | 0.005 | 0.005 | 2.074 | 1 | 1.0 | 2.1 | |
| BLANK | WG2038583-1 | 25 | 25 | 0.000 | 0.003 | 0.003 | 1.978 | 1 | 1.0 | 2.0 | |
| DUP | WG2038583-3 | 25 | 25 | 0.002 | 0.167 | 0.165 | 9.793 | 1 | 1.0 | 9.8 | L2511944-06 |

| | Sample number | sample volume | Final volume (ml) | Bkgd. Abs. | Gross Abs. | Absorbance | Sample Result mg/l | Spiked Volume | Spike conc. mg/l | Spike Result mg/l | Recovery % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MS | WG2038583-4 | 12.5 | 25 | 0.002 | 0.544 | 0.542 | 0.000 | 12.5 | 40.0000 | 56 | 140 |
| | | | | | | | | | | | L2511944-06 |
| LCS | WG2038583-2 | 25 | 25 | 0 | 0.371 | 0.371 | | 1 | 20.0000 | 20 | 99 |

# Quality Control

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : L2511944-06 | | |
| **Matrix Spike** | : WG2038583-4 | **MS Analysis Date** | : 03/10/25 12:50 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Sulfate | 9.1J | 40 | 56. | 140 | | | | | 55-147 | 14 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : NA | **Analysis Date** | : 03/10/25 12:50 |
| **Dup Sample ID** | : WG2038583-3 | **DUP Analysis Date** | : 03/10/25 12:50 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Sulfate | 9.1J | 9.8J | NC | 14 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2038583-2 | **LCS Analysis Date** | : 03/10/25 12:50 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Sulfate | 20.0 | 20.0 | 100. | | | | | 90-110 | 14 |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 14808-79-8 | 10 | 1.37 | mg/l | 90-110 | | 55-147 | 14 | 14 | 4500SO4-E | 28 days | 1 - Plastic 500ml unpreserved |
| Sulfate | 14808-79-8 | 10 | 1.37 | mg/l | 90-110 | | 55-147 | 14 | 14 | 9038 | 28 days | 1 - Plastic 500ml unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11468-1
**Page:** 1

**WETCHEM (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 14808-79-8 | 100 | 13.6 | mg/kg | 80-121 | 12 | 22-183 | 12 | 12 | 9038 | 28 days | 1 - Glass 250ml/8oz unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

# Calculations of Sulfate

Aqueous samples:

Calculate the concentration value of the sample directly from the standard curve.

$$mgSO_4/L = \frac{\text{absorbance - y-intercept}}{\text{slope}} \times \text{Dilution Factor}$$

If sample has a background absorbance, it has to be subtracted before calculation.

# Alkalinity Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-01 | Date Collected | : 03/04/25 14:43 |
| Client ID | : 2A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 10:45 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MKT |
| Lab File ID | : 250306_CSV.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 66.3 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-02 | Date Collected | : 03/04/25 14:40 |
| Client ID | : 2B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 10:47 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MKT |
| Lab File ID | : 250306_CSV.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 65.8 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-04 | Date Collected | : 03/04/25 12:25 |
| Client ID | : 3A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 10:50 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MKT |
| Lab File ID | : 250306_CSV.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 80.3 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-05 | Date Collected | : 03/04/25 12:45 |
| Client ID | : 3B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 10:53 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MKT |
| Lab File ID | : 250306_CSV.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 77.2 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-07 | Date Collected | : 03/04/25 09:25 |
| Client ID | : 4A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 10:55 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MKT |
| Lab File ID | : 250306_CSV.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 65.9 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-08 | Date Collected | : 03/04/25 10:10 |
| Client ID | : 4B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 10:58 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MKT |
| Lab File ID | : 250306_CSV.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 51.3 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2037359-1 | Date Collected | : NA |
| Client ID | : WG2037359-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/06/25 11:37 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MKT |
| Lab File ID | : 250306_CSV.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | ND | 2.00 | NA | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2037359-3 | Date Collected | : 03/04/25 10:57 |
| Client ID | : WG2037359-3 DUP | Date Received | : 03/04/25 |
| Sample Location | : | Date Analyzed | : 03/06/25 11:18 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MKT |
| Lab File ID | : 250306_CSV.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 71-52-3 | Alkalinity, Bicarbonate | 58.2 | 2.00 | NA | |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |

# Sample Raw Data

# Results Editor

## Result Overview

| Sample start t | Zero poin | Unit of Ze | Data marl | Slope 1 (C | Unit of Sl | Data marl | Sensor ty | List of sta | Standard | Comment | Temperat |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7.140 | pH | | -57.14 | mV/pH | | | | | | |

# Results Editor

## Result Overview

| Sample ID1 | Potentia | Unit of P | Data ma | Sample start | Volume | Unit of V | Density [ | Unit of D | Cor | Uni | Tempera | Unit of T | Commer |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -- | 7.05 | pH | | 3/6/2025 7: | 0 | mL | 1.0 | g/mL | 1.0 | | 25.0 | °C | |

# Titration report

## Method

| | | | |
|---|---|---|---|
| **Method ID** | Alk Total (2) | **Release state** | Released |
| **Name** | EP/EP | **Modified by** | SystemInternal |
| **Modified on** | 10/14/2023 11:44:43 AM | | |

## Summary

### Samples

| | Sample ID | Name | Result | State |
|---|---|---|---|---|
| 1 | Rinse,MKT | Sample size | 50 mL | |
| | | Potential R4 | 6.74 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.034 mL | OK |
| | | Consumption 4.2 R3 | 1.038 mL | OK |
| | | Content R5 | 20.680 mg/L | OK |
| | | ALK LOW R6 | 20.600 mg/L | OK |
| 2 | Rinse,MKT | Sample size | 50 mL | |
| | | Potential R4 | 4.81 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.018 mL | OK |
| | | Consumption 4.2 R3 | 0.025 mL | OK |
| | | Content R5 | 0.360 mg/L | OK |
| | | ALK LOW R6 | 0.220 mg/L | OK |
| 3 | WG2037241-1 | Sample size | 50 mL | |
| | | Potential R4 | 4.43 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.002 mL | OK |
| | | Consumption 4.2 R3 | 0.011 mL | OK |
| | | Content R5 | 0.040 mg/L | OK |
| | | ALK LOW R6 | -0.140 mg/L | OK |
| 4 | WG2037241-2 | Sample size | 50 mL | |
| | | Potential R4 | 10.52 pH | OK |
| | | Consumption 8.3 R1 | 4.647 mL | OK |
| | | Consumption 4.5 R2 | 5.028 mL | OK |
| | | Consumption 4.2 R3 | 5.034 mL | OK |
| | | Content R5 | 100.560 mg/L | OK |
| | | ALK LOW R6 | 100.440 mg/L | OK |
| 5 | I2512005-01 | Sample size | 50 mL | |
| | | Potential R4 | 5.03 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | NaN mL | Not OK |
| | | Consumption 4.2 R3 | NaN mL | Not OK |
| | | Content R5 | NaN mg/L | Not OK |
| | | ALK LOW R6 | NaN mg/L | Not OK |
| 6 | WG2037241-3 | Sample size | 50 mL | |

# Titration report

| | | | | |
|---|---|---|---|---|
| | | Potential R4 | 5.79 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.464 mL | OK |
| | | Consumption 4.2 R3 | 2.510 mL | OK |
| | | Content R5 | 49.280 mg/L | OK |
| | | ALK LOW R6 | 48.360 mg/L | OK |
| 7 | WG2037241-4 | Sample size | 50 mL | |
| | | Potential R4 | 9.23 pH | OK |
| | | Consumption 8.3 R1 | 3.106 mL | OK |
| | | Consumption 4.5 R2 | 7.912 mL | OK |
| | | Consumption 4.2 R3 | 7.931 mL | OK |
| | | Content R5 | 158.240 mg/L | OK |
| | | ALK LOW R6 | 157.860 mg/L | OK |
| 8 | I2512005-02 | Sample size | 50 mL | |
| | | Potential R4 | 5.43 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.183 mL | OK |
| | | Consumption 4.2 R3 | 2.228 mL | OK |
| | | Content R5 | 43.660 mg/L | OK |
| | | ALK LOW R6 | 42.760 mg/L | OK |
| 9 | I2512005-03 | Sample size | 50 mL | |
| | | Potential R4 | 5.42 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.769 mL | OK |
| | | Consumption 4.2 R3 | 2.826 mL | OK |
| | | Content R5 | 55.380 mg/L | OK |
| | | ALK LOW R6 | 54.240 mg/L | OK |
| 10 | I2512005-04 | Sample size | 50 mL | |
| | | Potential R4 | 5.98 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 4.834 mL | OK |
| | | Consumption 4.2 R3 | 4.882 mL | OK |
| | | Content R5 | 96.680 mg/L | OK |
| | | ALK LOW R6 | 95.720 mg/L | OK |
| 11 | I2512005-01 | Sample size | 50 mL | |
| | | Potential R4 | 5.43 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.587 mL | OK |
| | | Consumption 4.2 R3 | 2.628 mL | OK |
| | | Content R5 | 51.740 mg/L | OK |
| | | ALK LOW R6 | 50.920 mg/L | OK |
| 12 | I2511497-01 | Sample size | 50 mL | |
| | | Potential R4 | 5.42 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.472 mL | OK |
| | | Consumption 4.2 R3 | 2.529 mL | OK |
| | | Content R5 | 49.440 mg/L | OK |

# Titration report

| | | | | |
|---|---|---|---|---|
| | | ALK LOW R6 | 48.300 mg/L | OK |
| 13 | I2511497-11 | Sample size | 50 mL | |
| | | Potential R4 | 5.41 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.986 mL | OK |
| | | Consumption 4.2 R3 | 2.043 mL | OK |
| | | Content R5 | 39.720 mg/L | OK |
| | | ALK LOW R6 | 38.580 mg/L | OK |
| 14 | I2511497-12 | Sample size | 50 mL | |
| | | Potential R4 | 5.21 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.801 mL | OK |
| | | Consumption 4.2 R3 | 0.849 mL | OK |
| | | Content R5 | 16.020 mg/L | OK |
| | | ALK LOW R6 | 15.060 mg/L | OK |
| 15 | I2511497-13 | Sample size | 50 mL | |
| | | Potential R4 | 5.44 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.646 mL | OK |
| | | Consumption 4.2 R3 | 2.714 mL | OK |
| | | Content R5 | 52.920 mg/L | OK |
| | | ALK LOW R6 | 51.560 mg/L | OK |
| 16 | I2511497-14 | Sample size | 50 mL | |
| | | Potential R4 | 5.49 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.963 mL | OK |
| | | Consumption 4.2 R3 | 2.013 mL | OK |
| | | Content R5 | 39.260 mg/L | OK |
| | | ALK LOW R6 | 38.260 mg/L | OK |
| 17 | I2511509-01 | Sample size | 50 mL | |
| | | Potential R4 | 5.42 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.880 mL | OK |
| | | Consumption 4.2 R3 | 0.907 mL | OK |
| | | Content R5 | 17.600 mg/L | OK |
| | | ALK LOW R6 | 17.060 mg/L | OK |
| 18 | I2511509-02 | Sample size | 50 mL | |
| | | Potential R4 | 5.24 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.556 mL | OK |
| | | Consumption 4.2 R3 | 0.581 mL | OK |
| | | Content R5 | 11.120 mg/L | OK |
| | | ALK LOW R6 | 10.620 mg/L | OK |
| 19 | I2511533-01 | Sample size | 50 mL | |
| | | Potential R4 | 5.40 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.744 mL | OK |

# Titration report

| | | | | |
|---|---|---|---|---|
| | | Consumption 4.2 R3 | 1.772 mL | OK |
| | | Content R5 | 34.880 mg/L | OK |
| | | ALK LOW R6 | 34.320 mg/L | OK |
| 20 | WG2037287-3 | Sample size | 50 mL | |
| | | Potential R4 | 5.45 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.729 mL | OK |
| | | Consumption 4.2 R3 | 1.757 mL | OK |
| | | Content R5 | 34.580 mg/L | OK |
| | | ALK LOW R6 | 34.020 mg/L | OK |
| 21 | WG2037287-4 | Sample size | 50 mL | |
| | | Potential R4 | 10.40 pH | OK |
| | | Consumption 8.3 R1 | 5.992 mL | OK |
| | | Consumption 4.5 R2 | 7.376 mL | OK |
| | | Consumption 4.2 R3 | 7.384 mL | OK |
| | | Content R5 | 147.520 mg/L | OK |
| | | ALK LOW R6 | 147.360 mg/L | OK |
| 22 | I2511799-01 | Sample size | 50 mL | |
| | | Potential R4 | 5.93 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | NaN mL | Not OK |
| | | Consumption 4.2 R3 | NaN mL | Not OK |
| | | Content R5 | NaN mg/L | Not OK |
| | | ALK LOW R6 | NaN mg/L | Not OK |
| 23 | I2511799-02 | Sample size | 50 mL | |
| | | Potential R4 | 6.23 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 6.232 mL | OK |
| | | Consumption 4.2 R3 | 6.296 mL | OK |
| | | Content R5 | 124.640 mg/L | OK |
| | | ALK LOW R6 | 123.360 mg/L | OK |
| 24 | I2511799-03 | Sample size | 50 mL | |
| | | Potential R4 | 5.60 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 3.591 mL | OK |
| | | Consumption 4.2 R3 | 3.651 mL | OK |
| | | Content R5 | 71.820 mg/L | OK |
| | | ALK LOW R6 | 70.620 mg/L | OK |
| 25 | I2511799-04 | Sample size | 50 mL | |
| | | Potential R4 | 5.38 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.873 mL | OK |
| | | Consumption 4.2 R3 | 1.916 mL | OK |
| | | Content R5 | 37.460 mg/L | OK |
| | | ALK LOW R6 | 36.600 mg/L | OK |
| 26 | I2511799-10 | Sample size | 50 mL | |
| | | Potential R4 | 5.63 pH | OK |

# Titration report

| | | | | |
|---|---|---|---|---|
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 3.514 mL | OK |
| | | Consumption 4.2 R3 | 3.571 mL | OK |
| | | Content R5 | 70.280 mg/L | OK |
| | | ALK LOW R6 | 69.140 mg/L | OK |
| 27 | I2511799-11 | Sample size | 50 mL | |
| | | Potential R4 | 5.53 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.658 mL | OK |
| | | Consumption 4.2 R3 | 2.727 mL | OK |
| | | Content R5 | 53.160 mg/L | OK |
| | | ALK LOW R6 | 51.780 mg/L | OK |
| 28 | I2511799-12 | Sample size | 50 mL | |
| | | Potential R4 | 5.19 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.715 mL | OK |
| | | Consumption 4.2 R3 | 0.761 mL | OK |
| | | Content R5 | 14.300 mg/L | OK |
| | | ALK LOW R6 | 13.380 mg/L | OK |
| 29 | I2511799-13 | Sample size | 50 mL | |
| | | Potential R4 | 5.34 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.364 mL | OK |
| | | Consumption 4.2 R3 | 1.397 mL | OK |
| | | Content R5 | 27.280 mg/L | OK |
| | | ALK LOW R6 | 26.620 mg/L | OK |
| 30 | I2511799-14 | Sample size | 50 mL | |
| | | Potential R4 | 5.34 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.124 mL | OK |
| | | Consumption 4.2 R3 | 1.146 mL | OK |
| | | Content R5 | 22.480 mg/L | OK |
| | | ALK LOW R6 | 22.040 mg/L | OK |
| 31 | I2511799-15 | Sample size | 50 mL | |
| | | Potential R4 | 5.33 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.151 mL | OK |
| | | Consumption 4.2 R3 | 1.172 mL | OK |
| | | Content R5 | 23.020 mg/L | OK |
| | | ALK LOW R6 | 22.600 mg/L | OK |
| 32 | I2511799-16 | Sample size | 50 mL | |
| | | Potential R4 | 5.36 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.119 mL | OK |
| | | Consumption 4.2 R3 | 1.140 mL | OK |
| | | Content R5 | 22.380 mg/L | OK |
| | | ALK LOW R6 | 21.960 mg/L | OK |

# Titration report

| | | | | |
|---|---|---|---|---|
| 33 | I2511799-17 | Sample size | 50 mL | |
| | | Potential R4 | 5.38 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.132 mL | OK |
| | | Consumption 4.2 R3 | 1.150 mL | OK |
| | | Content R5 | 22.640 mg/L | OK |
| | | ALK LOW R6 | 22.280 mg/L | OK |
| 34 | I2511799-01 2x | Sample size | 50 mL | |
| | | Potential R4 | 5.95 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 11.361 mL | OK |
| | | Consumption 4.2 R3 | 11.425 mL | OK |
| | | Content R5 | 227.220 mg/L | OK |
| | | ALK LOW R6 | 225.940 mg/L | OK |
| 35 | WG2037287-2 | Sample size | 50 mL | |
| | | Potential R4 | 10.44 pH | OK |
| | | Consumption 8.3 R1 | 4.669 mL | OK |
| | | Consumption 4.5 R2 | 5.018 mL | OK |
| | | Consumption 4.2 R3 | 5.018 mL | OK |
| | | Content R5 | 100.360 mg/L | OK |
| | | ALK LOW R6 | 100.360 mg/L | OK |
| 36 | WG2037287-1 | Sample size | 50 mL | |
| | | Potential R4 | 4.99 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.026 mL | OK |
| | | Consumption 4.2 R3 | 0.037 mL | OK |
| | | Content R5 | 0.520 mg/L | OK |
| | | ALK LOW R6 | 0.300 mg/L | OK |
| 37 | I2511529-01 | Sample size | 50 mL | |
| | | Potential R4 | 5.29 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.864 mL | OK |
| | | Consumption 4.2 R3 | 1.891 mL | OK |
| | | Content R5 | 37.280 mg/L | OK |
| | | ALK LOW R6 | 36.740 mg/L | OK |
| 38 | I2511919-01 | Sample size | 50 mL | |
| | | Potential R4 | 5.52 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 3.317 mL | OK |
| | | Consumption 4.2 R3 | 3.342 mL | OK |
| | | Content R5 | 66.340 mg/L | OK |
| | | ALK LOW R6 | 65.840 mg/L | OK |
| 39 | I2511919-02 | Sample size | 50 mL | |
| | | Potential R4 | 5.58 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 3.290 mL | OK |
| | | Consumption 4.2 R3 | 3.329 mL | OK |

# Titration report

| | | | | |
|---|---|---|---|---|
| | | Content R5 | 65.800 mg/L | OK |
| | | ALK LOW R6 | 65.020 mg/L | OK |
| 40 | I2511919-04 | Sample size | 50 mL | |
| | | Potential R4 | 5.65 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 4.014 mL | OK |
| | | Consumption 4.2 R3 | 4.055 mL | OK |
| | | Content R5 | 80.280 mg/L | OK |
| | | ALK LOW R6 | 79.460 mg/L | OK |
| 41 | I2511919-05 | Sample size | 50 mL | |
| | | Potential R4 | 5.70 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 3.862 mL | OK |
| | | Consumption 4.2 R3 | 3.901 mL | OK |
| | | Content R5 | 77.240 mg/L | OK |
| | | ALK LOW R6 | 76.460 mg/L | OK |
| 42 | I2511919-07 | Sample size | 50 mL | |
| | | Potential R4 | 5.64 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 3.295 mL | OK |
| | | Consumption 4.2 R3 | 3.331 mL | OK |
| | | Content R5 | 65.900 mg/L | OK |
| | | ALK LOW R6 | 65.180 mg/L | OK |
| 43 | I2511919-08 | Sample size | 50 mL | |
| | | Potential R4 | 5.61 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.563 mL | OK |
| | | Consumption 4.2 R3 | 2.586 mL | OK |
| | | Content R5 | 51.260 mg/L | OK |
| | | ALK LOW R6 | 50.800 mg/L | OK |
| 44 | I2511944-01 | Sample size | 50 mL | |
| | | Potential R4 | 5.68 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 4.879 mL | OK |
| | | Consumption 4.2 R3 | 4.975 mL | OK |
| | | Content R5 | 97.580 mg/L | OK |
| | | ALK LOW R6 | 95.660 mg/L | OK |
| 45 | I2511944-02 | Sample size | 50 mL | |
| | | Potential R4 | 5.28 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.215 mL | OK |
| | | Consumption 4.2 R3 | 1.266 mL | OK |
| | | Content R5 | 24.300 mg/L | OK |
| | | ALK LOW R6 | 23.280 mg/L | OK |
| 46 | I2511944-03 | Sample size | 50 mL | |
| | | Potential R4 | 5.58 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |

# Titration report

| | | | | |
|---|---|---|---|---|
| | | Consumption 4.5 R2 | 2.115 mL | OK |
| | | Consumption 4.2 R3 | 2.135 mL | OK |
| | | Content R5 | 42.300 mg/L | OK |
| | | ALK LOW R6 | 41.900 mg/L | OK |
| 47 | I2511944-04 | Sample size | 50 mL | |
| | | Potential R4 | 5.92 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 12.565 mL | OK |
| | | Consumption 4.2 R3 | 12.753 mL | OK |
| | | Content R5 | 251.300 mg/L | OK |
| | | ALK LOW R6 | 247.540 mg/L | OK |
| 48 | I2511944-05 | Sample size | 50 mL | |
| | | Potential R4 | 5.36 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.015 mL | OK |
| | | Consumption 4.2 R3 | 1.030 mL | OK |
| | | Content R5 | 20.300 mg/L | OK |
| | | ALK LOW R6 | 20.000 mg/L | OK |
| 49 | I2511944-06 | Sample size | 50 mL | |
| | | Potential R4 | 5.61 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.895 mL | OK |
| | | Consumption 4.2 R3 | 2.927 mL | OK |
| | | Content R5 | 57.900 mg/L | OK |
| | | ALK LOW R6 | 57.260 mg/L | OK |
| 50 | WG2037359-3 | Sample size | 50 mL | |
| | | Potential R4 | 5.65 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.910 mL | OK |
| | | Consumption 4.2 R3 | 2.934 mL | OK |
| | | Content R5 | 58.200 mg/L | OK |
| | | ALK LOW R6 | 57.720 mg/L | OK |
| 51 | I2511944-07 | Sample size | 50 mL | |
| | | Potential R4 | 5.46 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.554 mL | OK |
| | | Consumption 4.2 R3 | 1.579 mL | OK |
| | | Content R5 | 31.080 mg/L | OK |
| | | ALK LOW R6 | 30.580 mg/L | OK |
| 52 | I2511944-08 | Sample size | 50 mL | |
| | | Potential R4 | 5.61 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.968 mL | OK |
| | | Consumption 4.2 R3 | 3.000 mL | OK |
| | | Content R5 | 59.360 mg/L | OK |
| | | ALK LOW R6 | 58.720 mg/L | OK |
| 53 | I2511944-09 | Sample size | 50 mL | |

# Titration report

| | | | | |
|---|---|---|---|---|
| | | Potential R4 | 5.00 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.060 mL | OK |
| | | Consumption 4.2 R3 | 0.090 mL | OK |
| | | Content R5 | 1.200 mg/L | OK |
| | | ALK LOW R6 | 0.600 mg/L | OK |
| 54 | I2511944-09 CONF | Sample size | 50 mL | |
| | | Potential R4 | 4.73 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.023 mL | OK |
| | | Consumption 4.2 R3 | 0.048 mL | OK |
| | | Content R5 | 0.460 mg/L | OK |
| | | ALK LOW R6 | -0.040 mg/L | OK |
| 55 | CCV | Sample size | 50 mL | |
| | | Potential R4 | 10.61 pH | OK |
| | | Consumption 8.3 R1 | 4.719 mL | OK |
| | | Consumption 4.5 R2 | 5.072 mL | OK |
| | | Consumption 4.2 R3 | 5.076 mL | OK |
| | | Content R5 | 101.440 mg/L | OK |
| | | ALK LOW R6 | 101.360 mg/L | OK |
| 56 | WG2037359-1 | Sample size | 50 mL | |
| | | Potential R4 | 5.08 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.032 mL | OK |
| | | Consumption 4.2 R3 | 0.037 mL | OK |
| | | Content R5 | 0.640 mg/L | OK |
| | | ALK LOW R6 | 0.540 mg/L | OK |

## Statistics

### R1

| | | | |
|---|---|---|---|
| **Mean** | NaN mL | | |
| **Maximum** | 5.992 mL | **Minimum** | 3.106 mL |
| **Standard deviation** | NaN mL | **Rel. standard deviation** | NaN % |
| **Total samples** | 56 | **Samples excluded** | 0 |

### R2

| | | | |
|---|---|---|---|
| **Mean** | NaN mL | | |
| **Maximum** | 12.565 mL | **Minimum** | 0.002 mL |
| **Standard deviation** | NaN mL | **Rel. standard deviation** | NaN % |
| **Total samples** | 56 | **Samples excluded** | 0 |

### R3

| | | | |
|---|---|---|---|
| **Mean** | NaN mL | | |
| **Maximum** | 12.753 mL | **Minimum** | 0.011 mL |

# Titration report

| | | | |
|---|---|---|---|
| **Standard deviation** | NaN mL | **Rel. standard deviation** | NaN % |
| **Total samples** | 56 | **Samples excluded** | 0 |

### R4

| | | | |
|---|---|---|---|
| **Mean** | 5.89 pH | | |
| **Maximum** | 10.61 pH | **Minimum** | 4.43 pH |
| **Standard deviation** | 1.43 pH | **Rel. standard deviation** | 24.217 % |
| **Total samples** | 56 | **Samples excluded** | 0 |

### R5

| | | | |
|---|---|---|---|
| **Mean** | NaN mg/L | | |
| **Maximum** | 251.300 mg/L | **Minimum** | 0.040 mg/L |
| **Standard deviation** | NaN mg/L | **Rel. standard deviation** | NaN % |
| **Total samples** | 56 | **Samples excluded** | 0 |

### R6

| | | | |
|---|---|---|---|
| **Mean** | NaN mg/L | | |
| **Maximum** | 247.540 mg/L | **Minimum** | -0.140 mg/L |
| **Standard deviation** | NaN mg/L | **Rel. standard deviation** | NaN % |
| **Total samples** | 56 | **Samples excluded** | 0 |

## Used Instruments

| | | | |
|---|---|---|---|
| **Name** | T7 Excellence Titrator | **Serial number** | C329519495 |

## Responsible User

| Time | Login name | Full name |
|---|---|---|
| 3/6/2025 7:22:06 AM | SystemInternal | System internal account |

# Quality Control

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : NA | **Analysis Date** | : 03/06/25 11:15 |
| **Dup Sample ID** | : WG2037359-3 | **DUP Analysis Date** | : 03/06/25 11:18 |

| Parameter | Sample Concentration (mg CaCO3/L) | Duplicate Concentration (mg CaCO3/L) | RPD | RPD Limit |
|---|---|---|---|---|
| Alkalinity, Carbonate | ND | ND | NC | 10 |
| Alkalinity, Bicarbonate | 57.9 | 58.2 | 1 | 9 |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alkalinity, Total | 471-34-1 | 2 | | mg CaCO3/L | 90-110 | 10 | 86-116 | 10 | 10 | 2320B | 14 days | 1 - Plastic 250ml unpreserved/No Headspace |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

## Calculations of Alkalinity

$$\text{Alkalinity, mg } CaCO_3/L = \frac{A \times N \times 50{,}000}{\text{mL Sample}}$$

Where:

A = mL of the standard acid titrated

N = normality of the standard acid

Results are calculated using Mettler Toledo software.

Standard sample size is 50mL, 0.02N Sulfuric acid for titration

# Sequence Logs

| | | | | | |
|---|---|---|---|---|---|
| CAL | 250306 | LCS 7.00 | 7.05 | INT: | mkt |
| pH 4 | 3484 | Titrant: | 4298 | | |
| pH 7 | 3386 | LCS: | 3530 | | |
| pH 10 | 3482 | MS: | 3529 | | |
| LCS | 3523 | | | | |

| | | | |
|---|---|---|---|
| 1 | Rinse,MKT | 42 | l2511919-07 |
| 2 | Rinse,MKT | 43 | l2511919-08 |
| 3 | WG2037241-1 | 44 | l2511944-01 |
| 4 | WG2037241-2 | 45 | l2511944-02 |
| 5 | l2512005-01 | 46 | l2511944-03 |
| 6 | WG2037241-3 | 47 | l2511944-04 |
| 7 | WG2037241-4 | 48 | l2511944-05 |
| 8 | l2512005-02 | 49 | l2511944-06 |
| 9 | l2512005-03 | 50 | WG2037359-3 |
| 10 | l2512005-04 | 51 | l2511944-07 |
| 11 | l2512005-01 | 52 | l2511944-08 |
| 12 | l2511497-01 | 53 | l2511944-09 |
| 13 | l2511497-11 | 54 | l2511944-09 CONF |
| 14 | l2511497-12 | 55 | CCV |
| 15 | l2511497-13 | 56 | WG2037359-1 |
| 16 | l2511497-14 | | |
| 17 | l2511509-01 | | |
| 18 | l2511509-02 | | |
| 19 | l2511533-01 | | |
| 20 | WG2037287-3 | | |
| 21 | WG2037287-4 | | |
| 22 | l2511799-01 | | |
| 23 | l2511799-02 | | |
| 24 | l2511799-03 | | |
| 25 | l2511799-04 | | |
| 26 | l2511799-10 | | |
| 27 | l2511799-11 | | |
| 28 | l2511799-12 | | |
| 29 | l2511799-13 | | |
| 30 | l2511799-14 | | |
| 31 | l2511799-15 | | |
| 32 | l2511799-16 | | |
| 33 | l2511799-17 | | |
| 34 | l2511799-01 2x | | |
| 35 | WG2037287-2 | | |
| 36 | WG2037287-1 | | |
| 37 | l2511529-01 | | |
| 38 | l2511919-01 | | |
| 39 | l2511919-02 | | |
| 40 | l2511919-04 | | |
| 41 | l2511919-05 | | |

# Chloride Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-01 | Date Collected | : 03/04/25 14:43 |
| Client ID | : 2A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 13:07 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250306-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 16. | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-02 | Date Collected | : 03/04/25 14:40 |
| Client ID | : 2B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 13:08 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250306-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 16. | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-04 | Date Collected | : 03/04/25 12:25 |
| Client ID | : 3A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 13:08 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250306-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 17. | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-05 | Date Collected | : 03/04/25 12:45 |
| Client ID | : 3B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 13:09 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250306-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 16. | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-07 | Date Collected | : 03/04/25 09:25 |
| Client ID | : 4A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 13:10 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250306-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 16. | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-08 | Date Collected | : 03/04/25 10:10 |
| Client ID | : 4B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 13:11 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250306-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 17. | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2037387-1 | Date Collected | : NA |
| Client ID | : WG2037387-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/06/25 13:00 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250306-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | ND | 1.0 | 0.89 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2037387-3 | Date Collected | : 03/04/25 10:57 |
| Client ID | : WG2037387-3 DUP | Date Received | : 03/04/25 |
| Sample Location | : | Date Analyzed | : 03/06/25 13:18 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250306-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 8.9 | 1.0 | 0.89 | |

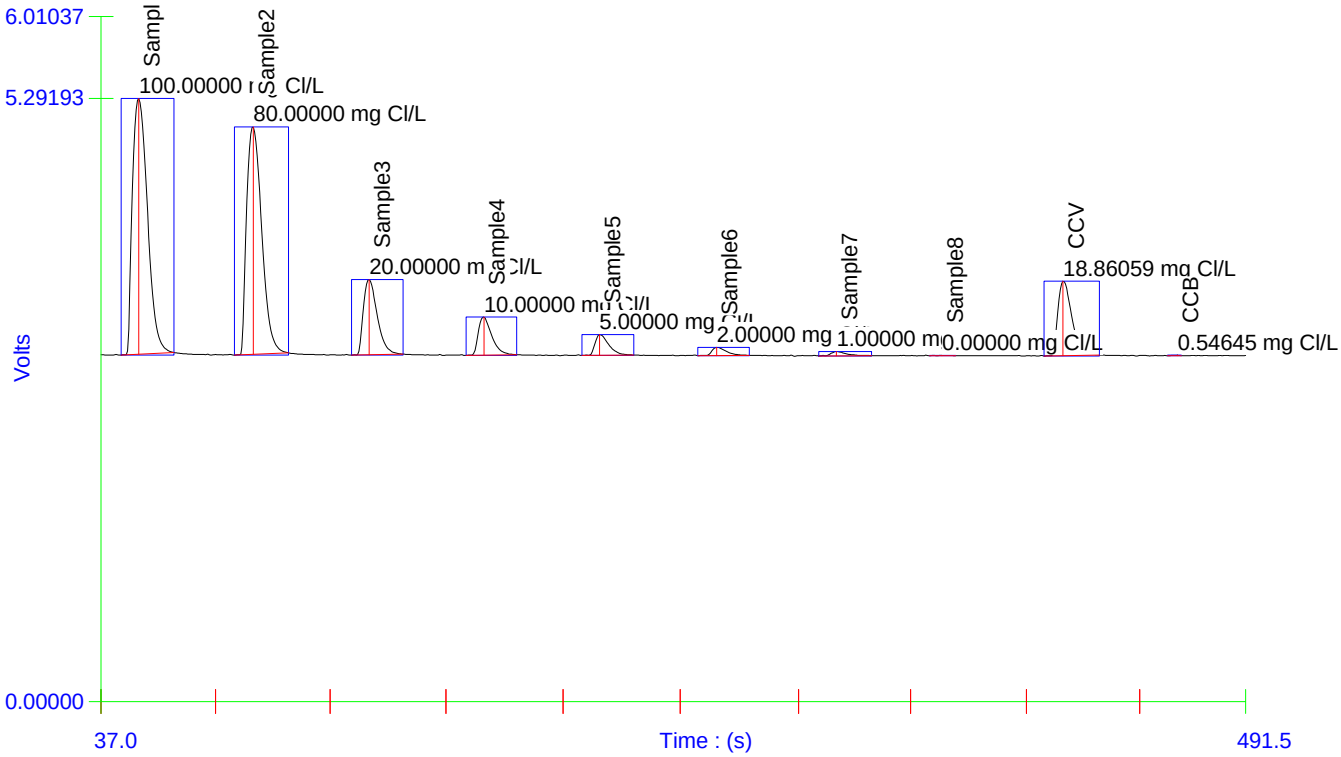
# Sample Raw Data

Author: Date : 3/6/2025

Original Run Filename: OM_3-6-2025_12-35-56PM.OMN Created: 3/6/2025 12:35:56 PM
Original Run Author's Signature: [a1wetcheminstrument]
Current Run Filename: OM_3-6-2025_12-35-56PM.OMN Last Modified: 3/6/2025 12:45:50 PM
Current Run Author's Signature: [a1wetcheminstrument]
Description: Default New Run

| Sample | Rep. | Cup No. | Channel 1 Chloride-CH3 (mg Cl/L) | ADF | MDF | Weight |
|---|---|---|---|---|---|---|
| Sample1 | 1 | S1 | 100.00000 | | | |
| Sample2 | 1 | S2 | 80.00000 | | | |
| Sample3 | 1 | S3 | 20.00000 | | | |
| Sample4 | 1 | S4 | 10.00000 | | | |
| Sample5 | 1 | S5 | 5.00000 | | | |
| Sample6 | 1 | S6 | 2.00000 | | | |
| Sample7 | 1 | S7 | 1.00000 | | | |
| Sample8 | 1 | S9 | 0.00000 | | | |
| CCV | 1 | S3 | 18.86059 | | | |
| | | Known Conc: | 20.00000 | | | |
| | | Calibration: | Table/Fig. : 1 | | | |
| CCB | 1 | S9 | 0.54645 | | | |
| | | Known Conc: | 0.00000 | | | |
| ~~ICV 5~~ | ~~1~~ | ~~1~~ | ~~5.81628~~ | | | |

Channel 1 (Chloride) - Set: 1 / 2



Author: Date : 3/6/2025

Channel 1 (Chloride) - Set: 2 / 2

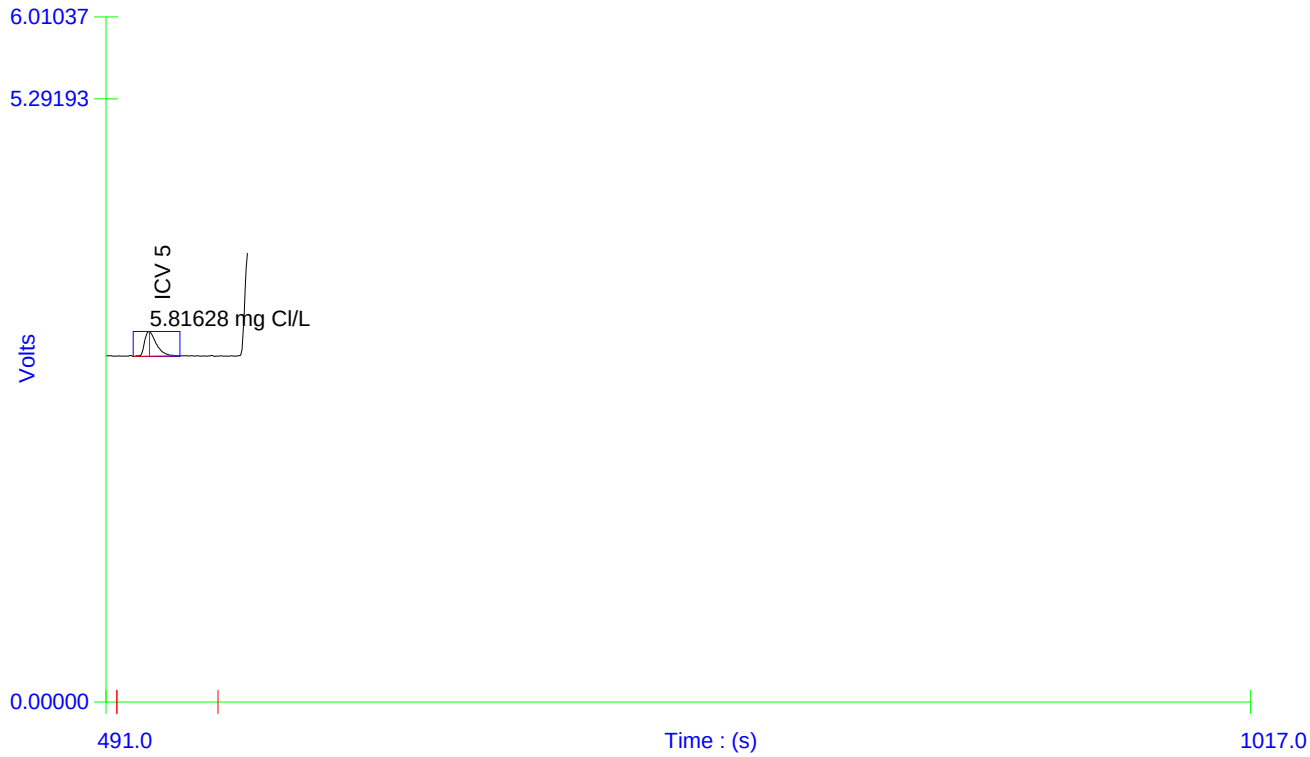
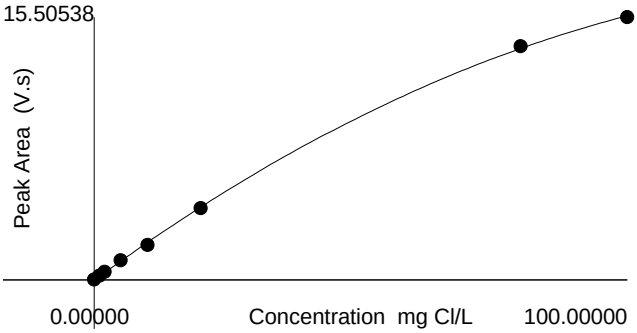



Table : 1 (Chloride-CH3)

| | Known Conc. (mg Cl/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg Cl/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.00000 | 1 | 15.50538 | 2.24330 | 0.0 | 0.5 | 97.66862 | 3/6/2025 | 12:36:54 PM |
| 2 | 80.00000 | 1 | 13.79842 | 1.99389 | 0.0 | -1.0 | 83.05557 | 3/6/2025 | 12:37:39 PM |
| 3 | 20.00000 | 1 | 4.23031 | 0.65901 | 0.0 | 1.6 | 19.08456 | 3/6/2025 | 12:38:26 PM |
| 4 | 10.00000 | 1 | 2.06507 | 0.33305 | 0.0 | 6.8 | 8.83291 | 3/6/2025 | 12:39:12 PM |
| 5 | 5.00000 | 1 | 1.15616 | 0.18270 | 0.0 | -3.6 | 4.99420 | 3/6/2025 | 12:39:58 PM |
| 6 | 2.00000 | 1 | 0.47410 | 0.07087 | 0.0 | -7.9 | 2.29405 | 3/6/2025 | 12:40:45 PM |
| 7 | 1.00000 | 1 | 0.25868 | 0.03725 | 0.0 | -22.9 | 1.47337 | 3/6/2025 | 12:41:32 PM |
| 8 | 0.00000 | 1 | 0.02395 | 0.00376 | | | 0.59671 | 3/6/2025 | 12:42:17 PM |

Figure : 1 (Chloride-CH3)




Area = - 0.00075 * Conc^2 + 0.23094 * Conc - 0.01969
Conc = 0.16630 * Area^2 + 3.68774 * Area + 0.50829
Correlation Coefficient (r) = 0.99989

Weighting : None

Author: Date : 3/6/2025

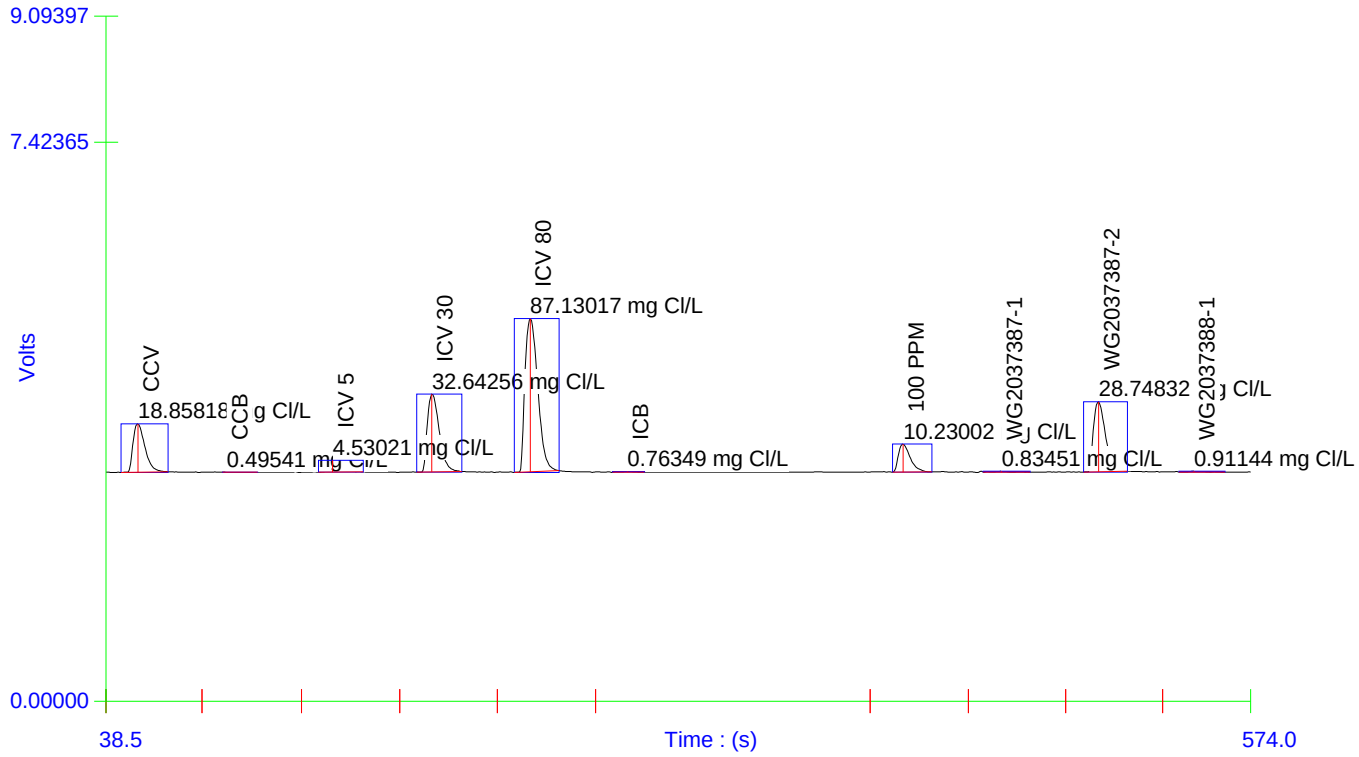
Original Run Filename: OM_3-6-2025_12-52-58PM.OMN Created: 3/6/2025 12:52:58 PM
Original Run Author's Signature: [a1wetcheminstrument]
Current Run Filename: OM_3-6-2025_12-52-58PM.OMN Last Modified: 3/6/2025 2:23:25 PM
Current Run Author's Signature: [a1wetcheminstrument]
Description: Default New Run

| Sample | Rep. | Cup No. | Channel 1 Chloride-CH3 (mg Cl/L) | ADF | MDF | Weight | |
|---|---|---|---|---|---|---|---|
| CCV | 1 | S3 | 18.85818 | | | | |
| | Known Conc: | | 20.00000 | | | | |
| CCB | 1 | S9 | 0.49541 | | | | |
| | Known Conc: | | 0.00000 | | | | |
| | Calibration: | | Table/Fig. : 1 | | | | |
| ICV 5 | 1 | 1 | 4.53021 | | | | 91% |
| ICV 30 | 1 | 2 | 32.64256 | | | | 109% |
| ICV 80 | 1 | 3 | 87.13017 | | | | 109% |
| ICB | 1 | 4 | 0.76349 | | | | |
| 100 PPM | 1 | 5 | 102.30019 | 10.00 | | | 102% |
| WG2037387-1 | 1 | 6 | 0.83451 | | | | |
| WG2037387-2 | 1 | 7 | 28.74832 | | | | 96% |
| WG2037388-1 | 1 | 8 | 0.91144 | | | | |
| WG2037388-2 | 1 | 9 | 28.97674 | | | | 97% |
| L2511849-01 | 1 | 10 | 202.06458 | 10.00 | | | |
| CCV | 1 | S3 | 19.62331 | | | | |
| | Known Conc: | | 20.00000 | | | | |
| CCB | 1 | S9 | 0.68857 | | | | |
| | Known Conc: | | 0.00000 | | | | |
| L2511919-01 | 1 | 11 | 15.76169 | | | | |
| L2511919-02 | 1 | 12 | 15.93028 | | | | |
| L2511919-04 | 1 | 13 | 17.33103 | | | | |
| L2511919-05 | 1 | 14 | 16.26915 | | | | |
| L2511919-07 | 1 | 15 | 15.79954 | | | | |
| L2511919-08 | 1 | 16 | 16.74463 | | | | |
| L2511923-01 | 1 | 17 | 134.14854 | | | | |
| L2511944-01 | 1 | 18 | 4.46017 | | | | |
| L2511944-02 | 1 | 19 | 7.29096 | | | | |
| L2511944-03 | 1 | 20 | 7.22386 | | | | |
| CCV | 1 | S3 | 19.18294 | | | | |
| | Known Conc: | | 20.00000 | | | | |
| CCB | 1 | S9 | 0.64548 | | | | |
| | Known Conc: | | 0.00000 | | | | |
| L2511944-04 | 1 | 21 | 3.70930 | | | | |
| L2511944-05 | 1 | 22 | 25.78144 | | | | |
| L2511944-06 | 1 | 23 | 8.98316 | | | | |
| WG2037387-3 | 1 | 24 | 8.89615 | | | | |
| WG2037387-4 | 1 | 25 | 27.81452 | | | | |
| L2511944-07 | 1 | 26 | 9.90212 | | | | |
| L2511944-08 | 1 | 27 | 8.99959 | | | | |
| L2511944-09 | 1 | 28 | 0.68539 | | | | |
| L2512055-01 | 1 | 29 | 335.88010 | | | | |
| L2512055-02 | 1 | 30 | 674.88251 | 10.00 | | | |
| CCV | 1 | S3 | 18.70061 | | | | |
| | Known Conc: | | 20.00000 | | | | |
| CCB | 1 | S9 | 0.74007 | | | | |
| | Known Conc: | | 0.00000 | | | | |
| L2512182-01 | 1 | 31 | 426.68549 | | | | |
| L2511893-01 | 1 | 32 | 106.76601 | | | | |
| WG2037388-3 | 1 | 33 | 105.01278 | | | | |
| WG2037388-4 | 1 | 34 | 120.55557 | | | | |
| L2511893-02 | 1 | 35 | 104.22211 | | | | |
| L2511893-03 | 1 | 36 | 165.38358 | 10.00 | | | |
| L2511893-04 | 1 | 37 | 0.77321 | | | | |
| L2511963-01 | 1 | 38 | 217.01733 | 10.00 | | | |
| L2511963-02 | 1 | 39 | 500.18762 | 10.00 | | | |
| L2511963-03 | 1 | 40 | 1670.75623 | 10.00 | | | |
| CCV | 1 | S3 | 19.48446 | | | | |

Author: Date : 3/6/2025

| | | | | | | |
|---|---|---|---|---|---|---|
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | 0.73472 | | | |
| | Known Conc: | | 0.00000 | | | |
| L2511963-04 | 1 | 41 | 511.88388 | | | |
| L2511963-05 | 1 | 42 | 95.38625 | | | |
| L2511963-06 | 1 | 43 | 1733.42529 | 10.00 | | |
| L2511963-07 | 1 | 44 | 3398.09644 | 100.00 | | |
| L2511963-08 | 1 | 45 | 3512.54932 | 10.00 | | |
| L2511923-01 | 1 | 17 | 149.09062 | 10.00 | | |
| L2511944-01 | 1 | 18 | 4.24784 | | | |
| L2512055-01 | 1 | 29 | 631.80768 | 10.00 | | |
| L2512182-01 | 1 | 31 | 1031.75940 | 10.00 | | |
| L2511893-01 | 1 | 32 | 105.54509 | 10.00 | | |
| CCV | 1 | S3 | 19.09030 | | | |
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | 0.68704 | | | |
| | Known Conc: | | 0.00000 | | | |
| WG2037388-3 | 1 | 33 | 104.49600 | 10.00 | | |
| WG2037388-4 | 1 | 34 | 119.77837 | 10.00 | | |
| L2511893-02 | 1 | 35 | 105.80626 | 10.00 | | |
| L2511963-03 | 1 | 40 | 1721.42273 | 100.00 | | |
| L2511963-04 | 1 | 41 | 1576.54248 | 10.00 | | |
| L2511963-06 | 1 | 43 | 1853.74658 | 100.00 | | |
| L2511963-08 | 1 | 45 | 6211.98193 | 100.00 | | |
| L2511963-05 | 1 | 42 | 90.94215 | 10.00 | | |
| L2512182-01 | 1 | 31 | 972.91858 | 100.00 | | |
| L2511963-04 | 1 | 41 | 1602.44006 | 100.00 | | |
| CCV | 1 | S3 | 18.81901 | | | |
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | 0.66456 | | | |
| | Known Conc: | | 0.00000 | | | |

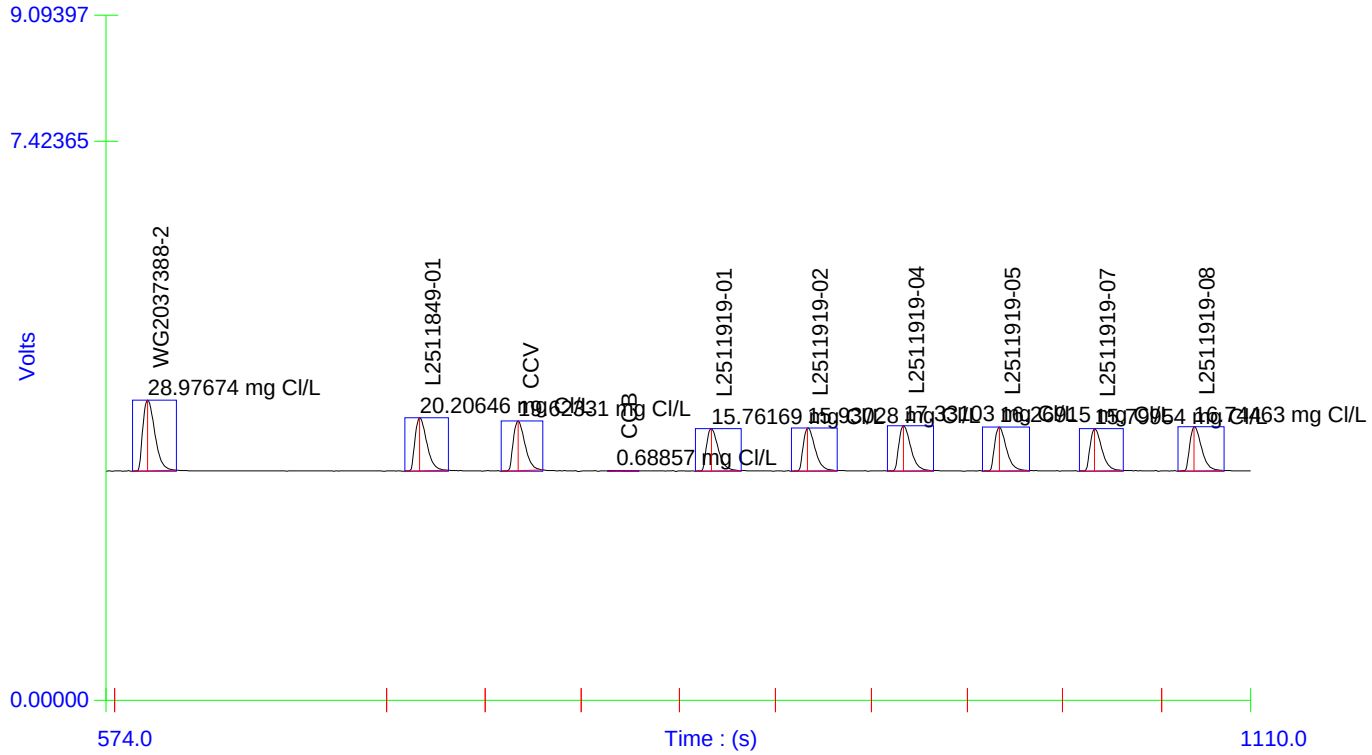
Channel 1 (Chloride) - Set: 1 / 8



Author:

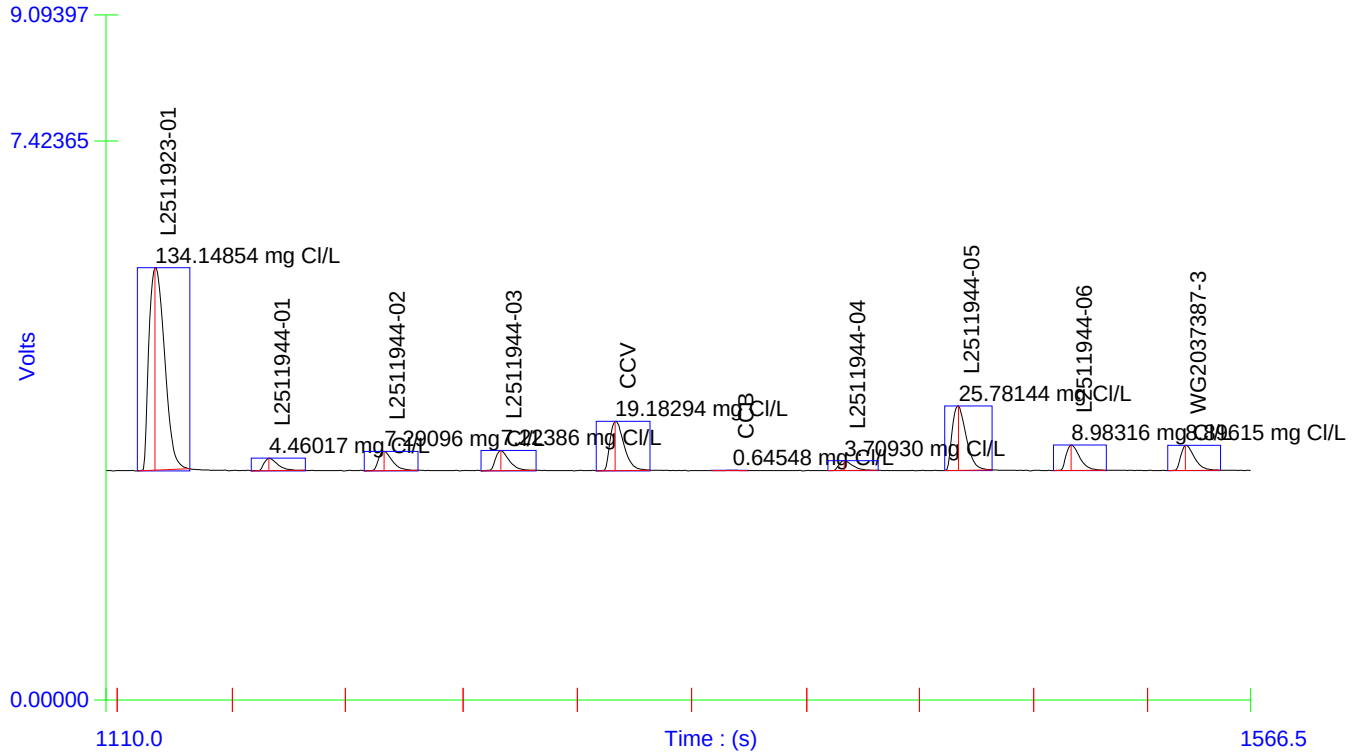
Date : 3/6/2025

Channel 1 (Chloride) - Set: 2 / 8

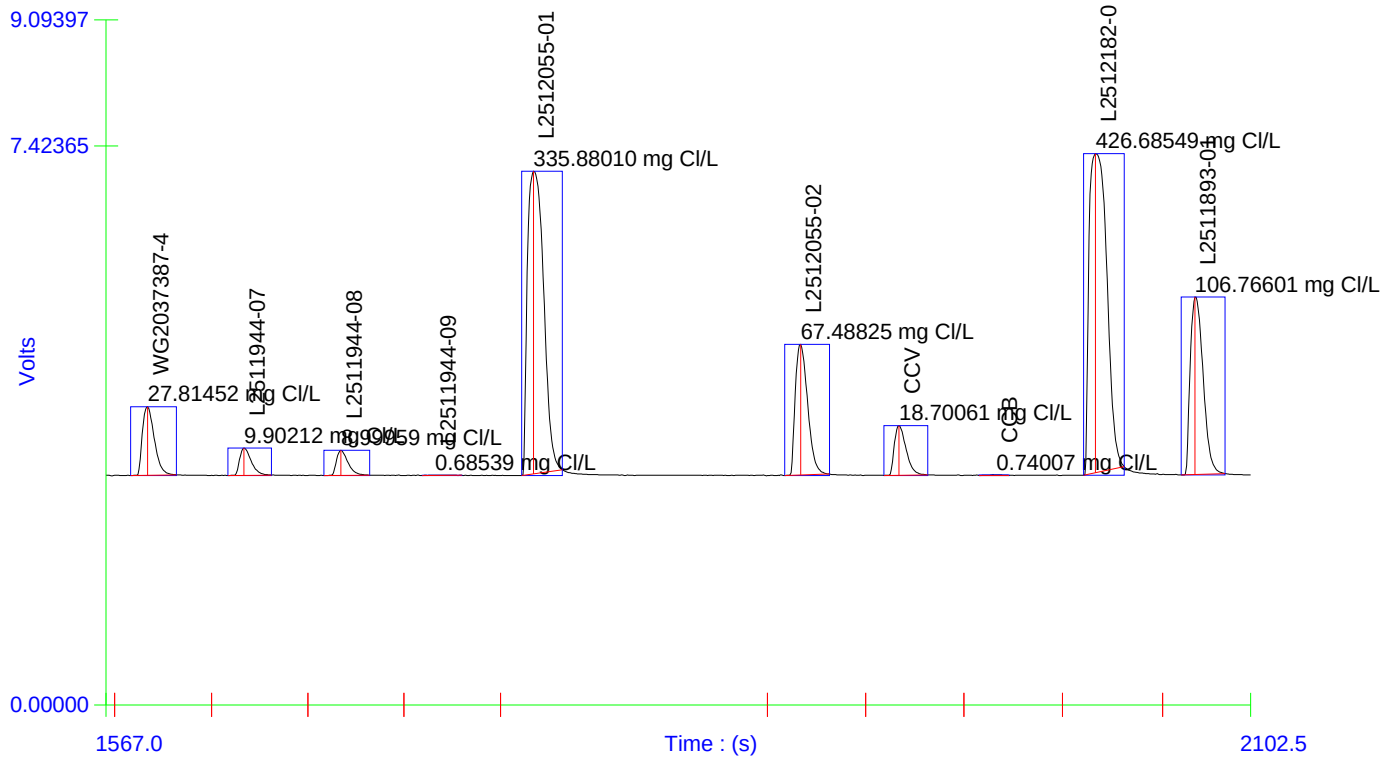


Author: Date : 3/6/2025

Channel 1 (Chloride) - Set: 3 / 8

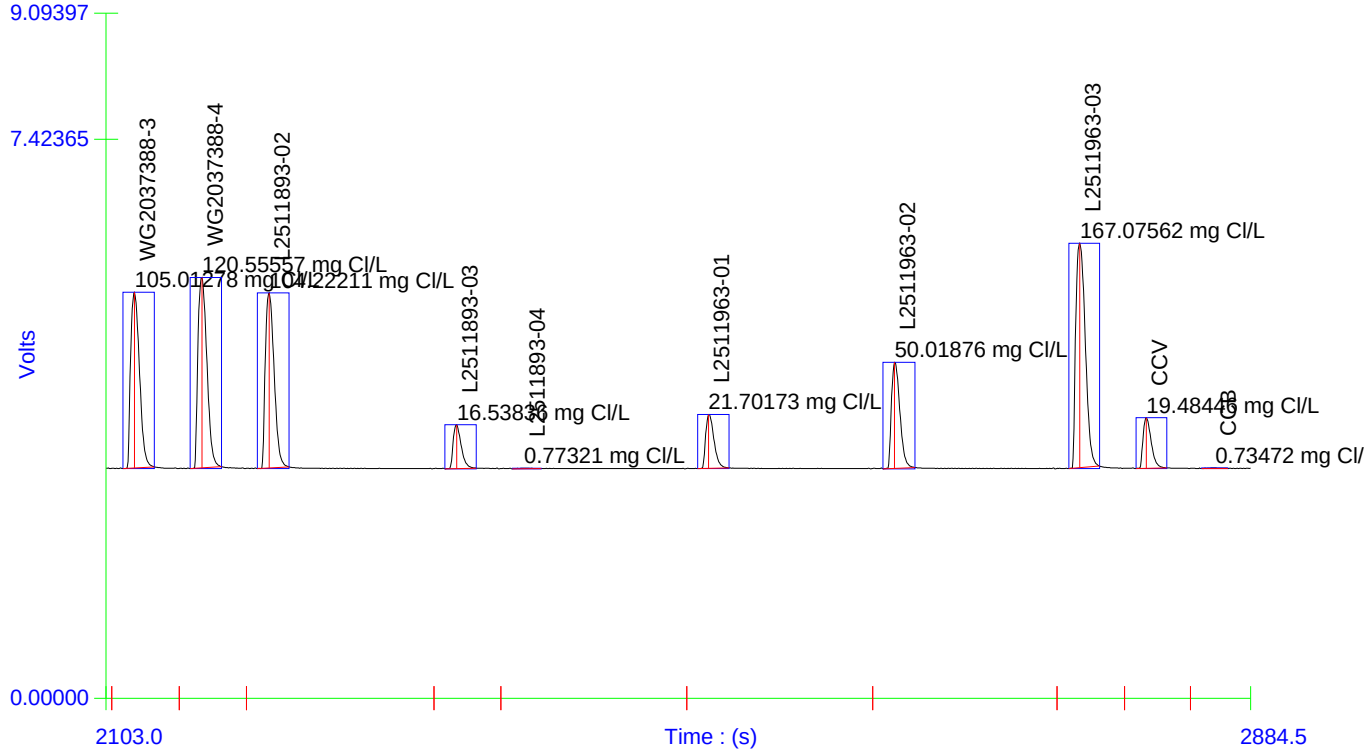



Channel 1 (Chloride) - Set: 4 / 8



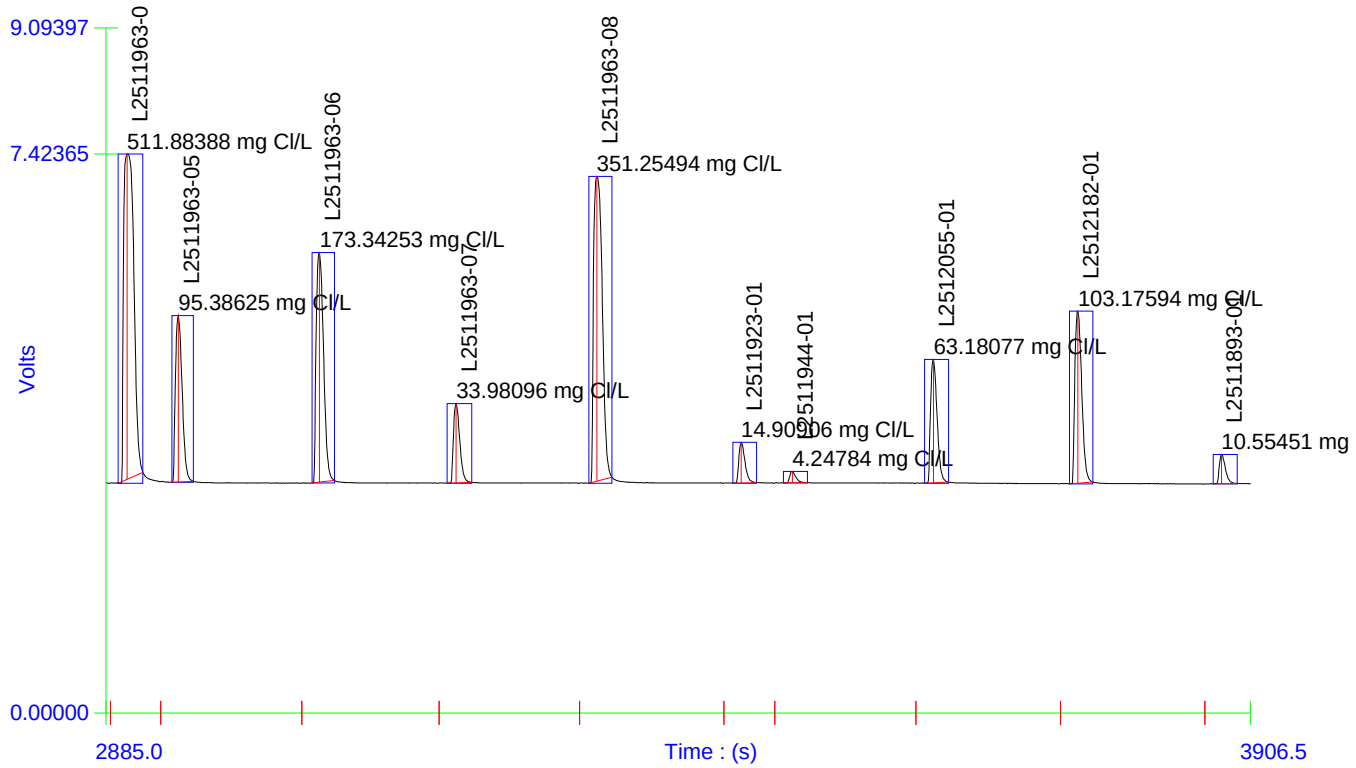
Author: Date : 3/6/2025

Channel 1 (Chloride) - Set: 5 / 8

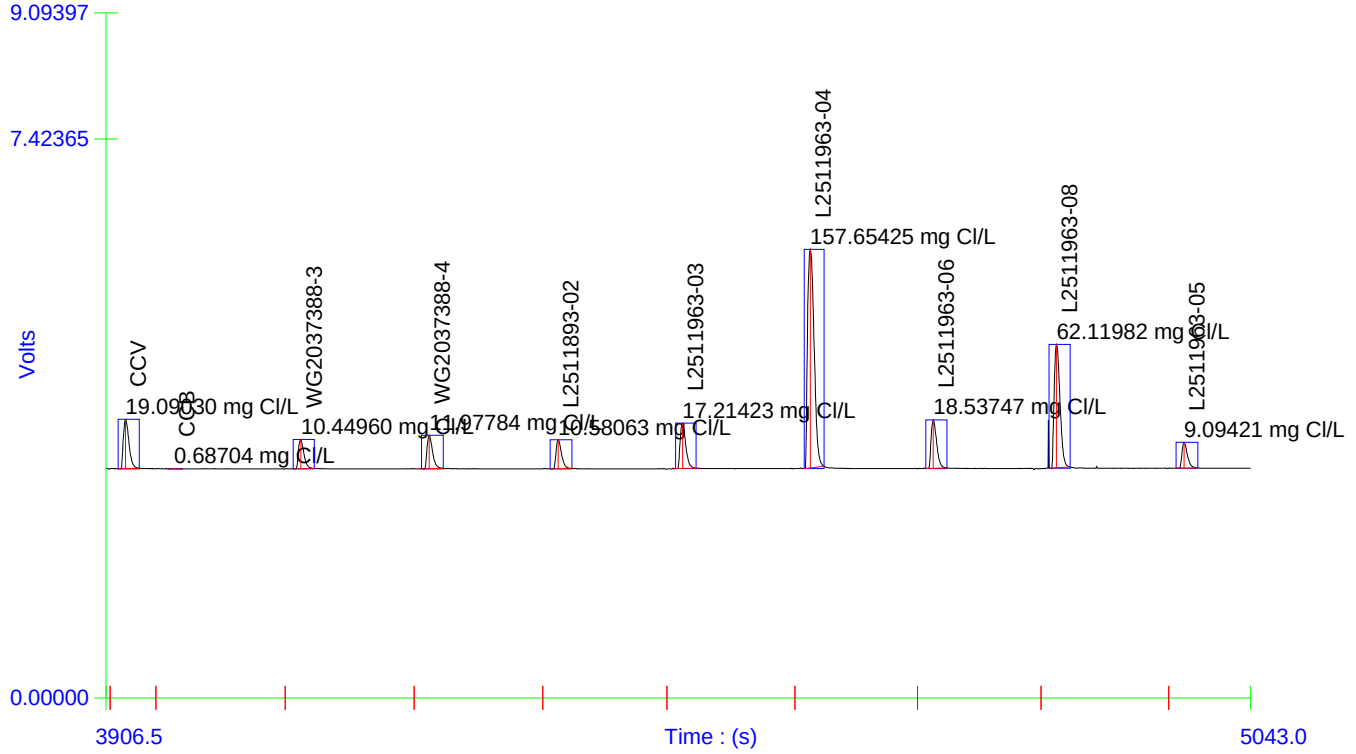


Author: Date : 3/6/2025

Channel 1 (Chloride) - Set: 6 / 8




Channel 1 (Chloride) - Set: 7 / 8



Author: Date : 3/6/2025

Channel 1 (Chloride) - Set: 8 / 8

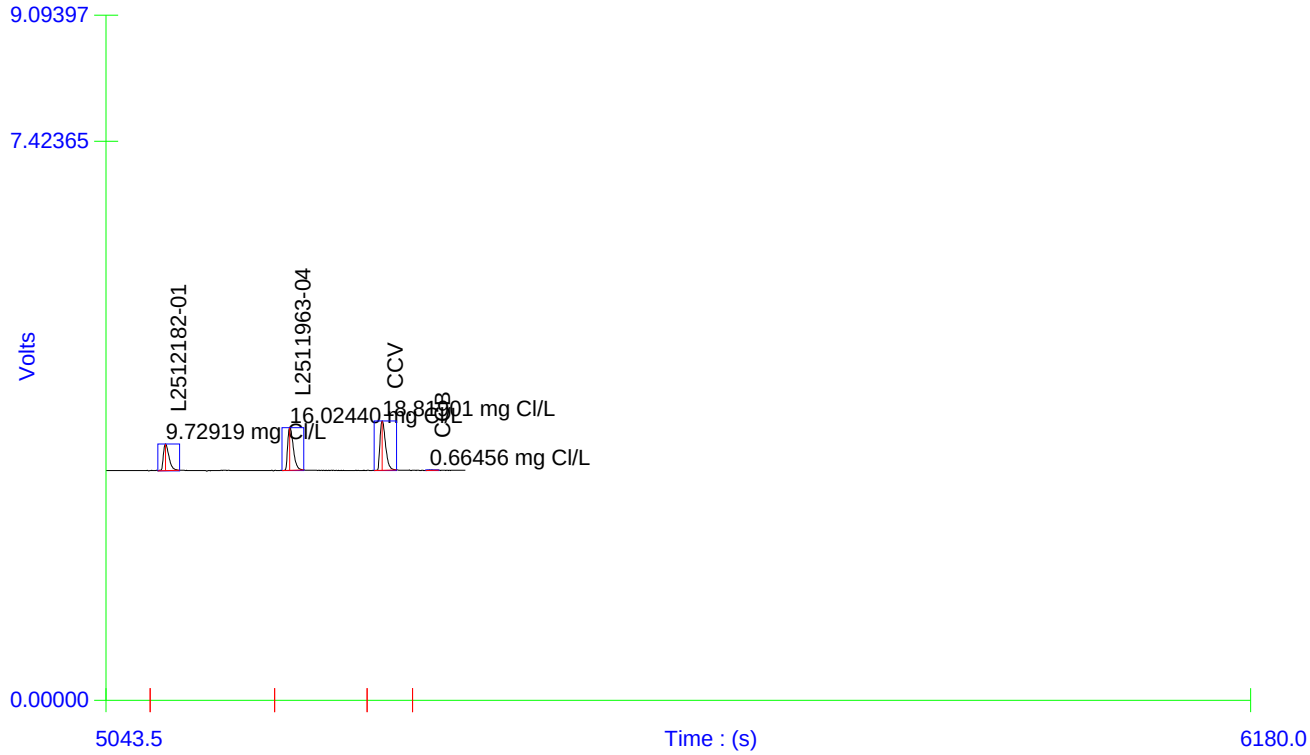
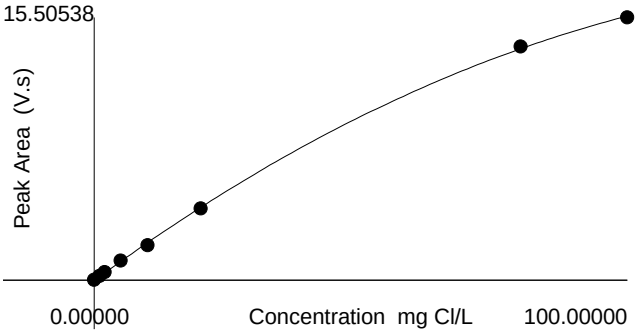



Table : 1 (Chloride-CH3)

| | Known Conc. (mg Cl/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg Cl/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.00000 | 1 | 15.50538 | 2.24330 | 0.0 | 0.5 | 97.66862 | 3/6/2025 | 12:36:54 PM |
| 2 | 80.00000 | 1 | 13.79842 | 1.99389 | 0.0 | -1.0 | 83.05557 | 3/6/2025 | 12:37:39 PM |
| 3 | 20.00000 | 1 | 4.23031 | 0.65901 | 0.0 | 1.6 | 19.08456 | 3/6/2025 | 12:38:26 PM |
| 4 | 10.00000 | 1 | 2.06507 | 0.33305 | 0.0 | 6.8 | 8.83291 | 3/6/2025 | 12:39:12 PM |
| 5 | 5.00000 | 1 | 1.15616 | 0.18270 | 0.0 | -3.6 | 4.99420 | 3/6/2025 | 12:39:58 PM |
| 6 | 2.00000 | 1 | 0.47410 | 0.07087 | 0.0 | -7.9 | 2.29405 | 3/6/2025 | 12:40:45 PM |
| 7 | 1.00000 | 1 | 0.25868 | 0.03725 | 0.0 | -22.9 | 1.47337 | 3/6/2025 | 12:41:32 PM |
| 8 | 0.00000 | 1 | 0.02395 | 0.00376 | | | 0.59671 | 3/6/2025 | 12:42:17 PM |

Figure : 1 (Chloride-CH3)




Area = - 0.00075 * Conc^2 + 0.23094 * Conc - 0.01969
Conc = 0.16630 * Area^2 + 3.68774 * Area + 0.50829
Correlation Coefficient (r) = 0.99989

Weighting : None

# Quality Control

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : L2511944-06 | | |
| **Matrix Spike** | : WG2037387-4 | **MS Analysis Date** | : 03/06/25 13:19 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Chloride | 9.0 | 20 | 28. | 95 | | | | | 58-140 | 7 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : NA | **Analysis Date** | : 03/06/25 13:17 |
| **Dup Sample ID** | : WG2037387-3 | **DUP Analysis Date** | : 03/06/25 13:18 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Chloride | 9.0 | 8.9 | 1 | 7 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2037387-2 | **LCS Analysis Date** | : 03/06/25 13:01 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Chloride | 30.0 | 29.0 | 97. | | | | | 90-110 | 7 |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 16887-00-6 | 1 | 0.2 | mg/l | 90-110 | | 58-140 | 7 | 7 | 4500CL-E | 28 days | 1 - Plastic 250ml unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11468-1
**Page:** 1

**WETCHEM (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 16887-00-6 | 10 | 3.73 | mg/kg | 89-109 | 35 | 62-129 | 35 | 35 | 9251 | 28 days | 1 - Glass 250ml/8oz unpreserved |
| Chloride | 16887-00-6 | 10 | 3.73 | mg/kg | 90-110 | 35 | 62-129 | 35 | 35 | 4500CL-E | 28 days | 1 - Glass 250ml/8oz unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

# Calculations of Chloride

Aqueous samples:

Compute sample Chloride concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

Calculate results by using reading on Channel 2 (Chloride)

To compute the final results for aqueous samples, multiply the direct reading by the dilution factor. (also done using software)

Cl mg/L = mg/L direct reading x dilution factor

# Sequence Logs

From Page No.

1 ICV 5
2 30
3 80
4 ICB
5 100ppm Cox
6 WG203738 7-1 BLK
7 -2 LCS
8 WG203738 8-1 BLK
9 -2 LCS
10 11849-01
11 11919-01
12 -02
13 -04
14 -05
15 -07
16 -08
17 11923-01
18 11944-01
19 -02
20 -03
21 -04
22 -05
23 -06
24 WG203738 7-3 DUP
25 -4 MS
26 11944-07
27 -08
28 -09
29 12055-01
30 -02
31 12182-01
32 11893-01
33 WG203738 8-3 DUP
34 -4 MS
35 11893-02
36 -03
37 -04
38 11963-01
39 -02
40 -03
41 -04
42 -05
43 -06
44 -07
45 -08

To Page No.

Witnessed & Understood by me, Date Invented by: Date

Recorded by:

# Fluoride Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-01 | Date Collected | : 03/04/25 14:43 |
| Client ID | : 2A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 05:13 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2037143.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/06/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.17 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-02 | Date Collected | : 03/04/25 14:40 |
| Client ID | : 2B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 05:13 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2037143.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/06/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.13 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-04 | Date Collected | : 03/04/25 12:25 |
| Client ID | : 3A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 05:13 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2037143.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/06/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.12 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-05 | Date Collected | : 03/04/25 12:45 |
| Client ID | : 3B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 05:13 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2037143.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/06/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.13 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-07 | Date Collected | : 03/04/25 09:25 |
| Client ID | : 4A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 05:13 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2037143.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/06/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.11 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-08 | Date Collected | : 03/04/25 10:10 |
| Client ID | : 4B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/06/25 05:13 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2037143.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/06/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.09 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2037143-1 | Date Collected | : NA |
| Client ID | : WG2037143-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/06/25 05:13 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2037143.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/06/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | ND | 0.20 | 0.01 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2037143-3 | Date Collected | : 03/04/25 10:57 |
| Client ID | : WG2037143-3 DUP | Date Received | : 03/04/25 |
| Sample Location | : | Date Analyzed | : 03/06/25 05:13 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2037143.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/06/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.08 | 0.20 | 0.02 | J |

# Sample Raw Data

PACE ANALYTICAL LABS

# WET CHEMISTRY DEPARTMENT

## F L U O R I D E

| Last Change 03/4/13 |
|---|
| File Flouride.xlt |

**Sample Number:** _____

**Client:** _____

**Analysis:** FLUORIDE
**Method:** SM 4500F-BC
**LCS Concentration (mg/l):** 2
**Spike Concentration (mg/l):** 1

**Product:** F-4500
**Analysis Analyte:** Fluoride,
**Analysis Date:** 3/6/2025 5:13
**Technician:** DTH
**Work group:** WG2037143
**RL:** 0.20 mg/L
**Distillation Date:** 3/6/2025 0:59

| Standard ID mg/L | Log Std-d | Reading mV | Result, Curve | Antilog Result | % Recovery | Calibration Curve | |
|---|---|---|---|---|---|---|---|
| | | | | | | Slope | y-intercept |
| 0.2 | -0.699 | 125 | -0.708 | 0.1961 | 98 | -59.394175 | 82.975 |
| 0.5 | -0.301 | 100.4 | -0.293 | 0.5089 | 102 | | |
| 1.0 | 0.000 | 82.7 | 0.005 | 1.0107 | 101 | Correlation | Coefficient |
| 10 | 1.000 | 23.8 | 0.996 | 9.915 | 99 | 0.99994731 | |

| | Sample number | Sample Volume (ml) | Distill Volume (ml) | Flask | Reagent | Dilution Factor | Meter Reading | RL Multiplier | FINAL RESULT (mg/l) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ICB | 50 | 50 | | YES | 1.00 | 0 | 1.00 | 0.00 | Recovery |
| | ICV | 50 | 50 | | YES | 1.00 | 0.995 | 1.00 | 1.00 | 100% |
| | L2511529-01 | 50 | 50 | | YES | 1.00 | 0.0559 | 1.00 | 0.06 | |
| SAMP | L2511919-01 | 50 | 50 | | YES | 1.00 | 0.165 | 1.00 | 0.17 | |
| SAMP | L2511919-02 | 50 | 50 | | YES | 1.00 | 0.126 | 1.00 | 0.13 | |
| SAMP | L2511919-04 | 50 | 50 | | YES | 1.00 | 0.123 | 1.00 | 0.12 | |
| SAMP | L2511919-05 | 50 | 50 | | YES | 1.00 | 0.125 | 1.00 | 0.13 | |
| SAMP | L2511919-07 | 50 | 50 | | YES | 1.00 | 0.109 | 1.00 | 0.11 | |
| SAMP | L2511919-08 | 50 | 50 | | YES | 1.00 | 0.0881 | 1.00 | 0.09 | |
| | L2511944-01 | 50 | 50 | | YES | 1.00 | 0.0302 | 1.00 | 0.03 | |
| | L2511944-02 | 50 | 50 | | YES | 1.00 | 0.0186 | 1.00 | 0.02 | |
| | L2511944-03 | 50 | 50 | | YES | 1.00 | 0.0736 | 1.00 | 0.07 | |
| | L2511944-04 | 50 | 50 | | YES | 1.00 | 0.0488 | 1.00 | 0.05 | |
| | L2511944-05 | 50 | 50 | | YES | 1.00 | 0.0287 | 1.00 | 0.03 | |
| | L2511944-06 | 50 | 50 | | YES | 1.00 | 0.0848 | 1.00 | 0.08 | |
| | L2511944-07 | 50 | 50 | | YES | 1.00 | 0.036 | 1.00 | 0.04 | |
| | L2511944-08 | 50 | 50 | | YES | 1.00 | 0.0792 | 1.00 | 0.08 | |
| | L2511944-09 | 50 | 50 | | YES | 1.00 | 0.00847 | 1.00 | 0.01 | |
| | CCV | 50 | 50 | | YES | 1.00 | 0.991 | 1.00 | 0.99 | |
| | CCB | 50 | 50 | | YES | 1.00 | 0 | 1.00 | 0.00 | |
| | CCV | 50 | 50 | | YES | 1.00 | 0.976 | 1.00 | 0.98 | |
| | CCB | 50 | 50 | | YES | 1.00 | 0 | 1.00 | 0.00 | |
| BLANK | WG2037143-1 | 50 | 50 | | YES | 1.00 | 0 | 1.00 | 0.00 | |
| DUP | WG2037143-3 | 50 | 50 | | YES | 1.00 | 0.0839 | 1.00 | 0.08 | L2511944-06 |

| | Sample number | sample volume | Distill volume (ml) | Flask | Reagent | Sample Result mg/l | Meter Reading | Spike conc. mg/l | Spike Result mg/l | Recovery % |
|---|---|---|---|---|---|---|---|---|---|---|
| MS | WG2037143-4 | 50 | 50 | | YES | .08 | 0.941 | 1 | 0.94 | 86 |
| LCS | WG2037143-2 | 50 | 50 | | YES | | 1.74 | 2 | 1.74 | 87 |

last sample

# Quality Control

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : L2511944-06 | | |
| **Matrix Spike** | : WG2037143-4 | **MS Analysis Date** | : 03/06/25 05:13 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Fluoride | 0.08J | 1 | 0.94 | 94 | | | | | 69-124 | 13 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : NA | **Analysis Date** | : 03/06/25 05:13 |
| **Dup Sample ID** | : WG2037143-3 | **DUP Analysis Date** | : 03/06/25 05:13 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Fluoride | 0.08J | 0.08J | NC | 13 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2037143-2 | **LCS Analysis Date** | : 03/06/25 05:13 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Fluoride | 2.00 | 1.70 | 87. | | | | | 78-120 | 13 |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | 16984-48-8 | 0.2 | 0.017 | mg/l | 78-120 | | 69-124 | 13 | 13 | 4500F-BC | 28 days | 1 - Plastic 500ml unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11468-1
**Page:** 1

**WETCHEM (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | 16984-48-8 | 10 | 1.04 | mg/kg | 80-120 | | 70-130 | 20 | 20 | 4500F-BC | 28 days | 1 - Glass 250ml/8oz unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

# Calculations of Fluoride

When the volume of the distillate is the same as the volume of the sample used, the direct determination of Fluoride concentration is the instrument's result.

However, when analyzing soil samples or high level samples requiring a dilution, the following equations apply:

**For liquids:**

Fluoride, mg/L = (mg F-/L) X (Volume of Distillate, mL)/ Volume of Sample, mL

**For solids:**

Fluoride, mg/Kg = (mg F-/L) X (Volume of Distillate, mL)/Weight of Sample, gm

To calculate final result for soil samples based on dry weight, multiply final result on 100 and divide on %TS (in %)

# Sample Preparation

Project No.
Book No.
Confide

TITLE

From Page No.

WG2037143

Analyst: DTH 5:15
Date & Time: 3/6/25
ICV:F 120024-100ppm
LCS:F 120024-100ppm
Spike:F 120024-100ppm
Curve:WC- 3567
TISAB III: R- 4322

| STD | MV |
|---|---|
| 0.2 | 125.0 |
| 0.5 | 100.4 |
| 1.0 | 82.7 |
| 10.0 | 23.8 |

| Sample | Volume | Final Volume | Meter |
|---|---|---|---|
| ICV | 50mL | 50mL | 0.995 |
| ICB | | | 0.0 |
| Blank | | | 0.0 |
| LCS | | | 1.74 |
| 11579-01 | | | 0.0559 |
| 11919-01 | | | 0.1165 |
| -02 | | | 0.176 |
| -04 | | | 0.123 |
| -05 | | | 0.125 |
| -07 | | | 0.109 |
| -08 | | | 0.0881 |
| 11944-01 | | | 0.0302 |
| CCV | | | 0.991 |
| CCB | | | 0.0 |
| -02 | | | 0.0186 |
| -03 | | | 0.0736 |
| -04 | | | 0.0488 |
| -05 | | | 0.0287 |
| -06 | | | 0.0848 |
| -07 | | | 0.0360 |
| -08 | | | 0.0792 |
| -09 | | | 0.00847 |
| DTH 3/6/25 ~~CCV~~ -06DUP | | | 0.0839 |
| ~~CCB~~ -06MS | | | 0.941 |
| CCV | | | 0.976 |
| CCB | | | 0.0 |

To Page No

Witnessed & Understood by me, | Date | Invented by: | Date
Recorded by:

TITLE _____ Book No. _____ Confidenti

From Page No. _____

| Tube | Sample | Volume | Final Volume | Block | Comments 00:59 |
|---|---|---|---|---|---|
| 1 | Blank | 50 ML | 50 ML | Phenol #2 | DTH 03/06/25 |
| 2 | LCS | | | | 1.0 ML ~~F012~~ F122024 DTH 3/6/25 |
| 3 | 11529-01 | | | | |
| 4 | 11919-01 | | | | |
| 5 | 02 | | | | |
| 6 | 04 | | | | |
| 7 | 05 | | | | |
| 8 | 07 | | | | |
| 9 | 08 | | | | |
| 10 | 11944-01 | | | | |
| 11 | -03 | | | Phenol #3 | |
| 12 | -03 | | | | |
| 13 | -04 | | | | |
| 14 | -05 | | | | |
| 15 | -06 | | | | |
| 16 | Dup06 | | | | |
| 17 | MS06 | | | | 0.5ML F122024-100ppm |
| 18 | 07 | | | | |
| 19 | 08 | | | | |
| 20 | 09 | | | | |

To Page No. _____

Witnessed & Understood by me, | Date | Invented by: | Date

Recorded by:

# Phosphates
# Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-01 | Date Collected | : 03/04/25 14:43 |
| Client ID | : 2A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 13:10 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : EYA |
| Lab File ID | : PHOS031025-WG2037673,78.c | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.107 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-02 | Date Collected | : 03/04/25 14:40 |
| Client ID | : 2B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 13:11 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : EYA |
| Lab File ID | : PHOS031025-WG2037673,78.c | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.049 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-04 | Date Collected | : 03/04/25 12:25 |
| Client ID | : 3A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 13:12 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : EYA |
| Lab File ID | : PHOS031025-WG2037673,78.c | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.107 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-05 | Date Collected | : 03/04/25 12:45 |
| Client ID | : 3B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 13:13 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : EYA |
| Lab File ID | : PHOS031025-WG2037673,78.c | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.052 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-07 | Date Collected | : 03/04/25 09:25 |
| Client ID | : 4A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 13:14 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : EYA |
| Lab File ID | : PHOS031025-WG2037673,78.c | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.095 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-08 | Date Collected | : 03/04/25 10:10 |
| Client ID | : 4B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 13:15 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : EYA |
| Lab File ID | : PHOS031025-WG2037673,78.c | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.080 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2037673-1 | Date Collected | : NA |
| Client ID | : WG2037673-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/10/25 13:07 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : EYA |
| Lab File ID | : PHOS031025-WG2037673,78.c | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.015 | 0.031 | 0.012 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2037673-3 | Date Collected | : 03/04/25 15:20 |
| Client ID | : WG2037673-3 DUP | Date Received | : 03/04/25 |
| Sample Location | : | Date Analyzed | : 03/10/25 13:20 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : EYA |
| Lab File ID | : PHOS031025-WG2037673,78.c | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.135 | 0.031 | 0.012 | |

# Sample Raw Data

# AQ2 Tray Report

| | |
|---|---|
| **Software version :** | 2.4.5 |
| **Report requested by :** | EAsamoah |
| **Date \ Time :** | 10-Mar-2025 14:04:17 |
| **Tray number :** | 2 |
| **Tray name :** | WG2037673,78 |

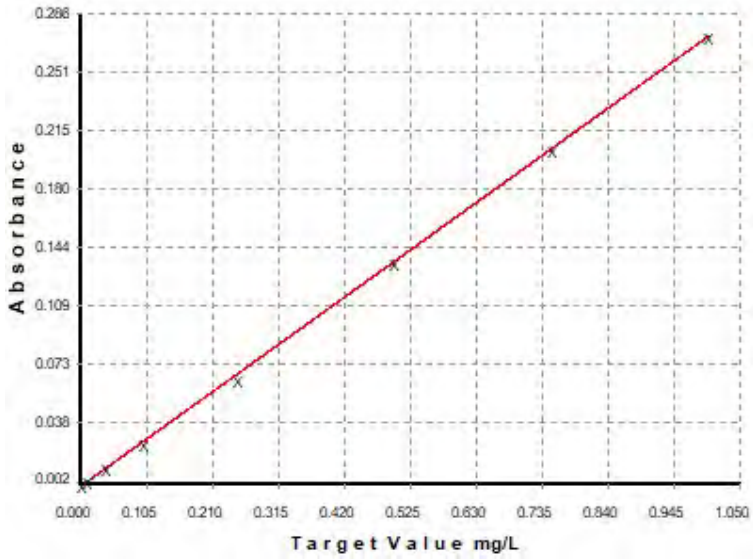
## T-Phos 1

### Calibration Chart

| Type | Absorbance | Calc mg/L | Target mg/L | % Error |
|---|---|---|---|---|
| S1 | 0.0022 | 0.006 | 0.000 | |
| S90 | 0.0040 | 0.013 | 0.010 | 30.61 |
| S91 | 0.0114 | 0.041 | 0.040 | 1.26 |
| S92 | 0.0270 | 0.098 | 0.100 | -2.22 |
| S93 | 0.0655 | 0.240 | 0.250 | -4.15 |
| S94 | 0.1359 | 0.499 | 0.500 | -0.14 |
| S95 | 0.2041 | 0.751 | 0.750 | 0.07 |
| S96 | 0.2725 | 1.003 | 1.000 | 0.27 |
| S0 | 0.0020 | 0.006 | 0.000 | |

| | |
|---|---|
| Polynomial Order : | 1 |
| Correlation Coefficient : | 0.9999 |
| Carryover(%) : | -0.1 |
| Calibration equation: | y = bx + a |
| y =: | Concentration mg/L |
| x =: | Measured absorbance |
| a =: | -1.659057E-03 |
| b =: | 3.685201E+00 |
| Date & Time : | 10-Mar-2025 13:04:49 |

### Calibration Graph




### Reagents

| Reagent Name | Batch Number | Operator | Expiry Date |
|---|---|---|---|
| TP Working Color | TP Color-03052025 | EYA | 26-Mar-2025 00:00:00 |
| TP Ascorbic | TP Ascorbic-03102025 | MEF | 17-Mar-2025 00:00:00 |

### Test Results

| Cup | Type | ID | Sample Details | Result | Units | QC Pro | Raw Data | Auto Dil. | Man Dil. | User | Time & Date |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | S1 | Standard 1 | | 0.002 | | | 0.002209 | | | EYA | 10-Mar-2025 12:57:03 |
| | S90 | Standard 90 | | 0.004 | | | 0.003994 | | | EYA | 10-Mar-2025 12:58:01 |
| | S91 | Standard 91 | | 0.011 | | | 0.011441 | | | EYA | 10-Mar-2025 12:58:59 |
| | S92 | Standard 92 | | 0.027 | | | 0.026984 | | | EYA | 10-Mar-2025 12:59:57 |
| | S93 | Standard 93 | | 0.065 | | | 0.065475 | | | EYA | 10-Mar-2025 13:00:55 |
| | S94 | Standard 94 | | 0.136 | | | 0.135934 | | | EYA | 10-Mar-2025 13:01:54 |
| | S95 | Standard 95 | | 0.204 | | | 0.204113 | | | EYA | 10-Mar-2025 13:02:52 |
| | S96 | Standard 96 | | 0.273 | | | 0.272543 | | | EYA | 10-Mar-2025 13:03:51 |
| | S0 | Standard 0 | | 0.002 | | | 0.002006 | | | EYA | 10-Mar-2025 13:04:49 |
| 2 | ICV | ICV | 10-MAR-2025 06-18 | 0.531 | mg/L | | 0.144580 | | | EYA | 10-Mar-2025 13:05:48 |
| 3 | ICB | ICB | 10-MAR-2025 06-18 | 0.005 | mg/L | | 0.001884 | | | EYA | 10-Mar-2025 13:06:49 |
| 4 | U1 | WG2037673-1O | 10-MAR-2025 06-18 | 0.005ELL | mg/L | | 0.001859 | | | EYA | 10-Mar-2025 13:07:49 |
| 5 | U2 | WG2037673-2O | 10-MAR-2025 06-18 | 0.537 | mg/L | | 0.146070 | | | EYA | 10-Mar-2025 13:08:48 |
| 6 | U3 | L2511529-01O | 10-MAR-2025 06-18 | 0.133 | mg/L | | 0.036596 | | | EYA | 10-Mar-2025 13:09:47 |
| 7 | U4 | L2511919-01O | 10-MAR-2025 06-18 | 0.035 | mg/L | | 0.010075 | | | EYA | 10-Mar-2025 13:10:46 |
| 8 | U5 | L2511919-02O | 10-MAR-2025 06-18 | 0.016 | mg/L | | 0.004917 | | | EYA | 10-Mar-2025 13:11:45 |
| 9 | U6 | L2511919-04O | 10-MAR-2025 06-18 | 0.035 | mg/L | | 0.009959 | | | EYA | 10-Mar-2025 13:12:44 |
| 10 | U7 | L2511919-05O | 10-MAR-2025 06-18 | 0.017 | mg/L | | 0.004964 | | | EYA | 10-Mar-2025 13:13:43 |
| 11 | U8 | L2511919-07O | 10-MAR-2025 06-18 | 0.031 | mg/L | | 0.008927 | | | EYA | 10-Mar-2025 13:14:42 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 12 | U9 | L2511919-08O | 10-MAR-2025 06-18 | 0.026 | mg/L | 0.007603 | EYA | 10-Mar-2025 13:15:41 |
| 13 | U10 | L2511944-02O | 10-MAR-2025 06-18 | 0.207 | mg/L | 0.056702 | EYA | 10-Mar-2025 13:16:39 |
| | CCV | CCV | | 0.523 | mg/L | 0.142389 | EYA | 10-Mar-2025 13:17:38 |
| | CCB | CCB | | 0.005 | mg/L | 0.001895 | EYA | 10-Mar-2025 13:18:39 |
| 14 | U11 | L2511944-03O | 10-MAR-2025 06-18 | 0.046 | mg/L | 0.012901 | EYA | 10-Mar-2025 13:19:40 |
| 15 | U12 | WG2037673-3O | 10-MAR-2025 06-18 | 0.044 | mg/L | 0.012436 | EYA | 10-Mar-2025 13:20:38 |
| 16 | U13 | WG2037673-4O | 10-MAR-2025 06-18 | 0.589 | mg/L | 0.160166 | EYA | 10-Mar-2025 13:21:39 |
| 17 | U14 | L2511944-04O | 10-MAR-2025 06-18 | 0.057 | mg/L | 0.015867 | EYA | 10-Mar-2025 13:22:40 |
| 18 | U15 | L2511871-01O | 10-MAR-2025 06-18 | 0.217 | mg/L | 0.059254 | EYA | 10-Mar-2025 13:23:13 |
| 19 | U16 | L2511893-01O | 10-MAR-2025 06-18 | 0.014 | mg/L | 0.004161 | EYA | 10-Mar-2025 13:24:10 |
| 20 | U17 | WG2037678-3O | 10-MAR-2025 06-18 | 0.015 | mg/L | 0.004390 | EYA | 10-Mar-2025 13:25:01 |
| 21 | U18 | WG2037678-4O | 10-MAR-2025 06-18 | 0.531 | mg/L | 0.144564 | EYA | 10-Mar-2025 13:25:53 |
| 22 | U19 | L2511893-02O | 10-MAR-2025 06-18 | 0.014 | mg/L | 0.004305 | EYA | 10-Mar-2025 13:26:44 |
| 23 | U20 | L2511893-03O | 10-MAR-2025 06-18 | 0.258 | mg/L | 0.070367 | EYA | 10-Mar-2025 13:27:35 |
| | CCV | CCV | | 0.532 | mg/L | 0.144897 | EYA | 10-Mar-2025 13:28:26 |
| | CCB | CCB | | 0.005 | mg/L | 0.001821 | EYA | 10-Mar-2025 13:29:18 |
| 24 | U21 | L2511893-04O | 10-MAR-2025 06-18 | 0.007 | mg/L | 0.002461 | EYA | 10-Mar-2025 13:30:09 |
| | CCV | CCV | | 0.528 | mg/L | 0.143700 | EYA | 10-Mar-2025 13:31:00 |
| | CCB | CCB | | 0.005 | mg/L | 0.001942 | EYA | 10-Mar-2025 13:31:52 |

# Quality Control

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : L2511944-03 | | |
| **Matrix Spike** | : WG2037673-4 | **MS Analysis Date** | : 03/10/25 13:21 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Phosphate, Total | 0.141 | 1.53 | 1.81 | 109 | | | | | 80-120 | 15 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : NA | **Analysis Date** | : 03/10/25 13:19 |
| **Dup Sample ID** | : WG2037673-3 | **DUP Analysis Date** | : 03/10/25 13:20 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Phosphate, Total | 0.141 | 0.135 | 4 | 15 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2037673-2 | **LCS Analysis Date** | : 03/10/25 13:08 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Phosphate, Total | 1.53 | 1.65 | 108. | | | | | 84-118 | 15 |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phosphorus, Total | 7723-14-0 | 0.01 | 0.004 | mg/l | 80-120 | | 75-125 | 20 | 20 | 4500P-E | 28 days | 1 - Plastic 500ml H2SO4 preserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11468-1
**Page:** 1

**WETCHEM (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phosphorus, Total | 7723-14-0 | 5 | 1.67 | mg/kg | 52-148 | 20 | 75-125 | 20 | 20 | 4500P-E | 28 days | 1 - Glass 250ml/8oz unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phosphorus, Orthophosphate | 7723-14-0 | 0.005 | 0.001 | mg/l | 90-110 | | 80-120 | 20 | 20 | 4500P-E | 48 hours | 1 - Plastic 500ml unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11468-1
**Page:** 1

**WETCHEM (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phosphorus, Orthophosphate | 7723-14-0 | 0.05 | 0.05 | mg/kg | | | | | | 4500P-E | 48 hours | 1 - Glass 250ml/8oz unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

# Calculations of TPhosphorus

Aqueous samples:

Calculate the concentration value of the sample directly from the standard curve. All calculations are done by SEAL (segmant flow spectrometer).

$$\text{Mg TPhosphorus/L} = \frac{\text{absorbance - y-intercept}}{\text{slope}} \times \text{Dilution Factor}$$

# Wet Chemistry
# By
# IC Methods

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-01 | Date Collected | : 03/04/25 14:43 |
| Client ID | : 2A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/08/25 10:52 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : CVN, |
| Lab File ID | : WG2038111-12 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | 0.059 | 0.050 | 0.013 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-02 | Date Collected | : 03/04/25 14:40 |
| Client ID | : 2B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/08/25 11:04 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : CVN, |
| Lab File ID | : WG2038111-12 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | 0.061 | 0.050 | 0.013 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-04 | Date Collected | : 03/04/25 12:25 |
| Client ID | : 3A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/08/25 11:16 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : CVN, |
| Lab File ID | : WG2038111-12 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | 0.066 | 0.050 | 0.013 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-05 | Date Collected | : 03/04/25 12:45 |
| Client ID | : 3B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/08/25 11:28 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : CVN, |
| Lab File ID | : WG2038111-12 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | 0.065 | 0.050 | 0.013 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-07 | Date Collected | : 03/04/25 09:25 |
| Client ID | : 4A | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/08/25 11:40 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : CVN, |
| Lab File ID | : WG2038111-12 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | 0.061 | 0.050 | 0.013 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2511919-08 | Date Collected | : 03/04/25 10:10 |
| Client ID | : 4B | Date Received | : 03/04/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/08/25 12:29 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : CVN, |
| Lab File ID | : WG2038111-12 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | 0.062 | 0.050 | 0.013 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038112-1 | Date Collected | : NA |
| Client ID | : WG2038112-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/08/25 10:28 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : CVN, |
| Lab File ID | : WG2038112 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | ND | 0.050 | 0.013 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2511919 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038112-4 | Date Collected | : 03/04/25 14:30 |
| Client ID | : WG2038112-4 DUP | Date Received | : 03/04/25 |
| Sample Location | : | Date Analyzed | : 03/08/25 15:42 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : CVN, |
| Lab File ID | : WG2038111-12 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

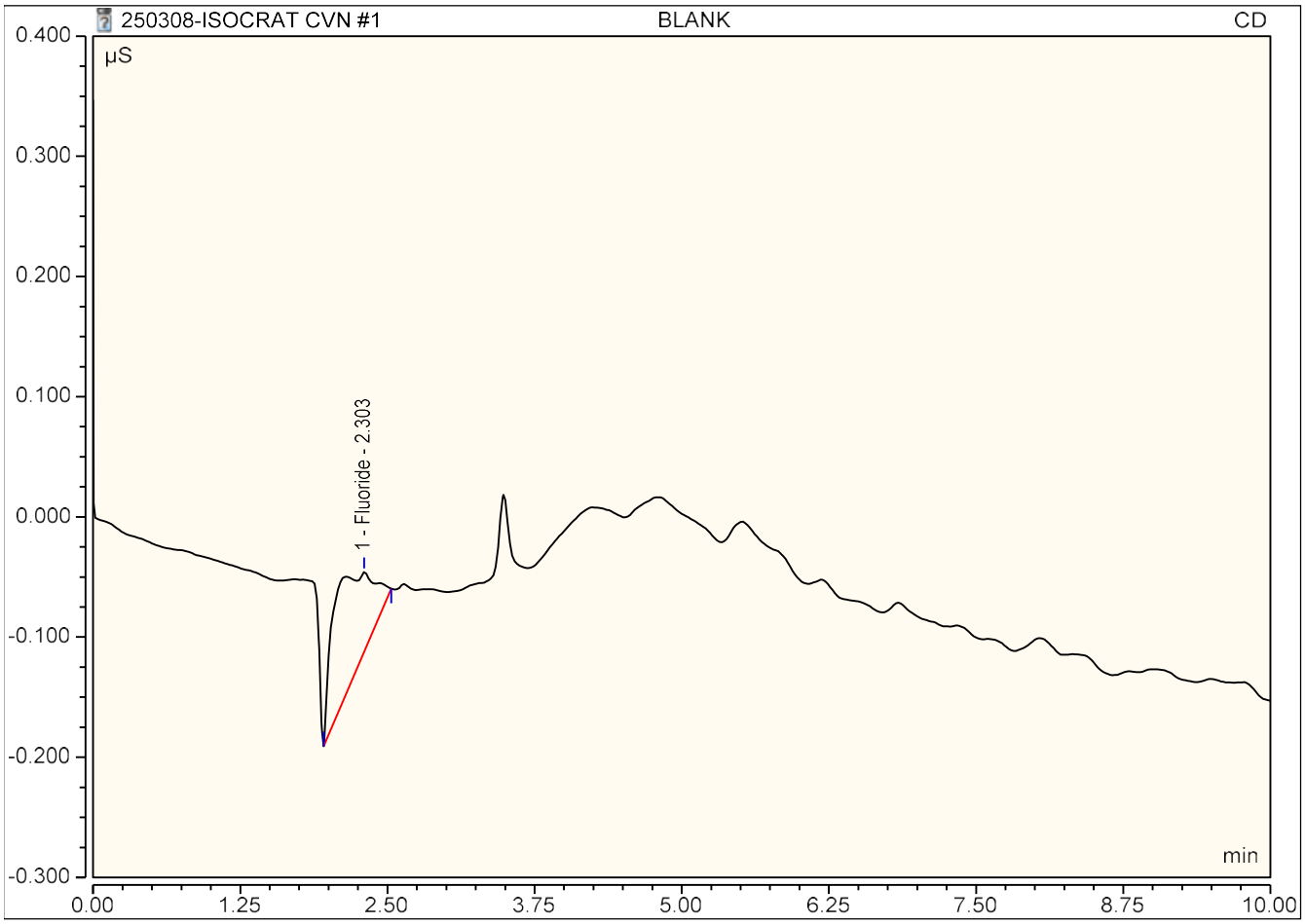
| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | 0.024 | 0.050 | 0.013 | J |

# Sample Raw Data

## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **BLANK** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **24-Feb-2025 / 15:16** | *Run Time:* | **10.00** |

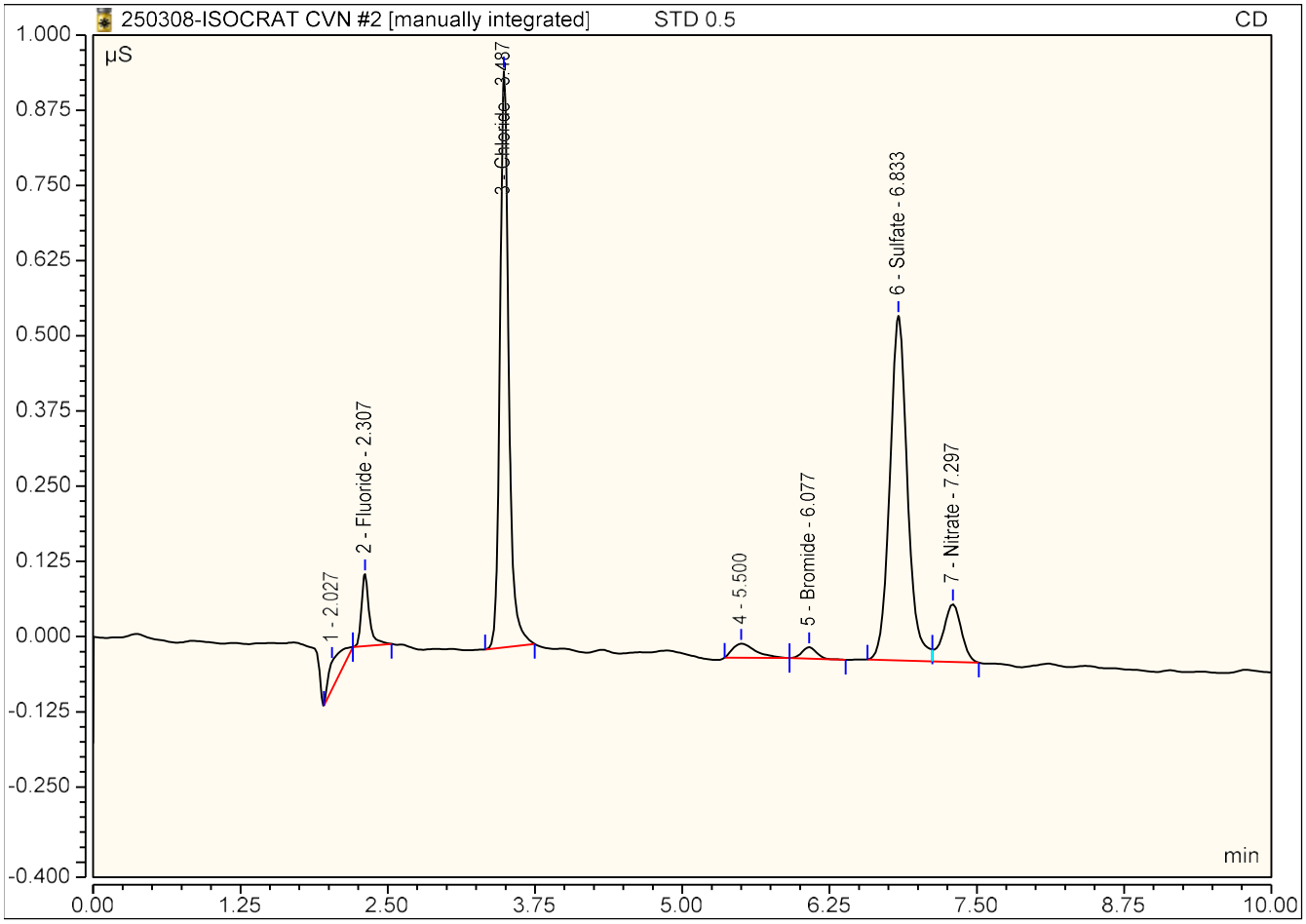
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 1 | 2.30 | **Fluoride** | BMB | 0.035 | 0.066 | 0.0938 |
| | | **TOTAL:** | | 0.03 | 0.07 | 0.09 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 0.5** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **24-Feb-2025 / 15:28** | *Run Time:* | **10.00** |

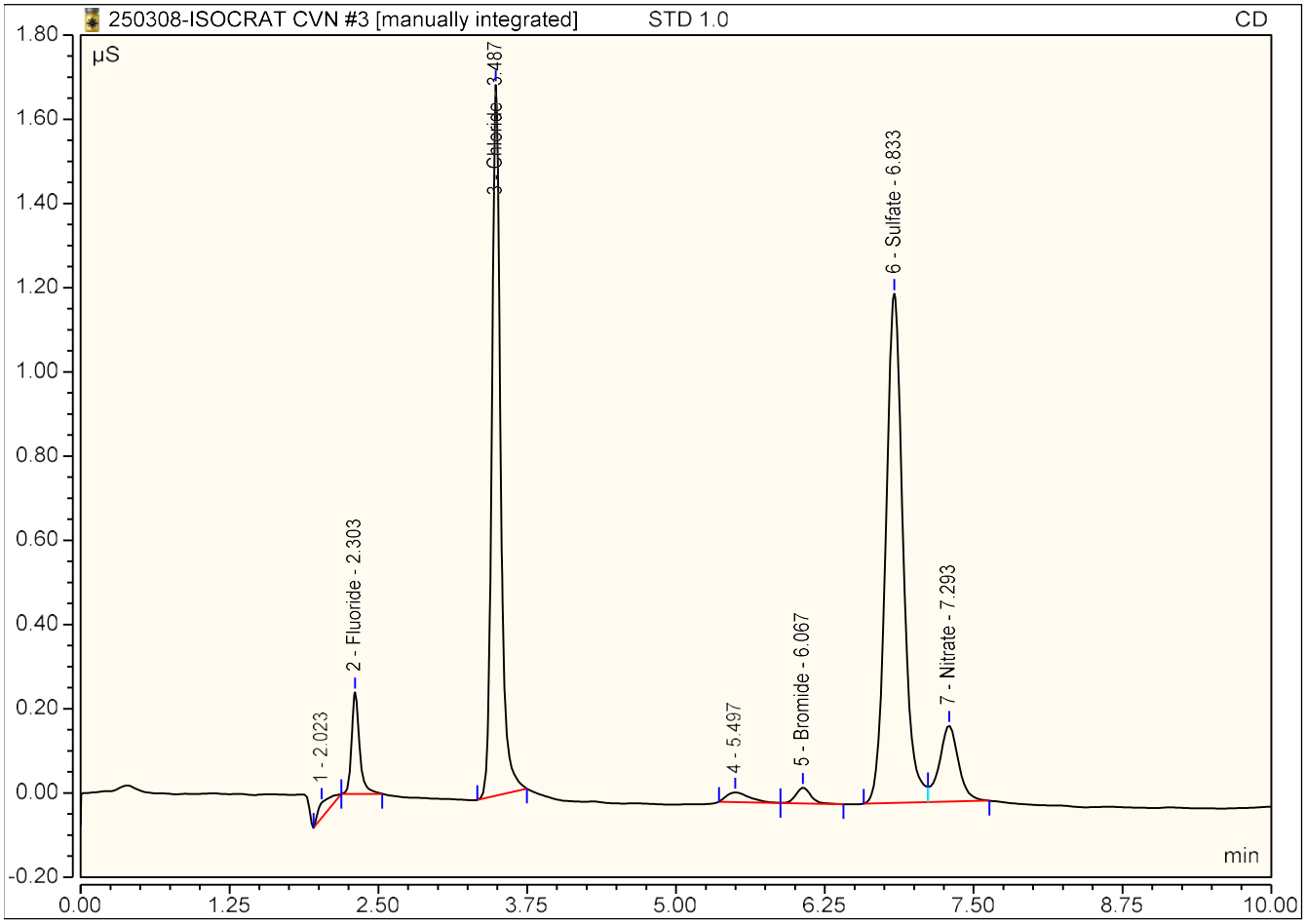
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.009 | 0.120 | 0.0476 |
| 3 | 3.49 | **Chloride** | BMB | 0.084 | 0.957 | 0.3758 |
| 5 | 6.08 | **Bromide** | BMB | 0.003 | 0.019 | 0.0457 |
| 6 | 6.83 | **Sulfate** | BM * | 0.099 | 0.573 | 0.6674 |
| 7 | 7.30 | **Nitrate** | MB* | 0.017 | 0.096 | 0.0446 |
| | | **TOTAL:** | | 0.21 | 1.76 | 1.18 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 1.0** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **24-Feb-2025 / 15:40** | *Run Time:* | **10.00** |

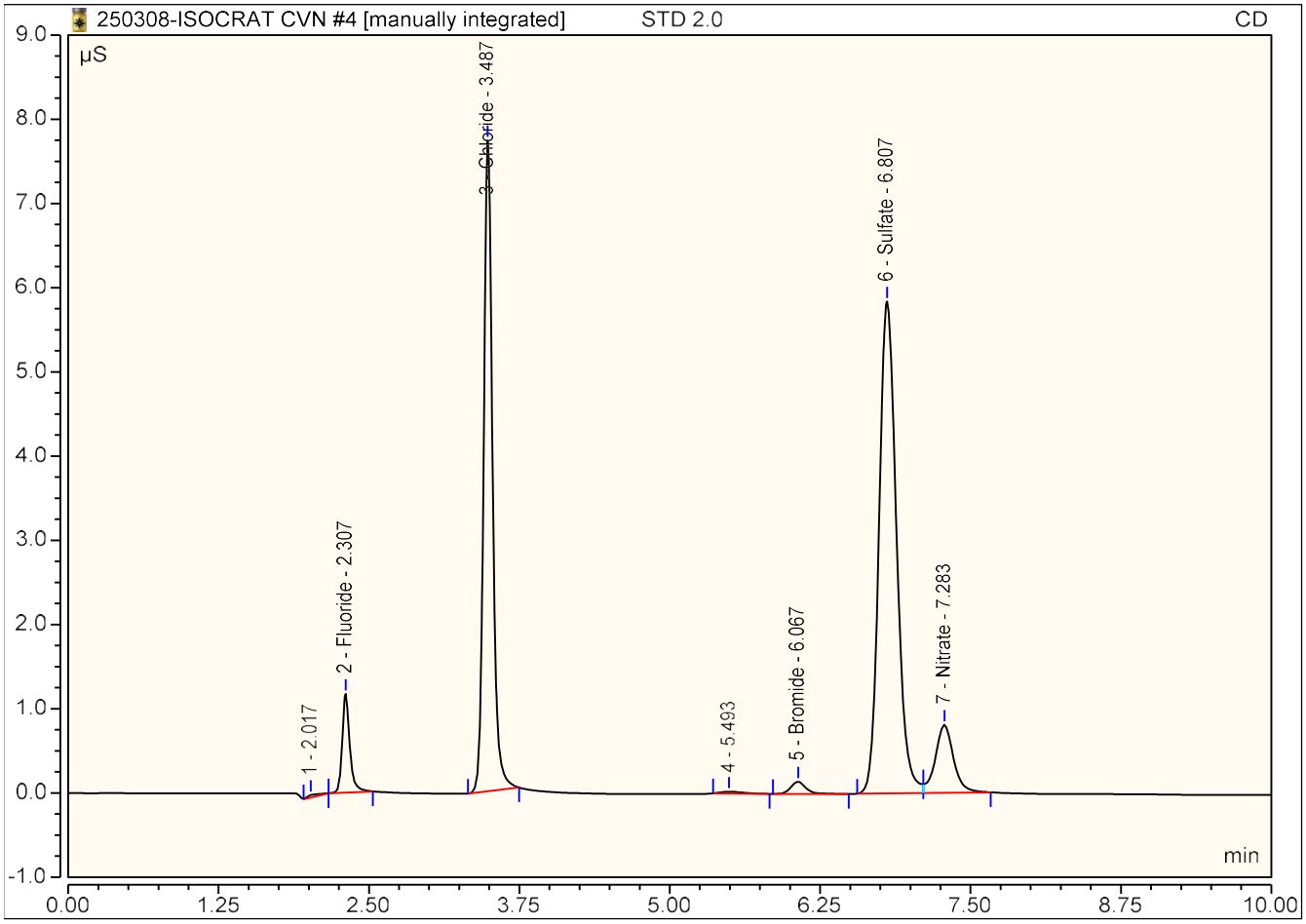
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.018 | 0.241 | 0.0642 |
| 3 | 3.49 | **Chloride** | BMB | 0.145 | 1.688 | 0.5449 |
| 5 | 6.07 | **Bromide** | BMB | 0.005 | 0.037 | 0.0673 |
| 6 | 6.83 | **Sulfate** | BM * | 0.204 | 1.209 | 1.0531 |
| 7 | 7.29 | **Nitrate** | MB* | 0.034 | 0.181 | 0.0635 |
| | | **TOTAL:** | | 0.41 | 3.36 | 1.79 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 2.0** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **24-Feb-2025 / 15:52** | *Run Time:* | **10.00** |

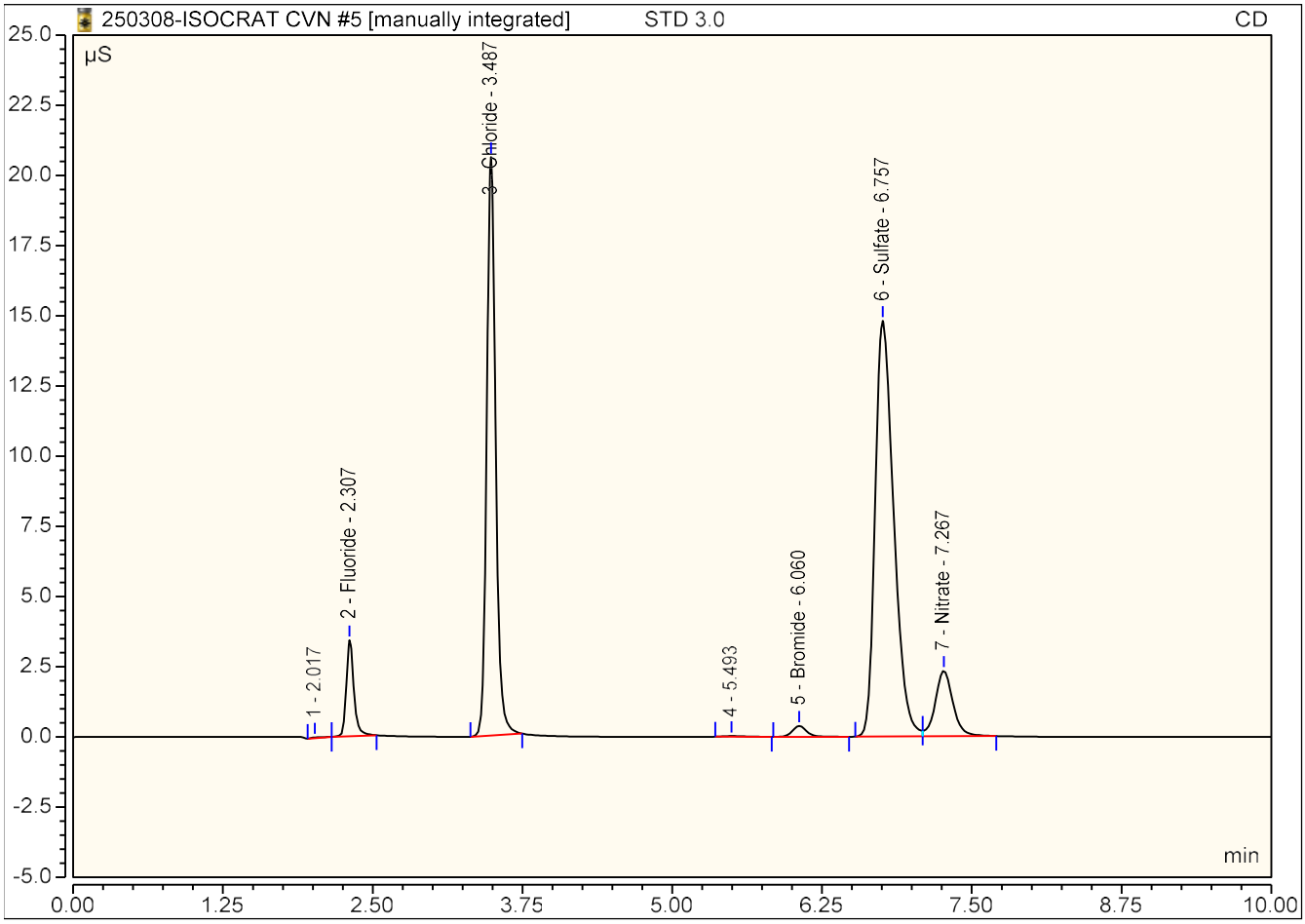
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.085 | 1.170 | 0.1838 |
| 3 | 3.49 | **Chloride** | BMB | 0.658 | 7.728 | 1.9560 |
| 5 | 6.07 | **Bromide** | BMB | 0.021 | 0.145 | 0.1909 |
| 6 | 6.81 | **Sulfate** | BM * | 0.980 | 5.839 | 3.9147 |
| 7 | 7.28 | **Nitrate** | MB* | 0.142 | 0.807 | 0.1847 |
| | | **TOTAL:** | | 1.89 | 15.69 | 6.43 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 3.0** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **24-Feb-2025 / 16:04** | *Run Time:* | **10.00** |

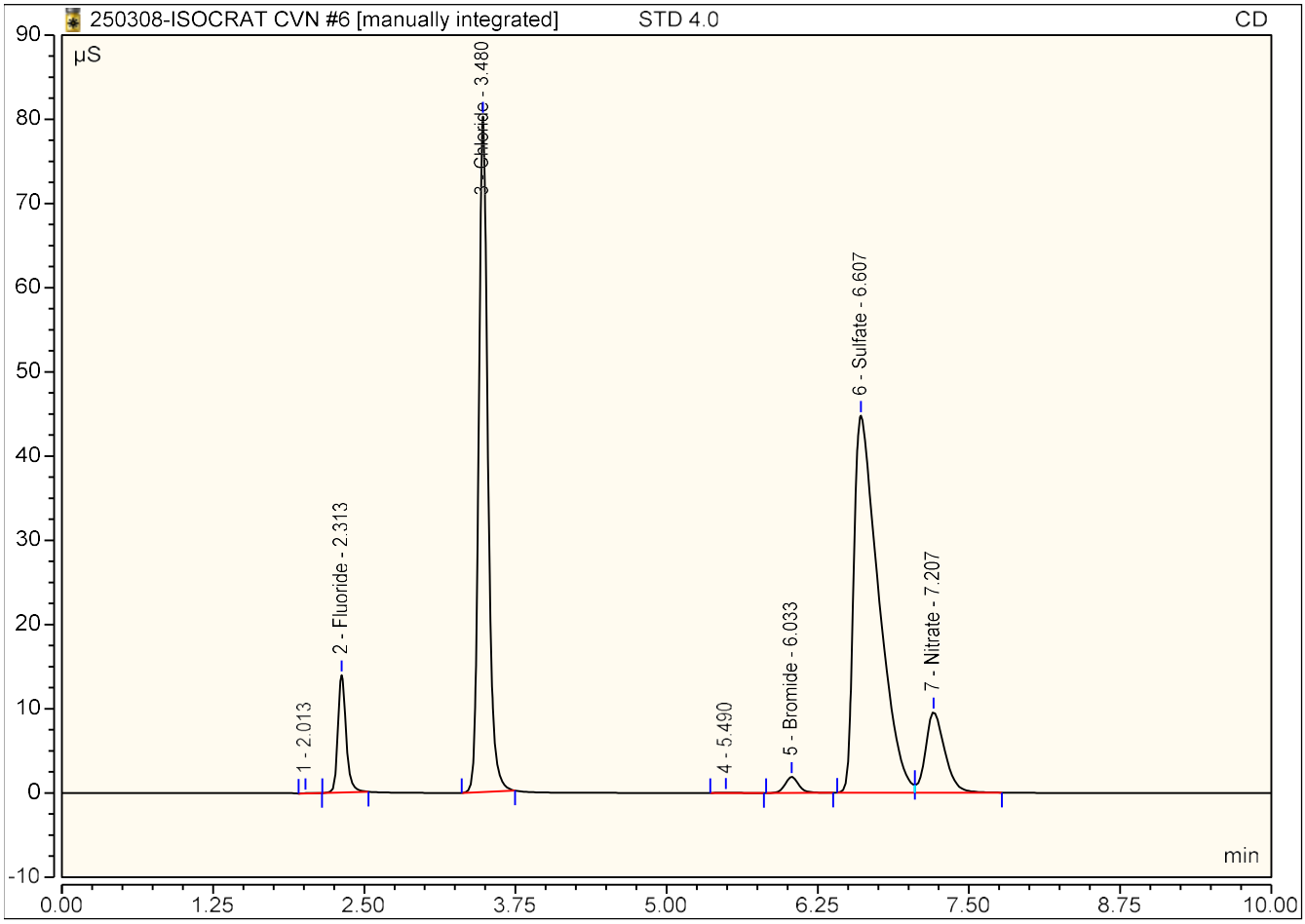
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.247 | 3.424 | 0.4769 |
| 3 | 3.49 | **Chloride** | BMB | 1.774 | 20.601 | 5.0224 |
| 5 | 6.06 | **Bromide** | BMB | 0.055 | 0.392 | 0.4612 |
| 6 | 6.76 | **Sulfate** | BM * | 2.650 | 14.806 | 10.0774 |
| 7 | 7.27 | **Nitrate** | MB* | 0.399 | 2.333 | 0.4750 |
| | | **TOTAL:** | | 5.12 | 41.56 | 16.51 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 4.0** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **24-Feb-2025 / 16:16** | *Run Time:* | **10.00** |

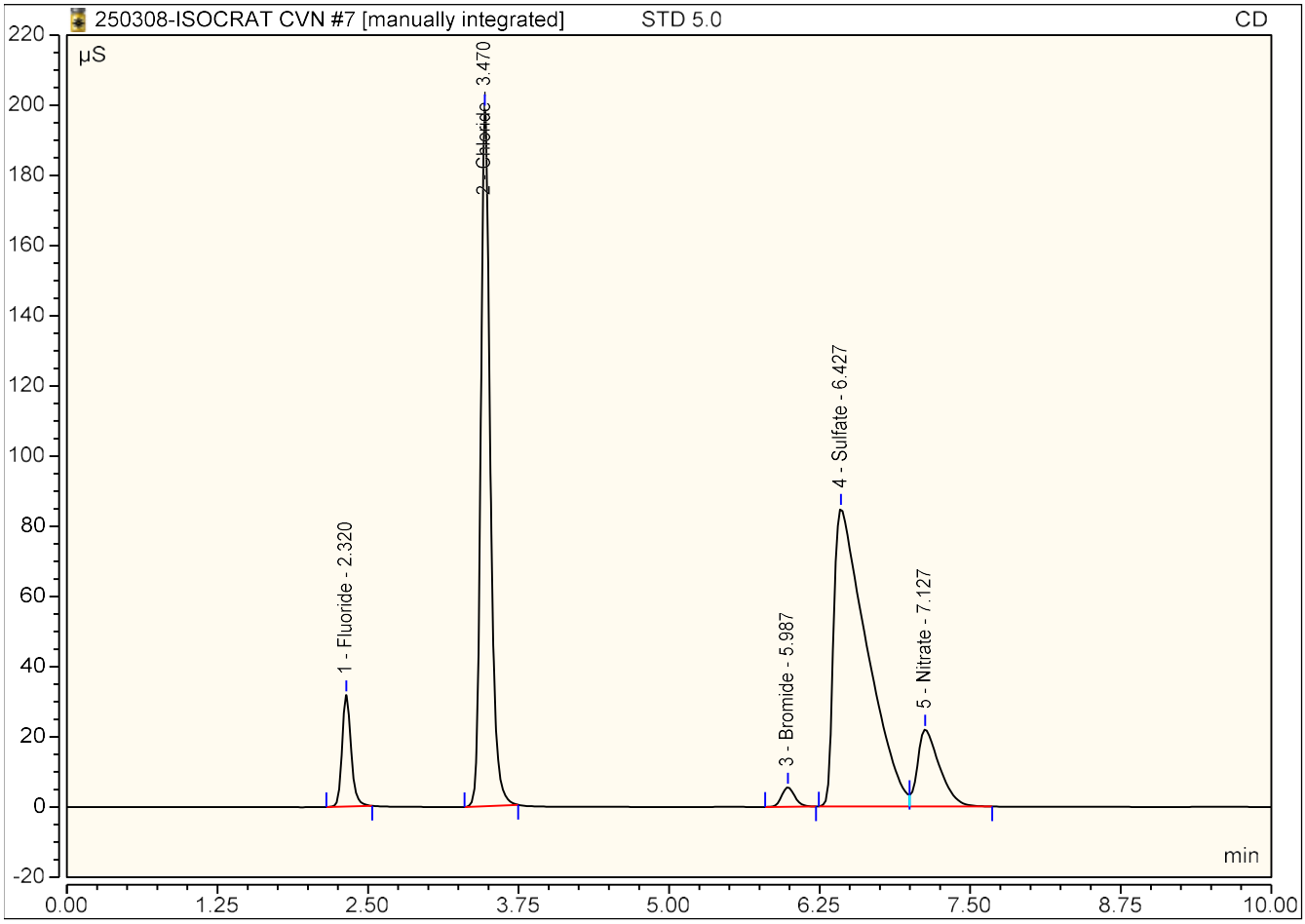
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 1.090 | 13.940 | 1.9996 |
| 3 | 3.48 | **Chloride** | BMB | 7.132 | 80.202 | 19.7542 |
| 5 | 6.03 | **Bromide** | BMB | 0.248 | 1.921 | 2.0099 |
| 6 | 6.61 | **Sulfate** | BM * | 10.667 | 44.745 | 39.6551 |
| 7 | 7.21 | **Nitrate** | MB* | 1.759 | 9.554 | 2.0072 |
| | | **TOTAL:** | | 20.90 | 150.36 | 65.43 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 5.0** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **24-Feb-2025 / 16:28** | *Run Time:* | **10.00** |

| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 1 | 2.32 | **Fluoride** | BMB | 2.754 | 31.785 | 5.0029 |
| 2 | 3.47 | **Chloride** | BMB | 18.169 | 198.603 | 50.0968 |
| 3 | 5.99 | **Bromide** | BMB | 0.701 | 5.530 | 5.6299 |
| 4 | 6.43 | **Sulfate** | BM * | 27.058 | 84.892 | 100.1322 |
| 5 | 7.13 | **Nitrate** | MB* | 4.644 | 21.933 | 5.2562 |
| | | **TOTAL:** | | 53.33 | 342.74 | 166.12 |



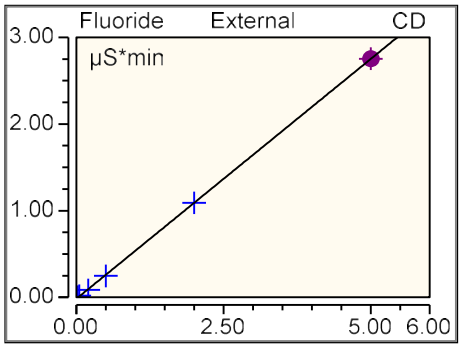
## Calibration Batch Report

| | | | |
|---|---|---|---|
| *Sequence:* | **250308-ISOCRAT CVN** | *Injection Volume:* | **25.00** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **24-Feb-2025 / 16:28** | *Run Time:* | **10** |

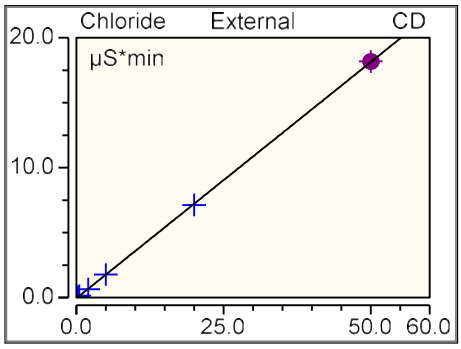
**Calibration Summary**

| Peak Name | Eval.Type | Cal.Type | Points | Offset (C0) | Slope (C1) | Curve (C2) | Coeff.Det. % |
|---|---|---|---|---|---|---|---|
| Fluoride | Area | in, WithOffse | 6.000 | -0.017 | 0.554 | 0.000 | 99.9921 |
| Chloride | Area | in, WithOffse | 6.000 | -0.053 | 0.364 | 0.000 | 99.9953 |
| Bromide | Area | in, WithOffse | 5.000 | -0.003 | 0.125 | 0.000 | 99.9125 |
| Sulfate | Area | in, WithOffse | 6.000 | -0.081 | 0.271 | 0.000 | 99.9977 |
| Nitrate | Area | in, WithOffse | 5.000 | -0.023 | 0.888 | 0.000 | 99.9464 |
| | | **AVERAGE:** | | -0.0354 | 0.4403 | 0.0000 | 99.9688 |

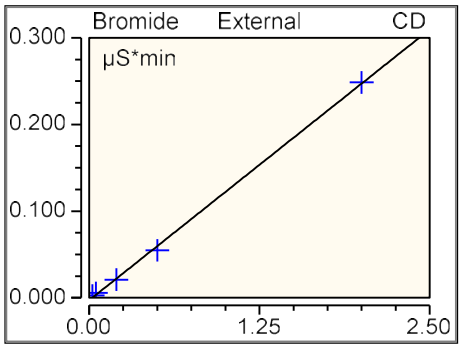
| Injection Name | Ret.Time min CD | Area µS*min CD | Height µS CD | Amount CD |
|---|---|---|---|---|
| | Fluoride | Fluoride | Fluoride | Fluoride |
| STD 0.5 | 2.307 | 0.0092 | 0.120 | 0.048 |
| STD 1.0 | 2.303 | 0.0184 | 0.241 | 0.064 |
| STD 2.0 | 2.307 | 0.0847 | 1.170 | 0.184 |
| STD 3.0 | 2.307 | 0.2470 | 3.424 | 0.477 |
| STD 4.0 | 2.313 | 1.0904 | 13.940 | 2.000 |
| STD 5.0 | 2.320 | 2.7539 | 31.785 | 5.003 |
| **Average** | 2.309 | | | |
| **Rel. Std. Dev.** | 0.265 % | | | |



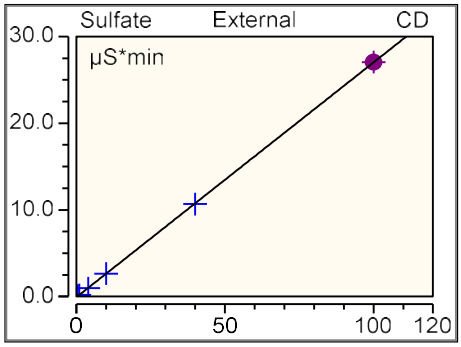

| Injection Name | Ret.Time min CD | Area µS*min CD | Height µS CD | Amount CD |
|---|---|---|---|---|
| | Chloride | Chloride | Chloride | Chloride |
| STD 0.5 | 3.487 | 0.0836 | 0.957 | 0.376 |
| STD 1.0 | 3.487 | 0.1451 | 1.688 | 0.545 |
| STD 2.0 | 3.487 | 0.6584 | 7.728 | 1.956 |
| STD 3.0 | 3.487 | 1.7737 | 20.601 | 5.022 |
| STD 4.0 | 3.480 | 7.1322 | 80.202 | 19.754 |
| STD 5.0 | 3.470 | 18.1689 | 198.603 | 50.097 |
| **Average** | 3.483 | | | |
| **Rel. Std. Dev.** | 0.195 % | | | |



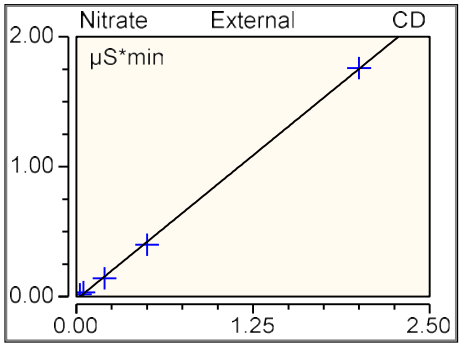

| Injection Name | Ret.Time min CD | Area µS*min CD | Height µS CD | Amount CD |
|---|---|---|---|---|
| | Bromide | Bromide | Bromide | Bromide |
| STD 0.5 | 6.077 | 0.0028 | 0.019 | 0.046 |
| STD 1.0 | 6.067 | 0.0055 | 0.037 | 0.067 |
| STD 2.0 | 6.067 | 0.0209 | 0.145 | 0.191 |
| STD 3.0 | 6.060 | 0.0547 | 0.392 | 0.461 |
| STD 4.0 | 6.033 | 0.2485 | 1.921 | 2.010 |
| STD 5.0 | 5.987 | 0.7014 | 5.530 | 5.630 |
| **Average** | 6.048 | | | |
| **Rel. Std. Dev.** | 0.555 % | | | |



| Injection Name | Ret.Time min CD | Area µS*min CD | Height µS CD | Amount CD |
|---|---|---|---|---|
| | Sulfate | Sulfate | Sulfate | Sulfate |
| STD 0.5 | 6.833 | 0.0994 | 0.573 | 0.667 |
| STD 1.0 | 6.833 | 0.2040 | 1.209 | 1.053 |
| STD 2.0 | 6.807 | 0.9796 | 5.839 | 3.915 |
| STD 3.0 | 6.757 | 2.6499 | 14.806 | 10.077 |
| STD 4.0 | 6.607 | 10.6666 | 44.745 | 39.655 |
| STD 5.0 | 6.427 | 27.0582 | 84.892 | 100.132 |
| **Average** | 6.711 | | | |
| **Rel. Std. Dev.** | 2.429 % | | | |



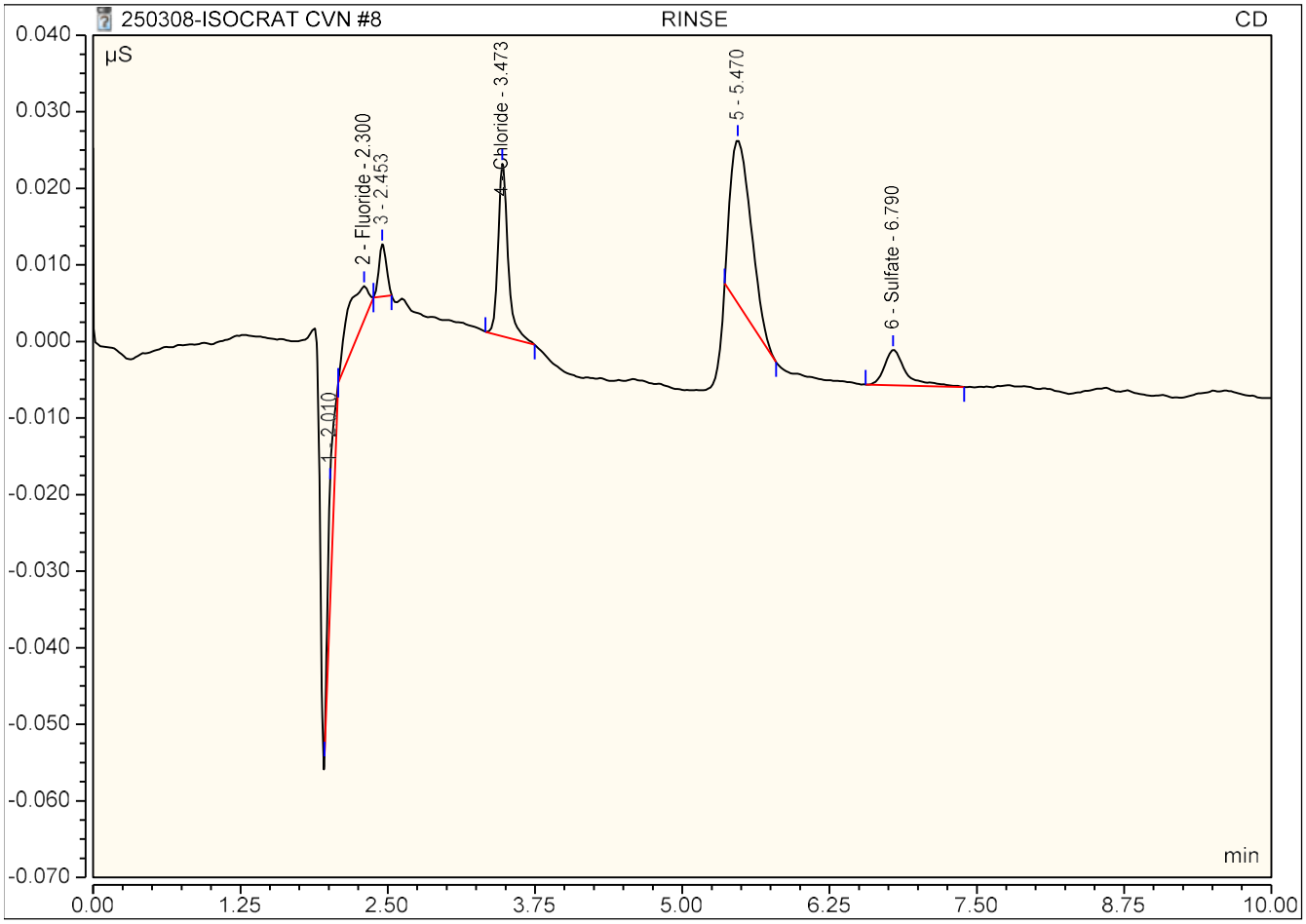

| Injection Name | Ret.Time min CD | Area µS*min CD | Height µS CD | Amount CD |
|---|---|---|---|---|
| | Nitrate | Nitrate | Nitrate | Nitrate |
| STD 0.5 | 7.297 | 0.0171 | 0.096 | 0.045 |
| STD 1.0 | 7.293 | 0.0339 | 0.181 | 0.063 |
| STD 2.0 | 7.283 | 0.1415 | 0.807 | 0.185 |
| STD 3.0 | 7.267 | 0.3992 | 2.333 | 0.475 |
| STD 4.0 | 7.207 | 1.7593 | 9.554 | 2.007 |
| STD 5.0 | 7.127 | 4.6435 | 21.933 | 5.256 |
| **Average** | 7.246 | | | |
| **Rel. Std. Dev.** | 0.924 % | | | |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **RINSE** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 09:27** | *Run Time:* | **10.00** |

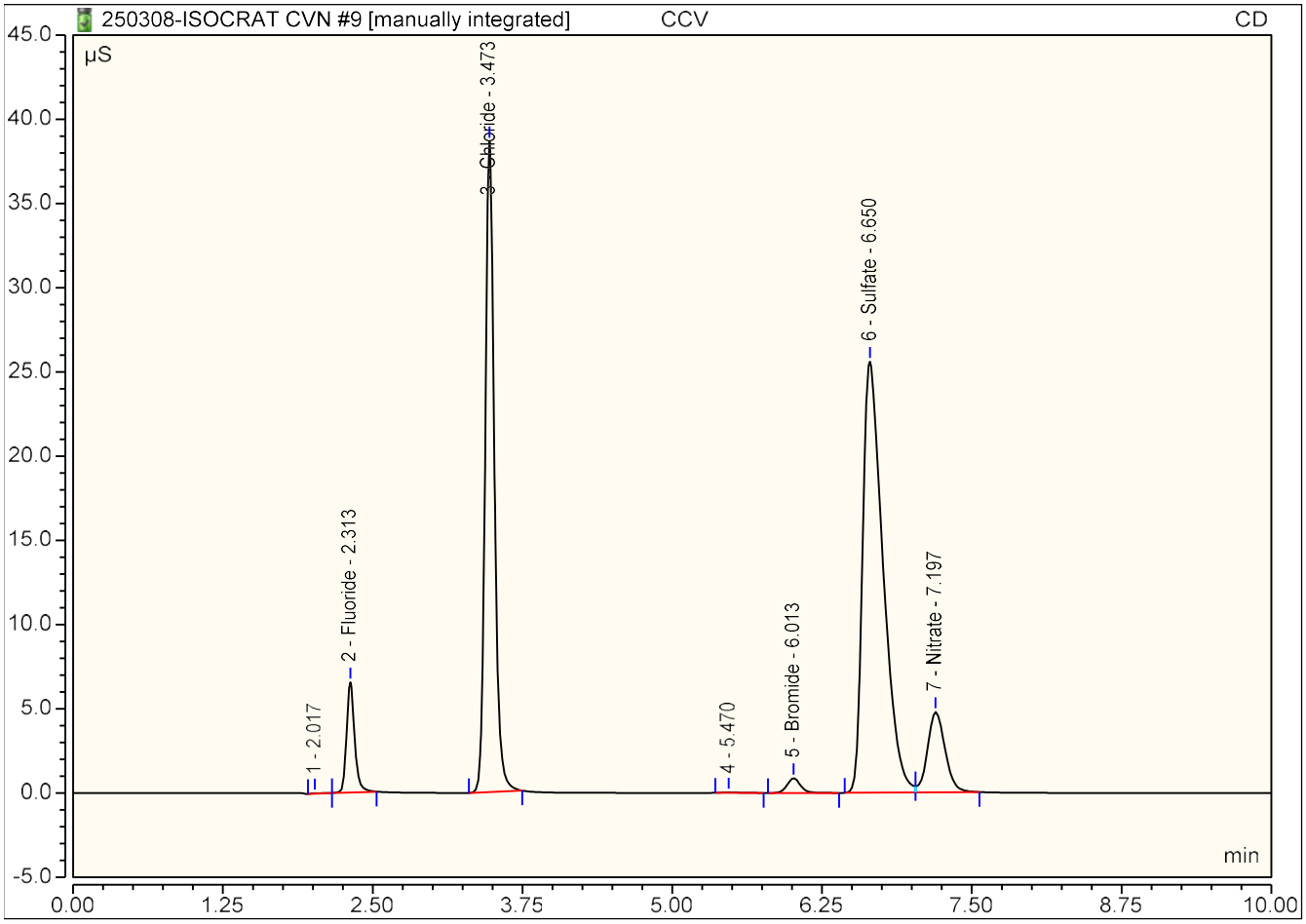
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.001 | 0.004 | 0.0333 |
| 4 | 3.47 | **Chloride** | BMB | 0.002 | 0.023 | 0.1520 |
| 6 | 6.79 | **Sulfate** | BMB | 0.001 | 0.005 | 0.3043 |
| | | **TOTAL:** | | 0.00 | 0.03 | 0.49 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 09:39** | *Run Time:* | **10.00** |

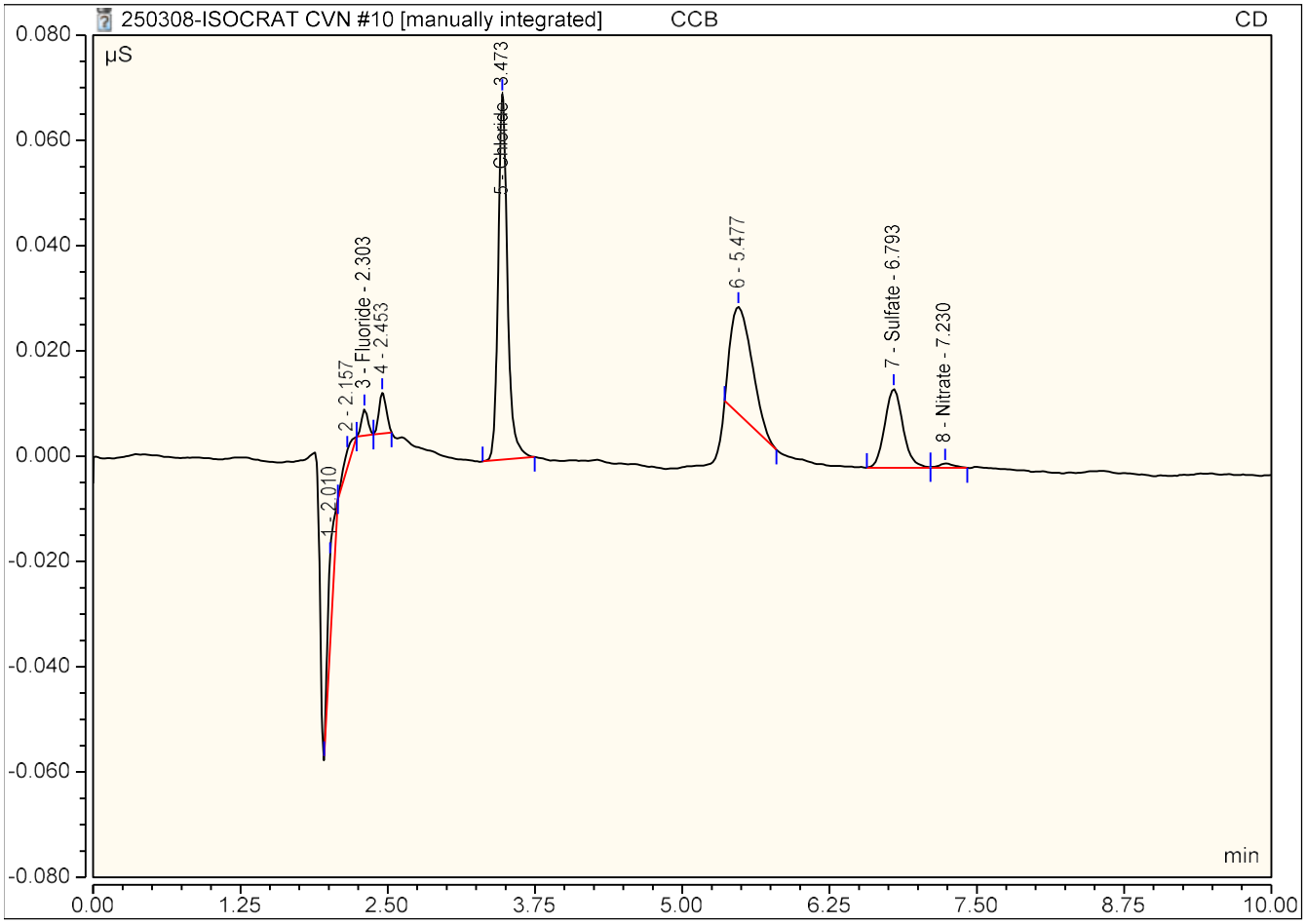
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.501 | 6.541 | 0.9362 |
| 3 | 3.47 | **Chloride** | BMB | 3.407 | 38.632 | 9.5125 |
| 5 | 6.01 | **Bromide** | BMB | 0.114 | 0.874 | 0.9325 |
| 6 | 6.65 | **Sulfate** | BM * | 5.056 | 25.580 | 18.9558 |
| 7 | 7.20 | **Nitrate** | MB* | 0.810 | 4.771 | 0.9381 |
| | | **TOTAL:** | | 9.89 | 76.40 | 31.28 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 09:52** | *Run Time:* | **10.00** |

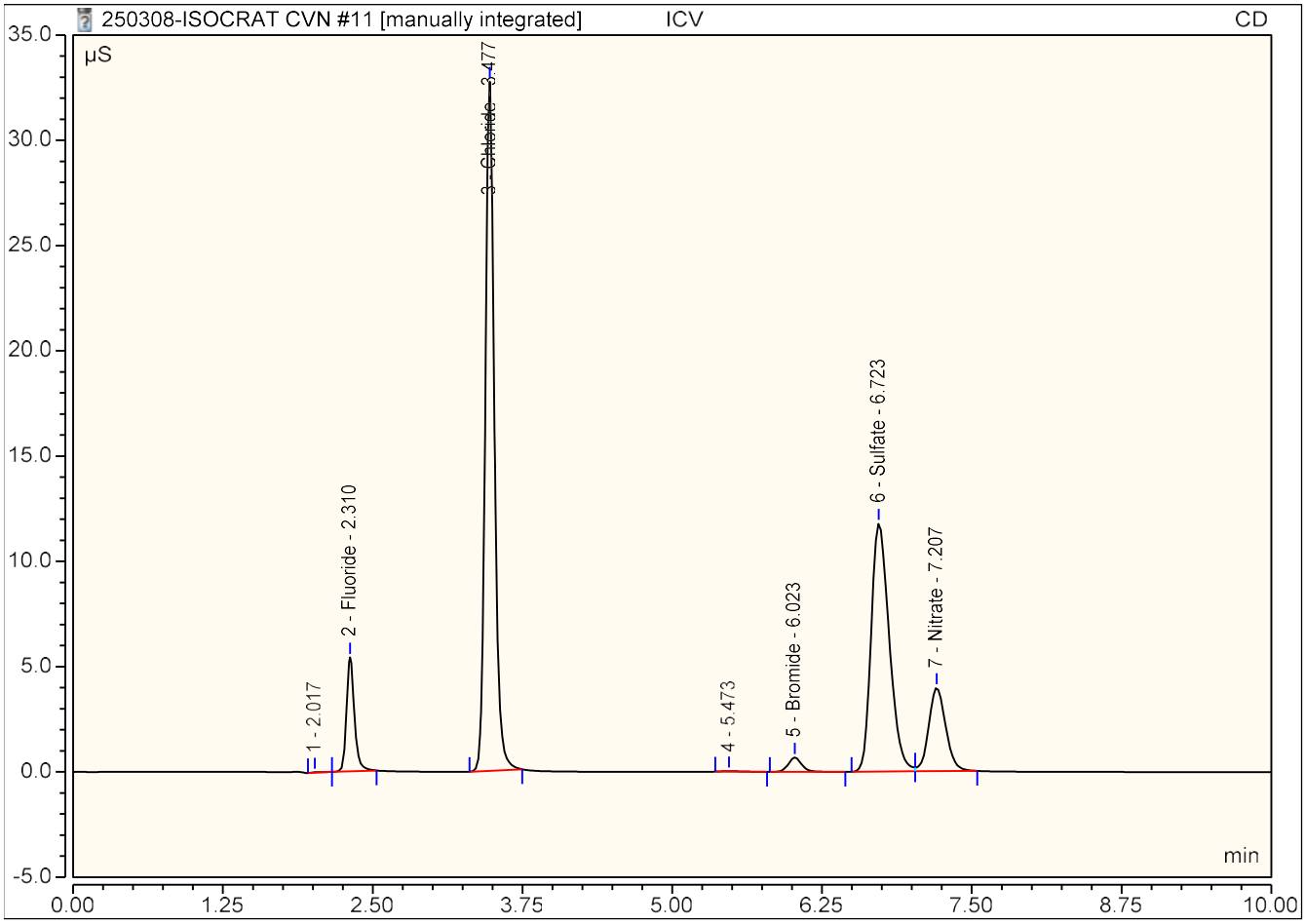
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB | 0.000 | 0.005 | 0.0315 |
| 5 | 3.47 | **Chloride** | BMB | 0.006 | 0.069 | 0.1634 |
| 7 | 6.79 | **Sulfate** | BM * | 0.003 | 0.015 | 0.3105 |
| 8 | 7.23 | **Nitrate** | MB* | 0.000 | 0.001 | 0.0255 |
| **TOTAL:** | | | | 0.01 | 0.09 | 0.53 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **ICV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 10:04** | *Run Time:* | **10.00** |

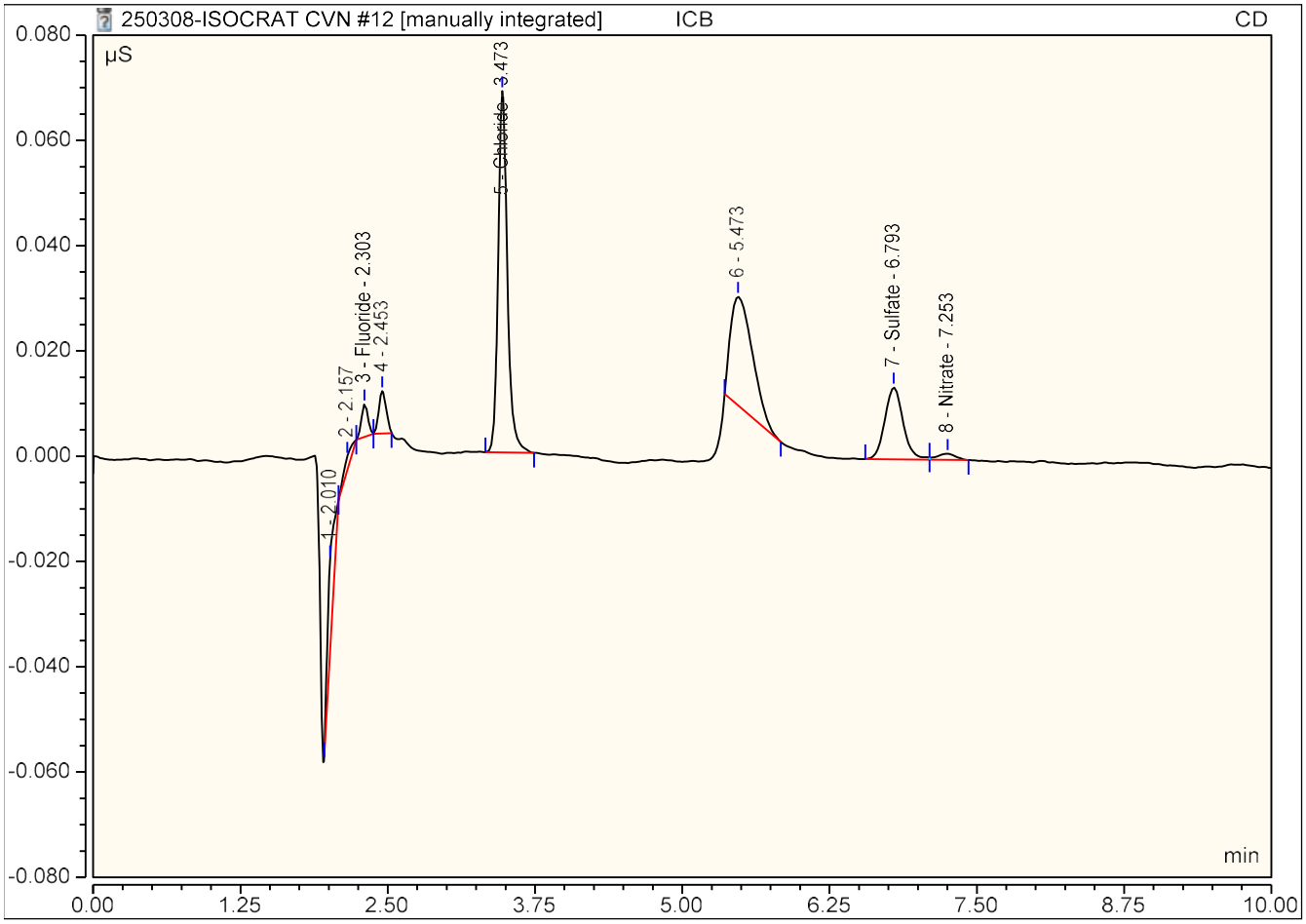
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.411 | 5.409 | 0.7737 |
| 3 | 3.48 | **Chloride** | BMB | 2.879 | 32.733 | 8.0610 |
| 5 | 6.02 | **Bromide** | BMB | 0.089 | 0.677 | 0.7384 |
| 6 | 6.72 | **Sulfate** | BM * | 2.057 | 11.783 | 7.8890 |
| 7 | 7.21 | **Nitrate** | MB* | 0.652 | 3.954 | 0.7600 |
| | | **TOTAL:** | | 6.09 | 54.56 | 18.22 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **ICB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 10:16** | *Run Time:* | **10.00** |

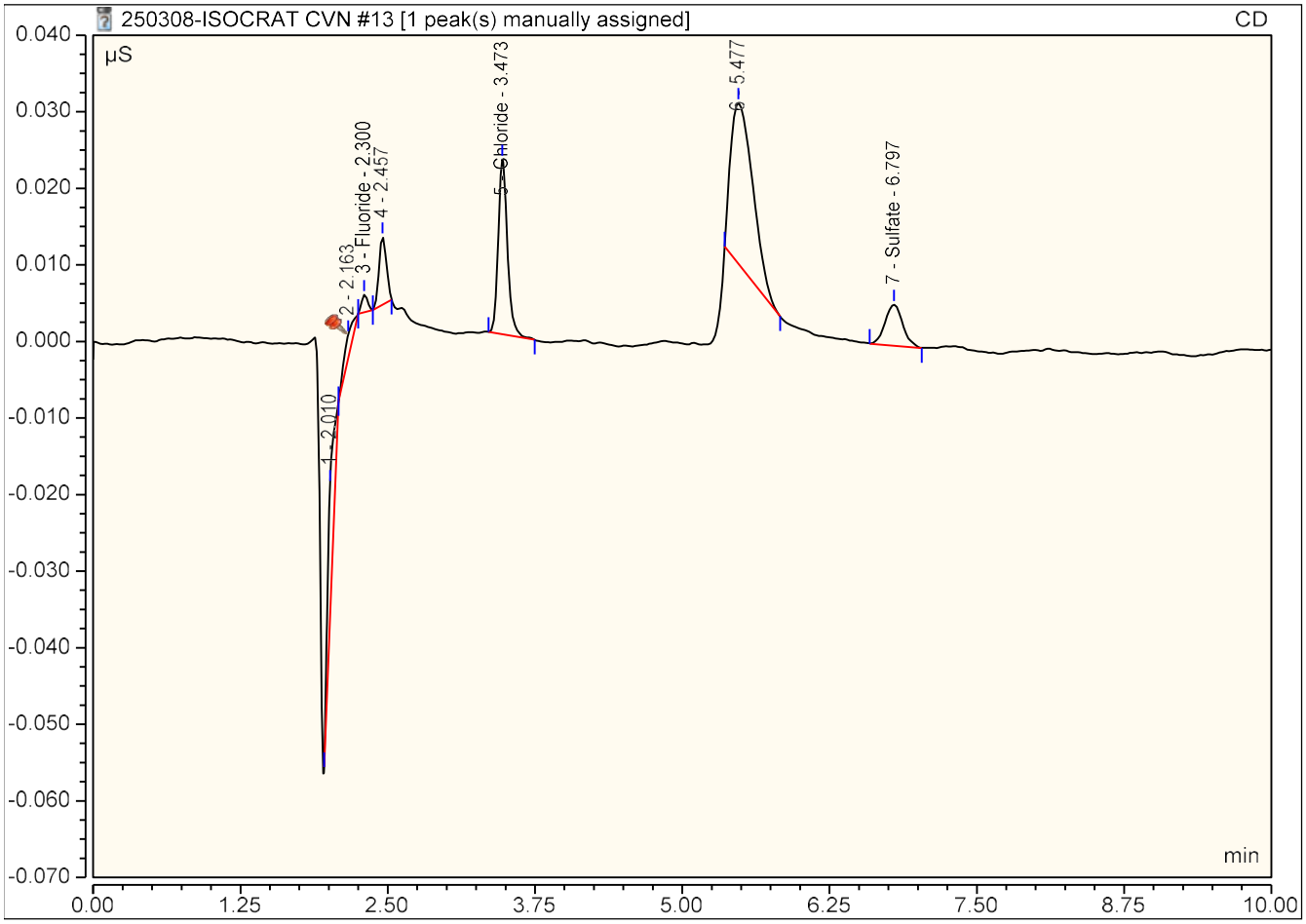
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB | 0.000 | 0.006 | 0.0317 |
| 5 | 3.47 | **Chloride** | BMB | 0.006 | 0.069 | 0.1630 |
| 7 | 6.79 | **Sulfate** | BM * | 0.002 | 0.014 | 0.3097 |
| 8 | 7.25 | **Nitrate** | MB* | 0.000 | 0.001 | 0.0256 |
| **TOTAL:** | | | | 0.01 | 0.09 | 0.53 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **BLK** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 10:28** | *Run Time:* | **10.00** |

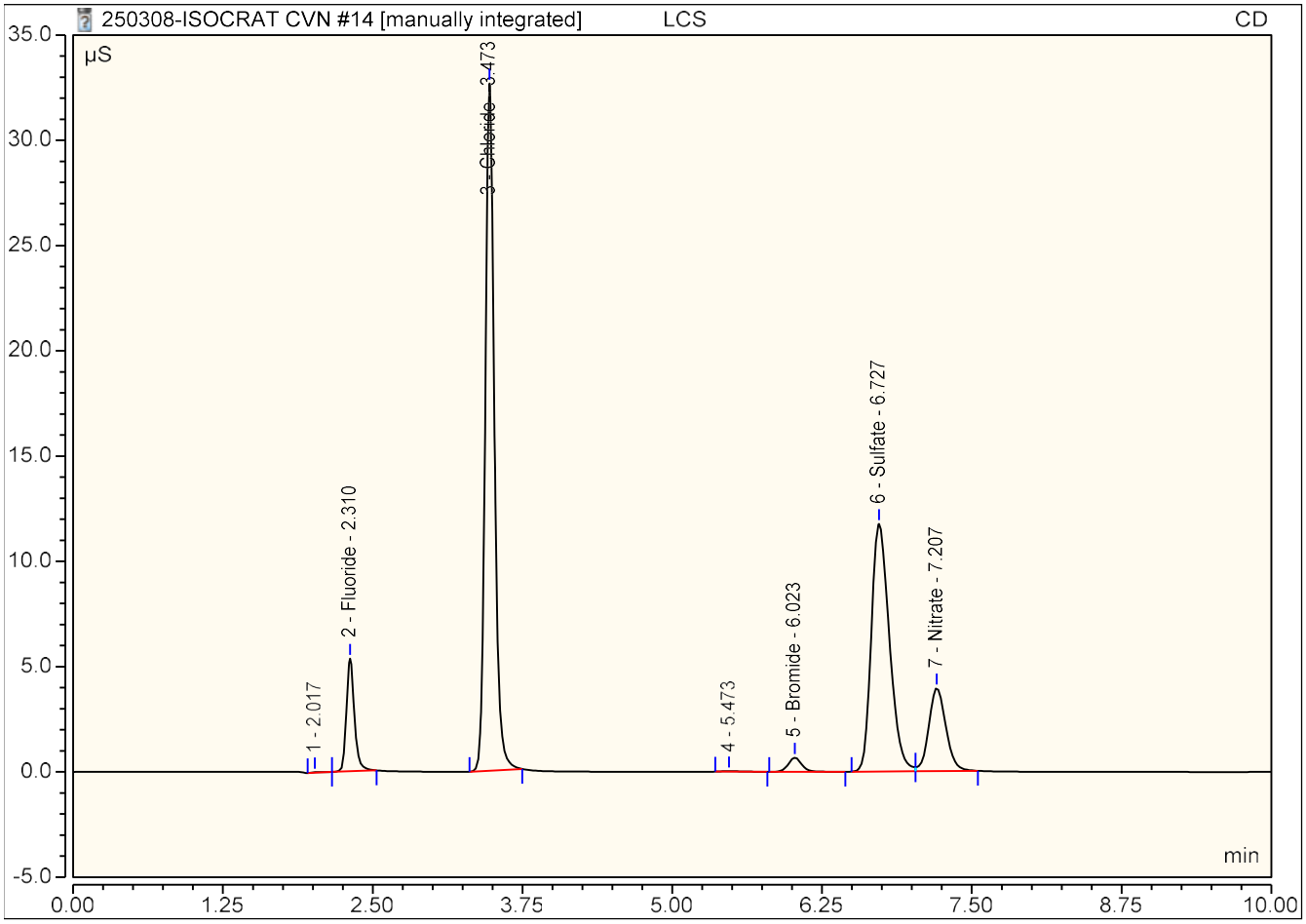
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB | 0.000 | 0.002 | 0.0312 |
| 5 | 3.47 | **Chloride** | BMB | 0.002 | 0.023 | 0.1516 |
| 7 | 6.80 | **Sulfate** | BMB | 0.001 | 0.005 | 0.3040 |
| **TOTAL:** | | | | 0.00 | 0.03 | 0.49 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **LCS** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 10:40** | *Run Time:* | **10.00** |

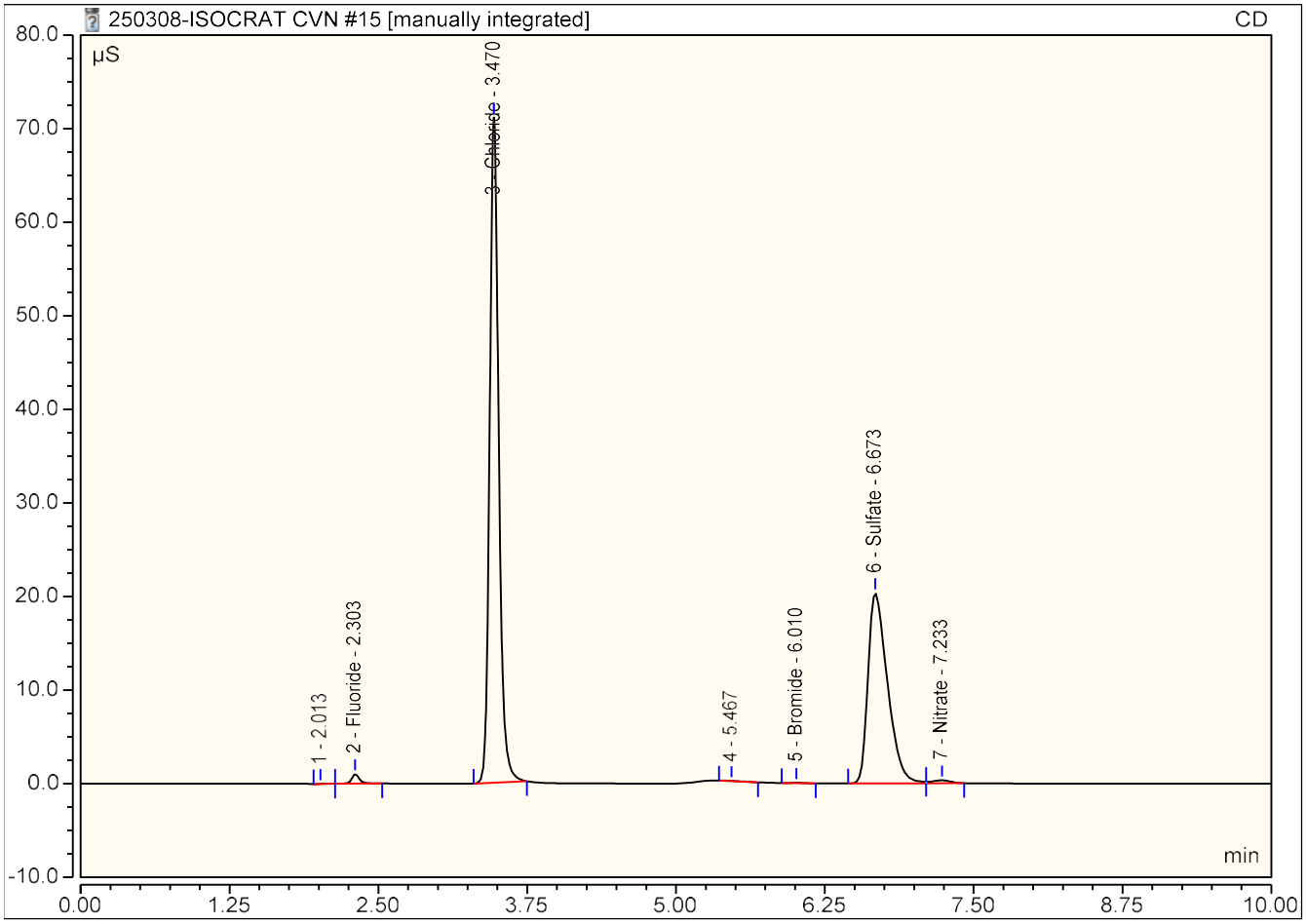
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.409 | 5.357 | 0.7695 |
| 3 | 3.47 | **Chloride** | BMB | 2.871 | 32.640 | 8.0377 |
| 5 | 6.02 | **Bromide** | BMB | 0.089 | 0.675 | 0.7365 |
| 6 | 6.73 | **Sulfate** | BM * | 2.054 | 11.765 | 7.8795 |
| 7 | 7.21 | **Nitrate** | MB* | 0.652 | 3.942 | 0.7594 |
| | | **TOTAL:** | | 6.07 | 54.38 | 18.18 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511919-01 BR** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 10:52** | *Run Time:* | **10.00** |

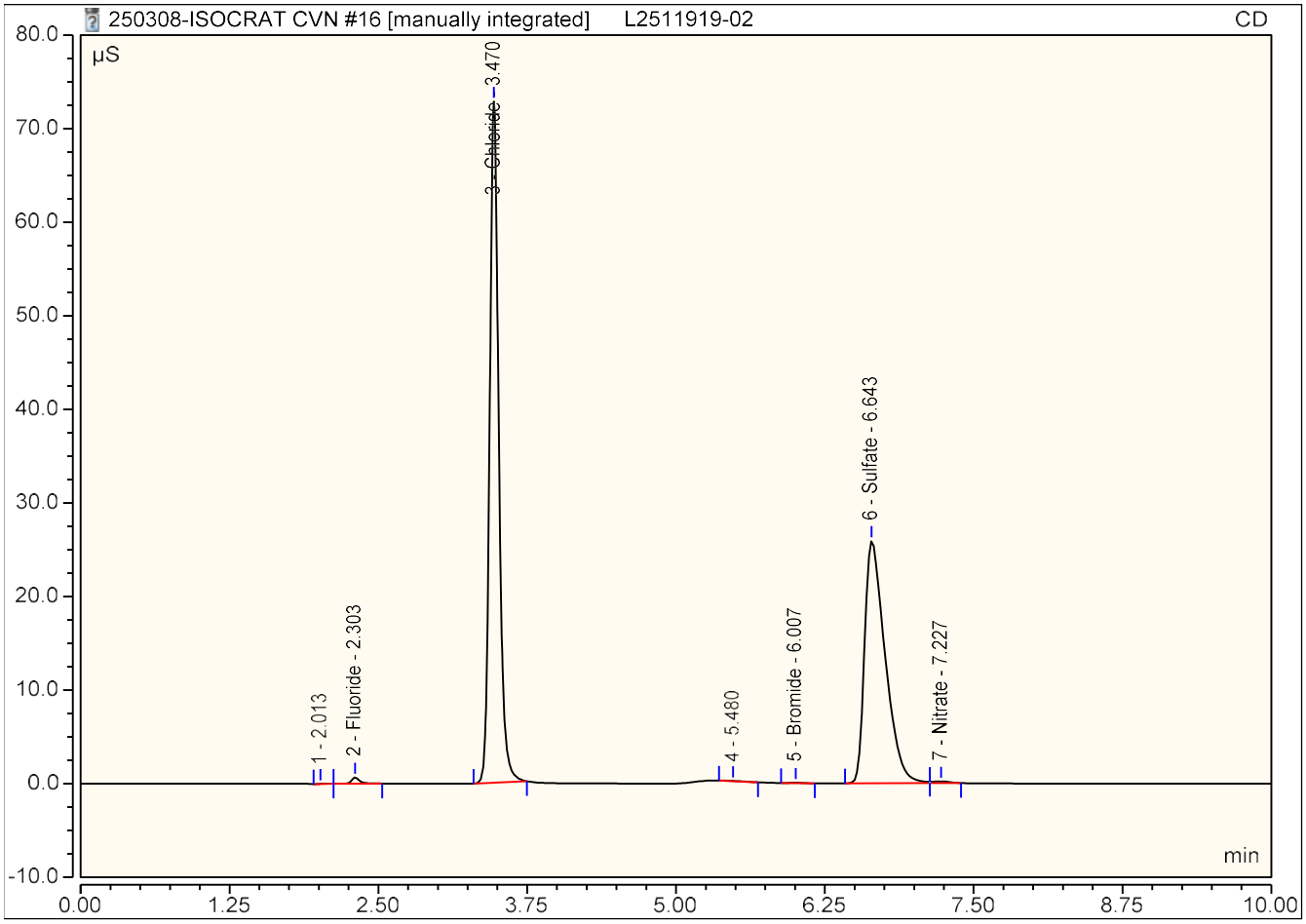
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.076 | 1.024 | 0.1677 |
| 3 | 3.47 | **Chloride** | BMB | 6.302 | 71.087 | 17.4715 |
| 5 | 6.01 | **Bromide** | BMB | 0.005 | 0.038 | 0.0599 |
| 6 | 6.67 | **Sulfate** | BM * | 3.855 | 20.353 | 14.5233 |
| 7 | 7.23 | **Nitrate** | MB* | 0.057 | 0.327 | 0.0894 |
| | | **TOTAL:** | | 10.29 | 92.83 | 32.31 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511919-02** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 11:04** | *Run Time:* | **10.00** |

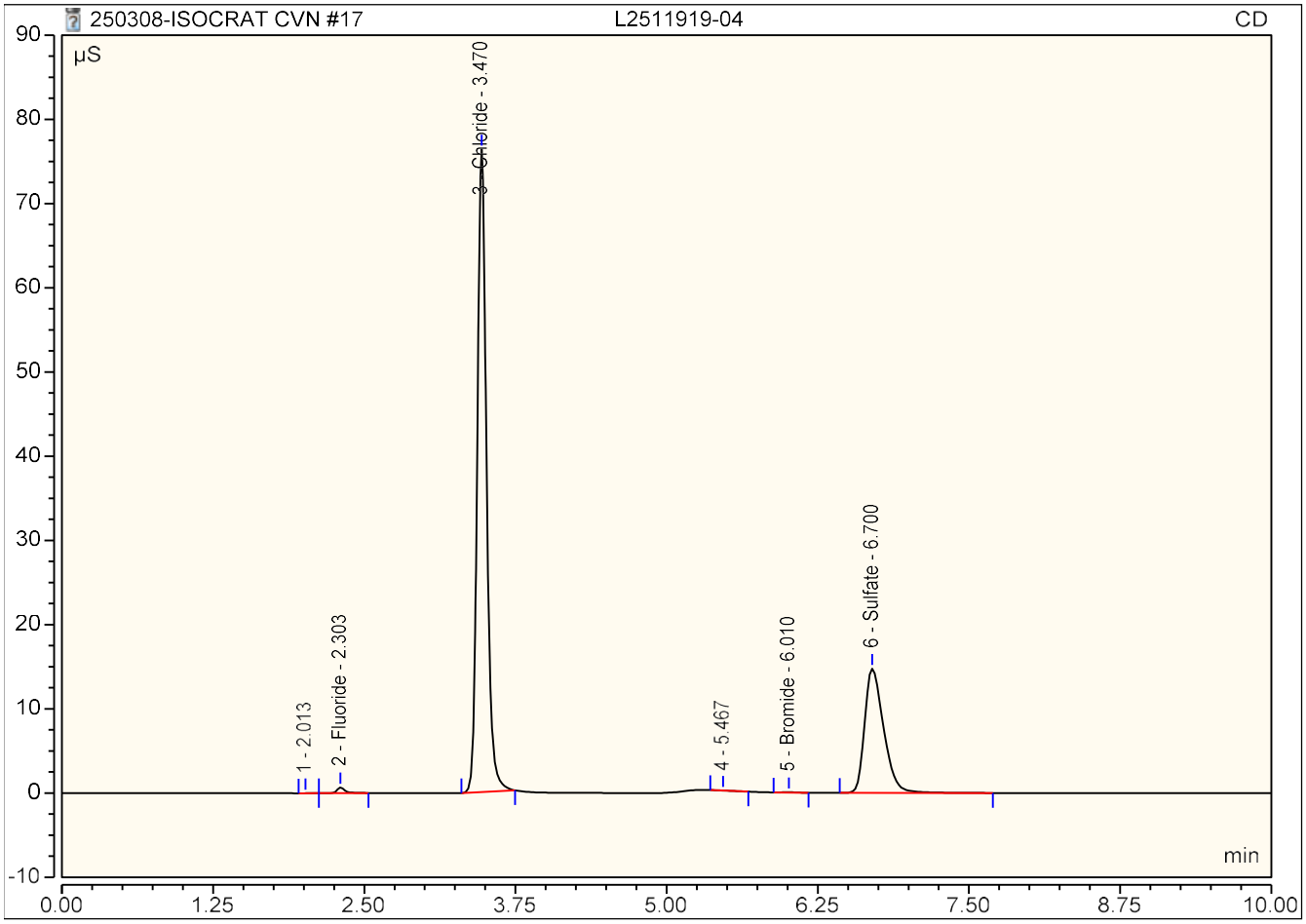
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.051 | 0.673 | 0.1222 |
| 3 | 3.47 | **Chloride** | BMB | 6.459 | 72.780 | 17.9024 |
| 5 | 6.01 | **Bromide** | BMB | 0.005 | 0.039 | 0.0610 |
| 6 | 6.64 | **Sulfate** | BM * | 5.195 | 25.919 | 19.4672 |
| 7 | 7.23 | **Nitrate** | MB* | 0.031 | 0.185 | 0.0601 |
| | | **TOTAL:** | | 11.74 | 99.60 | 37.61 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511919-04** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 11:16** | *Run Time:* | **10.00** |

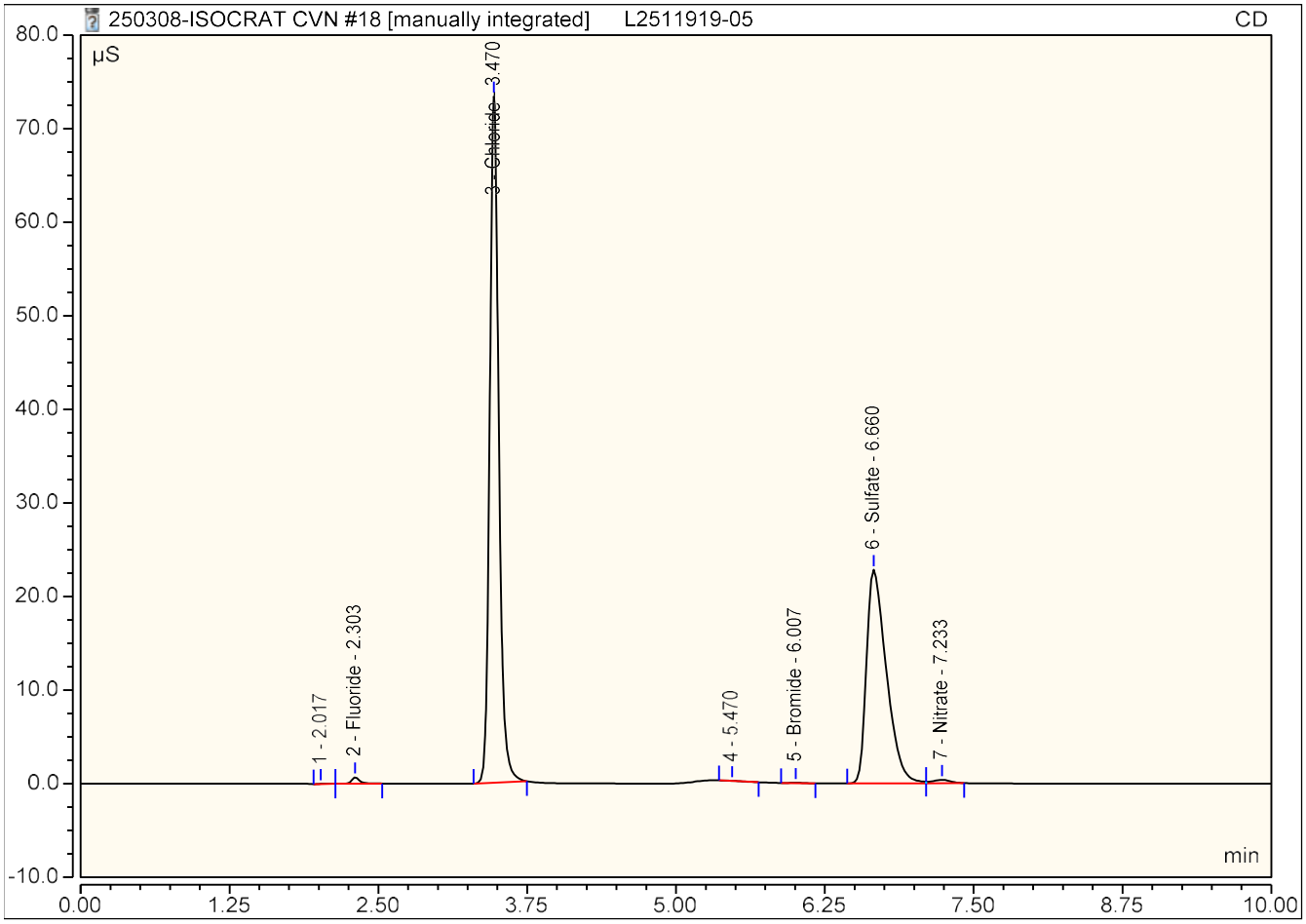
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.051 | 0.682 | 0.1230 |
| 3 | 3.47 | **Chloride** | BMB | 6.768 | 76.299 | 18.7538 |
| 5 | 6.01 | **Bromide** | BMB | 0.005 | 0.044 | 0.0669 |
| 6 | 6.70 | **Sulfate** | BMB | 2.693 | 14.763 | 10.2371 |
| **TOTAL:** | | | | 9.52 | 91.79 | 29.18 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511919-05** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 11:28** | *Run Time:* | **10.00** |

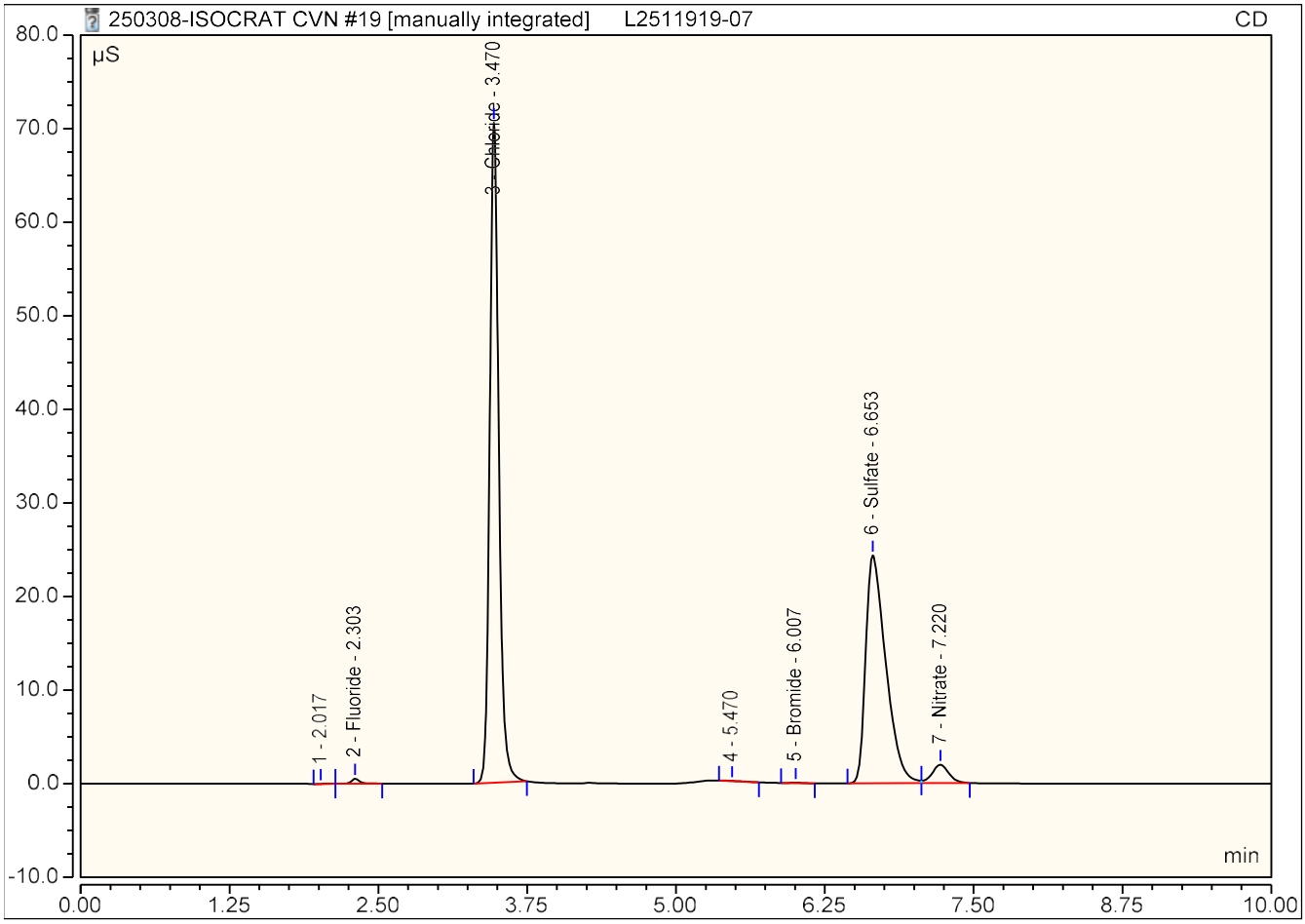
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.051 | 0.686 | 0.1236 |
| 3 | 3.47 | **Chloride** | BMB | 6.517 | 73.365 | 18.0632 |
| 5 | 6.01 | **Bromide** | BMB | 0.005 | 0.043 | 0.0656 |
| 6 | 6.66 | **Sulfate** | BM * | 4.424 | 22.815 | 16.6223 |
| 7 | 7.23 | **Nitrate** | MB* | 0.063 | 0.363 | 0.0965 |
| **TOTAL:** | | | | 11.06 | 97.27 | 34.97 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511919-07** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 11:40** | *Run Time:* | **10.00** |

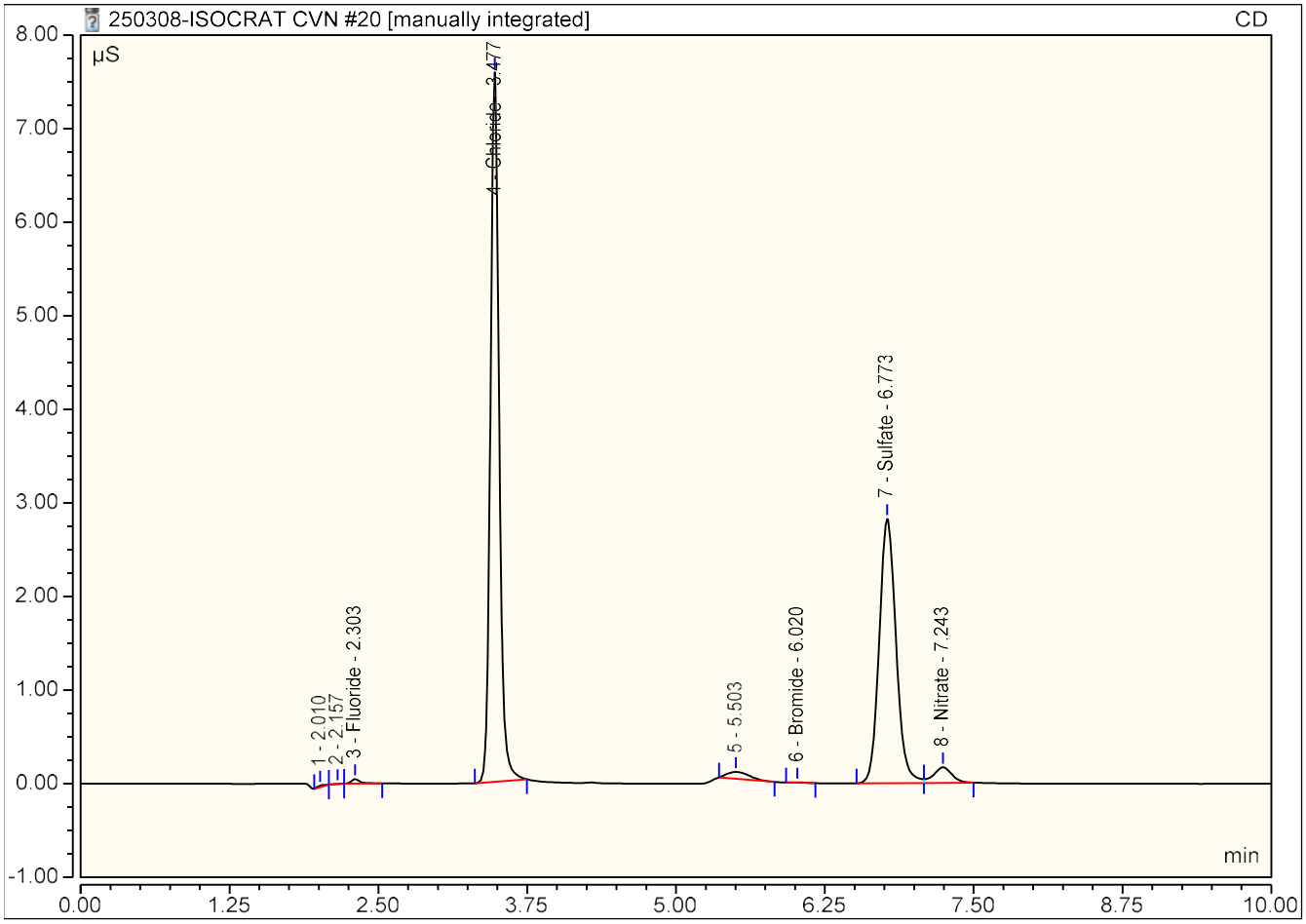
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.042 | 0.547 | 0.1060 |
| 3 | 3.47 | **Chloride** | BMB | 6.260 | 70.526 | 17.3561 |
| 5 | 6.01 | **Bromide** | BMB | 0.005 | 0.039 | 0.0612 |
| 6 | 6.65 | **Sulfate** | BM * | 4.779 | 24.353 | 17.9333 |
| 7 | 7.22 | **Nitrate** | MB* | 0.322 | 1.963 | 0.3883 |
| | | **TOTAL:** | | 11.41 | 97.43 | 35.84 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **XL2511919-07; 10X** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 11:52** | *Run Time:* | **10.00** |

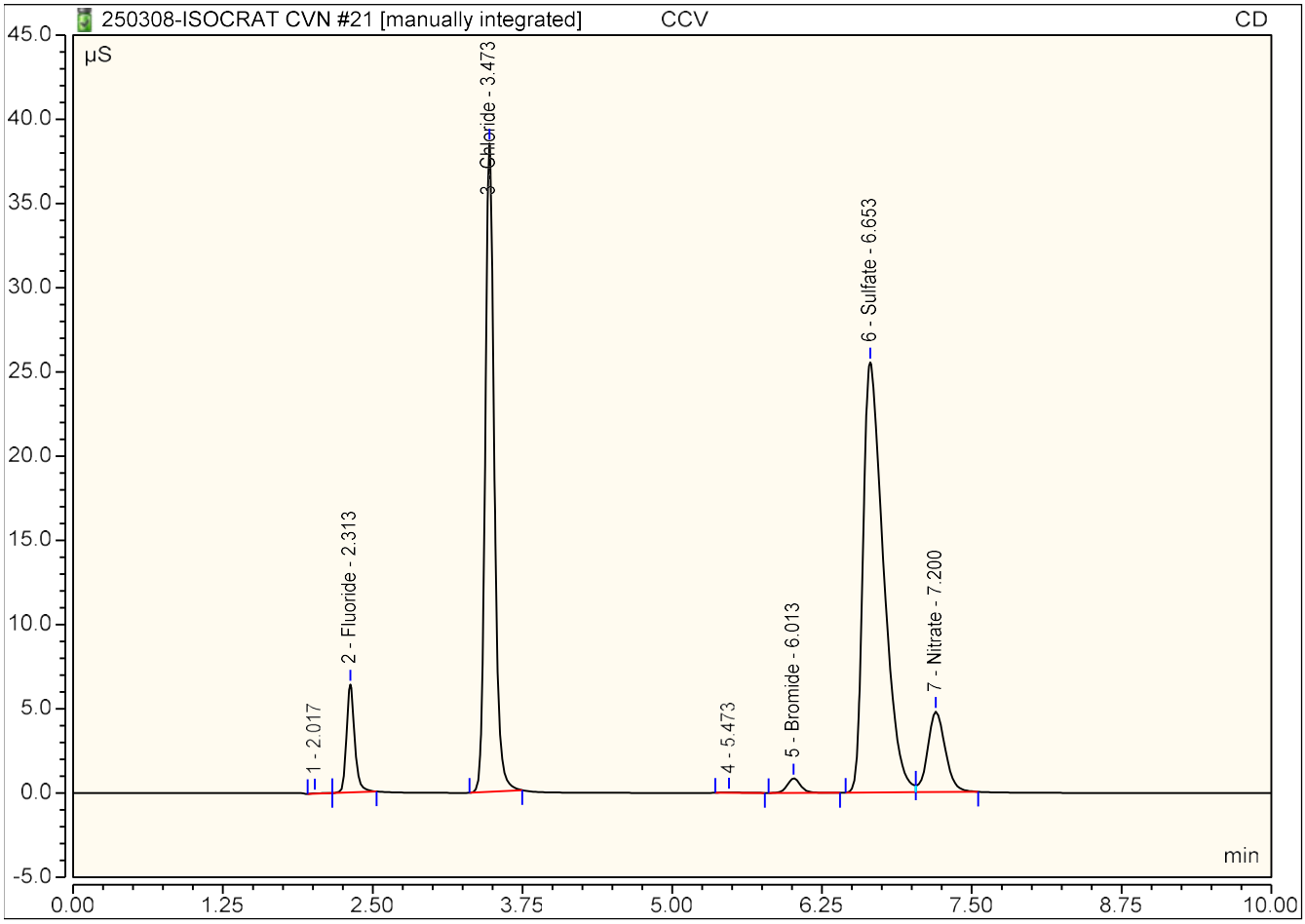
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB | 0.004 | 0.049 | 0.3827 |
| 4 | 3.48 | **Chloride** | BMB | 0.646 | 7.584 | 19.2271 |
| 6 | 6.02 | **Bromide** | BMB | 0.000 | 0.004 | 0.2718 |
| 7 | 6.77 | **Sulfate** | BM * | 0.462 | 2.826 | 20.0633 |
| 8 | 7.24 | **Nitrate** | MB* | 0.029 | 0.166 | 0.5851 |
| **TOTAL:** | | | | 1.14 | 10.63 | 40.53 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 12:05** | *Run Time:* | **10.00** |

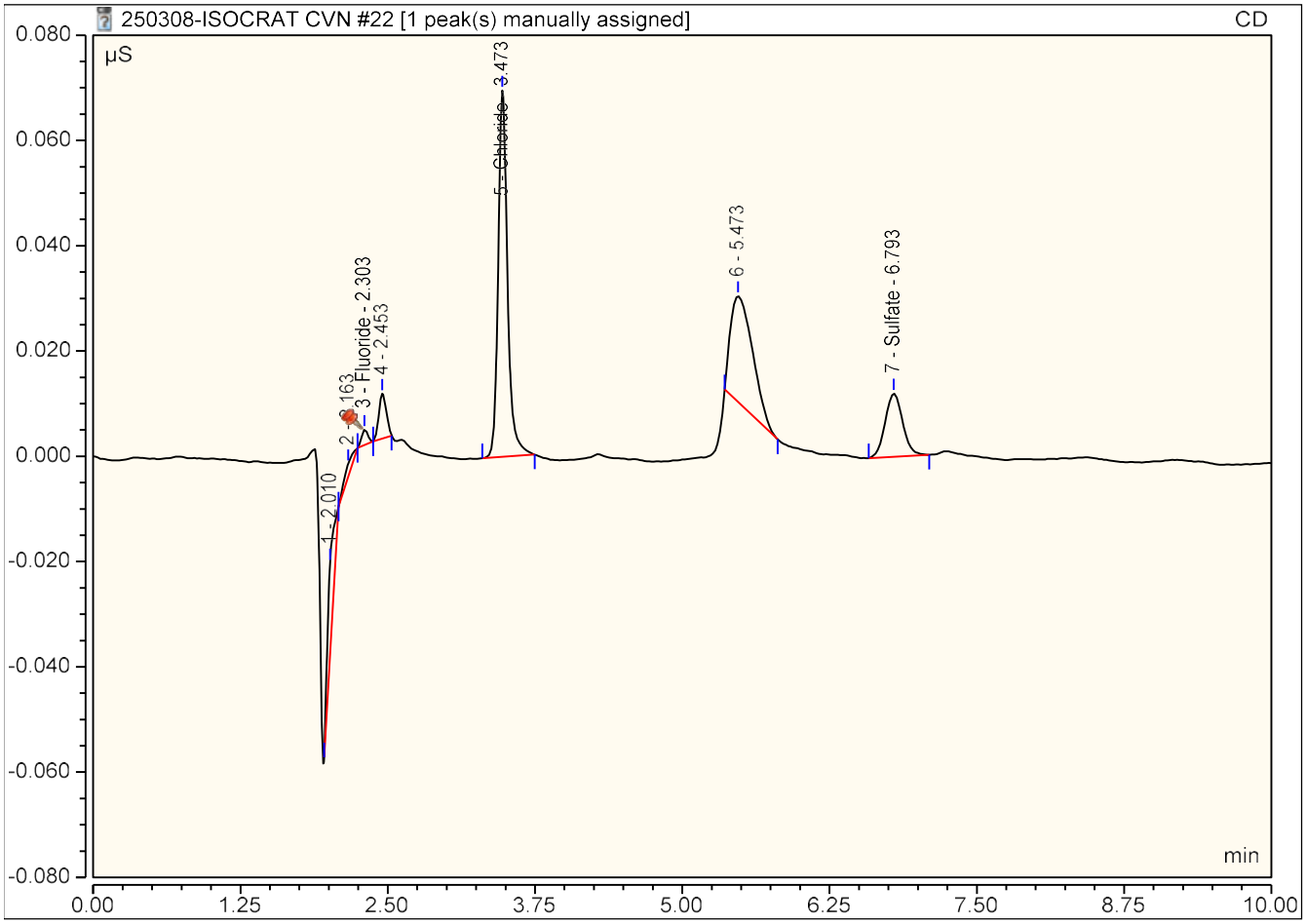
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.498 | 6.406 | 0.9305 |
| 3 | 3.47 | **Chloride** | BMB | 3.393 | 38.502 | 9.4750 |
| 5 | 6.01 | **Bromide** | BMB | 0.112 | 0.865 | 0.9218 |
| 6 | 6.65 | **Sulfate** | BM * | 5.054 | 25.540 | 18.9491 |
| 7 | 7.20 | **Nitrate** | MB* | 0.813 | 4.779 | 0.9407 |
| | | **TOTAL:** | | 9.87 | 76.09 | 31.22 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 12:17** | *Run Time:* | **10.00** |

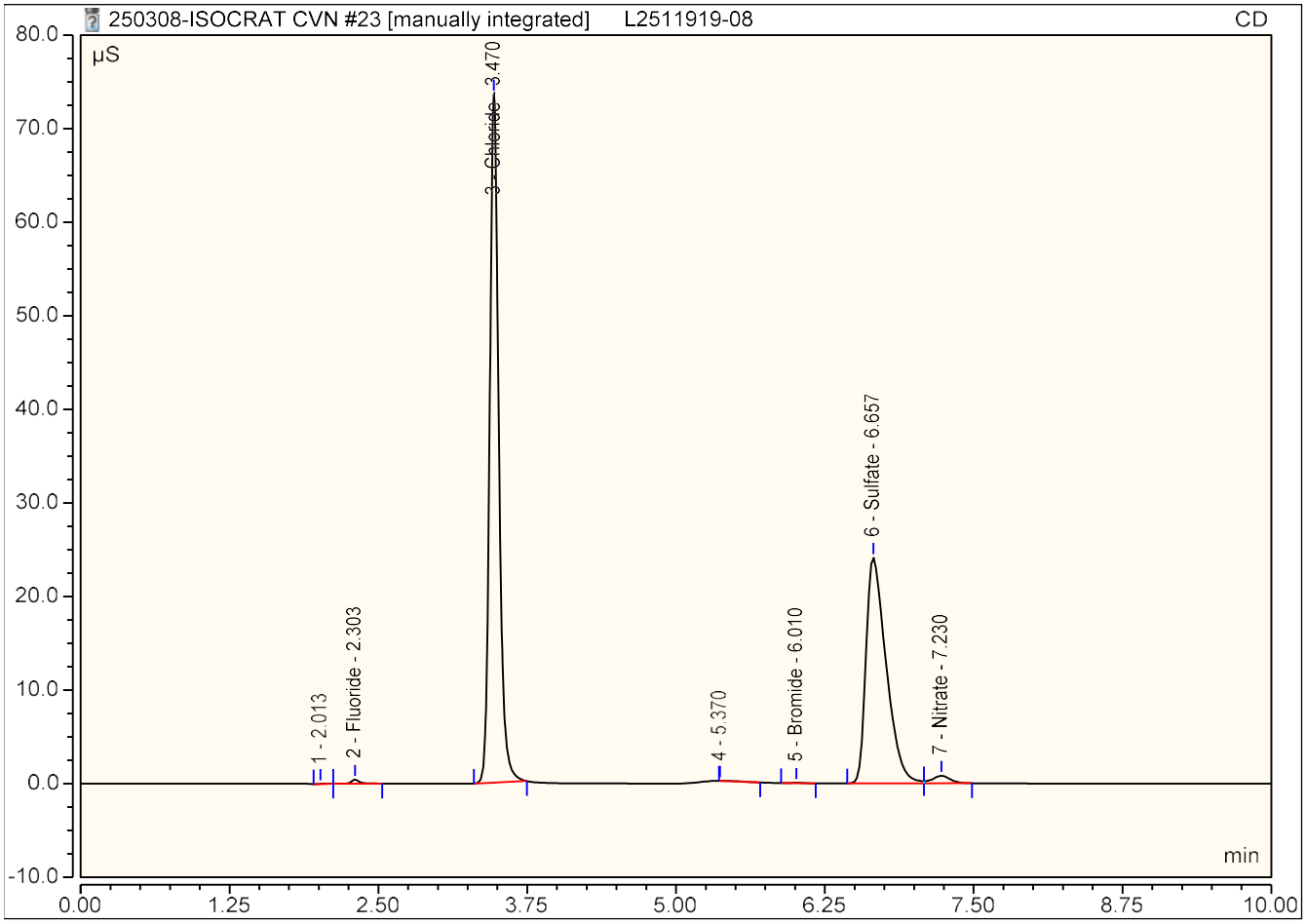
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB^ | 0.000 | 0.003 | 0.0313 |
| 5 | 3.47 | **Chloride** | BMB | 0.006 | 0.070 | 0.1635 |
| 7 | 6.79 | **Sulfate** | BMB | 0.002 | 0.012 | 0.3083 |
| **TOTAL:** | | | | 0.01 | 0.08 | 0.50 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511919-08** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 12:29** | *Run Time:* | **10.00** |

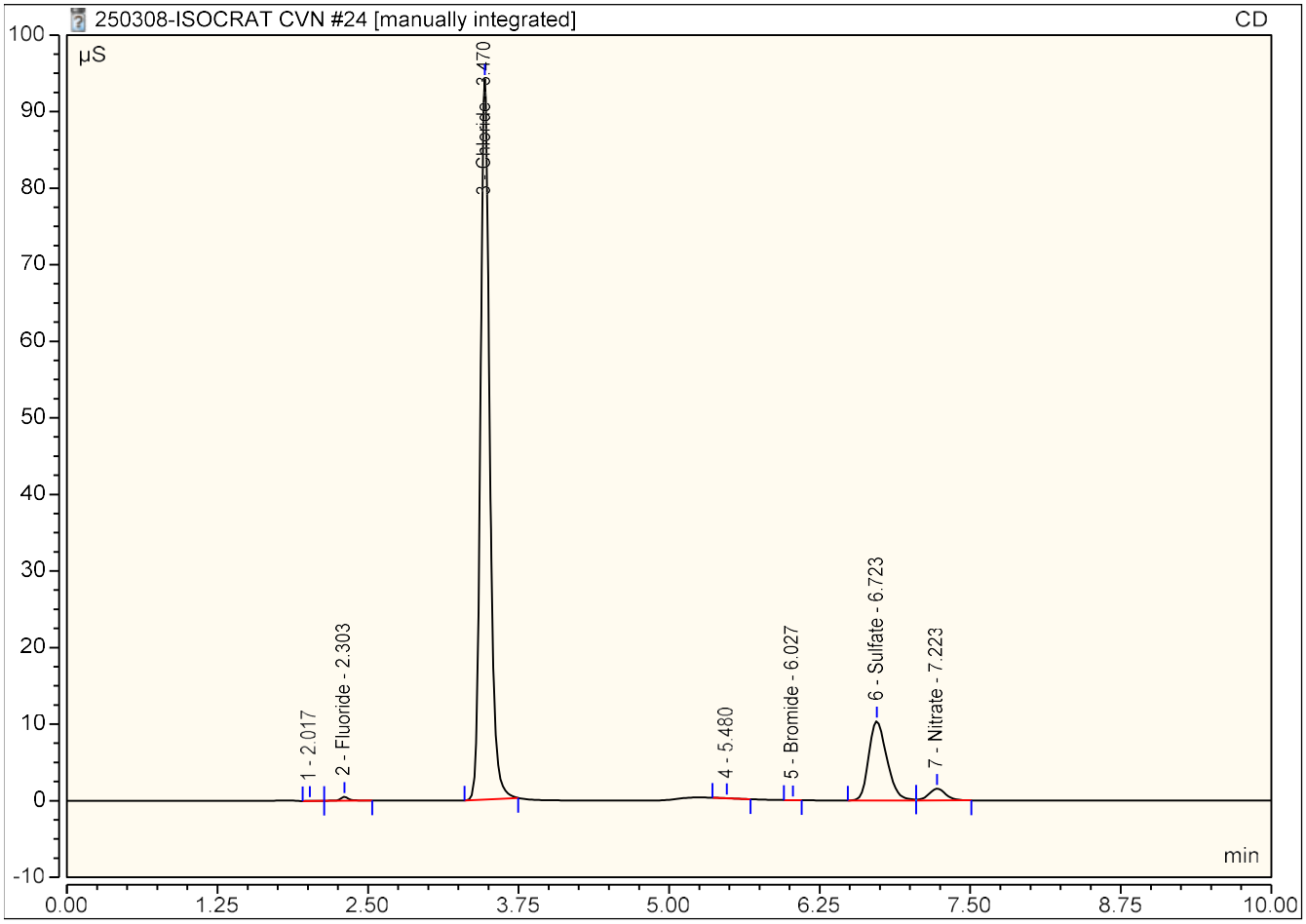
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.034 | 0.438 | 0.0921 |
| 3 | 3.47 | **Chloride** | BMB | 6.543 | 73.538 | 18.1338 |
| 5 | 6.01 | **Bromide** | BMB | 0.005 | 0.041 | 0.0629 |
| 6 | 6.66 | **Sulfate** | BM * | 4.740 | 24.118 | 17.7895 |
| 7 | 7.23 | **Nitrate** | MB* | 0.140 | 0.814 | 0.1835 |
| **TOTAL:** | | | | 11.46 | 98.95 | 36.26 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511972-16 CL SO4 BR** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 12:41** | *Run Time:* | **10.00** |

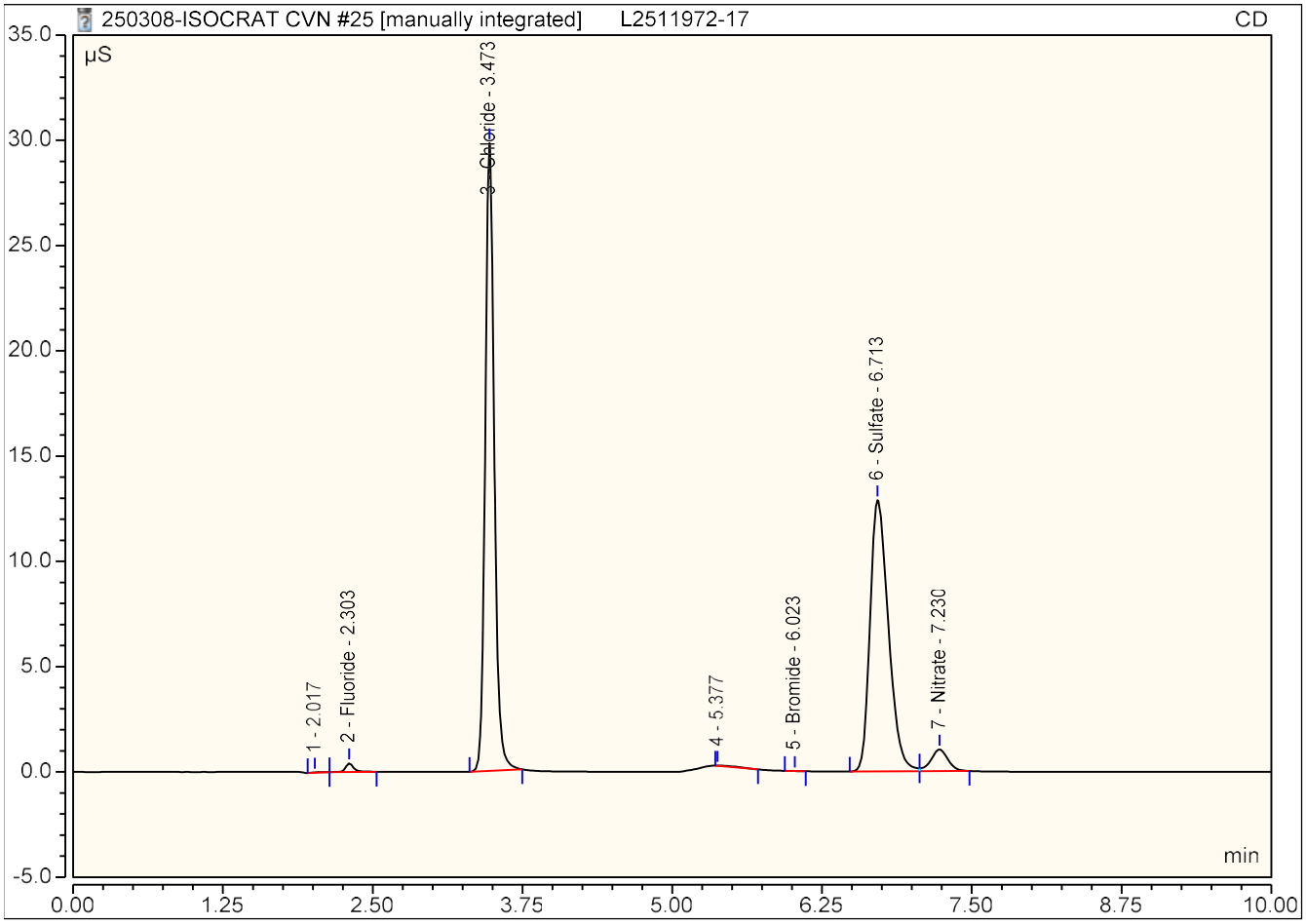
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.040 | 0.517 | 0.1023 |
| 3 | 3.47 | **Chloride** | BMB | 8.395 | 94.160 | 23.2246 |
| 5 | 6.03 | **Bromide** | BMB | 0.000 | 0.002 | 0.0245 |
| 6 | 6.72 | **Sulfate** | BM * | 1.807 | 10.351 | 6.9662 |
| 7 | 7.22 | **Nitrate** | MB* | 0.249 | 1.537 | 0.3063 |
| | | **TOTAL:** | | 10.49 | 106.57 | 30.62 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511972-17** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 12:53** | *Run Time:* | **10.00** |

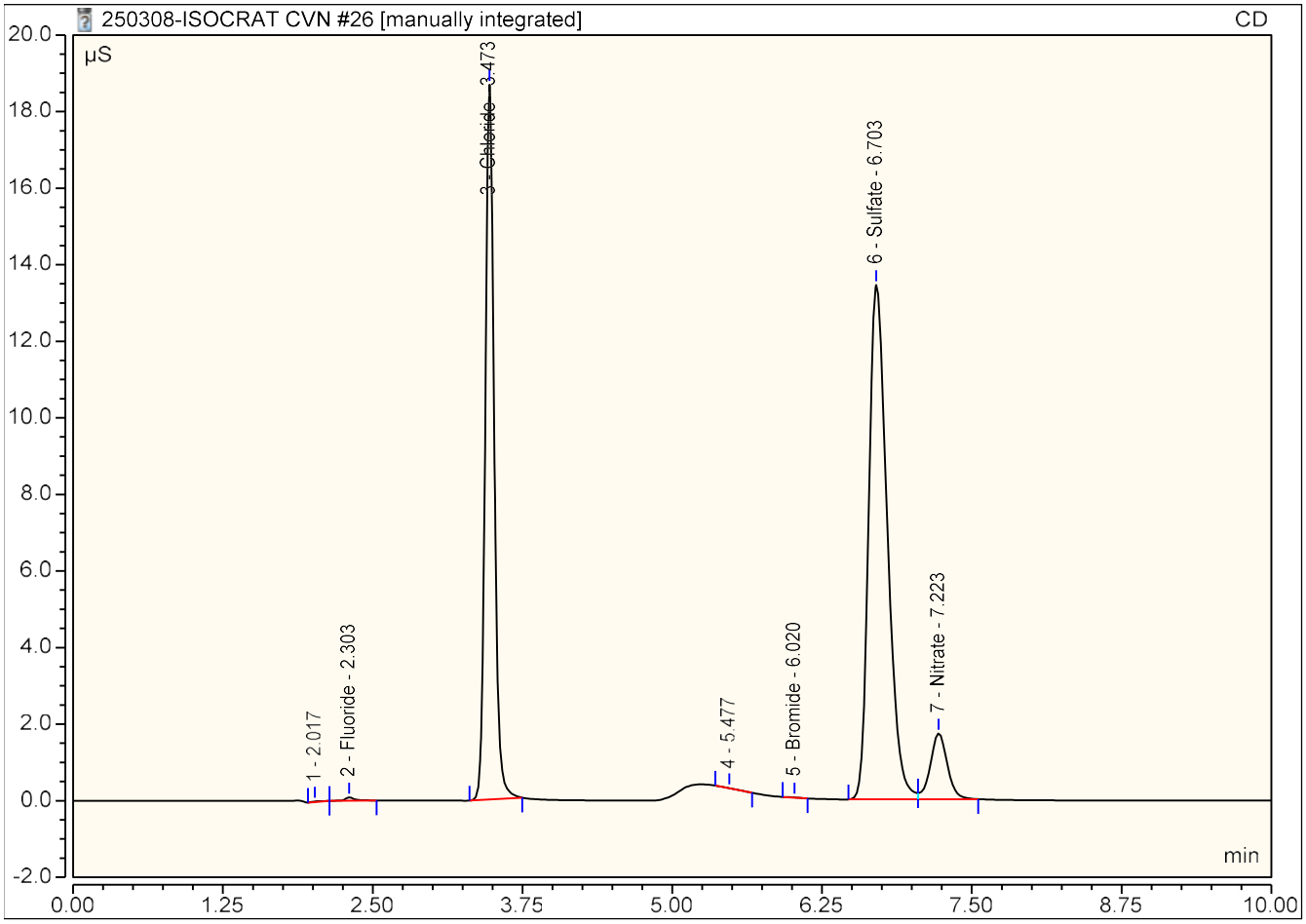
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.032 | 0.416 | 0.0888 |
| 3 | 3.47 | **Chloride** | BMB | 2.607 | 29.819 | 7.3134 |
| 5 | 6.02 | **Bromide** | BMB | 0.000 | 0.002 | 0.0251 |
| 6 | 6.71 | **Sulfate** | BM * | 2.284 | 12.883 | 8.7276 |
| 7 | 7.23 | **Nitrate** | MB* | 0.170 | 1.036 | 0.2170 |
| **TOTAL:** | | | | 5.09 | 44.16 | 16.37 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511944-01 BR** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 13:05** | *Run Time:* | **10.00** |

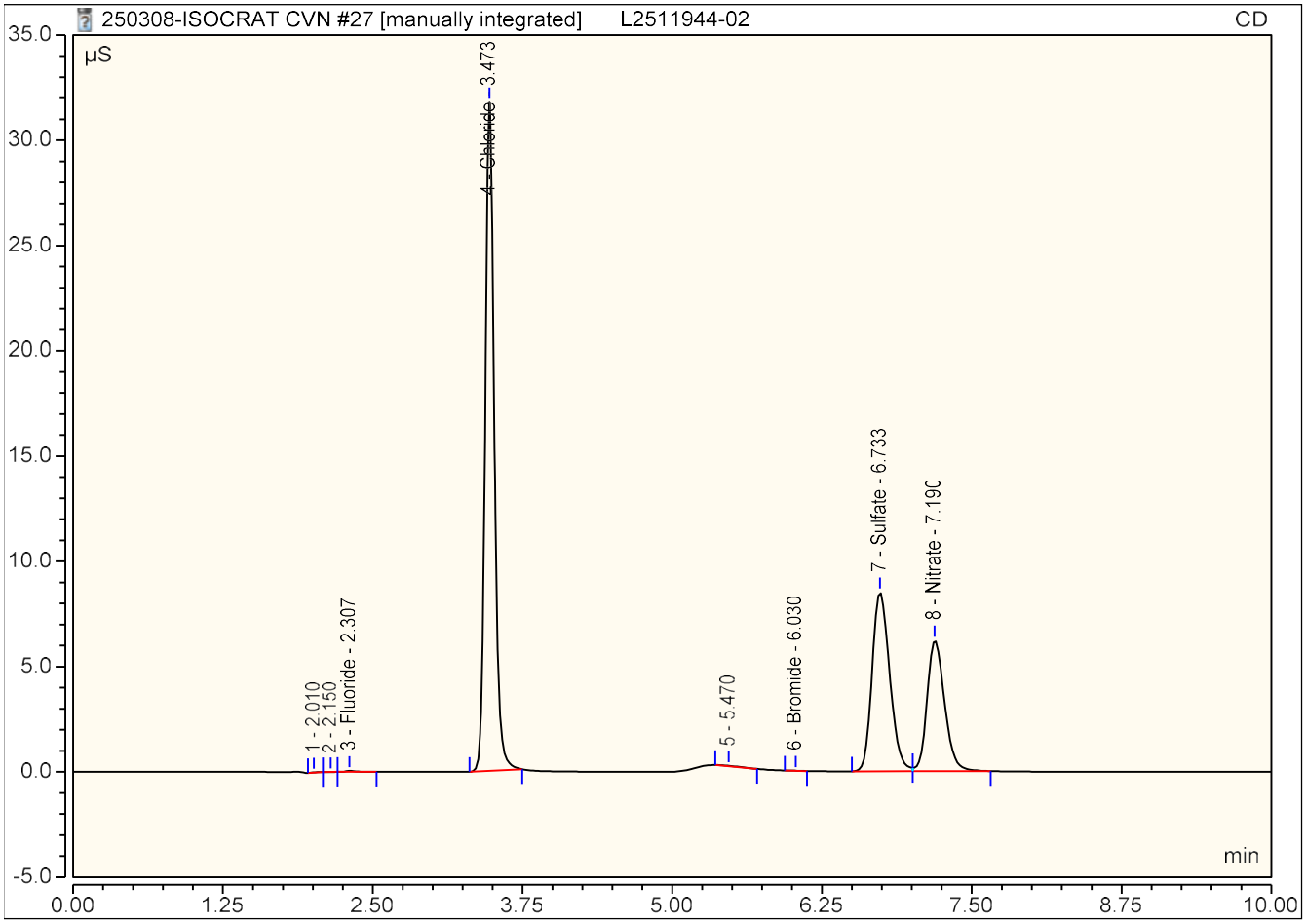
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.008 | 0.087 | 0.0453 |
| 3 | 3.47 | **Chloride** | BMB | 1.607 | 18.673 | 4.5652 |
| 5 | 6.02 | **Bromide** | BMB | 0.001 | 0.007 | 0.0292 |
| 6 | 6.70 | **Sulfate** | BM * | 2.405 | 13.438 | 9.1750 |
| 7 | 7.22 | **Nitrate** | MB* | 0.283 | 1.720 | 0.3441 |
| | | **TOTAL:** | | 4.30 | 33.92 | 14.16 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511944-02** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 13:17** | *Run Time:* | **10.00** |

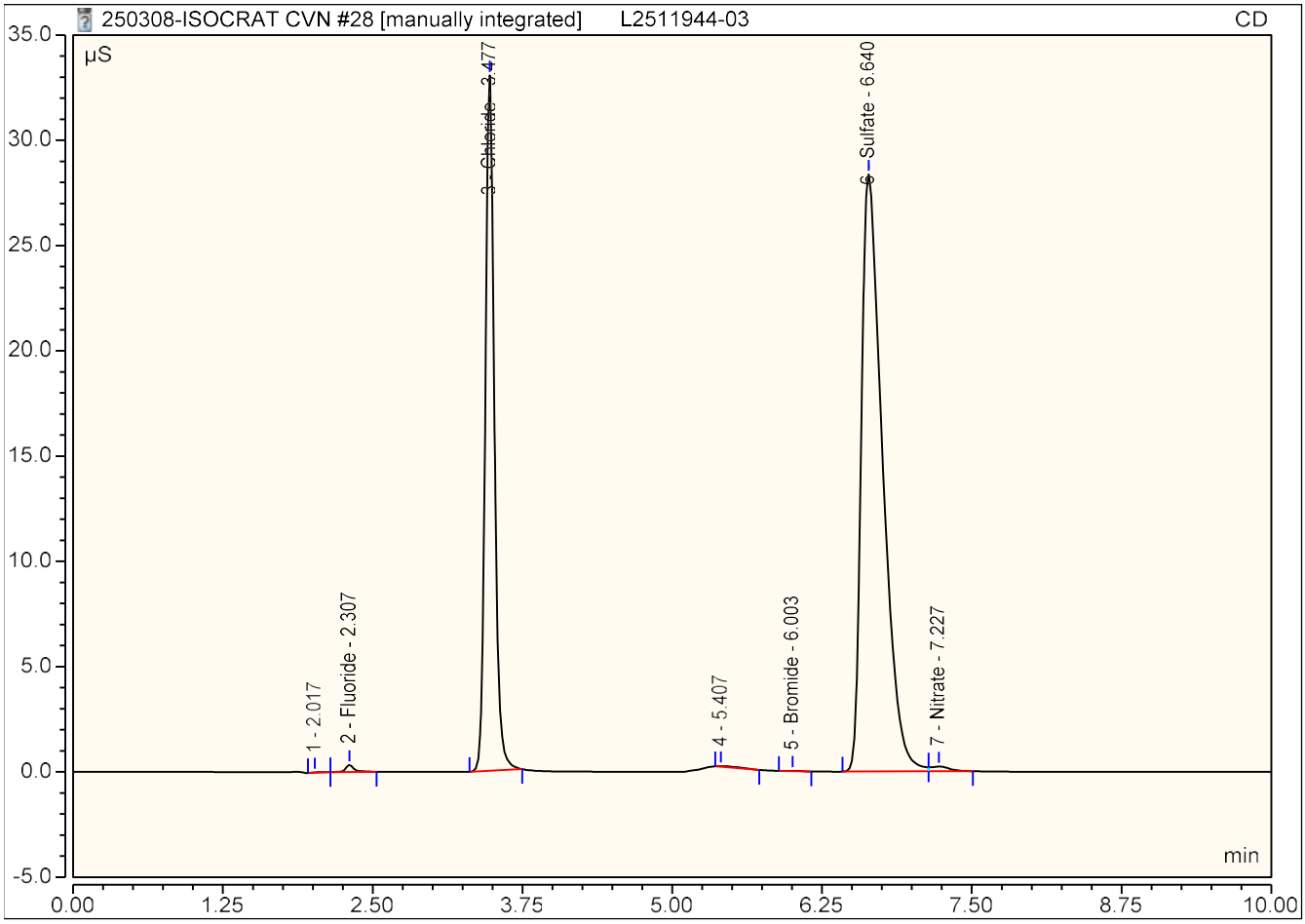
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.31 | **Fluoride** | BMB | 0.005 | 0.050 | 0.0396 |
| 4 | 3.47 | **Chloride** | BMB | 2.780 | 31.751 | 7.7902 |
| 6 | 6.03 | **Bromide** | BMB | 0.000 | 0.003 | 0.0256 |
| 7 | 6.73 | **Sulfate** | BM * | 1.448 | 8.514 | 5.6416 |
| 8 | 7.19 | **Nitrate** | MB* | 1.051 | 6.218 | 1.2095 |
| | | **TOTAL:** | | 5.28 | 46.54 | 14.71 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511944-03** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 13:29** | *Run Time:* | **10.00** |

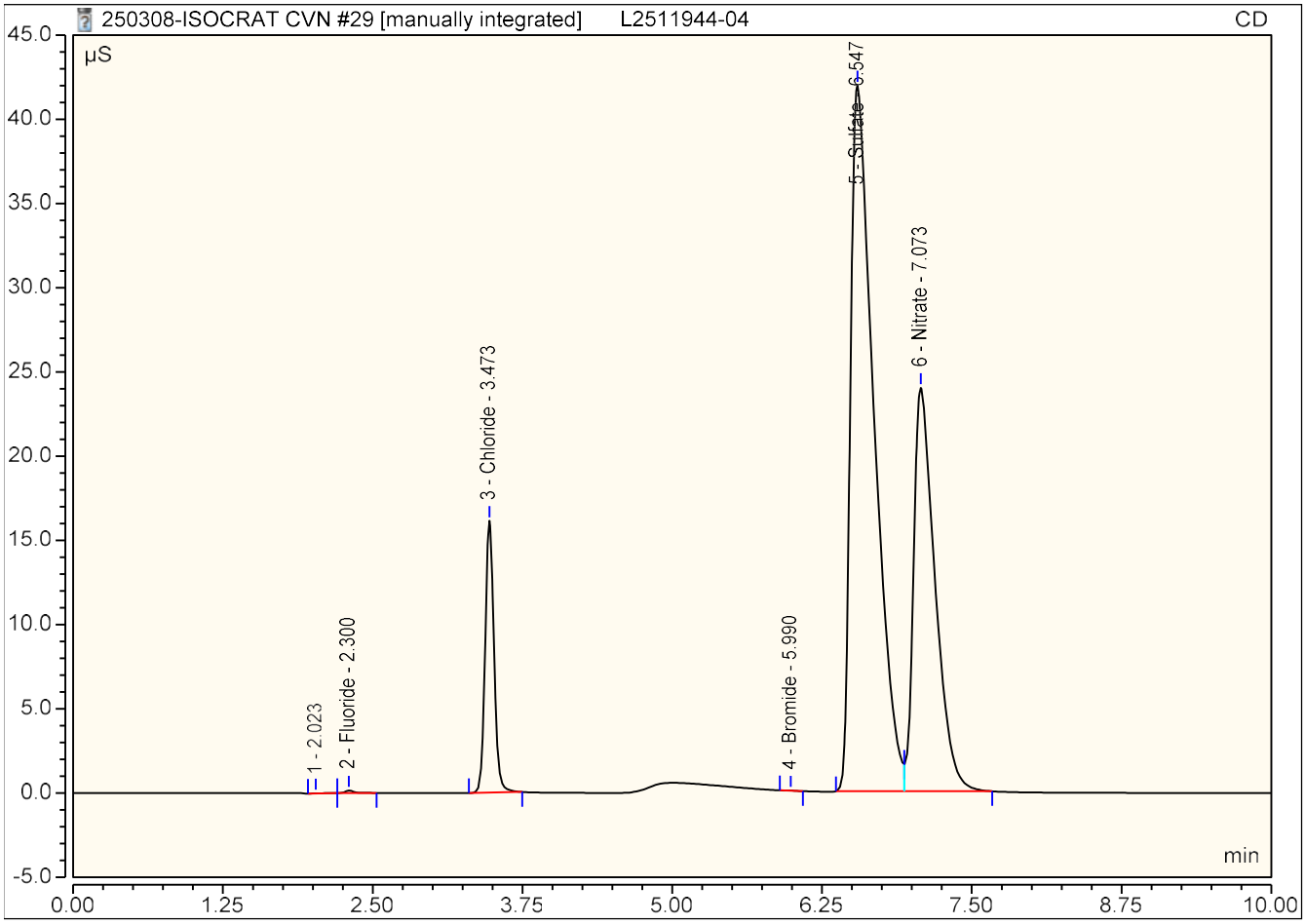
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.027 | 0.337 | 0.0794 |
| 3 | 3.48 | **Chloride** | BMB | 2.894 | 33.023 | 8.1027 |
| 5 | 6.00 | **Bromide** | BMB | 0.002 | 0.020 | 0.0424 |
| 6 | 6.64 | **Sulfate** | BM * | 5.806 | 28.360 | 21.7203 |
| 7 | 7.23 | **Nitrate** | MB* | 0.041 | 0.225 | 0.0718 |
| | | **TOTAL:** | | 8.77 | 61.96 | 30.02 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511944-04** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 13:41** | *Run Time:* | **10.00** |

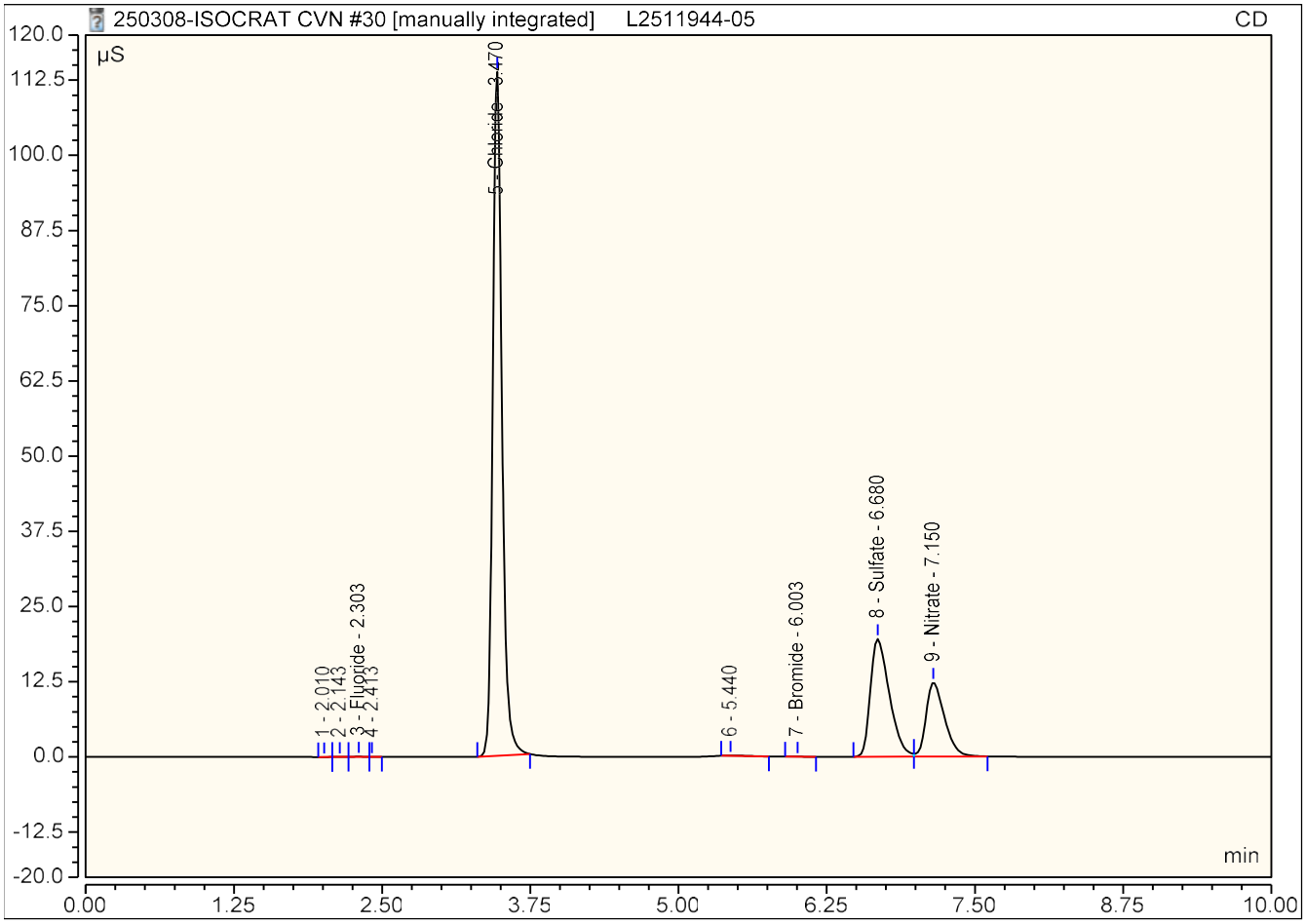
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.013 | 0.154 | 0.0535 |
| 3 | 3.47 | **Chloride** | BMB | 1.373 | 16.129 | 3.9198 |
| 4 | 5.99 | **Bromide** | BMB | 0.001 | 0.006 | 0.0285 |
| 5 | 6.55 | **Sulfate** | BM * | 9.568 | 41.895 | 35.6035 |
| 6 | 7.07 | **Nitrate** | MB* | 4.952 | 23.952 | 5.6040 |
| | | **TOTAL:** | | 15.91 | 82.14 | 45.21 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511944-05** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 13:53** | *Run Time:* | **10.00** |

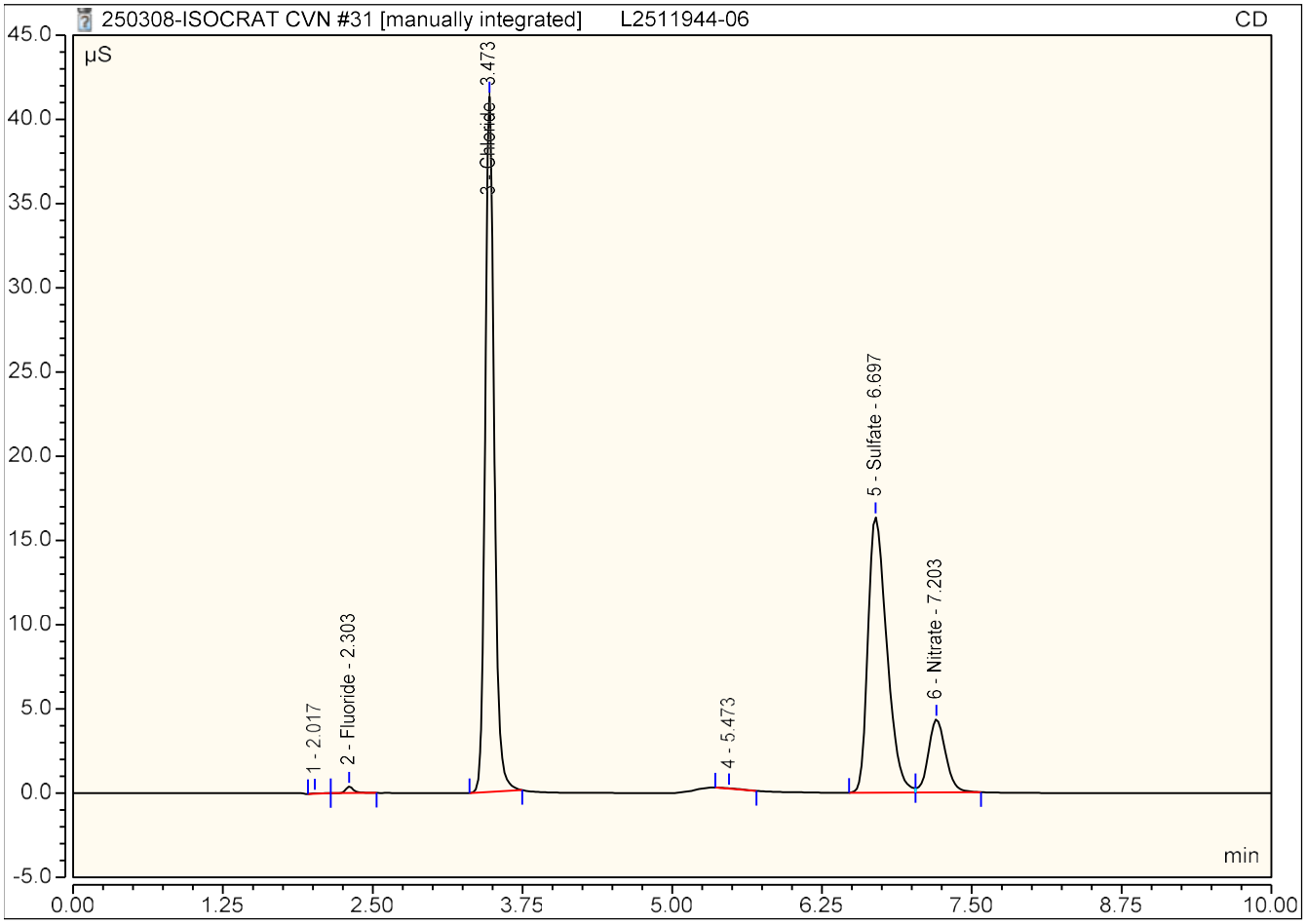
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB | 0.004 | 0.064 | 0.0386 |
| 5 | 3.47 | **Chloride** | BMB | 10.238 | 113.672 | 28.2941 |
| 7 | 6.00 | **Bromide** | BMB | 0.002 | 0.013 | 0.0359 |
| 8 | 6.68 | **Sulfate** | BM * | 3.620 | 19.562 | 13.6563 |
| 9 | 7.15 | **Nitrate** | MB* | 2.225 | 12.307 | 2.5317 |
| | | **TOTAL:** | | 16.09 | 145.62 | 44.56 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511944-06** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 14:05** | *Run Time:* | **10.00** |

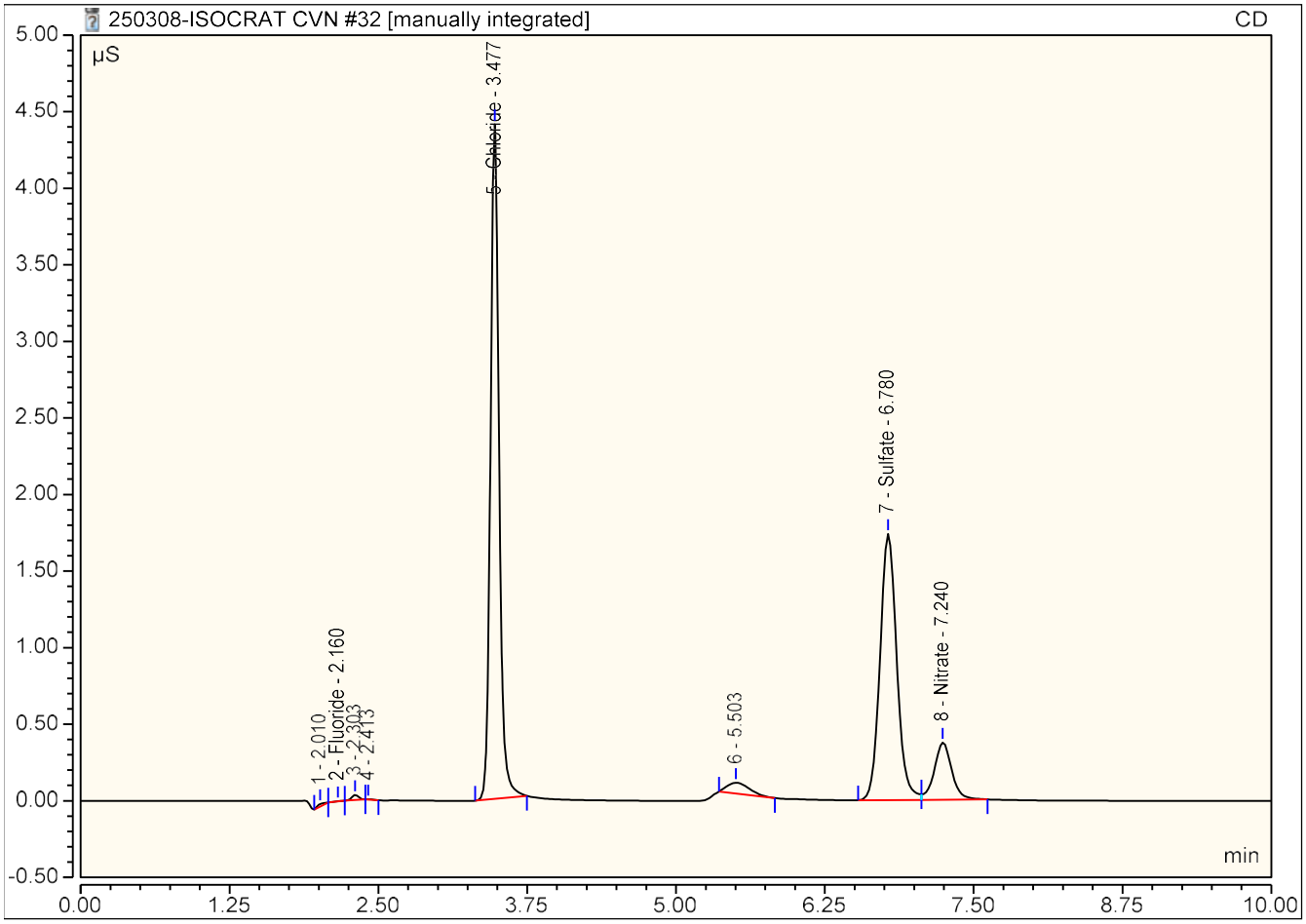
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.031 | 0.393 | 0.0865 |
| 3 | 3.47 | **Chloride** | BMB | 3.623 | 41.295 | 10.1057 |
| 5 | 6.70 | **Sulfate** | BM * | 2.981 | 16.360 | 11.2995 |
| 6 | 7.20 | **Nitrate** | MB* | 0.726 | 4.331 | 0.8428 |
| **TOTAL:** | | | | 7.36 | 62.38 | 22.33 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **XL2511944-06; 10X** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 14:17** | *Run Time:* | **10.00** |

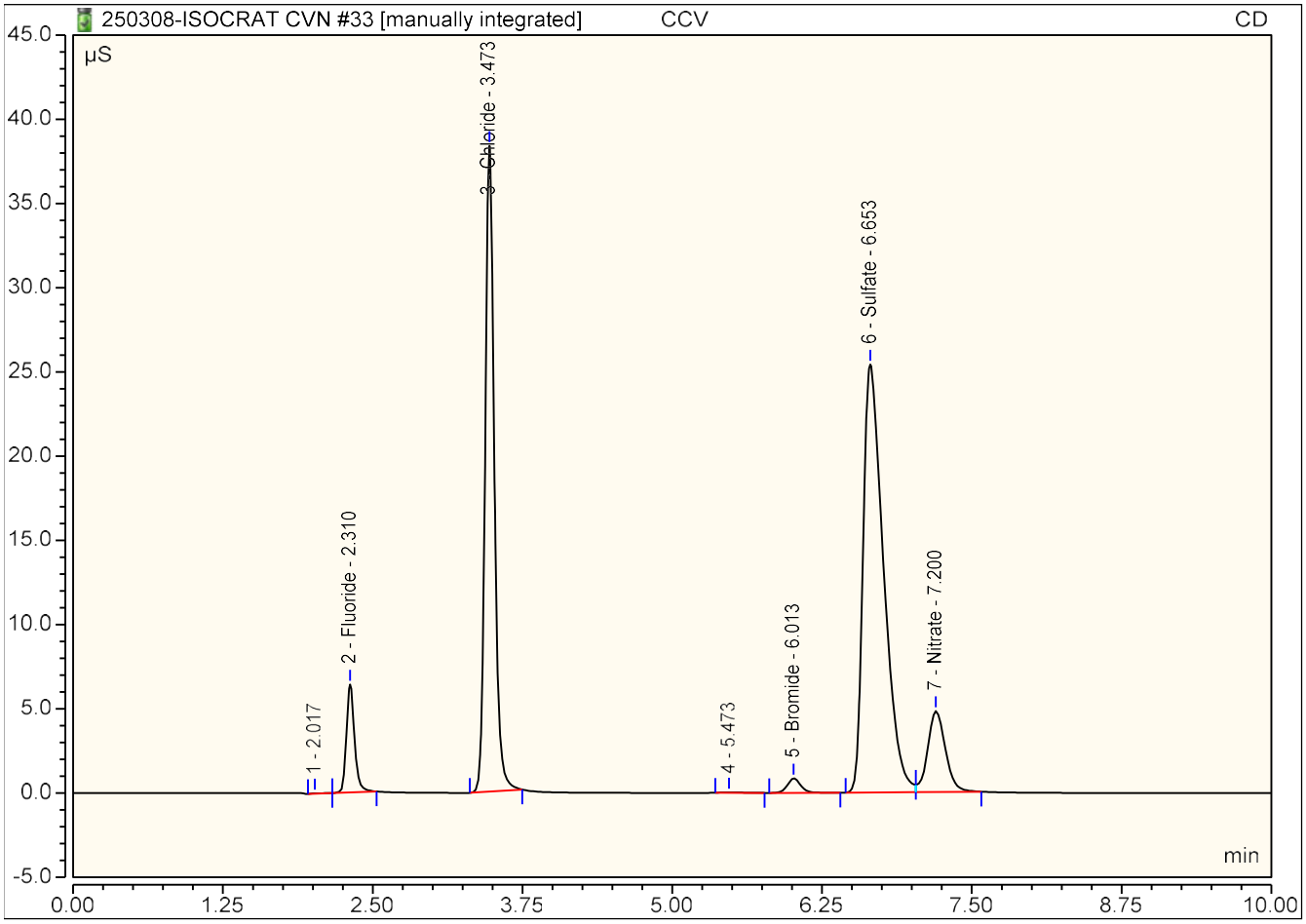
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.16 | **Fluoride** | BMB | 0.000 | 0.001 | 0.3115 |
| 5 | 3.48 | **Chloride** | BMB | 0.371 | 4.406 | 11.6611 |
| 7 | 6.78 | **Sulfate** | BM * | 0.282 | 1.739 | 13.4165 |
| 8 | 7.24 | **Nitrate** | MB* | 0.064 | 0.374 | 0.9711 |
| **TOTAL:** | | | | 0.72 | 6.52 | 26.36 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 14:30** | *Run Time:* | **10.00** |

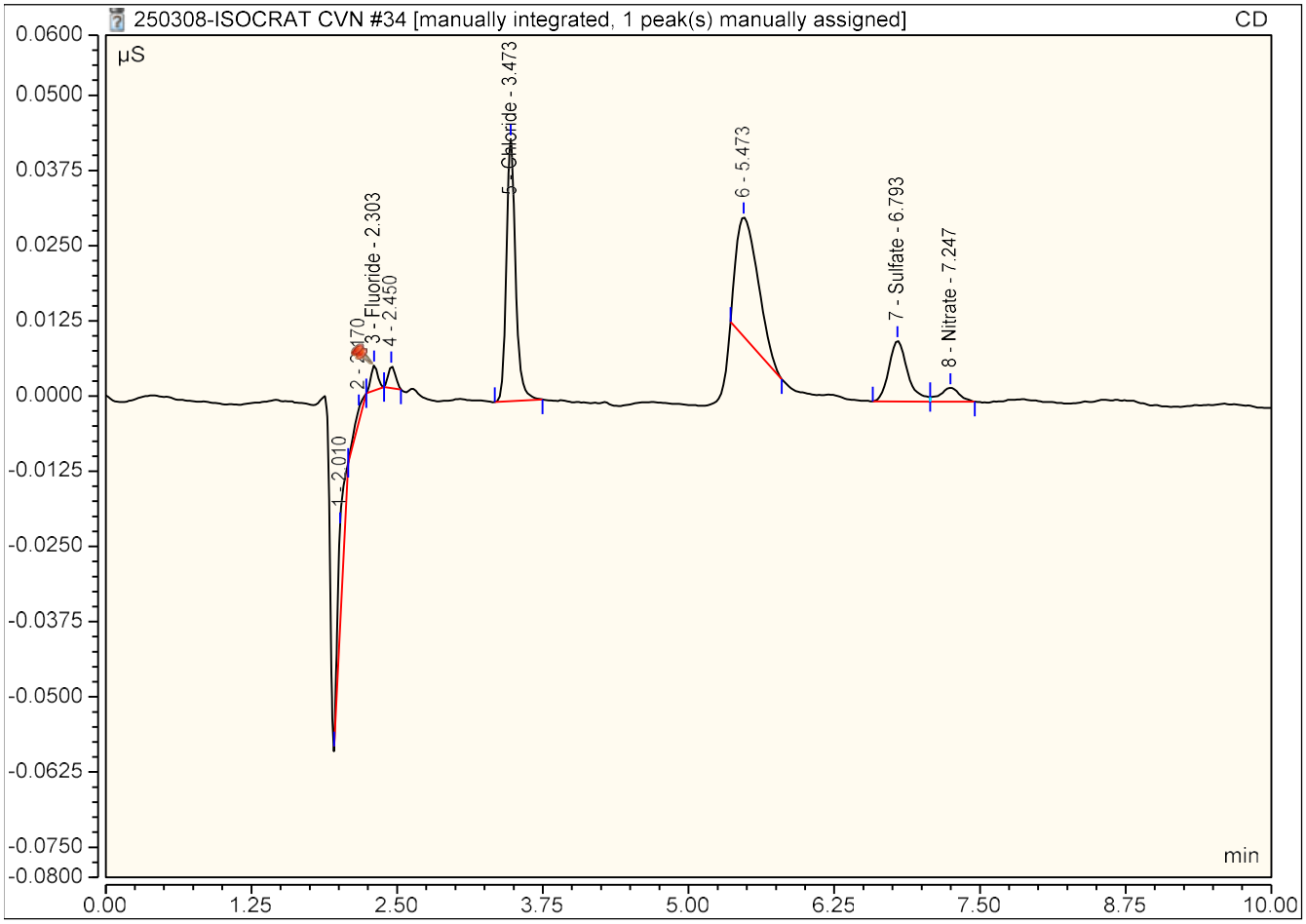
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.495 | 6.413 | 0.9251 |
| 3 | 3.47 | **Chloride** | BMB | 3.380 | 38.338 | 9.4394 |
| 5 | 6.01 | **Bromide** | BMB | 0.111 | 0.857 | 0.9138 |
| 6 | 6.65 | **Sulfate** | BM * | 5.032 | 25.410 | 18.8649 |
| 7 | 7.20 | **Nitrate** | MB* | 0.826 | 4.806 | 0.9556 |
| | | **TOTAL:** | | 9.84 | 75.82 | 31.10 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 14:42** | *Run Time:* | **10.00** |

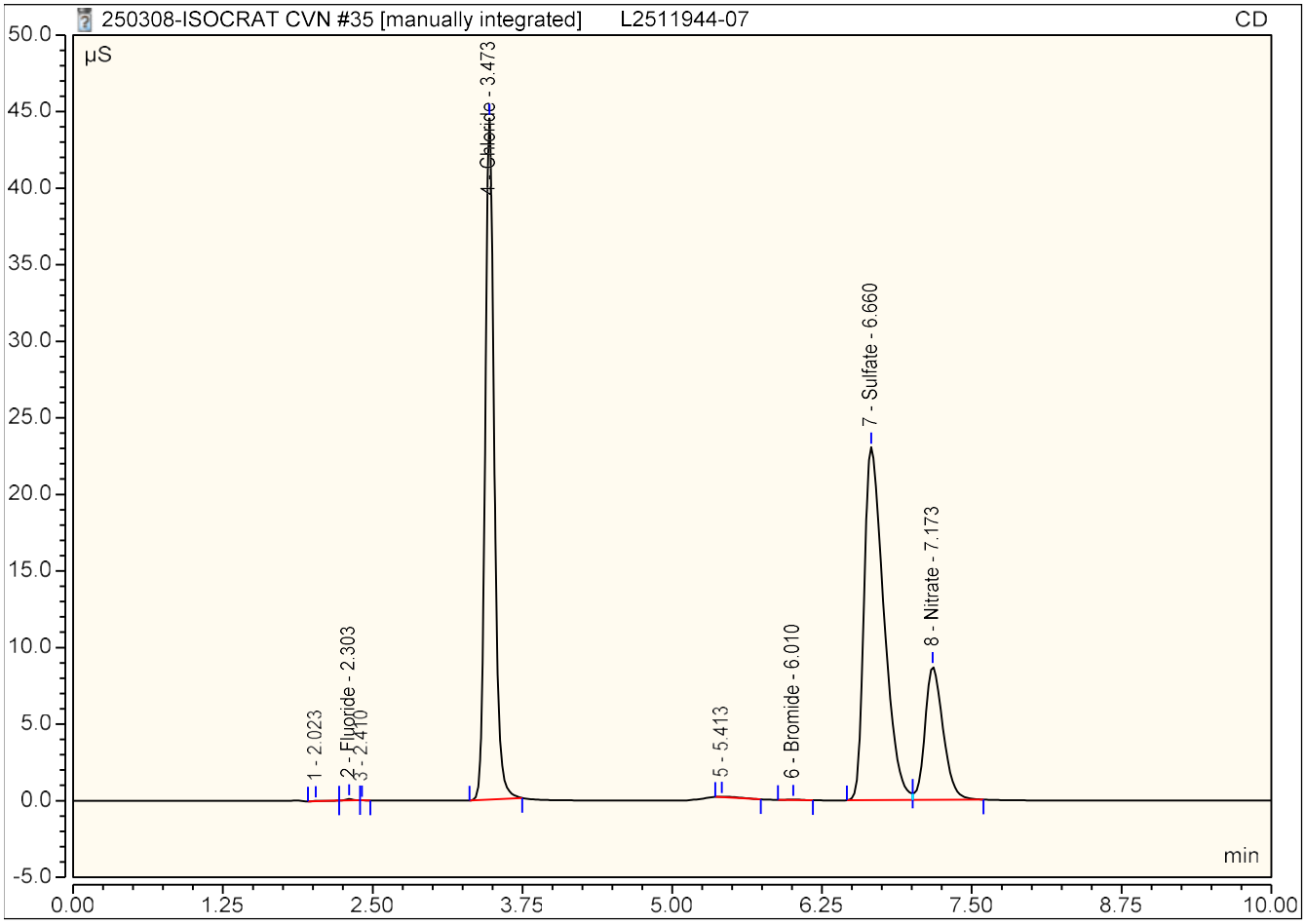
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB^ | 0.000 | 0.004 | 0.0315 |
| 5 | 3.47 | **Chloride** | BMB | 0.004 | 0.044 | 0.1568 |
| 7 | 6.79 | **Sulfate** | BM * | 0.002 | 0.010 | 0.3076 |
| 8 | 7.25 | **Nitrate** | MB* | 0.000 | 0.002 | 0.0258 |
| **TOTAL:** | | | | 0.01 | 0.06 | 0.52 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511944-07** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 14:54** | *Run Time:* | **10.00** |

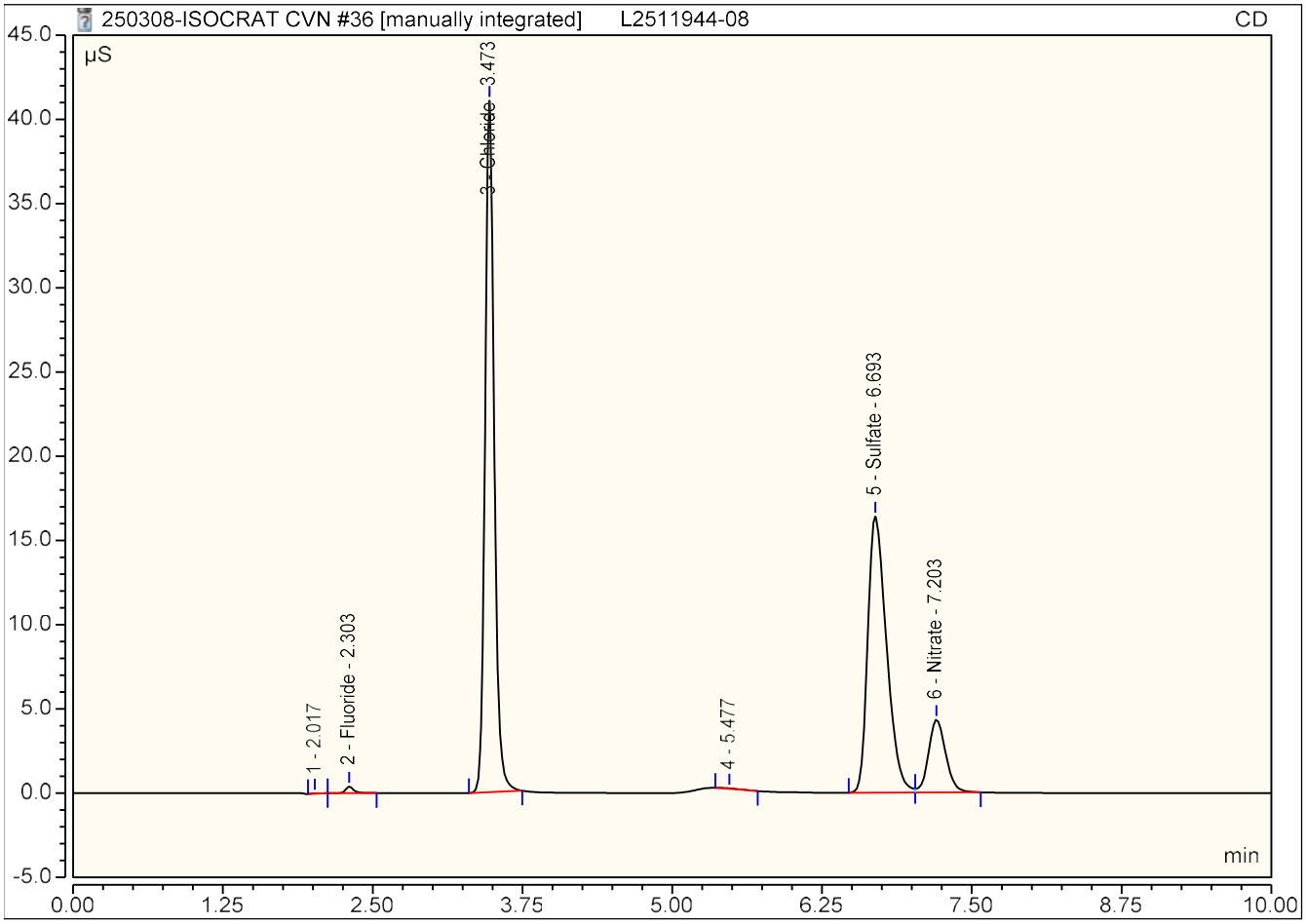
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.006 | 0.095 | 0.0423 |
| 4 | 3.47 | **Chloride** | BMB | 3.924 | 44.476 | 10.9354 |
| 6 | 6.01 | **Bromide** | BMB | 0.004 | 0.036 | 0.0590 |
| 7 | 6.66 | **Sulfate** | BM * | 4.423 | 23.044 | 16.6182 |
| 8 | 7.17 | **Nitrate** | MB* | 1.521 | 8.693 | 1.7384 |
| | | **TOTAL:** | | 9.88 | 76.35 | 29.39 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511944-08** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 15:06** | *Run Time:* | **10.00** |

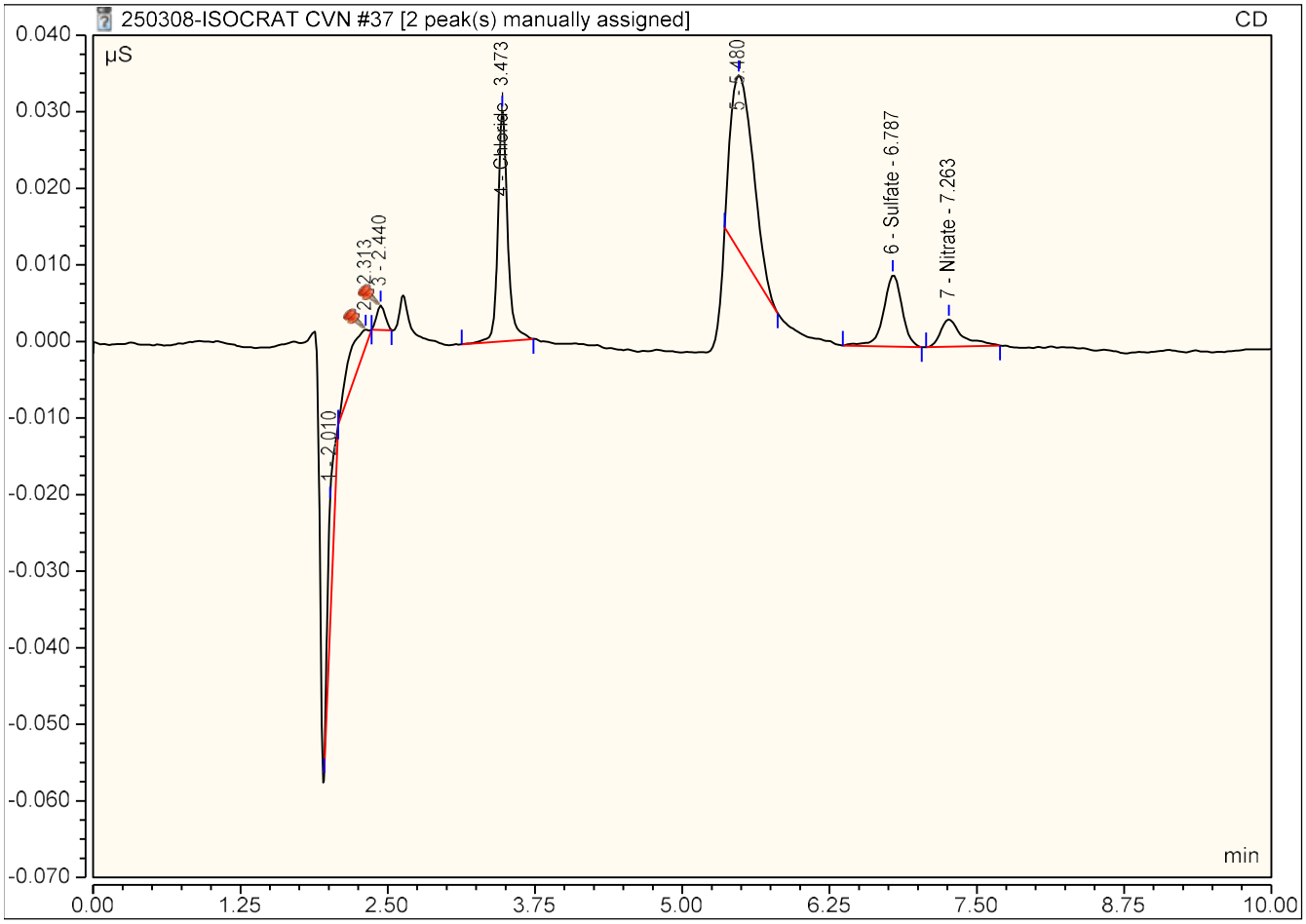
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.031 | 0.397 | 0.0866 |
| 3 | 3.47 | **Chloride** | BMB | 3.615 | 41.047 | 10.0842 |
| 5 | 6.69 | **Sulfate** | BM * | 2.971 | 16.402 | 11.2628 |
| 6 | 7.20 | **Nitrate** | MB* | 0.719 | 4.320 | 0.8356 |
| **TOTAL:** | | | | 7.34 | 62.17 | 22.27 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511944-09** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 15:18** | *Run Time:* | **10.00** |

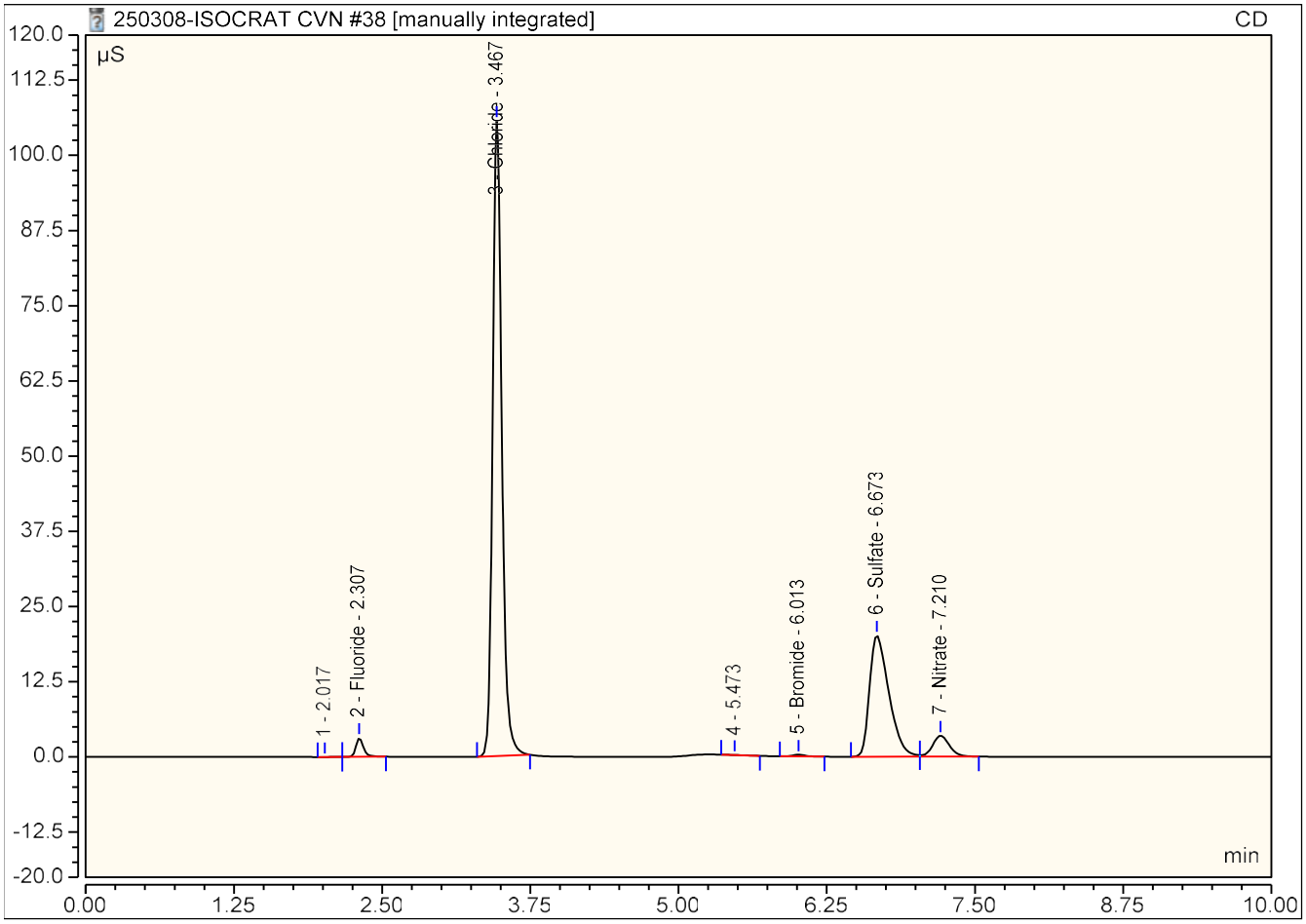
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 4 | 3.47 | **Chloride** | BMB | 0.003 | 0.030 | 0.1539 |
| 6 | 6.79 | **Sulfate** | BMB | 0.002 | 0.009 | 0.3069 |
| 7 | 7.26 | **Nitrate** | BMB | 0.001 | 0.004 | 0.0262 |
| **TOTAL:** | | | | 0.01 | 0.04 | 0.49 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511972-16 MS** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 15:30** | *Run Time:* | **10.00** |

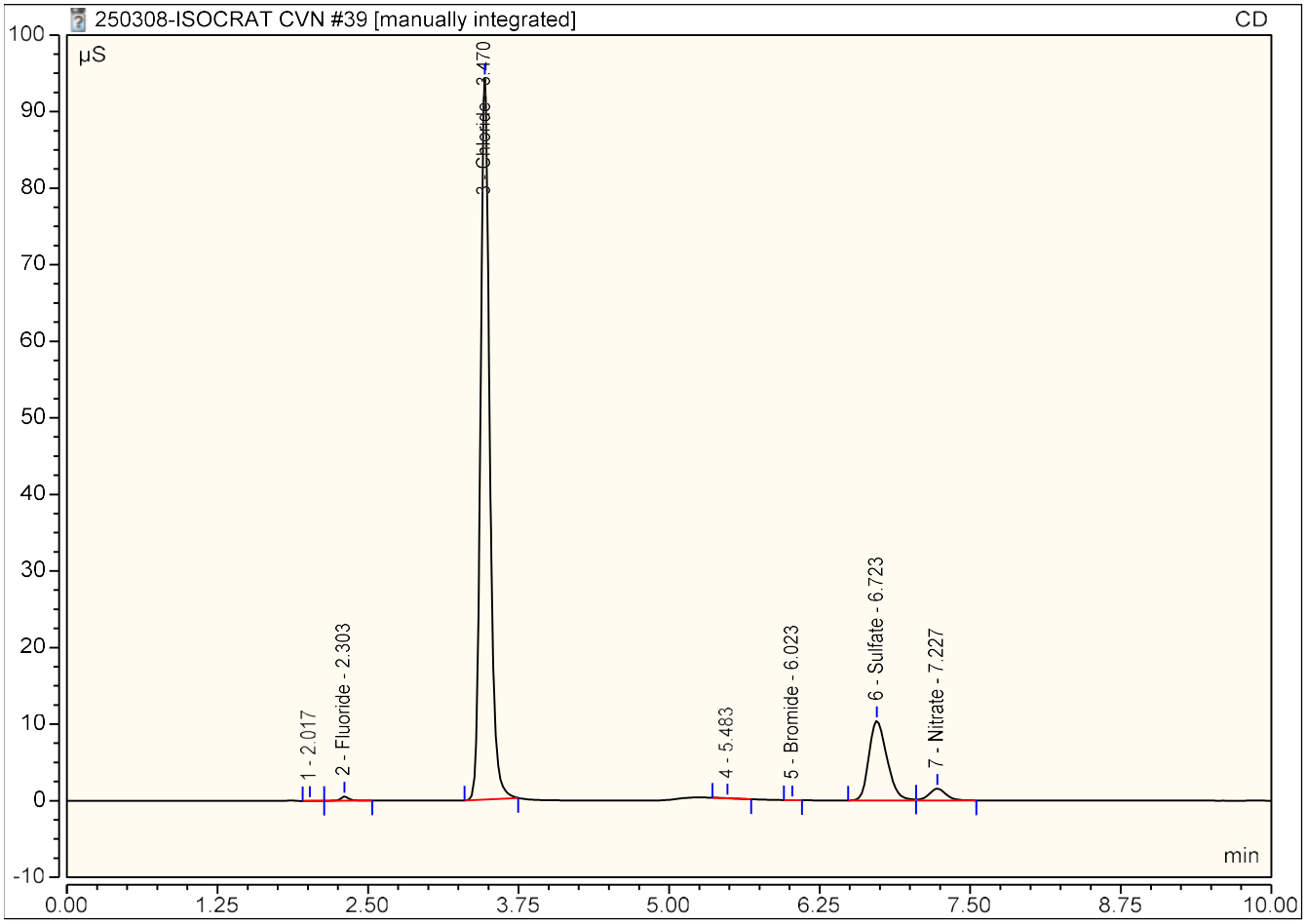
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.234 | 3.148 | 0.4536 |
| 3 | 3.47 | **Chloride** | BMB | 9.443 | 105.576 | 26.1084 |
| 5 | 6.01 | **Bromide** | BMB | 0.036 | 0.282 | 0.3097 |
| 6 | 6.67 | **Sulfate** | BM * | 3.803 | 20.138 | 14.3333 |
| 7 | 7.21 | **Nitrate** | MB* | 0.574 | 3.464 | 0.6724 |
| | | **TOTAL:** | | 14.09 | 132.61 | 41.88 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511972-16 DUP** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 15:42** | *Run Time:* | **10.00** |

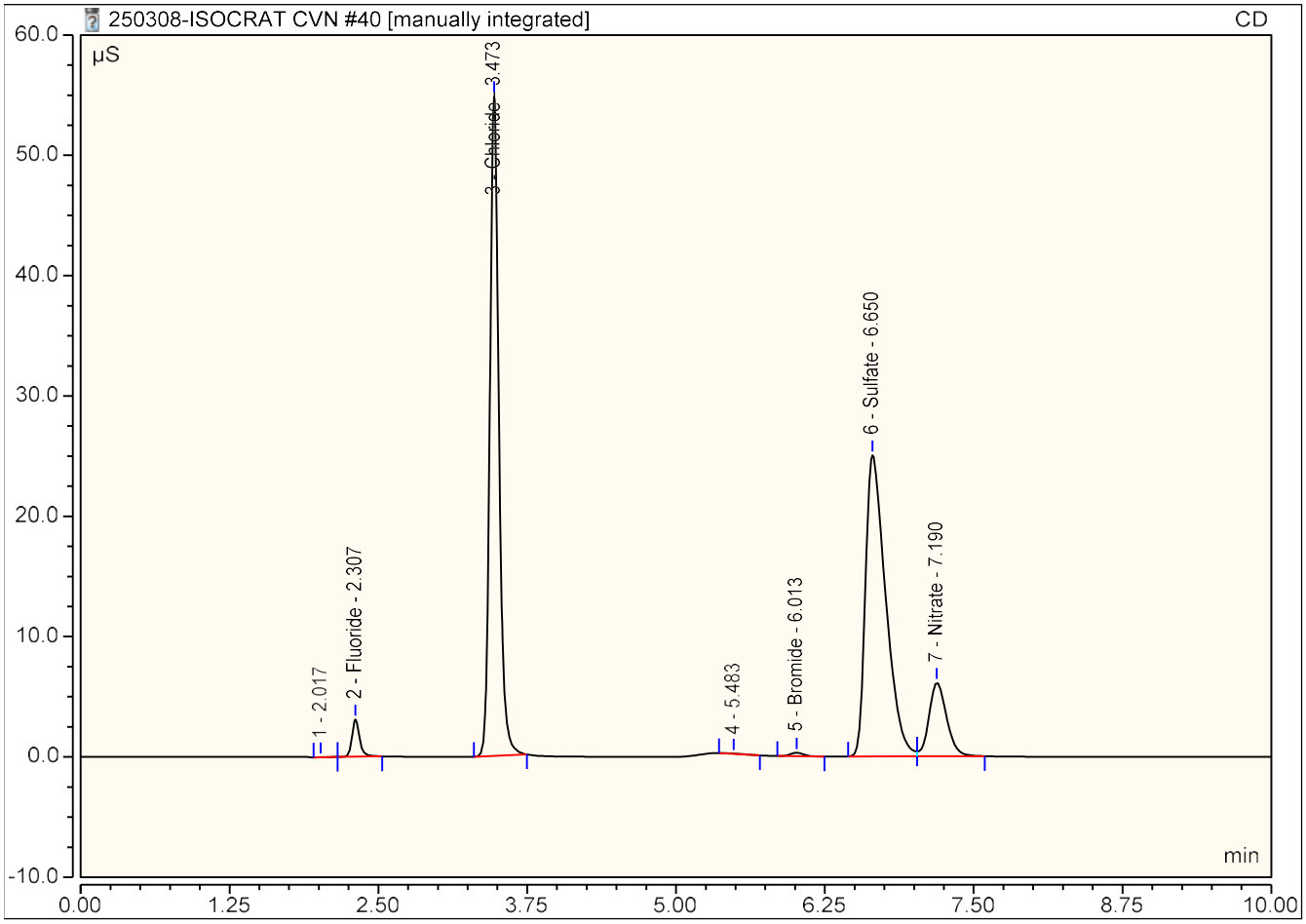
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.041 | 0.549 | 0.1057 |
| 3 | 3.47 | **Chloride** | BMB | 8.392 | 94.216 | 23.2179 |
| 5 | 6.02 | **Bromide** | BMB | 0.000 | 0.001 | 0.0245 |
| 6 | 6.72 | **Sulfate** | BM * | 1.808 | 10.381 | 6.9719 |
| 7 | 7.23 | **Nitrate** | MB* | 0.250 | 1.528 | 0.3068 |
| | | **TOTAL:** | | 10.49 | 106.68 | 30.63 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511944-06 MS** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 15:54** | *Run Time:* | **10.00** |

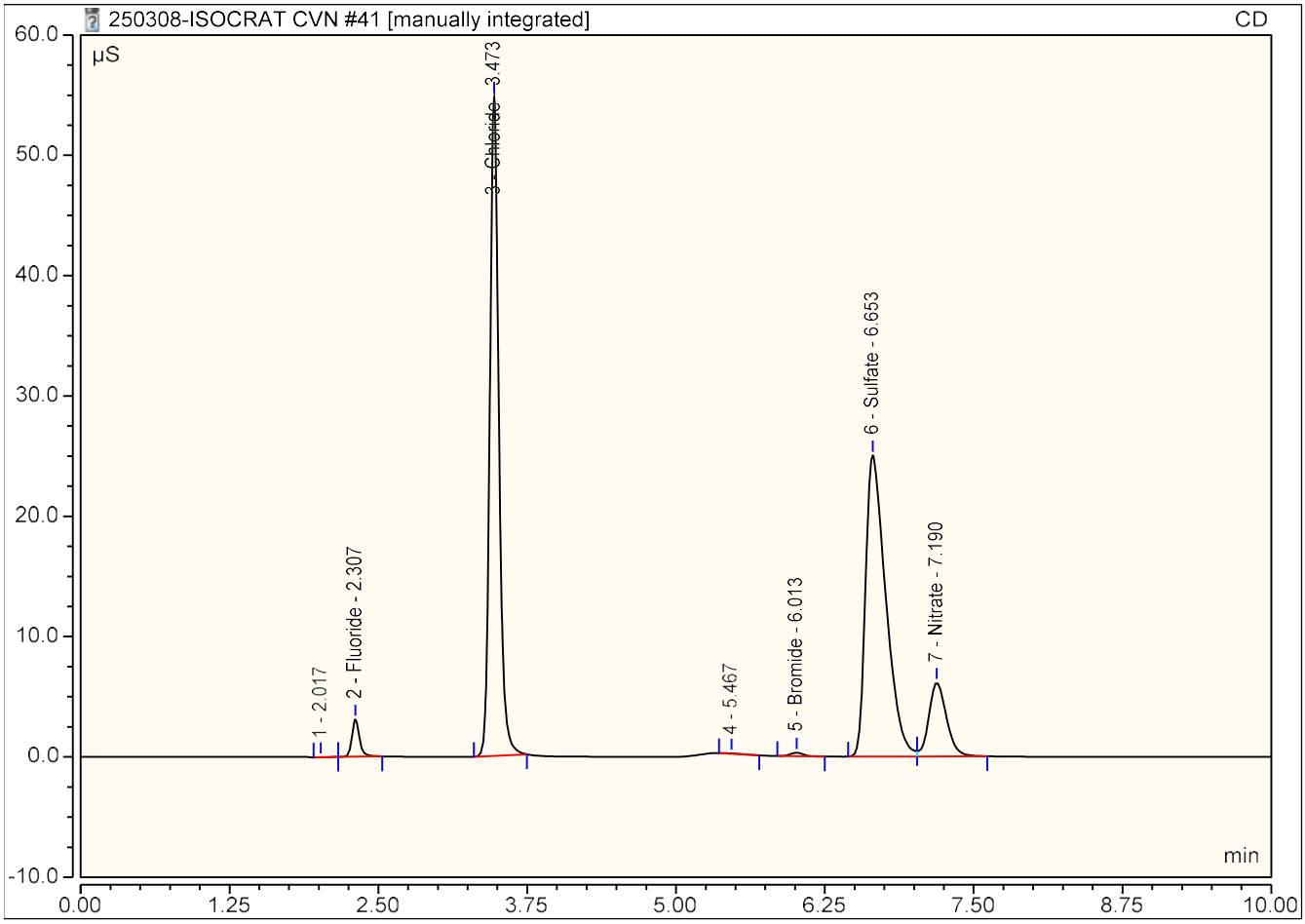
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.230 | 3.103 | 0.4459 |
| 3 | 3.47 | **Chloride** | BMB | 4.859 | 54.857 | 13.5058 |
| 5 | 6.01 | **Bromide** | BMB | 0.038 | 0.301 | 0.3293 |
| 6 | 6.65 | **Sulfate** | BM * | 4.939 | 25.039 | 18.5248 |
| 7 | 7.19 | **Nitrate** | MB* | 1.052 | 6.119 | 1.2105 |
| | | **TOTAL:** | | 11.12 | 89.42 | 34.02 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511944-06 MSD** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 16:06** | *Run Time:* | **10.00** |

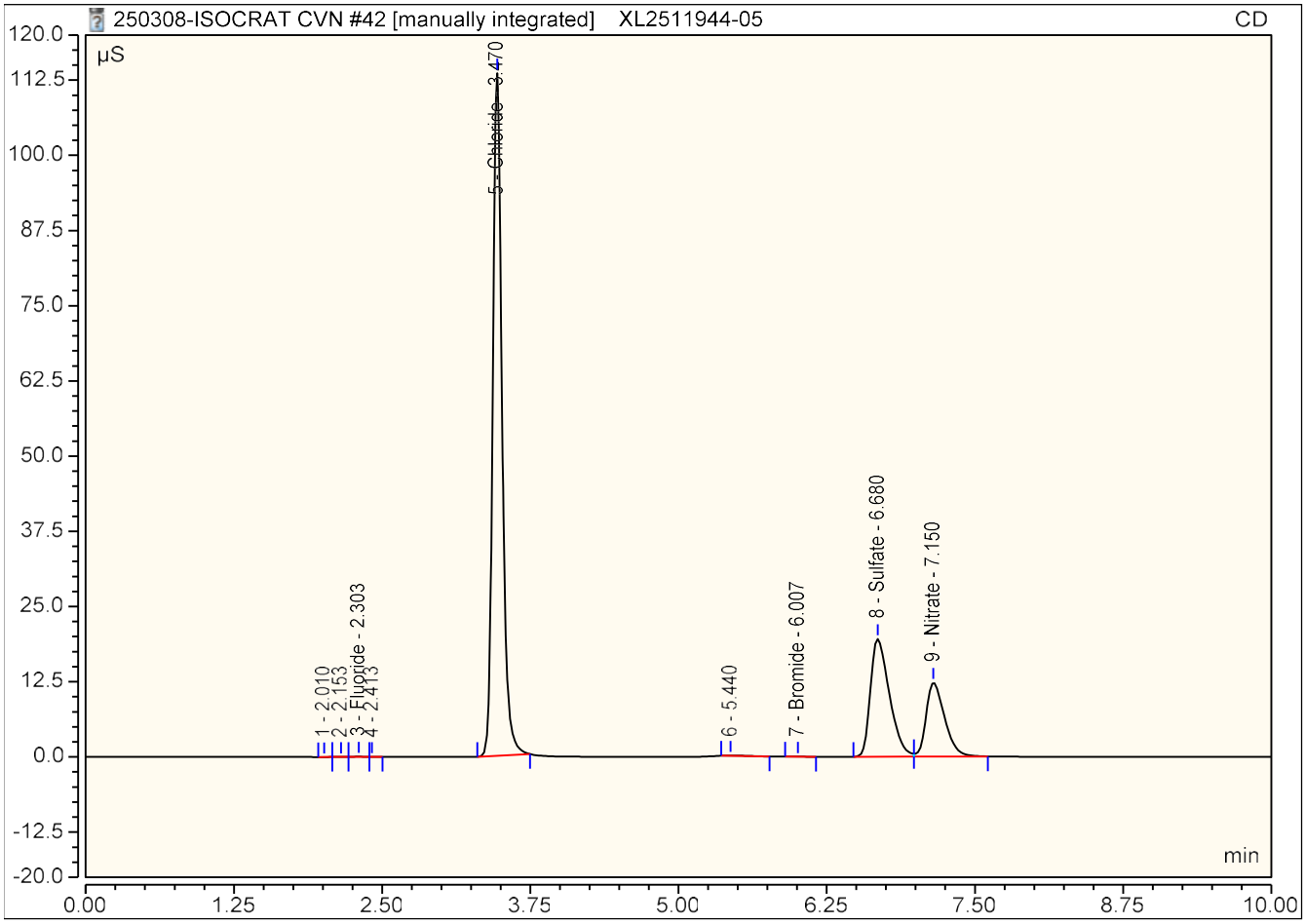
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.230 | 3.107 | 0.4454 |
| 3 | 3.47 | **Chloride** | BMB | 4.854 | 54.791 | 13.4916 |
| 5 | 6.01 | **Bromide** | BMB | 0.038 | 0.301 | 0.3291 |
| 6 | 6.65 | **Sulfate** | BM * | 4.934 | 25.028 | 18.5050 |
| 7 | 7.19 | **Nitrate** | MB* | 1.057 | 6.129 | 1.2155 |
| | | **TOTAL:** | | 11.11 | 89.36 | 33.99 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **XL2511944-05** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 16:18** | *Run Time:* | **10.00** |

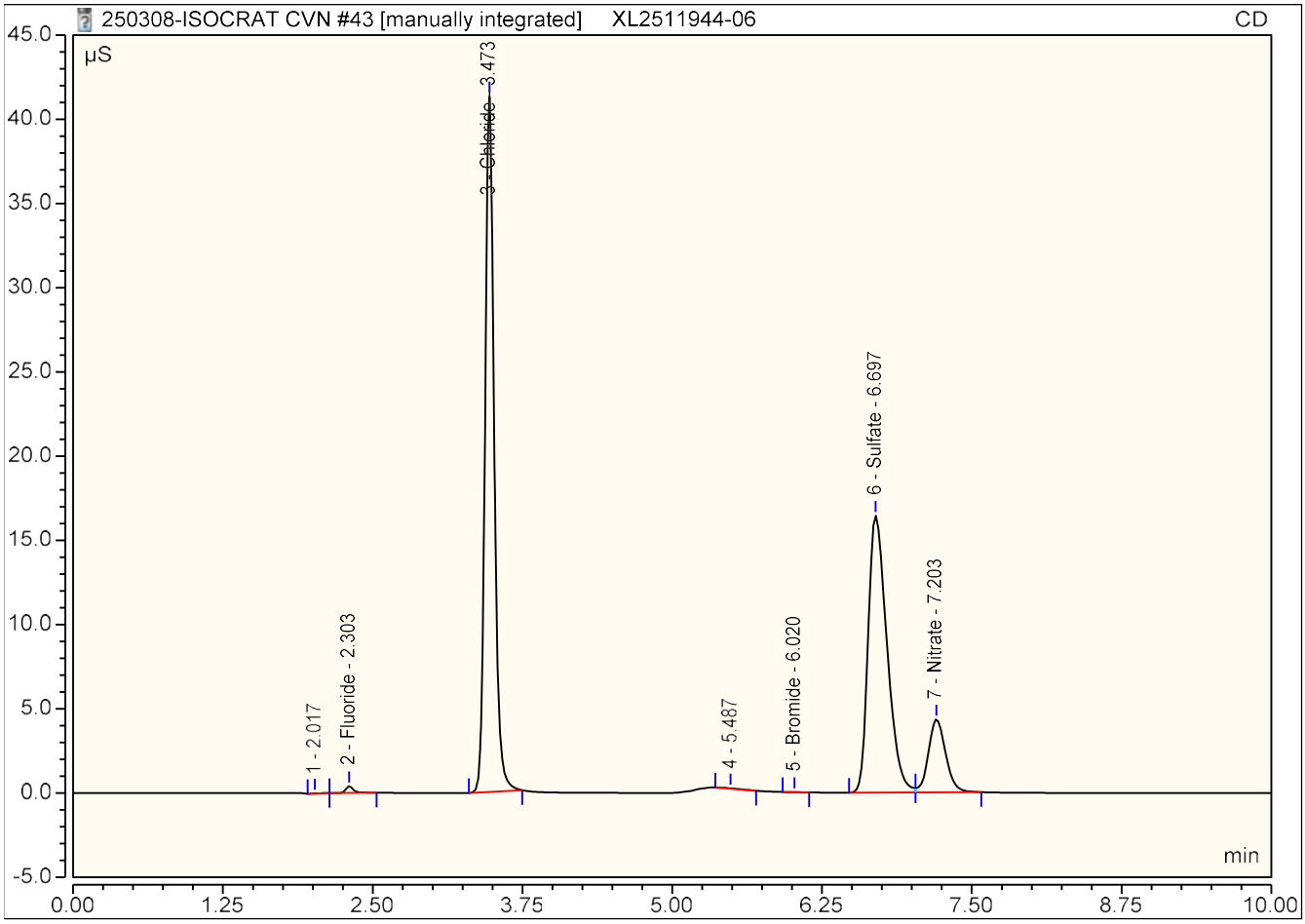
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB | 0.004 | 0.065 | 0.0388 |
| 5 | 3.47 | **Chloride** | BMB | 10.253 | 113.454 | 28.3331 |
| 7 | 6.01 | **Bromide** | BMB | 0.002 | 0.013 | 0.0358 |
| 8 | 6.68 | **Sulfate** | BM * | 3.623 | 19.578 | 13.6694 |
| 9 | 7.15 | **Nitrate** | MB* | 2.224 | 12.305 | 2.5309 |
| **TOTAL:** | | | | 16.11 | 145.41 | 44.61 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **XL2511944-06** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 16:30** | *Run Time:* | **10.00** |

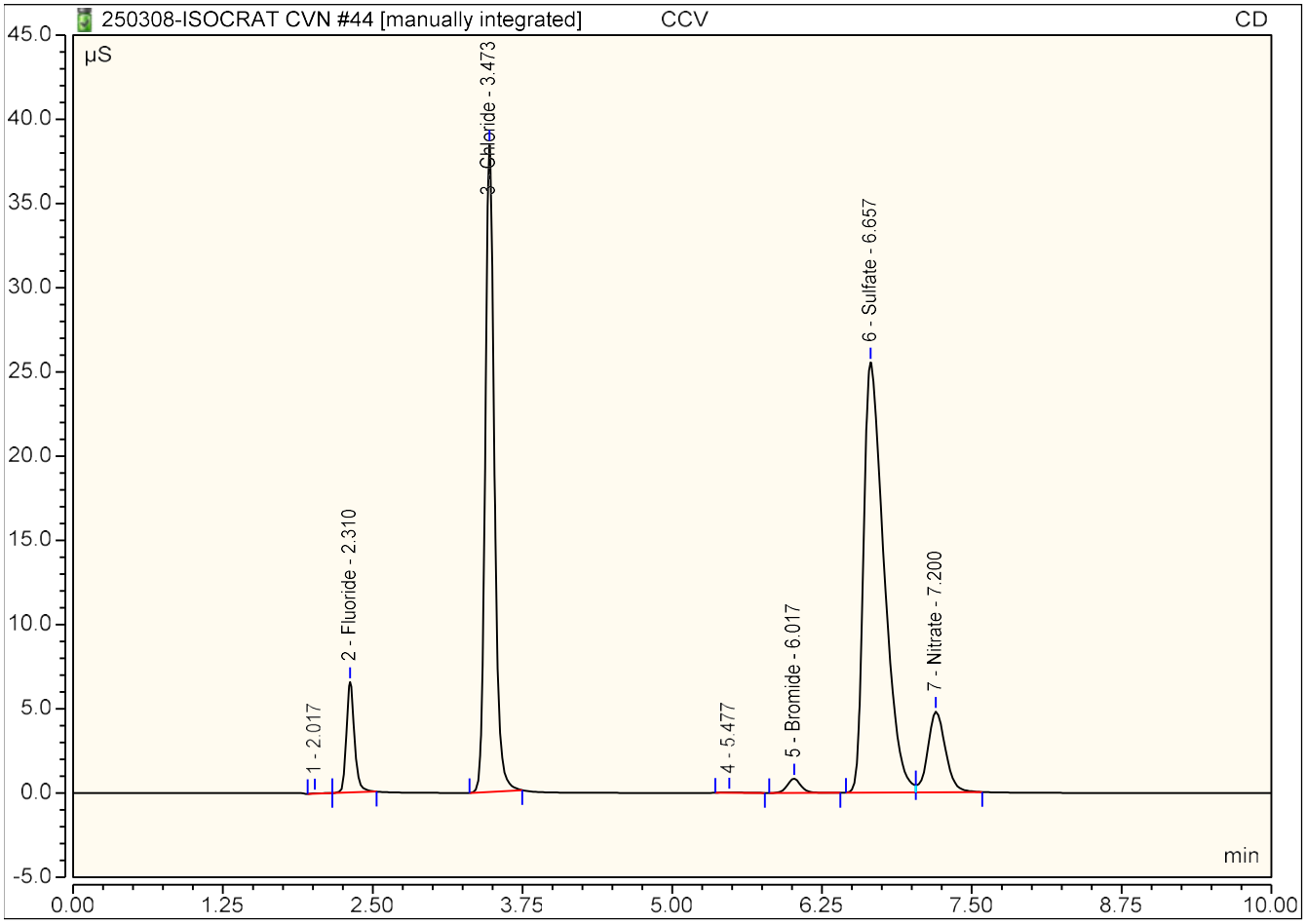
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.031 | 0.399 | 0.0870 |
| 3 | 3.47 | **Chloride** | BMB | 3.635 | 41.296 | 10.1390 |
| 5 | 6.02 | **Bromide** | BMB | 0.001 | 0.008 | 0.0302 |
| 6 | 6.70 | **Sulfate** | BM * | 2.988 | 16.434 | 11.3234 |
| 7 | 7.20 | **Nitrate** | MB* | 0.724 | 4.329 | 0.8411 |
| | | **TOTAL:** | | 7.38 | 62.47 | 22.42 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 16:43** | *Run Time:* | **10.00** |

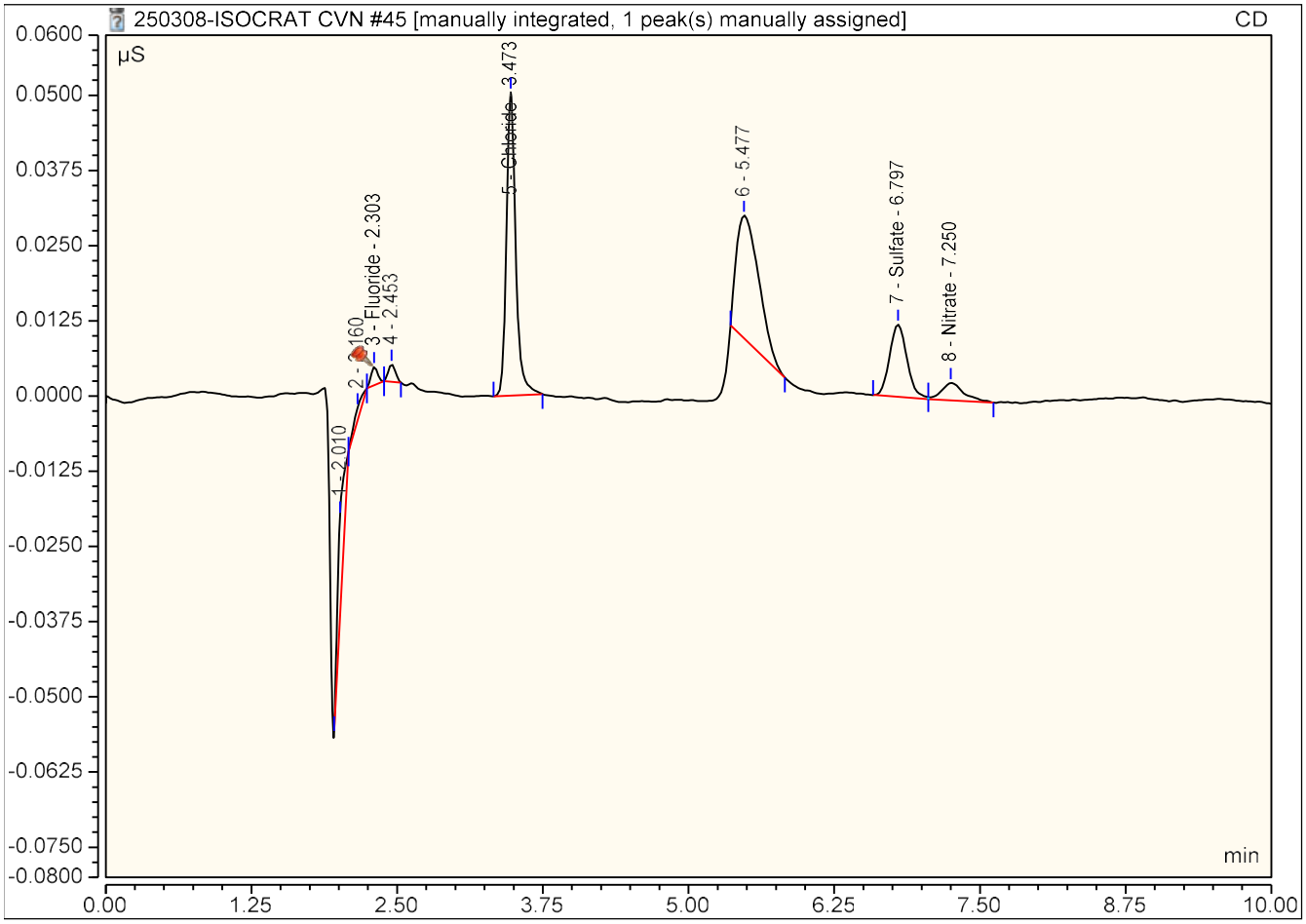
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.504 | 6.561 | 0.9409 |
| 3 | 3.47 | **Chloride** | BMB | 3.402 | 38.426 | 9.4993 |
| 5 | 6.02 | **Bromide** | BMB | 0.111 | 0.853 | 0.9120 |
| 6 | 6.66 | **Sulfate** | BM * | 5.063 | 25.537 | 18.9795 |
| 7 | 7.20 | **Nitrate** | MB* | 0.819 | 4.787 | 0.9480 |
| | | **TOTAL:** | | 9.90 | 76.16 | 31.28 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 16:55** | *Run Time:* | **10.00** |

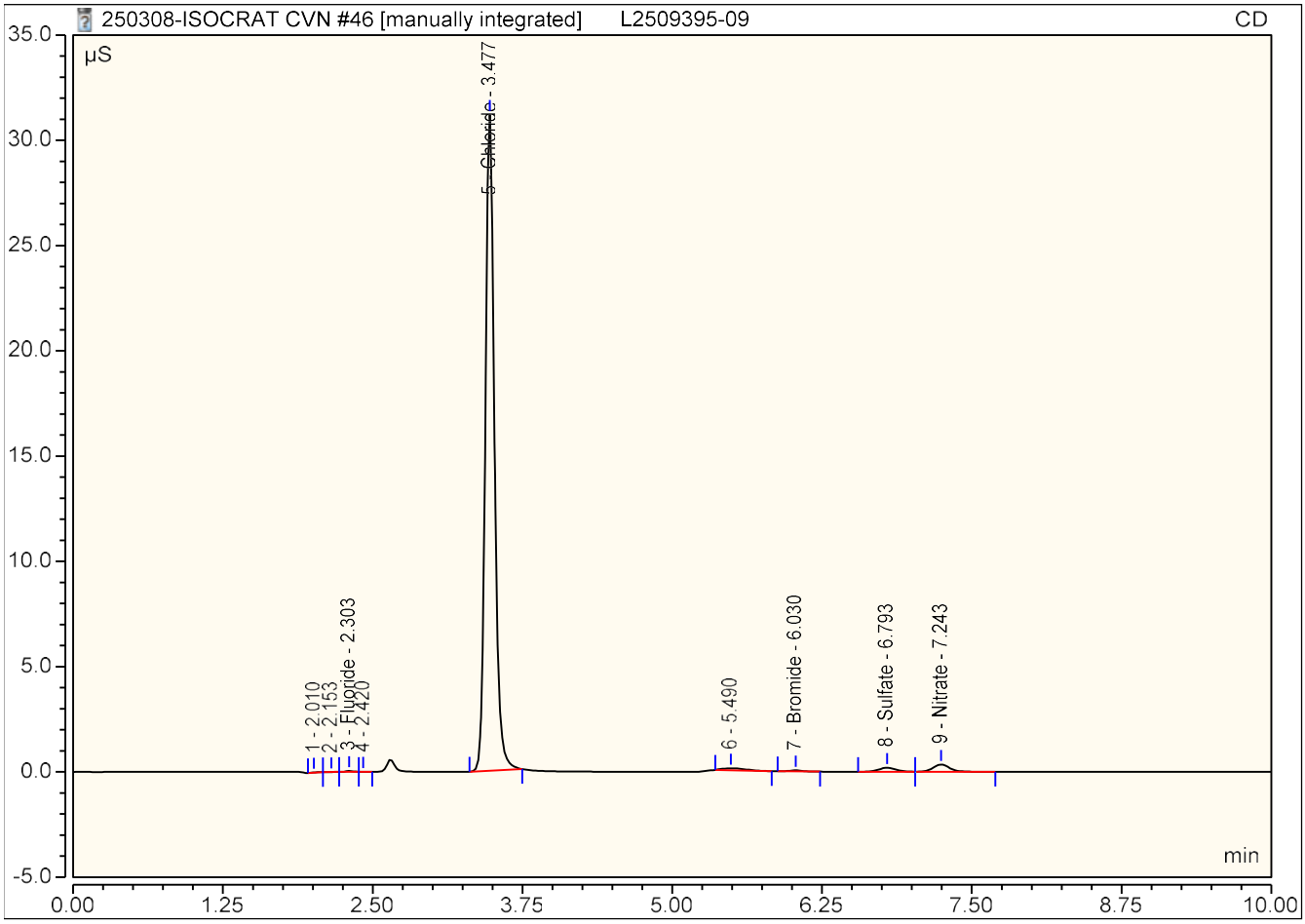
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB^ | 0.000 | 0.003 | 0.0313 |
| 5 | 3.47 | **Chloride** | BMB | 0.005 | 0.050 | 0.1587 |
| 7 | 6.80 | **Sulfate** | BM * | 0.002 | 0.012 | 0.3083 |
| 8 | 7.25 | **Nitrate** | MB* | 0.001 | 0.003 | 0.0261 |
| **TOTAL:** | | | | 0.01 | 0.07 | 0.52 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2509395-09** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 17:07** | *Run Time:* | **10.00** |

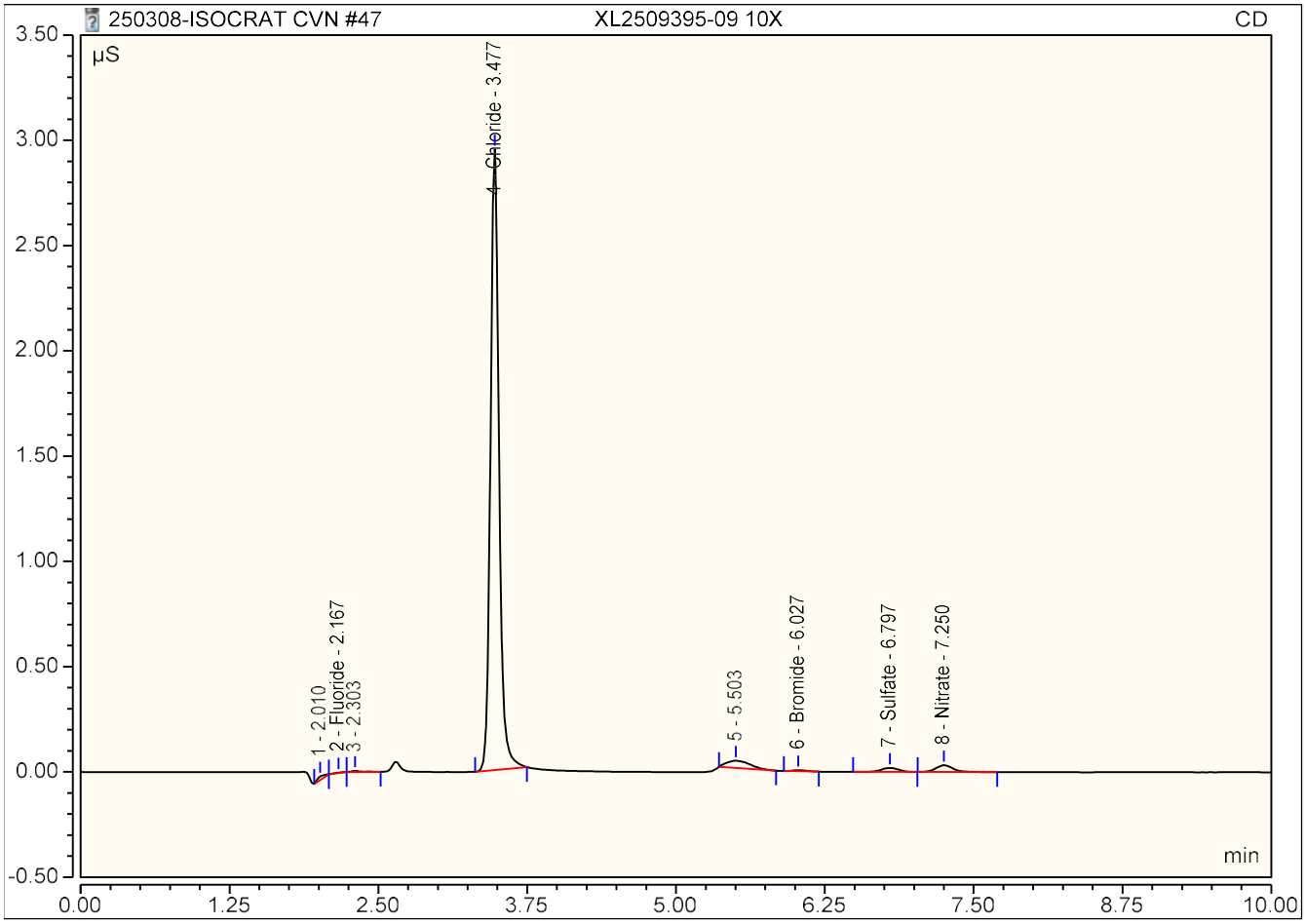
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB | 0.003 | 0.041 | 0.0357 |
| 5 | 3.48 | **Chloride** | BMB | 2.736 | 31.154 | 7.6691 |
| 7 | 6.03 | **Bromide** | BMB | 0.007 | 0.051 | 0.0766 |
| 8 | 6.79 | **Sulfate** | BM * | 0.033 | 0.194 | 0.4207 |
| 9 | 7.24 | **Nitrate** | MB* | 0.057 | 0.346 | 0.0894 |
| | | **TOTAL:** | | 2.84 | 31.79 | 8.29 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **XL2509395-09 10X** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 17:19** | *Run Time:* | **10.00** |

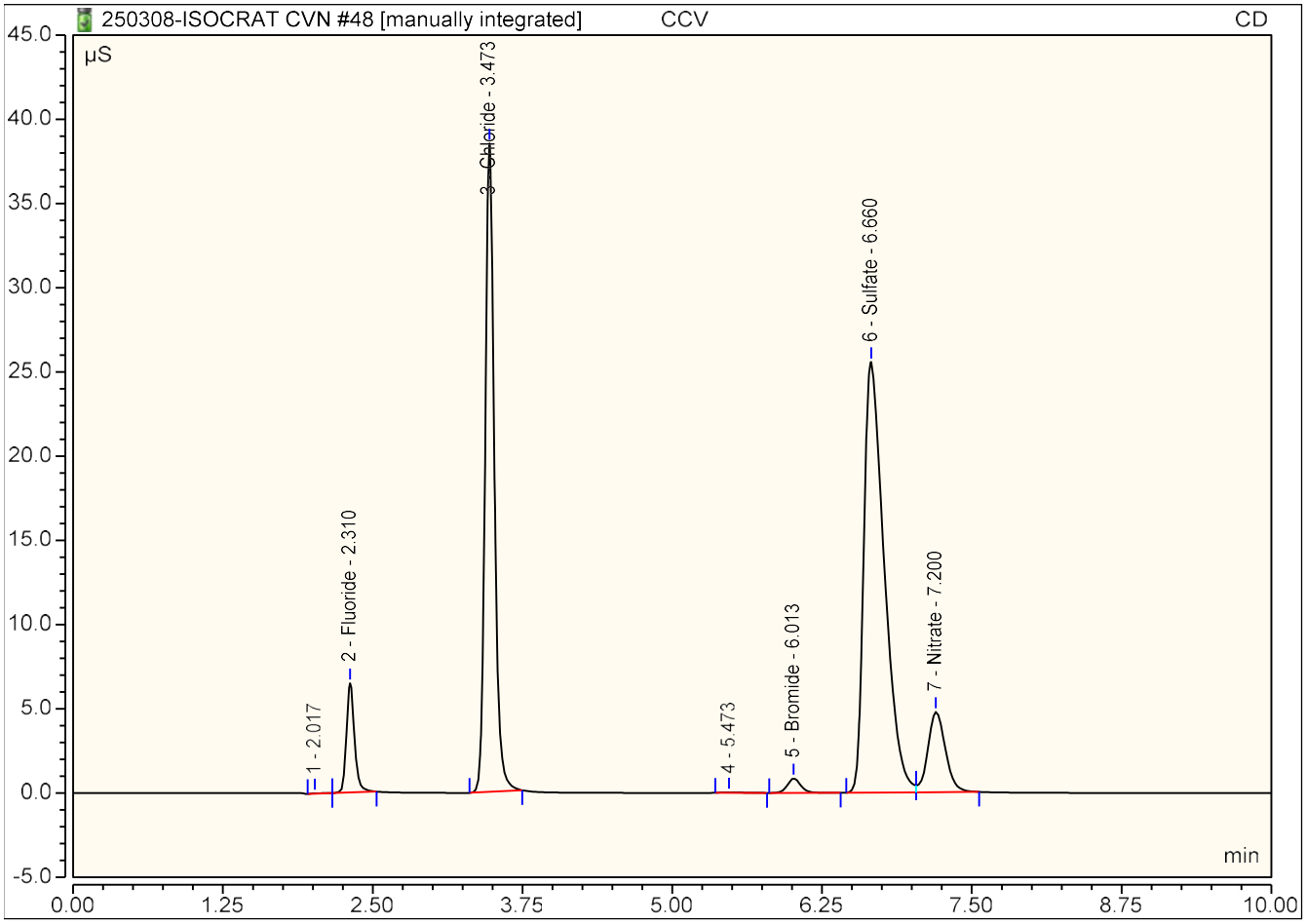
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.17 | **Fluoride** | BMB | 0.000 | 0.002 | 0.3128 |
| 4 | 3.48 | **Chloride** | BMB | 0.248 | 2.948 | 8.2703 |
| 6 | 6.03 | **Bromide** | BMB | 0.001 | 0.005 | 0.2863 |
| 7 | 6.80 | **Sulfate** | BMB | 0.003 | 0.019 | 3.1235 |
| 8 | 7.25 | **Nitrate** | BMB | 0.005 | 0.032 | 0.3147 |
| | | **TOTAL:** | | 0.26 | 3.01 | 12.31 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 17:31** | *Run Time:* | **10.00** |

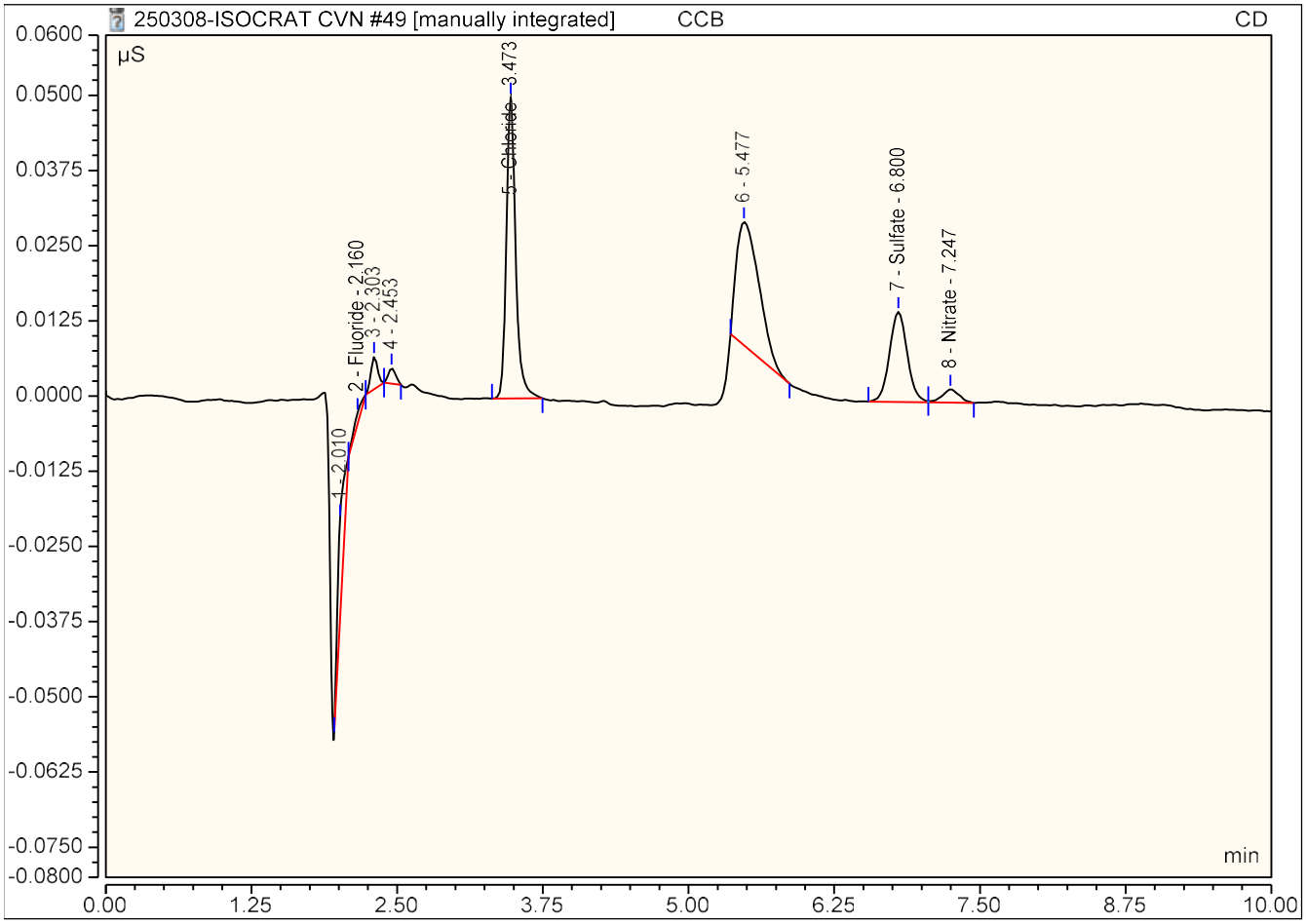
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.499 | 6.490 | 0.9315 |
| 3 | 3.47 | **Chloride** | BMB | 3.407 | 38.502 | 9.5115 |
| 5 | 6.01 | **Bromide** | BMB | 0.111 | 0.857 | 0.9142 |
| 6 | 6.66 | **Sulfate** | BM * | 5.055 | 25.554 | 18.9521 |
| 7 | 7.20 | **Nitrate** | MB* | 0.809 | 4.767 | 0.9370 |
| | | **TOTAL:** | | 9.88 | 76.17 | 31.25 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **08-Mar-2025 / 17:43** | *Run Time:* | **10.00** |

| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.16 | **Fluoride** | BMB | 0.000 | 0.002 | 0.0313 |
| 5 | 3.47 | **Chloride** | BMB | 0.005 | 0.050 | 0.1587 |
| 7 | 6.80 | **Sulfate** | BM * | 0.003 | 0.015 | 0.3104 |
| 8 | 7.25 | **Nitrate** | MB* | 0.000 | 0.002 | 0.0258 |
| **TOTAL:** | | | | 0.01 | 0.07 | 0.53 |



Anion Summary Report

| No. | Name | Dilution | Amount CD Fluoride | Amount CD Chloride | Amount CD Nitrate | Amount CD Sulfate | Amount CD Bromide |
|---|---|---|---|---|---|---|---|
| 1 | BLANK | 1.0 | 0.0938 | n.a. | n.a. | n.a. | n.a. |
| 2 | STD 0.5 | 1.0 | 0.0476 | 0.3758 | 0.0446 | 0.6674 | 0.0457 |
| 3 | STD 1.0 | 1.0 | 0.0642 | 0.5449 | 0.0635 | 1.0531 | 0.0673 |
| 4 | STD 2.0 | 1.0 | 0.1838 | 1.9560 | 0.1847 | 3.9147 | 0.1909 |
| 5 | STD 3.0 | 1.0 | 0.4769 | 5.0224 | 0.4750 | 10.0774 | 0.4612 |
| 6 | STD 4.0 | 1.0 | 1.9996 | 19.7542 | 2.0072 | 39.6551 | 2.0099 |
| 7 | STD 5.0 | 1.0 | 5.0029 | 50.0968 | 5.2562 | 100.1322 | 5.6299 |
| 8 | RINSE | 1.0 | 0.0333 | 0.1520 | n.a. | 0.3043 | n.a. |
| 9 | CCV | 1.0 | 0.9362 | 9.5125 | 0.9381 | 18.9558 | 0.9325 |
| 10 | CCB | 1.0 | 0.0315 | 0.1634 | 0.0255 | 0.3105 | n.a. |
| 11 | ICV | 1.0 | 0.7737 | 8.0610 | 0.7600 | 7.8890 | 0.7384 |
| 12 | ICB | 1.0 | 0.0317 | 0.1630 | 0.0256 | 0.3097 | n.a. |
| 13 | BLK | 1.0 | 0.0312 | 0.1516 | n.a. | 0.3040 | n.a. |
| 14 | LCS | 1.0 | 0.7695 | 8.0377 | 0.7594 | 7.8795 | 0.7365 |
| 15 | L2511919-01 BR | 1.0 | 0.1677 | 17.4715 | 0.0894 | 14.5233 | 0.0599 |
| 16 | L2511919-02 | 1.0 | 0.1222 | 17.9024 | 0.0601 | 19.4672 | 0.0610 |
| 17 | L2511919-04 | 1.0 | 0.1230 | 18.7538 | n.a. | 10.2371 | 0.0669 |
| 18 | L2511919-05 | 1.0 | 0.1236 | 18.0632 | 0.0965 | 16.6223 | 0.0656 |
| 19 | L2511919-07 | 1.0 | 0.1060 | 17.3561 | 0.3883 | 17.9333 | 0.0612 |
| 20 | XL2511919-07; 10X | 10.0 | 0.3827 | 19.2271 | 0.5851 | 20.0633 | 0.2718 |
| 21 | CCV | 1.0 | 0.9305 | 9.4750 | 0.9407 | 18.9491 | 0.9218 |
| 22 | CCB | 1.0 | 0.0313 | 0.1635 | n.a. | 0.3083 | n.a. |
| 23 | L2511919-08 | 1.0 | 0.0921 | 18.1338 | 0.1835 | 17.7895 | 0.0629 |
| 24 | L2511972-16 CL SO4 BR | 1.0 | 0.1023 | 23.2246 | 0.3063 | 6.9662 | 0.0245 |
| 25 | L2511972-17 | 1.0 | 0.0888 | 7.3134 | 0.2170 | 8.7276 | 0.0251 |
| 26 | L2511944-01 BR | 1.0 | 0.0453 | 4.5652 | 0.3441 | 9.1750 | 0.0292 |
| 27 | L2511944-02 | 1.0 | 0.0396 | 7.7902 | 1.2095 | 5.6416 | 0.0256 |
| 28 | L2511944-03 | 1.0 | 0.0794 | 8.1027 | 0.0718 | 21.7203 | 0.0424 |
| 29 | L2511944-04 | 1.0 | 0.0535 | 3.9198 | 5.6040 | 35.6035 | 0.0285 |
| 30 | L2511944-05 | 1.0 | 0.0386 | 28.2941 | 2.5317 | 13.6563 | 0.0359 |
| 31 | L2511944-06 | 1.0 | 0.0865 | 10.1057 | 0.8428 | 11.2995 | n.a. |
| 32 | XL2511944-06; 10X | 10.0 | 0.3115 | 11.6611 | 0.9711 | 13.4165 | n.a. |
| 33 | CCV | 1.0 | 0.9251 | 9.4394 | 0.9556 | 18.8649 | 0.9138 |
| 34 | CCB | 1.0 | 0.0315 | 0.1568 | 0.0258 | 0.3076 | n.a. |
| 35 | L2511944-07 | 1.0 | 0.0423 | 10.9354 | 1.7384 | 16.6182 | 0.0590 |
| 36 | L2511944-08 | 1.0 | 0.0866 | 10.0842 | 0.8356 | 11.2628 | n.a. |
| 37 | L2511944-09 | 1.0 | n.a. | 0.1539 | 0.0262 | 0.3069 | n.a. |
| 38 | L2511972-16 MS | 1.0 | 0.4536 | 26.1084 | 0.6724 | 14.3333 | 0.3097 |
| 39 | L2511972-16 DUP | 1.0 | 0.1057 | 23.2179 | 0.3068 | 6.9719 | 0.0245 |
| 40 | L2511944-06 MS | 1.0 | 0.4459 | 13.5058 | 1.2105 | 18.5248 | 0.3293 |
| 41 | L2511944-06 MSD | 1.0 | 0.4454 | 13.4916 | 1.2155 | 18.5050 | 0.3291 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 42 | XL2511944-05 | 1.0 | 0.0388 | 28.3331 | 2.5309 | 13.6694 | 0.0358 |
| 43 | XL2511944-06 | 1.0 | 0.0870 | 10.1390 | 0.8411 | 11.3234 | 0.0302 |
| 44 | CCV | 1.0 | 0.9409 | 9.4993 | 0.9480 | 18.9795 | 0.9120 |
| 45 | CCB | 1.0 | 0.0313 | 0.1587 | 0.0261 | 0.3083 | n.a. |
| 46 | L2509395-09 | 1.0 | 0.0357 | 7.6691 | 0.0894 | 0.4207 | 0.0766 |
| 47 | XL2509395-09 10X | 10.0 | 0.3128 | 8.2703 | 0.3147 | 3.1235 | 0.2863 |
| 48 | CCV | 1.0 | 0.9315 | 9.5115 | 0.9370 | 18.9521 | 0.9142 |
| 49 | CCB | 1.0 | 0.0313 | 0.1587 | 0.0258 | 0.3104 | n.a. |
| | Sum: | 76.000 | 18.3457 | | 37.6817 | 626.3352 | 16.8152 |
| | Average: | 1.551 | 0.3822 | | 0.8564 | 13.0486 | 0.4671 |
| | Rel.Std.Dev: | 140.555 % | 2.0534 | | 1.3957 | 1.2048 | 2.1088 |

| Inject Time | Comment |
|---|---|
| 24/Feb/2025 15:16 | AU |
| 24/Feb/2025 15:28 | LOT#250224-0.5 |
| 24/Feb/2025 15:40 | LOT#250224-1.0 |
| 24/Feb/2025 15:52 | LOT#250224-2.0 |
| 24/Feb/2025 16:04 | LOT#250224-3.0 |
| 24/Feb/2025 16:16 | LOT#250224-4.0 |
| 24/Feb/2025 16:28 | LOT#250224-5.0 |
| 08/Mar/2025 09:27 | WG2038111-12-13 |
| 08/Mar/2025 09:39 | LOT#250306-C |
| 08/Mar/2025 09:52 | CVN |
| 08/Mar/2025 10:04 | LOT#250306-I |
| 08/Mar/2025 10:16 | CVN |
| 08/Mar/2025 10:28 | CVN |
| 08/Mar/2025 10:40 | LOT#250306-I |
| 08/Mar/2025 10:52 | CVN |
| 08/Mar/2025 11:04 | CVN |
| 08/Mar/2025 11:16 | CVN |
| 08/Mar/2025 11:28 | CVN |
| 08/Mar/2025 11:40 | CVN |
| 08/Mar/2025 11:52 | CVN |
| 08/Mar/2025 12:05 | LOT#250306-C |
| 08/Mar/2025 12:17 | CVN |
| 08/Mar/2025 12:29 | CVN |
| 08/Mar/2025 12:41 | CVN |
| 08/Mar/2025 12:53 | CVN |
| 08/Mar/2025 13:05 | CVN |
| 08/Mar/2025 13:17 | CVN |
| 08/Mar/2025 13:29 | CVN |
| 08/Mar/2025 13:41 | CVN |
| 08/Mar/2025 13:53 | CVN |
| 08/Mar/2025 14:05 | CVN |
| 08/Mar/2025 14:17 | CVN |
| 08/Mar/2025 14:30 | LOT#250306-C |
| 08/Mar/2025 14:42 | CVN |
| 08/Mar/2025 14:54 | CVN |
| 08/Mar/2025 15:06 | CVN |
| 08/Mar/2025 15:18 | CVN |
| 08/Mar/2025 15:30 | CVN |
| 08/Mar/2025 15:42 | CVN |
| 08/Mar/2025 15:54 | CVN |
| 08/Mar/2025 16:06 | CVN |

| | |
|---|---|
| 08/Mar/2025 16:18 | CVN |
| 08/Mar/2025 16:30 | CVN |
| 08/Mar/2025 16:43 | LOT#250306-C |
| 08/Mar/2025 16:55 | CVN |
| 08/Mar/2025 17:07 | CVN |
| 08/Mar/2025 17:19 | CVN |
| 08/Mar/2025 17:31 | CVN |
| 08/Mar/2025 17:43 | CVN |
| | 0.000 |
| | #DIV/0! |
| | #DIV/0! |

# Quality Control

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : L2511972-16 | | |
| **Matrix Spike** | : WG2038112-3 | **MS Analysis Date** | : 03/08/25 15:30 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Bromide | 0.024J | 0.4 | 0.310 | 78 | Q | | | | | 90-110 | 20 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : NA | **Analysis Date** | : 03/08/25 12:41 |
| **Dup Sample ID** | : WG2038112-4 | **DUP Analysis Date** | : 03/08/25 15:42 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Bromide | 0.024J | 0.024J | NC | 20 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2511919 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2038112-2 | **LCS Analysis Date** | : 03/08/25 10:40 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Bromide | 0.800 | 0.736 | 92. | | | | | 90-110 | 20 |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | 0.05 | 0.0132 | mg/l | 90-110 | | 90-110 | 20 | 20 | 300.0 | 28 days | 1 - Plastic 250ml unpreserved |
| Chloride | 16887-00-6 | 0.5 | 0.0839 | mg/l | 90-110 | | 64-148 | 18 | 18 | 9056 | 28 days | 1 - Plastic 250ml unpreserved |
| Chloride | 16887-00-6 | 0.5 | 0.0839 | mg/l | 90-110 | | 90-110 | 18 | 18 | 300.0 | 28 days | 1 - Plastic 250ml unpreserved |
| Fluoride | 16984-48-8 | 0.05 | 0.037 | mg/l | 90-110 | | 81-124 | 15 | 15 | 9056 | 28 days | 1 - Plastic 500ml unpreserved |
| Fluoride | 16984-48-8 | 0.05 | 0.037 | mg/l | 90-110 | | 90-110 | 15 | 15 | 300.0 | 28 days | 1 - Plastic 500ml unpreserved |
| Nitrogen, Nitrate | 14797-55-8 | 0.05 | 0.0128 | mg/l | 90-110 | | 90-110 | 15 | 15 | 300.0 | 48 hours | 1 - Plastic 250ml unpreserved |
| Nitrogen, Nitrate | 14797-55-8 | 0.05 | 0.0128 | mg/l | 90-110 | | 80-120 | 15 | 15 | 9056 | 48 hours | 1 - Plastic 250ml unpreserved |
| Sulfate | 14808-79-8 | 1 | 0.454 | mg/l | 90-110 | | 72-124 | 20 | 20 | 9056 | 28 days | 1 - Plastic 500ml unpreserved |
| Sulfate | 14808-79-8 | 1 | 0.454 | mg/l | 90-110 | | 90-110 | 20 | 20 | 300.0 | 28 days | 1 - Plastic 500ml unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

# Calculations of Anions by Ion Chromatography

Aqueous samples:

The Dionex calculates the area of the peaks produced by the instrument, compares them to the peak area of the calibration standard stored in its memory, and calculates result in mg/L.

If the sample was manually diluted prior to analysis, the calculated mean must be manually multiplied by the dilution factor. The Reported Detection Limit is also multiplied by the same dilution factor.

$$\text{Result, mg/L} = \frac{\text{area} - \text{y-intercept}}{\text{slope}} \times \text{Dilution Factor}$$

# Wet Chemistry

# Total Nitrogen Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-01 | Date Collected | : 03/05/25 11:20 |
| Client ID | : 5A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 14:40 |
| Sample Matrix | : WATER | Dilution Factor | : 5 |
| Analytical Method | : 107,- | Analyst | : JRO |
| Lab File ID | : WG2040210.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Total Nitrogen | ND | 1.5 | 1.5 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-02 | Date Collected | : 03/05/25 11:25 |
| Client ID | : 5B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 14:40 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 107,- | Analyst | : JRO |
| Lab File ID | : WG2040210.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Total Nitrogen | 2.2 | 0.30 | 0.30 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-04 | Date Collected | : 03/05/25 09:25 |
| Client ID | : 6A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 14:40 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 107,- | Analyst | : JRO |
| Lab File ID | : WG2040210.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Total Nitrogen | ND | 0.30 | 0.30 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-05 | Date Collected | : 03/05/25 09:27 |
| Client ID | : 6B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 14:40 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 107,- | Analyst | : JRO |
| Lab File ID | : WG2040210.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Total Nitrogen | 1.8 | 0.30 | 0.30 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-07 | Date Collected | : 03/05/25 08:15 |
| Client ID | : 7A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 14:40 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 107,- | Analyst | : JRO |
| Lab File ID | : WG2040210.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Total Nitrogen | 0.66 | 0.30 | 0.30 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-08 | Date Collected | : 03/05/25 08:13 |
| Client ID | : 7B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 14:40 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 107,- | Analyst | : JRO |
| Lab File ID | : WG2040210.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Total Nitrogen | 0.31 | 0.30 | 0.30 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-10 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 14:40 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 107,- | Analyst | : JRO |
| Lab File ID | : WG2040210.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Total Nitrogen | 1.3 | 0.30 | 0.30 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-11 | Date Collected | : 03/05/25 16:45 |
| Client ID | : 8B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 14:40 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 107,- | Analyst | : JRO |
| Lab File ID | : WG2040210.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Total Nitrogen | 0.91 | 0.30 | 0.30 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-13 | Date Collected | : 03/05/25 14:10 |
| Client ID | : 9A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 14:40 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 107,- | Analyst | : JRO |
| Lab File ID | : WG2040210.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Total Nitrogen | 5.3 | 0.30 | 0.30 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-14 | Date Collected | : 03/05/25 15:15 |
| Client ID | : 9B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 14:40 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 107,- | Analyst | : JRO |
| Lab File ID | : WG2040210.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Total Nitrogen | ND | 0.30 | 0.30 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-16 | Date Collected | : 03/05/25 12:45 |
| Client ID | : 10A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 14:40 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 107,- | Analyst | : JRO |
| Lab File ID | : WG2040210.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Total Nitrogen | 3.9 | 0.30 | 0.30 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-17 | Date Collected | : 03/05/25 12:55 |
| Client ID | : 10B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 14:40 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 107,- | Analyst | : JRO |
| Lab File ID | : WG2040210.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Total Nitrogen | 2.4 | 0.30 | 0.30 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-19 | Date Collected | : 03/05/25 00:00 |
| Client ID | : DUP001 | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 14:40 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 107,- | Analyst | : JRO |
| Lab File ID | : WG2040210.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Total Nitrogen | 4.0 | 0.30 | 0.30 | |

# Sample Raw Data

PACE ANALYTICAL LABS

# WET CHEMISTRY DEPARTMENT

TOTAL NITROGEN

Last Change 3/5/13 GFF
File tnitrogen.xlt

**Sample #:** _____

**Client:** _____

**Analysis:** **Total Nitrogen**

**Method:** ***Calculation from TKN & NO3/NO2***

**Product:** **TNITROGEN**
**Analyte:** **Total Nitrogen,**
**Analysis Date:** 3/13/2025 14:40
**Technician:** JRO
**Work group:** WG2040210
**RL:** **0.3 mg/L**

| | Sample Number | TKN (mg/L) | NO3/NO2 (mg/L) | RL Multiplier | Result (mg/L) |
|---|---|---|---|---|---|
| SAMP | L2512368-01 | 1.11 | 0.13 | 5.0 | 0.13 |
| SAMP | L2512368-02 | 0 | 2.2 | 1.0 | 2.2 |
| SAMP | L2512368-04 | 0.176 | 0.22 | 1.0 | 0.22 |
| SAMP | L2512368-05 | 0 | 1.8 | 1.0 | 1.8 |
| SAMP | L2512368-07 | 0.314 | 0.35 | 1.0 | 0.664 |
| SAMP | L2512368-08 | 0.0752 | 0.31 | 1.0 | 0.31 |
| SAMP | L2512368-10 | 0.068 | 1.3 | 1.0 | 1.3 |
| SAMP | L2512368-11 | 0.39 | 0.52 | 1.0 | 0.91 |
| SAMP | L2512368-13 | 0 | 5.3 | 1.0 | 5.3 |
| SAMP | L2512368-14 | 0.215 | 0 | 1.0 | 0.215 |
| SAMP | L2512368-16 | 0 | 3.9 | 1.0 | 3.9 |
| SAMP | L2512368-17 | 0 | 2.4 | 1.0 | 2.4 |
| SAMP | L2512368-19 | 0 | 4 | 1.0 | 4 |
| SAMP | L2512532-01 | 0.717 | 0 | 1.0 | 0.717 |
| SAMP | L2512532-02 | 0.412 | 0 | 1.0 | 0.412 |
| SAMP | L2512532-03 | 0.573 | 0 | 1.0 | 0.573 |
| SAMP | L2512534-01 | 0.76 | 0.16 | 1.0 | 0.92 |
| SAMP | L2512607-01 | 0 | 9.4 | 1.6 | 9.4 |
| SAMP | L2512607-02 | 0 | 1.4 | 1.0 | 1.4 |
| SAMP | L2512607-03 | 0.0908 | 3.7 | 1.0 | 3.7 |
| SAMP | L2512607-04 | 0 | 4.6 | 1.0 | 4.6 |
| SAMP | L2512607-05 | 0 | 3.8 | 1.0 | 3.8 |
| SAMP | L2512607-06 | 0 | 0 | 1.0 | 0 |
| SAMP | L2512628-01 | 0 | 20 | 1.6 | 20 |
| SAMP | L2512663-01 | 0.344 | 0.62 | 1.0 | 0.964 |
| SAMP | L2512679-01 | 0.081 | 0.072 | 1.0 | 0.153 |
| | | | | | |
| | | | | | |

# Calculations of Total Nitrogen

Calculate the concentration value based on results for TKN-N and N03/NO2-N.

Aqueous samples:

mgTN-N/L = TKN-N(mg/l) + NO3/NO2-N (mg/l)

Soil samples:

mgTN-N/Kg = TKN-N(mg/Kg) + NO3/NO2-N(mg/Kg)

# Total Kjeldahl Nitrogen Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-01 | Date Collected | : 03/05/25 11:20 |
| Client ID | : 5A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 11:38 |
| Sample Matrix | : WATER | Dilution Factor | : 5 |
| Analytical Method | : 121,4500NH3-H | Analyst | : KEM |
| Lab File ID | : NH320250313-C | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/12/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | 1.11 | 1.50 | 0.330 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-02 | Date Collected | : 03/05/25 11:25 |
| Client ID | : 5B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 11:39 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NH3-H | Analyst | : KEM |
| Lab File ID | : NH320250313-C | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/12/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | ND | 0.300 | 0.066 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-04 | Date Collected | : 03/05/25 09:25 |
| Client ID | : 6A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 11:40 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NH3-H | Analyst | : KEM |
| Lab File ID | : NH320250313-C | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/12/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | 0.176 | 0.300 | 0.066 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-05 | Date Collected | : 03/05/25 09:27 |
| Client ID | : 6B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 11:41 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NH3-H | Analyst | : KEM |
| Lab File ID | : NH320250313-C | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/12/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | ND | 0.300 | 0.066 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-07 | Date Collected | : 03/05/25 08:15 |
| Client ID | : 7A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 11:42 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NH3-H | Analyst | : KEM |
| Lab File ID | : NH320250313-C | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/12/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | 0.314 | 0.300 | 0.066 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-08 | Date Collected | : 03/05/25 08:13 |
| Client ID | : 7B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 11:43 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NH3-H | Analyst | : KEM |
| Lab File ID | : NH320250313-C | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/12/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | 0.075 | 0.300 | 0.066 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-10 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 11:43 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NH3-H | Analyst | : KEM |
| Lab File ID | : NH320250313-C | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/12/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | 0.068 | 0.300 | 0.066 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-11 | Date Collected | : 03/05/25 16:45 |
| Client ID | : 8B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 11:49 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NH3-H | Analyst | : KEM |
| Lab File ID | : NH320250313-C | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/12/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | 0.390 | 0.300 | 0.066 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-13 | Date Collected | : 03/05/25 14:10 |
| Client ID | : 9A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 11:50 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NH3-H | Analyst | : KEM |
| Lab File ID | : NH320250313-C | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/12/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | ND | 0.300 | 0.066 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-14 | Date Collected | : 03/05/25 15:15 |
| Client ID | : 9B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 11:51 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NH3-H | Analyst | : KEM |
| Lab File ID | : NH320250313-C | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/12/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | 0.215 | 0.300 | 0.066 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-16 | Date Collected | : 03/05/25 12:45 |
| Client ID | : 10A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 11:52 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NH3-H | Analyst | : KEM |
| Lab File ID | : NH320250313-C | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/12/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | ND | 0.300 | 0.066 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-17 | Date Collected | : 03/05/25 12:55 |
| Client ID | : 10B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 11:53 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NH3-H | Analyst | : KEM |
| Lab File ID | : NH320250313-C | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/12/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | ND | 0.300 | 0.066 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-19 | Date Collected | : 03/05/25 00:00 |
| Client ID | : DUP001 | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/13/25 11:54 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NH3-H | Analyst | : KEM |
| Lab File ID | : NH320250313-C | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/12/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | ND | 0.300 | 0.066 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2039543-1 | Date Collected | : NA |
| Client ID | : WG2039543-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/13/25 11:35 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NH3-H | Analyst | : KEM |
| Lab File ID | : NH320250313-C | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/12/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | 0.157 | 0.300 | 0.022 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2039543-3 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8ADUP | Date Received | : 03/05/25 |
| Sample Location | : | Date Analyzed | : 03/13/25 11:47 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NH3-H | Analyst | : KEM |
| Lab File ID | : NH320250313-C | Instrument ID | : LACHAT |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/12/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Total Kjeldahl | ND | 0.300 | 0.066 | U |

# Sample Raw Data

Author: A1WETCHEMINSTRUMENT Date : 3/13/2025

Original Run Filename: OM_3-13-2025_10-24-04AM.OMN Created: 3/13/2025 10:24:04 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_3-13-2025_10-24-04AM.OMN Last Modified: 3/13/2025 11:00:42 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

| | Sample | Rep. | Cup No. | Channel 2 Ammonia (mg N/L) | ADF | MDF | Weight | TRAY A |
|---|---|---|---|---|---|---|---|---|
| | STD 1 | 1 | S1 | 10.00000 | | | | |
| | STD 2 | 1 | S2 | 8.00000 | | | | |
| | STD 3 | 1 | S3 | 4.00000 | | | | |
| | STD 4 | 1 | S4 | 2.00000 | | | | |
| | STD 5 | 1 | S5 | 1.00000 | | | | |
| | STD 6 | 1 | S6 | 0.40000 | | | | |
| | STD 7 | 1 | S7 | 0.20000 | | | | |
| | STD 8 | 1 | S8 | 0.10000 | | | | |
| | STD 9 | 1 | S9 | 0.05000 | | | | |
| | STD 10 | 1 | S10 | 0.00000 | | | | |
| | CCV 0.4000 | 1 | S6 | 0.37978 | | | | 95% |
| | | Known Conc: | | 100.00000 | | | | |
| | | Calibration: | | Table/Fig. : 1 | | | | |
| | CCV 4.0000 | 1 | S3 | 4.00087 | | | | 100% |
| | | Known Conc: | | 100.00000 | | | | |
| | CCB | 1 | S10 | 0.00640 | | | | |
| | | Known Conc: | | 100.00000 | | | | |
| | HI ICV 8.0 | 1 | 1 | 8.15262 | | | | 102% |
| | LO ICV 1.0 | 1 | 2 | 0.98717 | | | | 99% |
| | ICB | 1 | 3 | 0.00584 | | | | |
| | WG2039575-1 T | 1 | 4 | 0.00931 | | | | |
| | WG2039575-2 T | 1 | 5 | 37.71535 | | 15.00 | | 94% |
| | LCS LO T | 1 | 6 | 3.97740 | | 3.00 | | 99% |
| | L2512241-02 T | 1 | 7 | 0.56015 | | 6.00 | | |
| | L2512241-04 T | 1 | 8 | 1.62699 | | 3.00 | | |
| | WG2039575-4 T | 1 | 9 | 12.02074 | | 3.00 | | 119% |
| X | WG2039575-3 T | 1 | 10 | 2.80823 | | 3.00 | | RERUN |
| | CCV 0.4000 | 1 | S6 | 0.42428 | | | | |
| | | Known Conc: | | 100.00000 | | | | |
| | CCV 4.0000 | 1 | S3 | 4.05606 | | | | |
| | | Known Conc: | | 100.00000 | | | | |
| | CCB | 1 | S10 | 0.01663 | | | | |
| | | Known Conc: | | 100.00000 | | | | |
| | L2512241-05 T | 1 | 11 | 2.51231 | | 3.00 | | |
| | WG2039575-3 T | 1 | 10 | 2.55673 | | 3.00 | | RPD=2% |
| | CCV 0.4000 | 1 | S6 | 0.39166 | | | | 98% |
| | | Known Conc: | | 100.00000 | | | | |
| | CCV 4.0000 | 1 | S3 | 4.06682 | | | | 102% |
| | | Known Conc: | | 100.00000 | | | | |
| | CCB | 1 | S10 | 0.00997 | | | | |
| | | Known Conc: | | 100.00000 | | | | |

Author: A1WETCHEMINSTRUMENT Date : 3/13/2025

Channel 2 (Ammonia High) - Current View

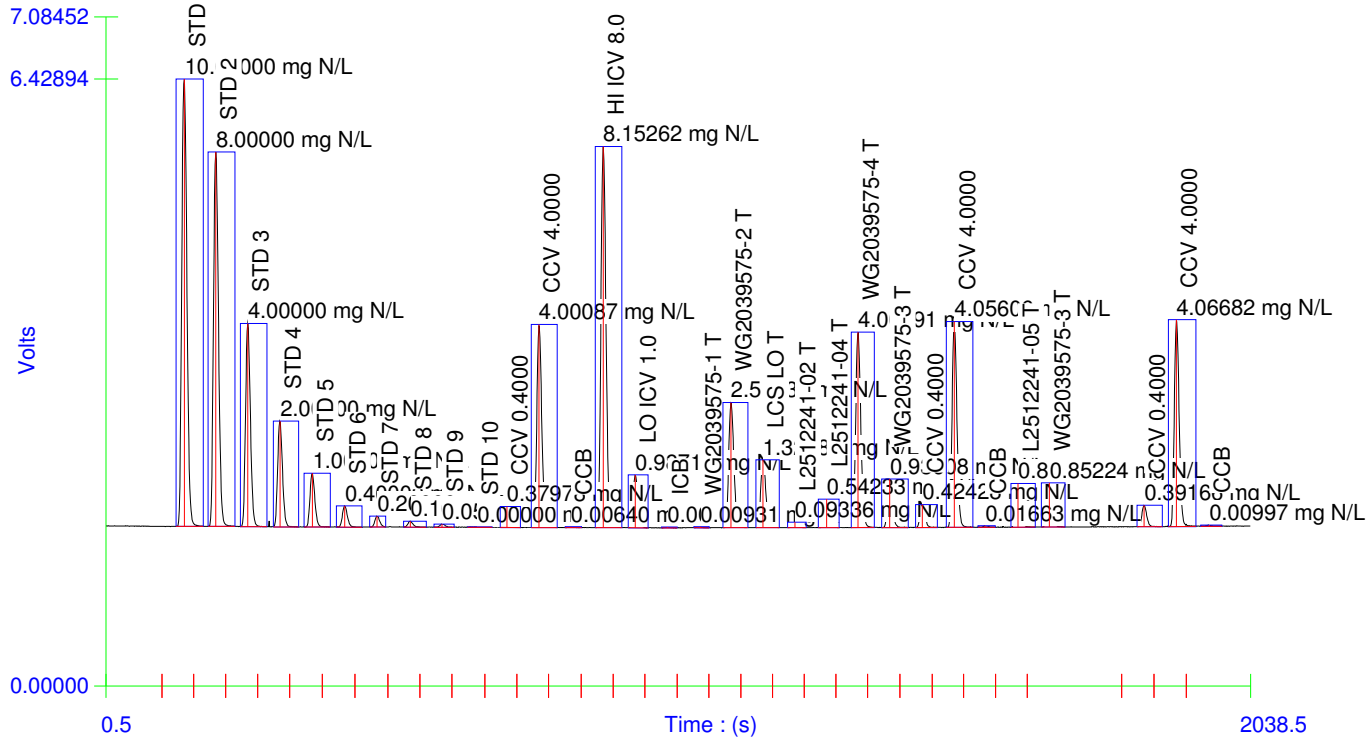
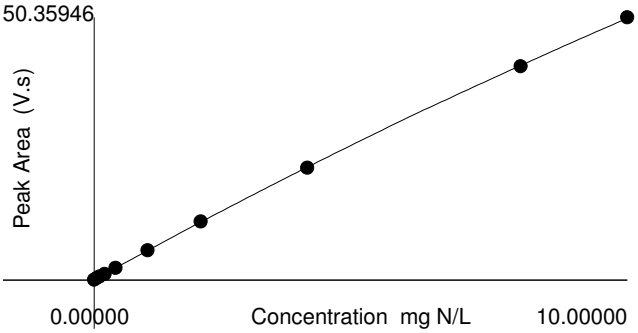



Table : 1 (Ammonia)

| | Known Conc. (mg N/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg N/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10.00000 | 1 | 50.35946 | 4.73866 | 0.0 | -0.4 | 10.02557 | 3/13/2025 | 10:28:20 AM |
| 2 | 8.00000 | 1 | 40.95819 | 3.96553 | 0.0 | 0.5 | 7.97205 | 3/13/2025 | 10:29:16 AM |
| 3 | 4.00000 | 1 | 21.50008 | 2.14993 | 0.0 | 0.6 | 3.98382 | 3/13/2025 | 10:30:13 AM |
| 4 | 2.00000 | 1 | 11.21318 | 1.12416 | 0.0 | -1.0 | 2.01812 | 3/13/2025 | 10:31:10 AM |
| 5 | 1.00000 | 1 | 5.70796 | 0.56994 | 0.0 | -1.0 | 1.00671 | 3/13/2025 | 10:32:08 AM |
| 6 | 0.40000 | 1 | 2.29254 | 0.22453 | 0.0 | 1.1 | 0.39345 | 3/13/2025 | 10:33:06 AM |
| 7 | 0.20000 | 1 | 1.16615 | 0.11503 | 0.0 | 2.6 | 0.19358 | 3/13/2025 | 10:34:04 AM |
| 8 | 0.10000 | 1 | 0.64857 | 0.06065 | 0.0 | -2.1 | 0.10214 | 3/13/2025 | 10:35:03 AM |
| 9 | 0.05000 | 1 | 0.37205 | 0.03340 | 0.0 | -5.2 | 0.05339 | 3/13/2025 | 10:36:01 AM |
| 10 | 0.00000 | 1 | 0.05406 | 0.00364 | | | -0.00258 | 3/13/2025 | 10:36:57 AM |

Figure : 1 (Ammonia)




Area = - 0.06314 * Conc^2 + 5.64141 * Conc + 0.07177
Conc = 0.00047 * Area^2 + 0.17582 * Area - 0.01209
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Author: A1WETCHEMINSTRUMENT Date : 3/13/2025

Original Run Filename: OM_3-13-2025_11-07-01AM.OMN Created: 3/13/2025 11:07:01 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_3-13-2025_11-07-01AM.OMN Last Modified: 3/13/2025 11:24:14 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

| Sample | Rep. | Cup No. | Channel 2 Ammonia (mg N/L) | ADF | MDF | Weight | TRAY B |
|---|---|---|---|---|---|---|---|
| CCV 0.4000 | 1 | S6 | 0.39474 | | | | 99% |
| | Known Conc: | | 100.00000 | | | | |
| CCV 4.0000 | 1 | S3 | 4.04846 | | | | 101% |
| | Known Conc: | | 100.00000 | | | | |
| | Calibration: | | Table/Fig. : 1 | | | | |
| CCB | 1 | S10 | 0.01193 | | | | |
| | Known Conc: | | 100.00000 | | | | |
| WG2039859-1 | 1 | 1 | 0.01715 | | 1.50 | | |
| WG2039859-2 | 1 | 2 | 19.74887 | | 7.50 | | 99% |
| LCS LO | 1 | 3 | 1.95142 | | 1.50 | | 98% |
| L2512558-22 | 1 | 4 | 13.73481 | | 15.00 | | |
| WG2039859-4 | 1 | 5 | 57.54517 | | 15.00 | | 110% |
| WG2039859-3 | 1 | 6 | 13.82065 | | 15.00 | | RPD=1% |
| L2512558-23 | 1 | 7 | 0.11392 | | 1.50 | | |
| L2512558-24 | 1 | 8 | 1.56005 | | 1.50 | | |
| CCV 0.4000 | 1 | S6 | 0.39575 | | | | 99% |
| | Known Conc: | | 100.00000 | | | | |
| CCV 4.0000 | 1 | S3 | 4.06674 | | | | 102% |
| | Known Conc: | | 100.00000 | | | | |
| CCB | 1 | S10 | 0.01873 | | | | |
| | Known Conc: | | 100.00000 | | | | |

Channel 2 (Ammonia High) - Current View

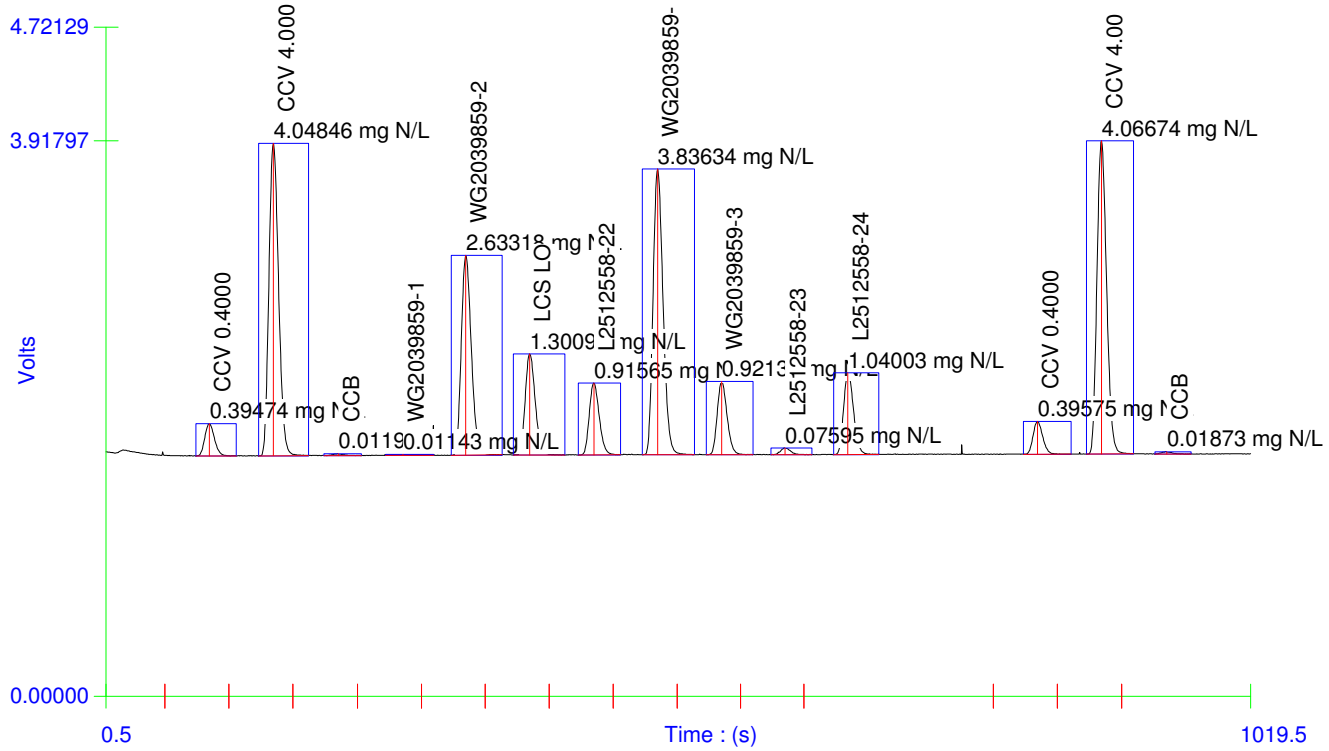
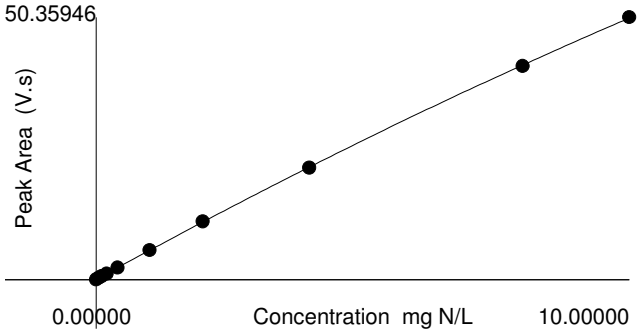


Table : 1 (Ammonia)

| | Known Conc. (mg N/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg N/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10.00000 | 1 | 50.35946 | 4.73866 | 0.0 | -0.4 | 10.02557 | 3/13/2025 | 10:28:20 AM |
| 2 | 8.00000 | 1 | 40.95819 | 3.96553 | 0.0 | 0.5 | 7.97205 | 3/13/2025 | 10:29:16 AM |
| 3 | 4.00000 | 1 | 21.50008 | 2.14993 | 0.0 | 0.6 | 3.98382 | 3/13/2025 | 10:30:13 AM |
| 4 | 2.00000 | 1 | 11.21318 | 1.12416 | 0.0 | -1.0 | 2.01812 | 3/13/2025 | 10:31:10 AM |
| 5 | 1.00000 | 1 | 5.70796 | 0.56994 | 0.0 | -1.0 | 1.00671 | 3/13/2025 | 10:32:08 AM |
| 6 | 0.40000 | 1 | 2.29254 | 0.22453 | 0.0 | 1.1 | 0.39345 | 3/13/2025 | 10:33:06 AM |
| 7 | 0.20000 | 1 | 1.16615 | 0.11503 | 0.0 | 2.6 | 0.19358 | 3/13/2025 | 10:34:04 AM |
| 8 | 0.10000 | 1 | 0.64857 | 0.06065 | 0.0 | -2.1 | 0.10214 | 3/13/2025 | 10:35:03 AM |
| 9 | 0.05000 | 1 | 0.37205 | 0.03340 | 0.0 | -5.2 | 0.05339 | 3/13/2025 | 10:36:01 AM |
| 10 | 0.00000 | 1 | 0.05406 | 0.00364 | | | -0.00258 | 3/13/2025 | 10:36:57 AM |

Figure : 1 (Ammonia)




Area = - 0.06314 * Conc^2 + 5.64141 * Conc + 0.07177
Conc = 0.00047 * Area^2 + 0.17582 * Area - 0.01209
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Author: A1WETCHEMINSTRUMENT Date : 3/13/2025

Original Run Filename: OM_3-13-2025_11-31-34AM.OMN Created: 3/13/2025 11:31:34 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_3-13-2025_11-31-34AM.OMN Last Modified: 3/13/2025 12:10:30 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

| Sample | Rep. | Cup No. | Channel 2 Ammonia (mg N/L) | ADF | MDF | Weight | TRAY C |
|---|---|---|---|---|---|---|---|
| CCV 0.4000 | 1 | S6 | 0.39671 | | | | 99% |
| | Known Conc: | | 100.00000 | | | | |
| CCV 4.0000 | 1 | S3 | 4.04941 | | | | 101% |
| | Known Conc: | | 100.00000 | | | | |
| | Calibration: | | Table/Fig. : 1 | | | | |
| CCB | 1 | S10 | 0.01699 | | | | |
| | Known Conc: | | 100.00000 | | | | |
| WG2039543-1 T | 1 | 1 | 0.05232 | | | | |
| WG2039543-2 T | 1 | 2 | 37.33052 | | 15.00 | | 93% |
| LCS LO T | 1 | 3 | 4.07429 | | 3.00 | | 102% |
| L2512368-01 T | 1 | 4 | 1.11374 | | 15.00 | | |
| L2512368-02 T | 1 | 5 | 0.05066 | | 3.00 | | |
| L2512368-04 T | 1 | 6 | 0.17597 | | 3.00 | | |
| L2512368-05 T | 1 | 7 | 0.03174 | | 3.00 | | |
| L2512368-07 T | 1 | 8 | 0.31458 | | 3.00 | | |
| L2512368-08 T | 1 | 9 | 0.07518 | | 3.00 | | |
| L2512368-10 T | 1 | 10 | 0.06803 | | 3.00 | | |
| CCV 0.4000 | 1 | S6 | 0.39593 | | | | 99% |
| | Known Conc: | | 100.00000 | | | | |
| CCV 4.0000 | 1 | S3 | 4.07576 | | | | 102% |
| | Known Conc: | | 100.00000 | | | | |
| CCB | 1 | S10 | 0.01743 | | | | |
| | Known Conc: | | 100.00000 | | | | |
| WG2039543-3 T | 1 | 12 | 0.06102 | | 3.00 | | RPD=NC |
| WG2039543-4 T | 1 | 11 | 8.12750 | | 3.00 | | 102% |
| L2512368-11 T | 1 | 13 | 0.39026 | | 3.00 | | |
| L2512368-13 T | 1 | 14 | 0.04548 | | 3.00 | | |
| L2512368-14 T | 1 | 15 | 0.21529 | | 3.00 | | |
| L2512368-16 T | 1 | 16 | -0.00631 | | 3.00 | | |
| L2512368-17 T | 1 | 17 | 0.05229 | | 3.00 | | |
| L2512368-19 T | 1 | 18 | -0.00181 | | 3.00 | | |
| L2512532-01 T | 1 | 19 | 0.71675 | | 3.00 | | |
| L2512532-02 T | 1 | 20 | 0.41200 | | 3.00 | | |
| CCV 0.4000 | 1 | S6 | 0.39361 | | | | 98% |
| | Known Conc: | | 100.00000 | | | | |
| CCV 4.0000 | 1 | S3 | 4.07257 | | | | 102% |
| | Known Conc: | | 100.00000 | | | | |
| CCB | 1 | S10 | 0.01613 | | | | |
| | Known Conc: | | 100.00000 | | | | |
| L2512532-03 T | 1 | 21 | 0.57327 | | 3.00 | | |
| L2512534-01 T | 1 | 22 | 0.75970 | | 3.00 | | |
| L2512628-01 T | 1 | 23 | 0.01916 | | 3.00 | | |
| L2512663-01 T | 1 | 24 | 0.34372 | | 3.00 | | |
| L2512679-01 T | 1 | 25 | 0.08100 | | 3.00 | | |
| CCV 0.4000 | 1 | S6 | 0.39473 | | | | 99% |
| | Known Conc: | | 100.00000 | | | | |
| CCV 4.0000 | 1 | S3 | 4.08282 | | | | 102% |
| | Known Conc: | | 100.00000 | | | | |
| CCB | 1 | S10 | 0.01668 | | | | |
| | Known Conc: | | 100.00000 | | | | |

Author: A1WETCHEMINSTRUMENT Date : 3/13/2025

Channel 2 (Ammonia High) - Current View

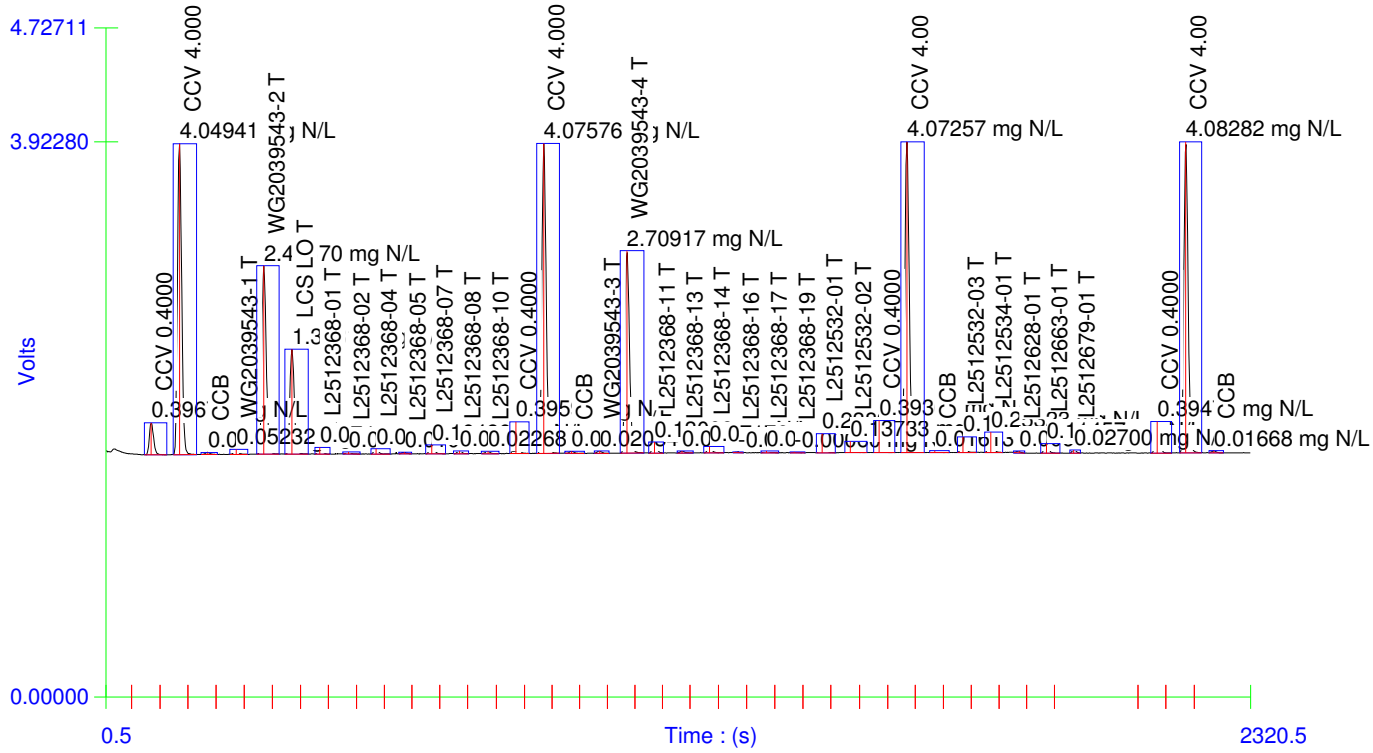
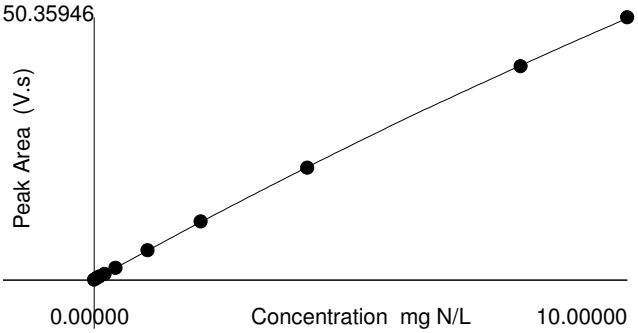



Table : 1 (Ammonia)

| | Known Conc. (mg N/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg N/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10.00000 | 1 | 50.35946 | 4.73866 | 0.0 | -0.4 | 10.02557 | 3/13/2025 | 10:28:20 AM |
| 2 | 8.00000 | 1 | 40.95819 | 3.96553 | 0.0 | 0.5 | 7.97205 | 3/13/2025 | 10:29:16 AM |
| 3 | 4.00000 | 1 | 21.50008 | 2.14993 | 0.0 | 0.6 | 3.98382 | 3/13/2025 | 10:30:13 AM |
| 4 | 2.00000 | 1 | 11.21318 | 1.12416 | 0.0 | -1.0 | 2.01812 | 3/13/2025 | 10:31:10 AM |
| 5 | 1.00000 | 1 | 5.70796 | 0.56994 | 0.0 | -1.0 | 1.00671 | 3/13/2025 | 10:32:08 AM |
| 6 | 0.40000 | 1 | 2.29254 | 0.22453 | 0.0 | 1.1 | 0.39345 | 3/13/2025 | 10:33:06 AM |
| 7 | 0.20000 | 1 | 1.16615 | 0.11503 | 0.0 | 2.6 | 0.19358 | 3/13/2025 | 10:34:04 AM |
| 8 | 0.10000 | 1 | 0.64857 | 0.06065 | 0.0 | -2.1 | 0.10214 | 3/13/2025 | 10:35:03 AM |
| 9 | 0.05000 | 1 | 0.37205 | 0.03340 | 0.0 | -5.2 | 0.05339 | 3/13/2025 | 10:36:01 AM |
| 10 | 0.00000 | 1 | 0.05406 | 0.00364 | | | -0.00258 | 3/13/2025 | 10:36:57 AM |

Figure : 1 (Ammonia)




Area = - 0.06314 * Conc^2 + 5.64141 * Conc + 0.07177
Conc = 0.00047 * Area^2 + 0.17582 * Area - 0.01209
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

# Quality Control

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 8A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-10 | | |
| **Matrix Spike** | : WG2039543-4 | **MS Analysis Date** | : 03/13/25 11:48 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Nitrogen, Total Kjeldahl | 0.068J | 8 | 8.13 | 102 | | | | | 77-111 | 24 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 8A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-10 | **Analysis Date** | : 03/13/25 11:43 |
| **Dup Sample ID** | : WG2039543-3 | **DUP Analysis Date** | : 03/13/25 11:47 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Nitrogen, Total Kjeldahl | 0.068J | ND | NC | 24 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2039543-2 | **LCS Analysis Date** | : 03/13/25 11:36 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Nitrogen, Total Kjeldahl | 40.0 | 37.3 | 93. | | | | | 78-122 | 24 |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, Total Kjeldahl | NONE | 0.3 | 0.066 | mg/l | 78-122 | | 77-111 | 24 | 24 | 4500NH3-H | 28 days | 1 - Plastic 500ml H2SO4 preserved |
| Nitrogen, Total Kjeldahl | NONE | 0.3 | 0.066 | mg/l | 78-122 | | 77-111 | 24 | 24 | 351.1 | 28 days | 1 - Plastic 500ml H2SO4 preserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11468-1
**Page:** 1

**WETCHEM (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, Total Kjeldahl | NONE | 150 | 31.5 | mg/kg | 81-115 | 26 | 43-160 | 26 | 26 | 4500NH3-H | 28 days | 1 - Glass 250ml/8oz unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

# Calculations of Nitrogen in TKN

Aqueous samples:

Compute sample TKN –N concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

If the sample has a concentration of less than 2ppm, calculate results by using the low curve generated on Channel 1.

If the sample concentration is greater than 2ppm, calculate the results by using the high curve generated on Channel 2.

To Compute the final results for aqueous samples, multiply the direct reading by the dilution factor based on the initial preparation volume. (also done using software)

TKN-N mg/L = mg/L direct reading x dilution factor

# Sequence Logs

From Page No. ____

Tray A (10-24-04 AM)
prep 3/12/25 @17:00

1 Hi JEV 8.0
2 Lo JEV 1.0
3 JEB
4 WG2039575-1T, Blk
5 -2T, LCS Hi, 5x
6 LCS Lo T
7 12241-02T (2x)
8 -04T
9 -05T MS
⊗10 -05T Dup, rerun
11 -05T

RTM

Tray B (11-07-01 AM)
prep 3/12/25 22:00

1 WG2039859-1, Blk
2 -2, LCS Hi, 5x
3 LCS Lo
4 12558 RTM -22 (10x)
5 -22 MS (10x)
6 -22 Dup (10x)
7 -23
8 -24

Tray C (11-31-34 AM)
prep 3/12/25 @17:10

1 WG2039543-1T, Blk
2 -2T, LCS Hi, 5x
3 LCS Lo T
4 12368-01T (5x)
5 -02T
6 -04T
7 -05T
8 -07T
9 -08T
10 -10T
11 -10T MS
12 -10T Dup
13 -11T
14 -13T
15 -14T
16 -16T
17 -17T
18 -19T
19 12532 -01T
20 -02T
21 -03T
22 12534 -01T
23 12628 -01T
24 12663 -01T
25 12679 -01T

RTM

Date: RTM 3/13/25
Sodium Phenolate: 3/4/25 R-4161
Sodium Hypochlorate: 3/4/25 stoptshop
Sodium Nitropruisside: 3/4/25 R-3969
Borric Acid Soln.: 3/4/25 R-4019
ICV 1.0: 3/11/25 WC-3495
ICV 8.0:
Cal. Std: 3/6/25 WC-3561
See Front Page for Instructions:

To Page No. ____

Witnessed & Understood by me, | Date | Invented by: | Date
Recorded by:

# Sample Preparation

Project No. _____

**Confidential** Book No. _____ WG2039543

From Page No. ____

| Sample | Dilution | Volume | Final Vol. |
|---|---|---|---|
| Blank | 1x | 50mL | 150mL |
| Low | | | |
| High | | | |
| L25122368-01 | 5X(10T50)N=20 | | |
| -02 | 1x | | |
| -04 | | | |
| -05 | | | |
| -07 | | | |
| -08 | | | |
| -10 Pt | | | |
| -10 Dup | | | |
| -10 MS | | | |
| -11 | | | |
| -13 | | | |
| -14 | | | |
| -16 | | | |
| -17 | | | |
| -19 | | | |
| 12532-01 | | | |
| -02 | | | |
| -03 | | | |
| 12534-01 | | | |
| 12628-01 | | | |
| 12663-01 | | | |
| 12679-01 | | | |

Same Standards 03/12/25 @ 17:10 SAD

of Reagents

as previous

pg #61

To Page No. ____

Witnessed & Understood by me, | Date | Invented by: | Date

Recorded by:

# Nitrate and Nitrite Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-01 | Date Collected | : 03/05/25 11:20 |
| Client ID | : 5A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 05:57 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : MRM |
| Lab File ID | : NO3250311-A1 | Instrument ID | : LACHAT4 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | 0.13 | 0.10 | 0.046 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-02 | Date Collected | : 03/05/25 11:25 |
| Client ID | : 5B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 05:58 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : MRM |
| Lab File ID | : NO3250311-A1 | Instrument ID | : LACHAT4 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | 2.2 | 0.10 | 0.046 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-04 | Date Collected | : 03/05/25 09:25 |
| Client ID | : 6A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 06:00 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : MRM |
| Lab File ID | : NO3250311-A1 | Instrument ID | : LACHAT4 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | 0.22 | 0.10 | 0.046 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-05 | Date Collected | : 03/05/25 09:27 |
| Client ID | : 6B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 06:01 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : MRM |
| Lab File ID | : NO3250311-A1 | Instrument ID | : LACHAT4 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | 1.8 | 0.10 | 0.046 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-07 | Date Collected | : 03/05/25 08:15 |
| Client ID | : 7A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 06:02 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : MRM |
| Lab File ID | : NO3250311-A1 | Instrument ID | : LACHAT4 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | 0.35 | 0.10 | 0.046 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-08 | Date Collected | : 03/05/25 08:13 |
| Client ID | : 7B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 06:03 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : MRM |
| Lab File ID | : NO3250311-A1 | Instrument ID | : LACHAT4 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | 0.31 | 0.10 | 0.046 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-10 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 06:05 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : MRM |
| Lab File ID | : NO3250311-A1 | Instrument ID | : LACHAT4 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | 1.3 | 0.10 | 0.046 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-11 | Date Collected | : 03/05/25 16:45 |
| Client ID | : 8B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 06:09 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : MRM |
| Lab File ID | : NO3250311-A1 | Instrument ID | : LACHAT4 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | 0.52 | 0.10 | 0.046 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-13 | Date Collected | : 03/05/25 14:10 |
| Client ID | : 9A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 06:14 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : MRM |
| Lab File ID | : NO3250311-A1 | Instrument ID | : LACHAT4 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | 5.3 | 0.10 | 0.046 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-14 | Date Collected | : 03/05/25 15:15 |
| Client ID | : 9B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 06:15 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : MRM |
| Lab File ID | : NO3250311-A1 | Instrument ID | : LACHAT4 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | ND | 0.10 | 0.046 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-16 | Date Collected | : 03/05/25 12:45 |
| Client ID | : 10A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 06:16 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : MRM |
| Lab File ID | : NO3250311-A1 | Instrument ID | : LACHAT4 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | 3.9 | 0.10 | 0.046 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-17 | Date Collected | : 03/05/25 12:55 |
| Client ID | : 10B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 06:18 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : MRM |
| Lab File ID | : NO3250311-A1 | Instrument ID | : LACHAT4 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | 2.4 | 0.10 | 0.046 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-19 | Date Collected | : 03/05/25 00:00 |
| Client ID | : DUP001 | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 06:19 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : MRM |
| Lab File ID | : NO3250311-A1 | Instrument ID | : LACHAT4 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | 4.0 | 0.10 | 0.046 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038834-1 | Date Collected | : NA |
| Client ID | : WG2038834-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/11/25 05:48 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : MRM |
| Lab File ID | : NO3250311-A1 | Instrument ID | : LACHAT4 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | ND | 0.10 | 0.046 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038834-3 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8ADUP | Date Received | : 03/05/25 |
| Sample Location | : | Date Analyzed | : 03/11/25 06:06 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500NO3-F | Analyst | : MRM |
| Lab File ID | : NO3250311-A1 | Instrument ID | : LACHAT4 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Nitrogen, Nitrate/Nitrite | 1.2 | 0.10 | 0.05 | |

# Sample Raw Data

Author: MRM Date : 3/11/2025

Original Run Filename: OM_3-11-2025_04-35-00AM.OMN Created: 3/11/2025 4:35:00 AM
Original Run Author's Signature: [A1wetcheminstrument]
Current Run Filename: OM_3-11-2025_04-35-00AM.OMN Last Modified: 3/11/2025 6:32:31 AM
Current Run Author's Signature: [A1wetcheminstrument]
Description: Default New Run

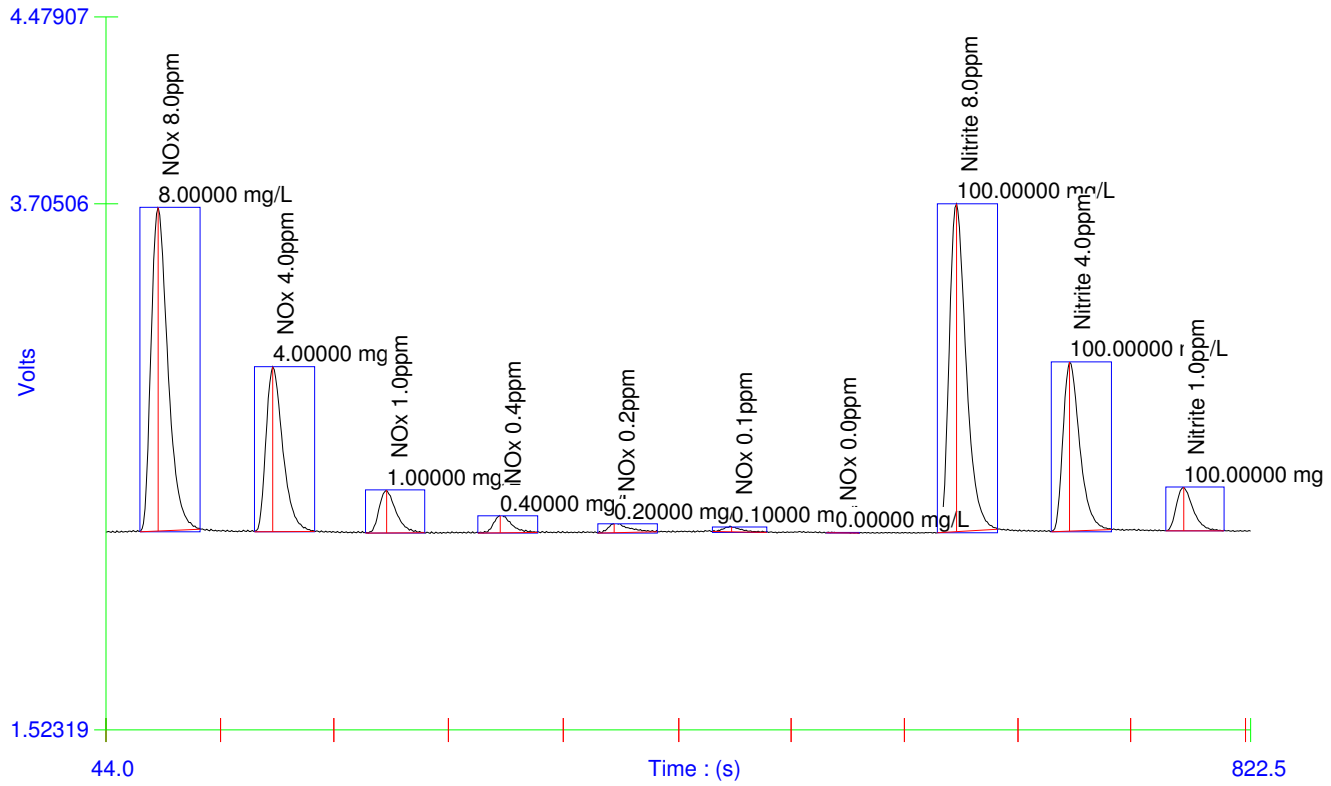
| Sample | Rep. | Cup No. | Channel 1 NO3+NO2 (mg/L) | Channel 2 Nitrite (mg N/L) | ADF | MDF | Weight |
|---|---|---|---|---|---|---|---|
| NOx 8.0ppm | 1 | S3 | 8.00000 | 100.00000 | | | |
| NOx 4.0ppm | 1 | S4 | 4.00000 | 100.00000 | | | |
| NOx 1.0ppm | 1 | S2 | 1.00000 | 100.00000 | | | |
| NOx 0.4ppm | 1 | S5 | 0.40000 | 100.00000 | | | |
| NOx 0.2ppm | 1 | S6 | 0.20000 | 100.00000 | | | |
| NOx 0.1ppm | 1 | S7 | 0.10000 | 100.00000 | | | |
| NOx 0.0ppm | 1 | S1 | 0.00000 | 100.00000 | | | |
| Nitrite 8.0ppm | 1 | S10 | 100.00000 | 8.00000 | | | |
| Nitrite 4.0ppm | 1 | S11 | 100.00000 | 4.00000 | | | |
| Nitrite 1.0ppm | 1 | S9 | 100.00000 | 1.00000 | | | |
| Nitrite 0.4ppm | 1 | S12 | 100.00000 | 0.40000 | | | |
| Nitrite 0.1ppm | 1 | S13 | 100.00000 | 0.10000 | | | |
| Nitrite 0.05ppm | 1 | S14 | 100.00000 | 0.05000 | | | |
| Nitrite 0.0ppm | 1 | S1 | 100.00000 | 0.00000 | | | |
| CCV NO3 | 1 | S2 | 1.01128 | -0.00370 | | | |
| | Known Conc: | | 1.00000 | 0.00000 | | | |
| | Calibration: | | Table/Fig. : 1 | Table/Fig. : 2 | | | |
| CCV NO2 | 1 | S9 | 1.04449 | 1.07539 | | | |
| | Known Conc: | | 0.00000 | 1.00000 | | | |
| CCB | 1 | S1 | -0.01725 | -0.00794 | | | |
| | Known Conc: | | 0.00000 | 0.00000 | | | |
| ICV NO3 5.0 | 1 | 1 | 4.86738 | -0.00786 | | | |
| ICV NO2 5.0 | 1 | 2 | 5.12472 | 5.15522 | | | |
| ICV NO3 0.5 | 1 | 3 | 0.49239 | -0.01099 | | | |
| ICV NO2 0.5 | 1 | 4 | 0.51479 | 0.53365 | | | |
| ICB | 1 | 5 | -0.03166 | -0.00209 | | | |
| DILUTER CHCK 8 PPM | 1 | 6 | 8.34705 | 8.29957 | 5.00 | | |
| BLANK NO3 | 1 | 7 | -0.01273 | -0.00716 | | | |
| LCS NO3 | 1 | 8 | 4.89250 | -0.00705 | | | |
| BLANK NO2 | 1 | 9 | -0.04645 | -0.01036 | | | |
| LCS NO2 | 1 | 10 | 5.13274 | 5.14733 | | | |
| CCV NO3 | 1 | S2 | 1.01009 | -0.01306 | | | |
| | Known Conc: | | 1.00000 | 0.00000 | | | |
| CCV NO2 | 1 | S9 | 1.03627 | 1.06343 | | | |
| | Known Conc: | | 0.00000 | 1.00000 | | | |
| CCB | 1 | S1 | -0.03186 | -0.00594 | | | |
| | Known Conc: | | 0.00000 | 0.00000 | | | |
| WG2038832-1; BLK NO3 SOIL5.1664 | 1 | 11 | -0.09364 | -0.10392 | | | 0.10333 g |
| WG2038832-2; LCS NO3 SOIL 5.1337 | 1 | 12 | 47.07949 | -0.05565 | | | 0.10267 g |
| WG2038833-1; BLK NO2 SOIL 5.2110 | 1 | 13 | -0.50394 | -0.05258 | | | 0.10422 g |
| WG2038833-2; LCS NO2 SOIL 5.2711 | 1 | 14 | 48.48997 | 48.94278 | | | 0.10542 g |
| L2511730-01; 5.1035 | 1 | 15 | 63.37503 | 6.18748 | 10.00 | | 0.10207 g |
| WG2038832-3; DUP NO3 730-01 5.3950 | 1 | 16 | 54.31454 | 4.33784 | 10.00 | | 0.10790 g |
| WG2038832-4; MS NO3 730-01 5.3190 | 1 | 17 | 141.11340 | 5.24937 | 10.00 | | 0.10638 g |
| WG2038833-3; DUP NO2 730-01 5.3950 | 1 | 18 | 52.69026 | 4.34359 | 10.00 | | 0.10790 g |
| WG2038833-4; MS NO2 730-01 5.1564 | 1 | 19 | 141.12358 | 91.72018 | 10.00 | | 0.10313 g |
| L2512011-01; 5.0110 | 1 | 20 | -0.34424 | 0.04031 | | | 0.10022 g |
| CCV NO3 | 1 | S2 | 1.02321 | -0.00738 | | | |
| | Known Conc: | | 1.00000 | 0.00000 | | | |
| CCV NO2 | 1 | S9 | 1.07683 | 1.08272 | | | |
| | Known Conc: | | 0.00000 | 1.00000 | | | |
| CCB | 1 | S1 | -0.03564 | -0.01148 | | | |
| | Known Conc: | | 0.00000 | 0.00000 | | | |
| L2512080-01; 5.7754 | 1 | 21 | 0.09683 | 0.12092 | | | 0.11551 g |
| L2512723-01; 5.9862 | 1 | 22 | 0.25881 | 0.19850 | | | 0.11972 g |
| L2512736-01; 5.4622 | 1 | 23 | 0.28096 | 0.18860 | | | 0.10924 g |
| L2512930-01; 5.9859 | 1 | 24 | 0.20396 | 0.25918 | | | 0.11972 g |
| L2511730-01; 5.1035 | 1 | 15 | 60.41311 | 6.13510 | | | 0.10207 g |
| WG2038832-3; DUP NO3 730-01 5.3950 | 1 | 16 | 52.36452 | 4.61376 | | | 0.10790 g |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG2038833-3; DUP NO2 730-01 5.3950 | 1 | 18 | 51.89111 | 4.47738 | | | 0.10790 g |
| WG2038834-1; BLK CNO3 | 1 | 25 | -0.00012 | -0.00318 | | | |
| WG2038834-2; LCS CNO3 | 1 | 26 | 4.91612 | -0.00244 | | | |
| L2512909-01; MTX 5 U PTO 50 | 1 | 27 | -1.00592 | -0.20710 | 10.00 | 10.00 | |
| CCV NO3 | 1 | S2 | 0.99493 | -0.00384 | | | |
| | Known Conc: | | 1.00000 | 0.00000 | | | |
| CCV NO2 | 1 | S9 | 1.05315 | 1.07933 | | | |
| | Known Conc: | | 0.00000 | 1.00000 | | | |
| CCB | 1 | S1 | -0.01559 | -0.00891 | | | |
| | Known Conc: | | 0.00000 | 0.00000 | | | |
| L2512368-01 | 1 | 28 | 0.12886 | -0.00437 | | | |
| L2512368-02 | 1 | 29 | 2.22303 | -0.00300 | | | |
| L2512368-04 | 1 | 30 | 0.21541 | -0.00437 | | | |
| L2512368-05 | 1 | 31 | 1.79116 | -0.00827 | | | |
| L2512368-07 | 1 | 32 | 0.34744 | -0.00550 | | | |
| L2512368-08 | 1 | 33 | 0.30715 | -0.01128 | | | |
| L2512368-10 | 1 | 34 | 1.28365 | -0.00650 | | | |
| WG2038834-3; DUP CNO3 368-10 | 1 | 35 | 1.25911 | -0.01140 | | | |
| WG2038834-4; MS CNO3 368-10 | 1 | 36 | 4.77604 | -0.00789 | | | |
| L2512368-11 | 1 | 37 | 0.52202 | -0.00303 | | | |
| CCV NO3 | 1 | S2 | 1.00217 | -0.01053 | | | |
| | Known Conc: | | 1.00000 | 0.00000 | | | |
| CCV NO2 | 1 | S9 | 1.01966 | 1.07223 | | | |
| | Known Conc: | | 0.00000 | 1.00000 | | | |
| CCB | 1 | S1 | -0.02884 | -0.00925 | | | |
| | Known Conc: | | 0.00000 | 0.00000 | | | |
| L2512368-13 | 1 | 38 | 5.28314 | -0.00989 | | | |
| L2512368-14 | 1 | 39 | -0.04977 | -0.00307 | | | |
| L2512368-16 | 1 | 40 | 3.88856 | -0.01511 | | | |
| L2512368-17 | 1 | 41 | 2.38175 | -0.01090 | | | |
| L2512368-19 | 1 | 42 | 3.95713 | -0.00301 | | | |
| L2512805-01 | 1 | 43 | -0.01450 | -0.00213 | | | |
| L2512805-02 | 1 | 44 | 0.17672 | -0.01319 | | | |
| L2512805-03 | 1 | 45 | 1.09901 | -0.00734 | | | |
| L2512805-04 | 1 | 46 | 2.26578 | -0.00704 | | | |
| L2512909-01; MTX 5 U PTO 50 | 1 | 27 | 1.20407 | 0.13529 | | 10.00 | |
| CCV NO3 | 1 | S2 | 0.99567 | -0.00068 | | | |
| | Known Conc: | | 1.00000 | 0.00000 | | | |
| CCV NO2 | 1 | S9 | 1.05712 | 1.08907 | | | |
| | Known Conc: | | 0.00000 | 1.00000 | | | |
| CCB | 1 | S1 | -0.05781 | -0.01204 | | | |
| | Known Conc: | | 0.00000 | 0.00000 | | | |

Author: MRM

Date : 3/11/2025

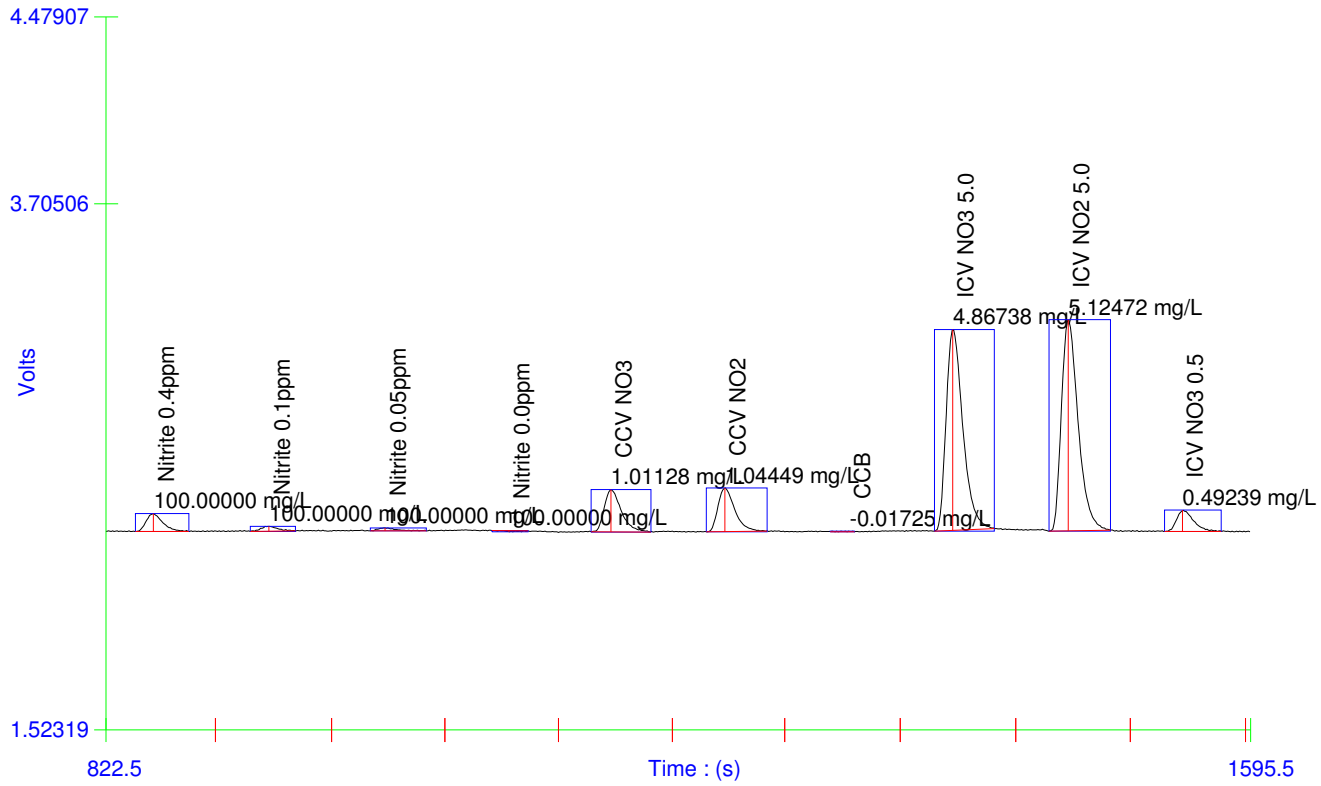
Channel 1 (NO3+NO2) - Set: 1 / 9



Author: MRM

Date : 3/11/2025

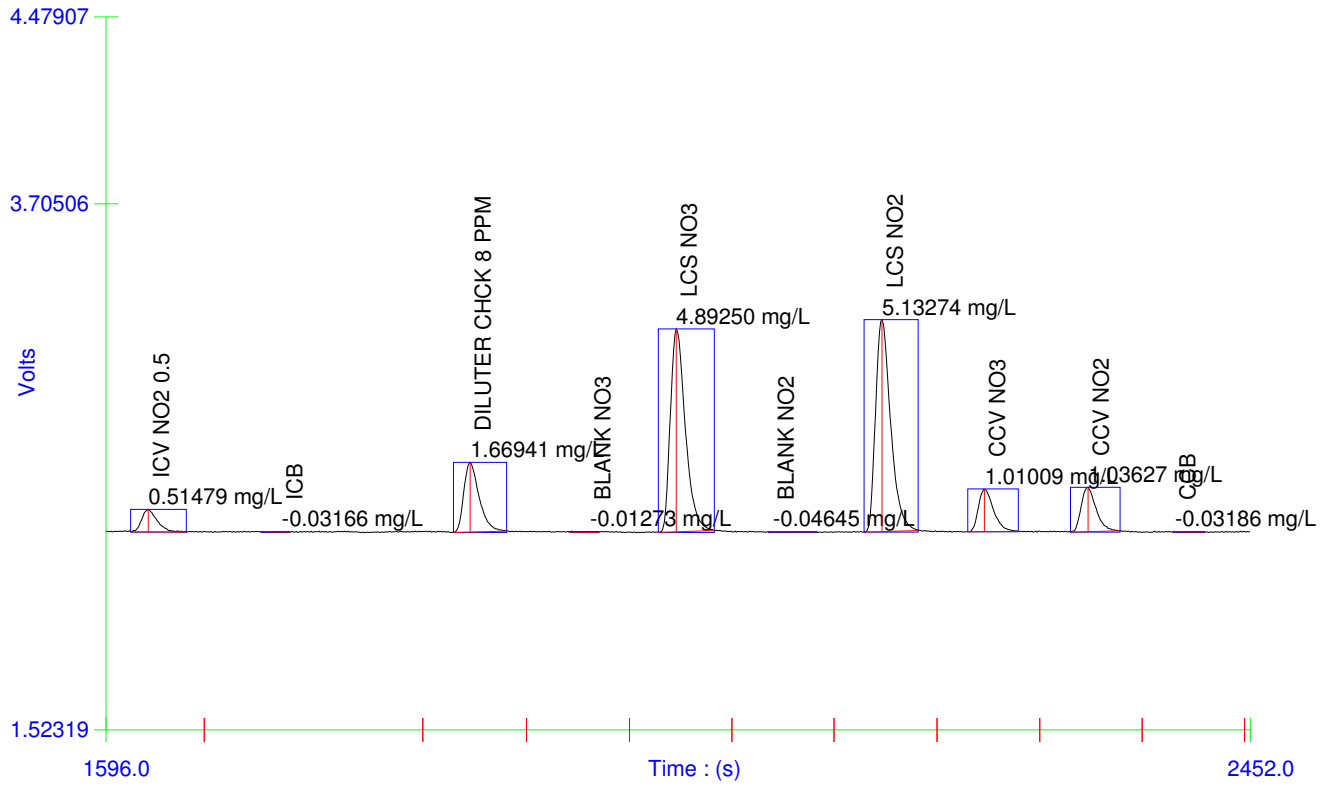
Channel 1 (NO3+NO2) - Set: 2 / 9



Author: MRM

Date : 3/11/2025

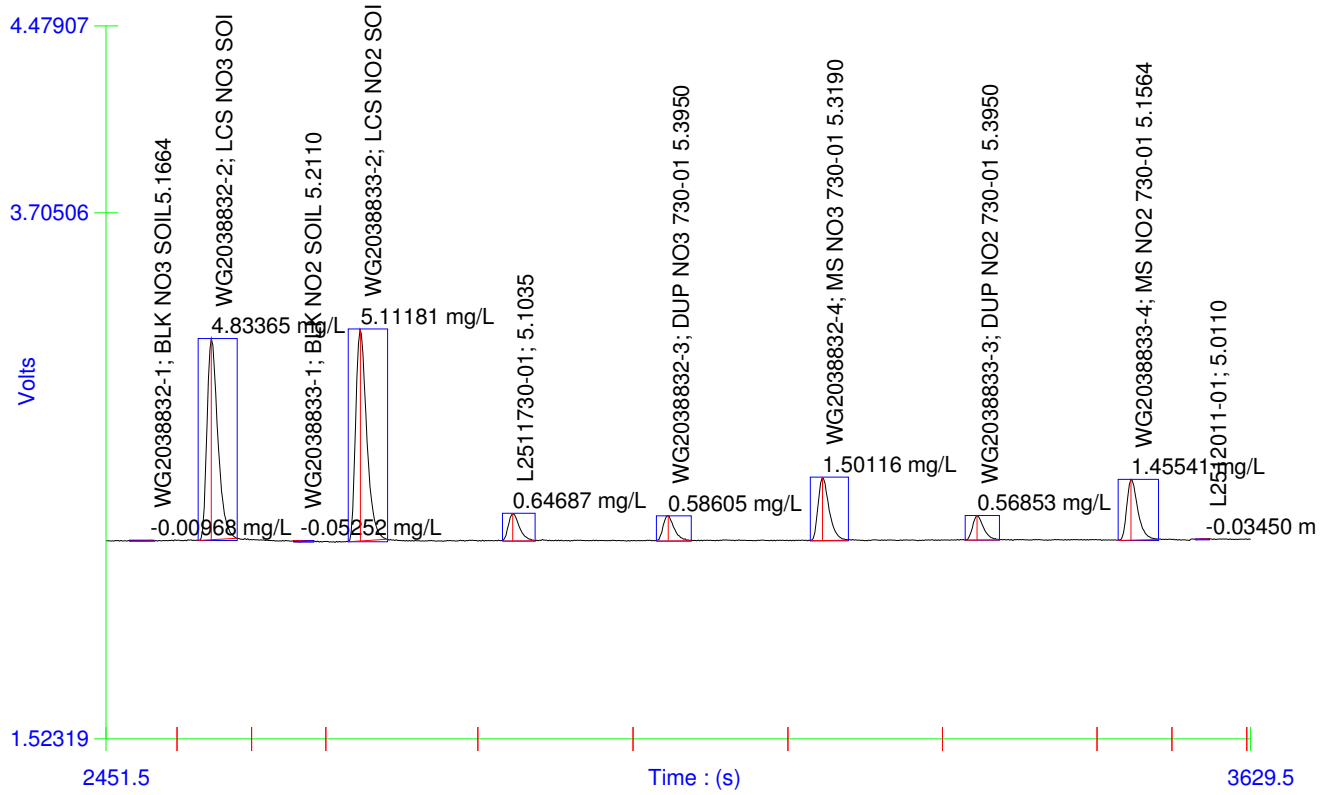
Channel 1 (NO3+NO2) - Set: 3 / 9



Author: MRM

Date : 3/11/2025

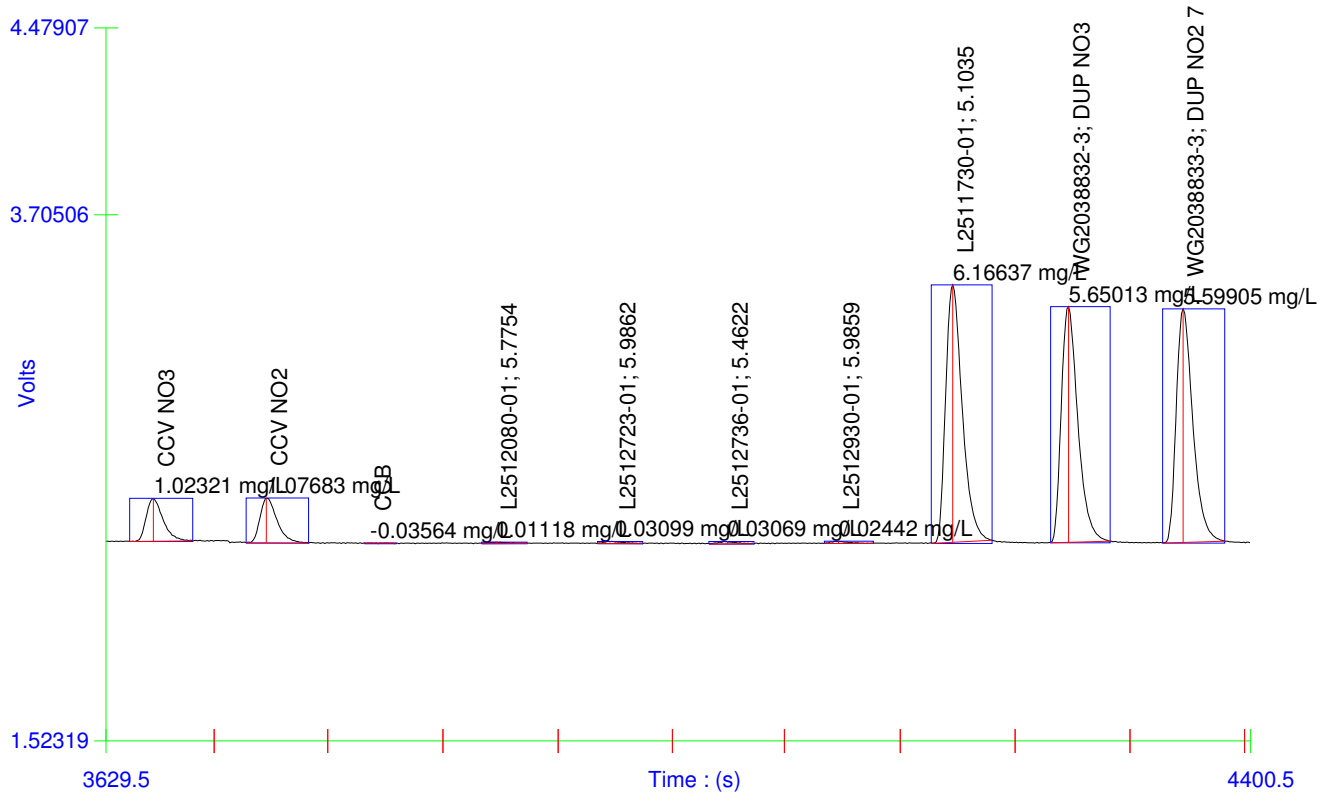
Channel 1 (NO3+NO2) - Set: 4 / 9



Author: MRM

Date : 3/11/2025

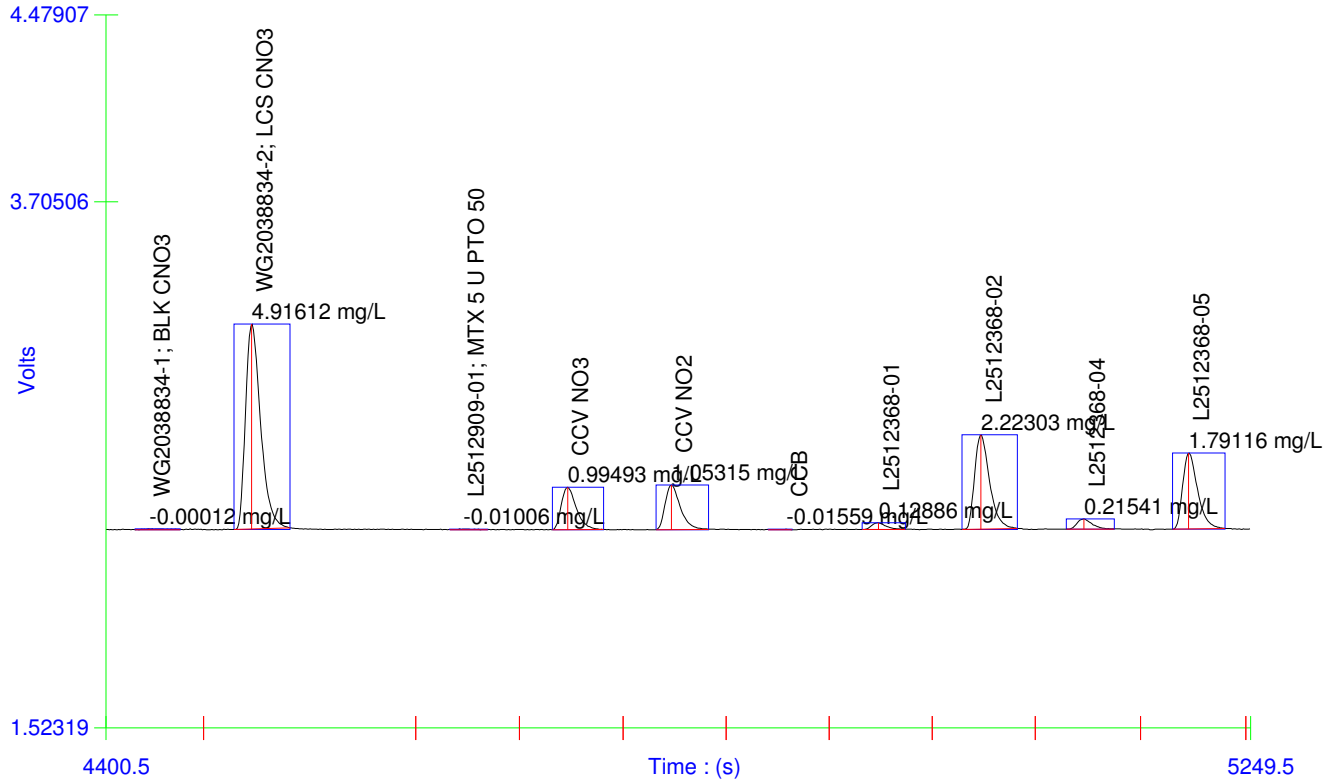
Channel 1 (NO3+NO2) - Set: 5 / 9



Author: MRM

Date : 3/11/2025

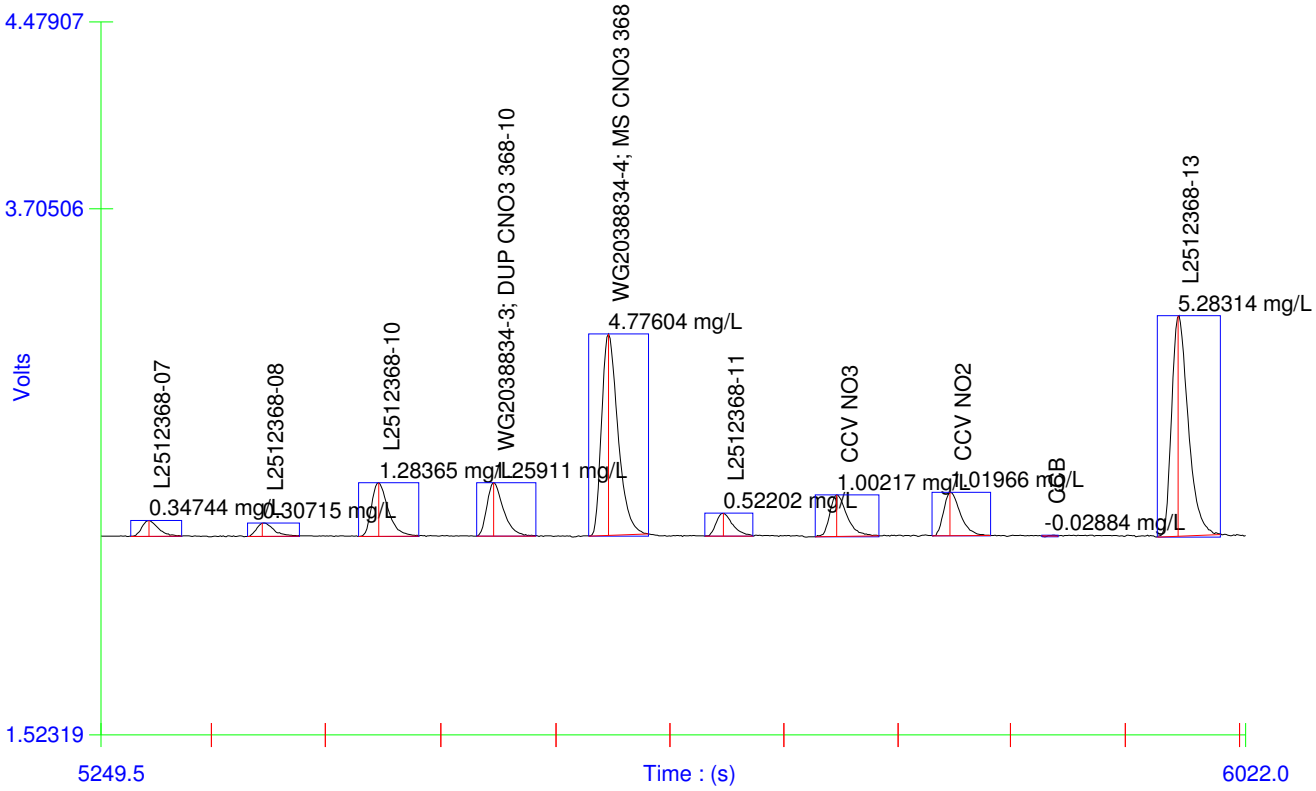
Channel 1 (NO3+NO2) - Set: 6 / 9



Author: MRM

Date : 3/11/2025

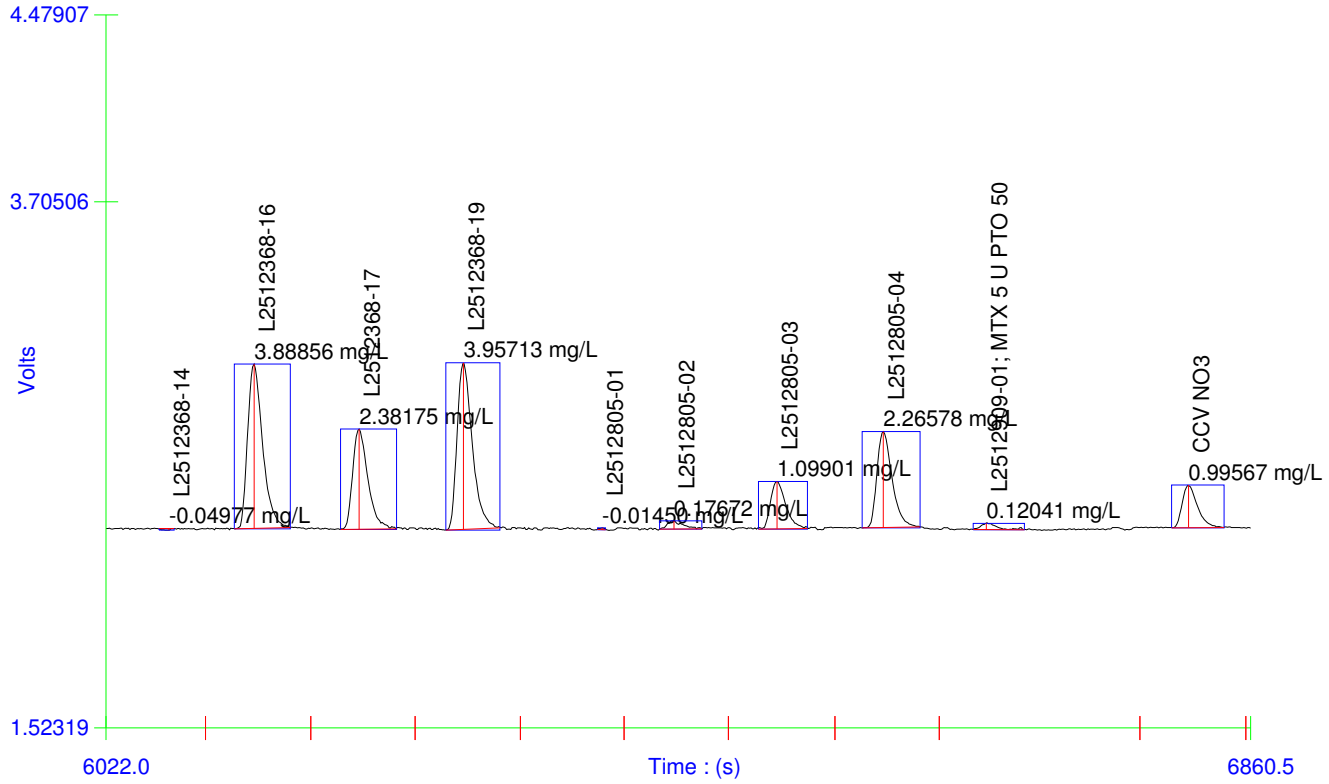
Channel 1 (NO3+NO2) - Set: 7 / 9



Author: MRM

Date : 3/11/2025

Channel 1 (NO3+NO2) - Set: 8 / 9



Author: MRM

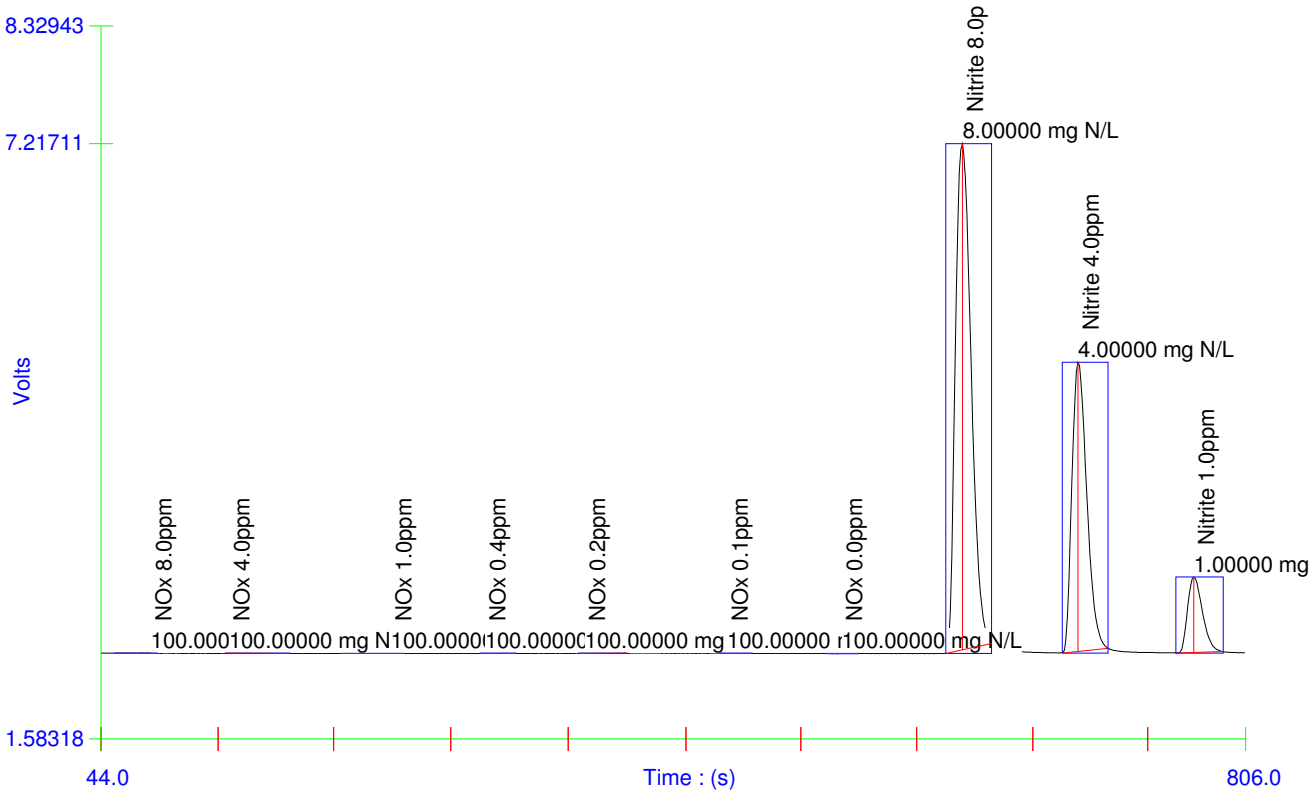
Date : 3/11/2025

Channel 1 (NO3+NO2) - Set: 9 / 9

Author: MRM

Date : 3/11/2025

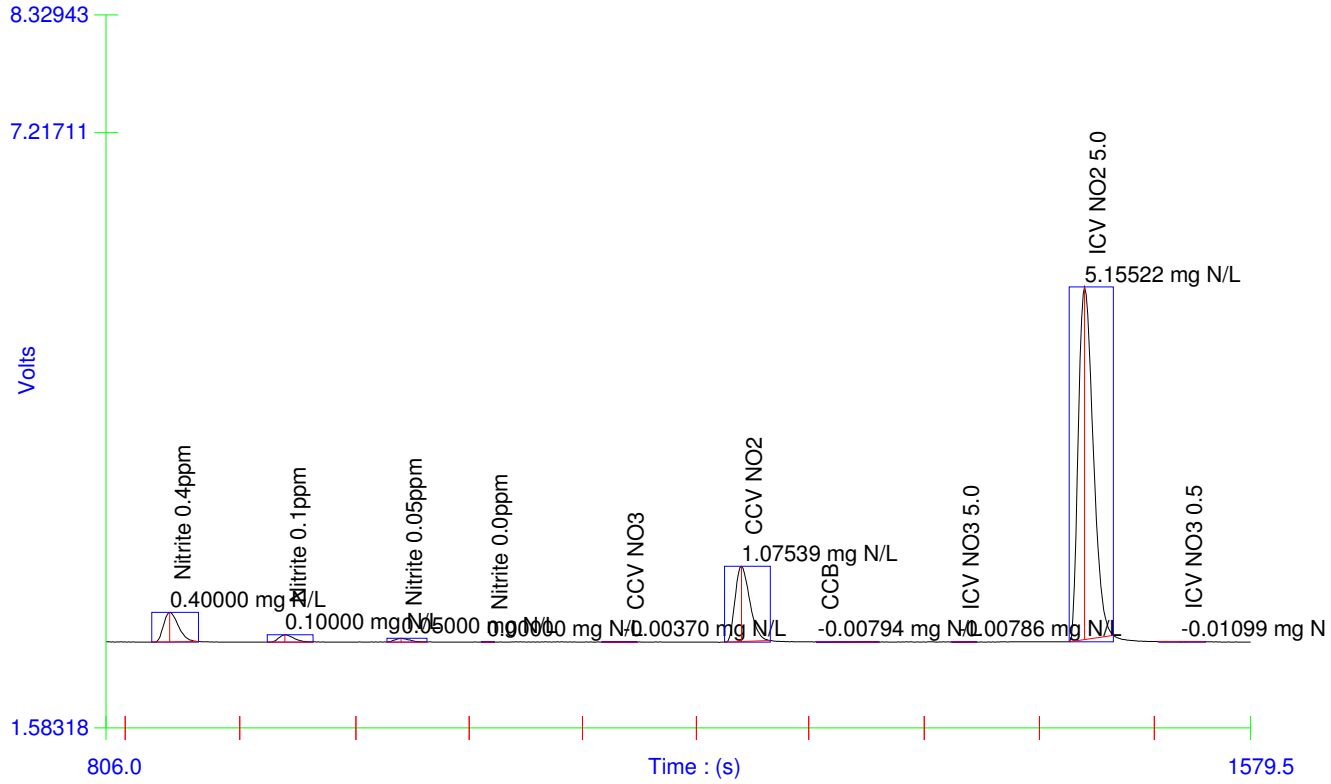
Channel 2 (NO2) - Set: 1 / 9



Author: MRM

Date : 3/11/2025

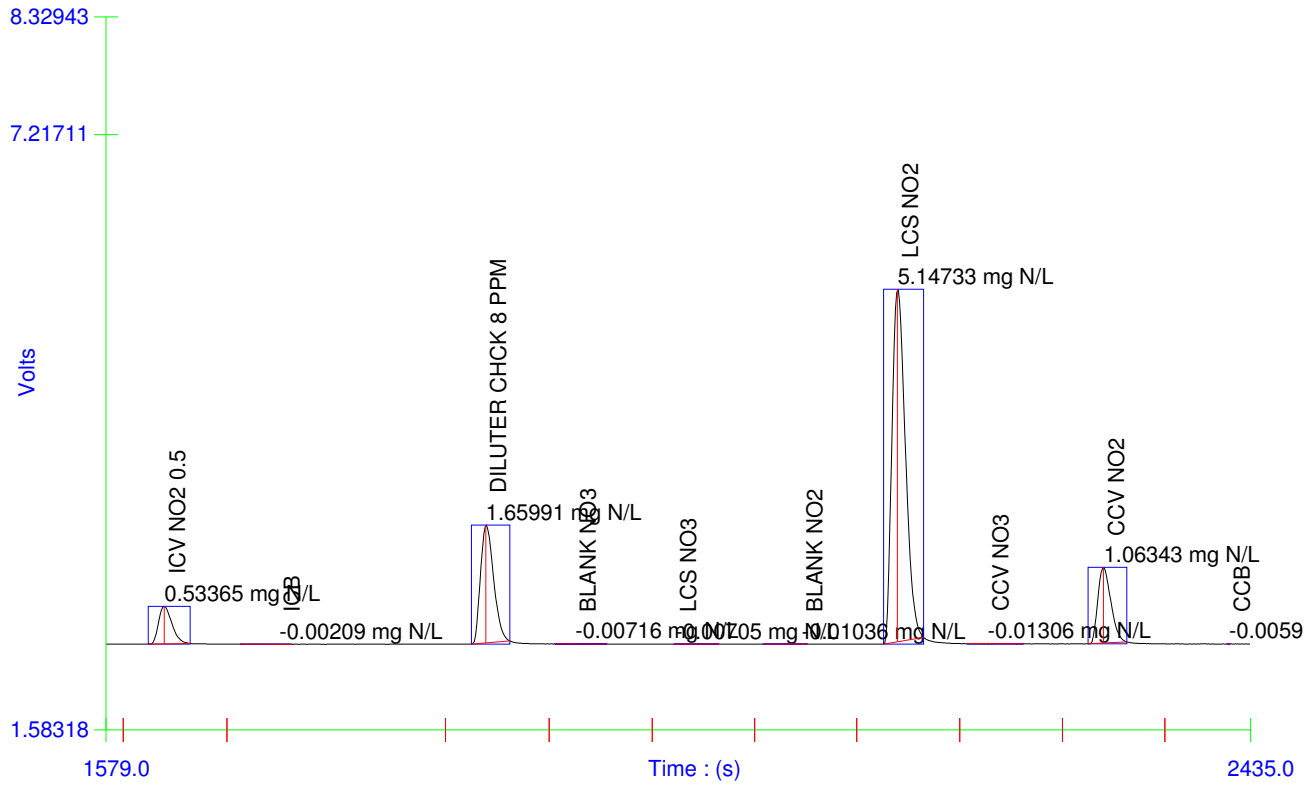
Channel 2 (NO2) - Set: 2 / 9



Author: MRM

Date : 3/11/2025

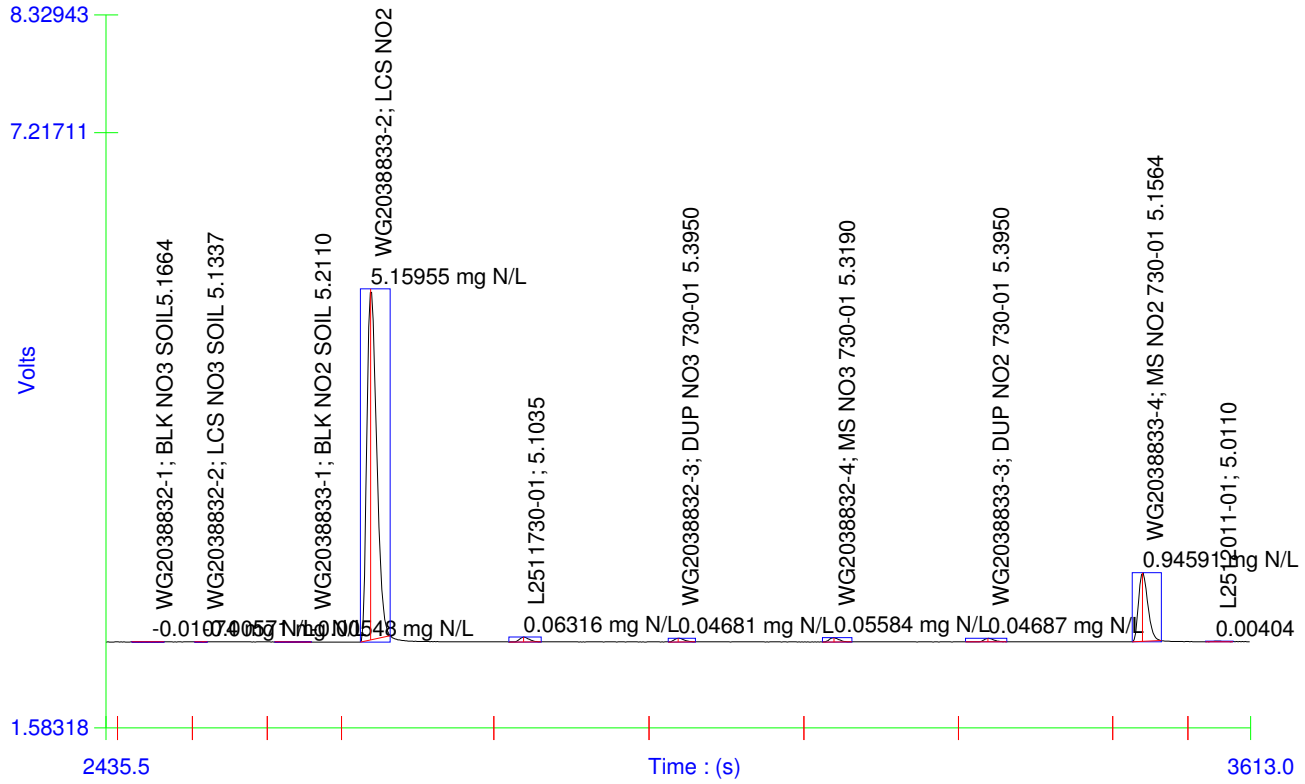
Channel 2 (NO2) - Set: 3 / 9



Author: MRM

Date : 3/11/2025

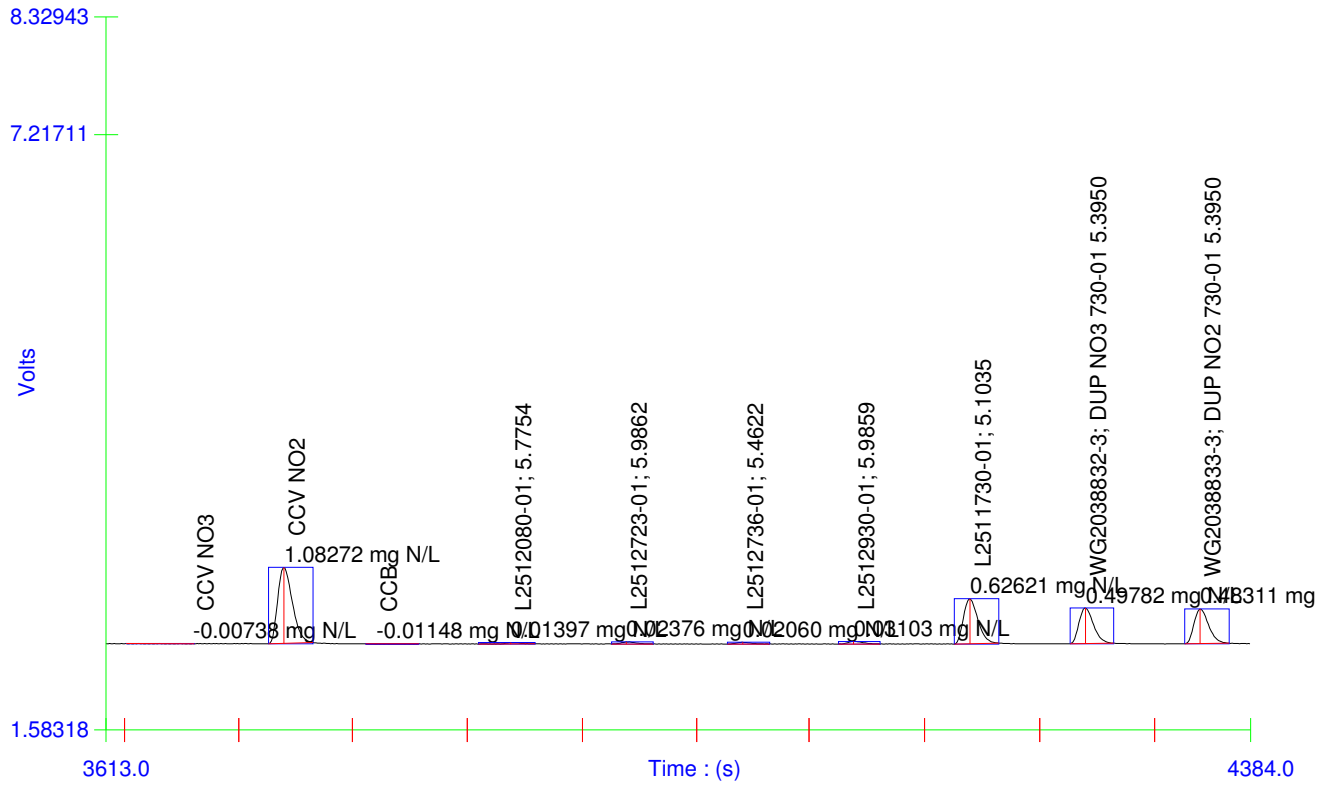
Channel 2 (NO2) - Set: 4 / 9



Author: MRM

Date : 3/11/2025

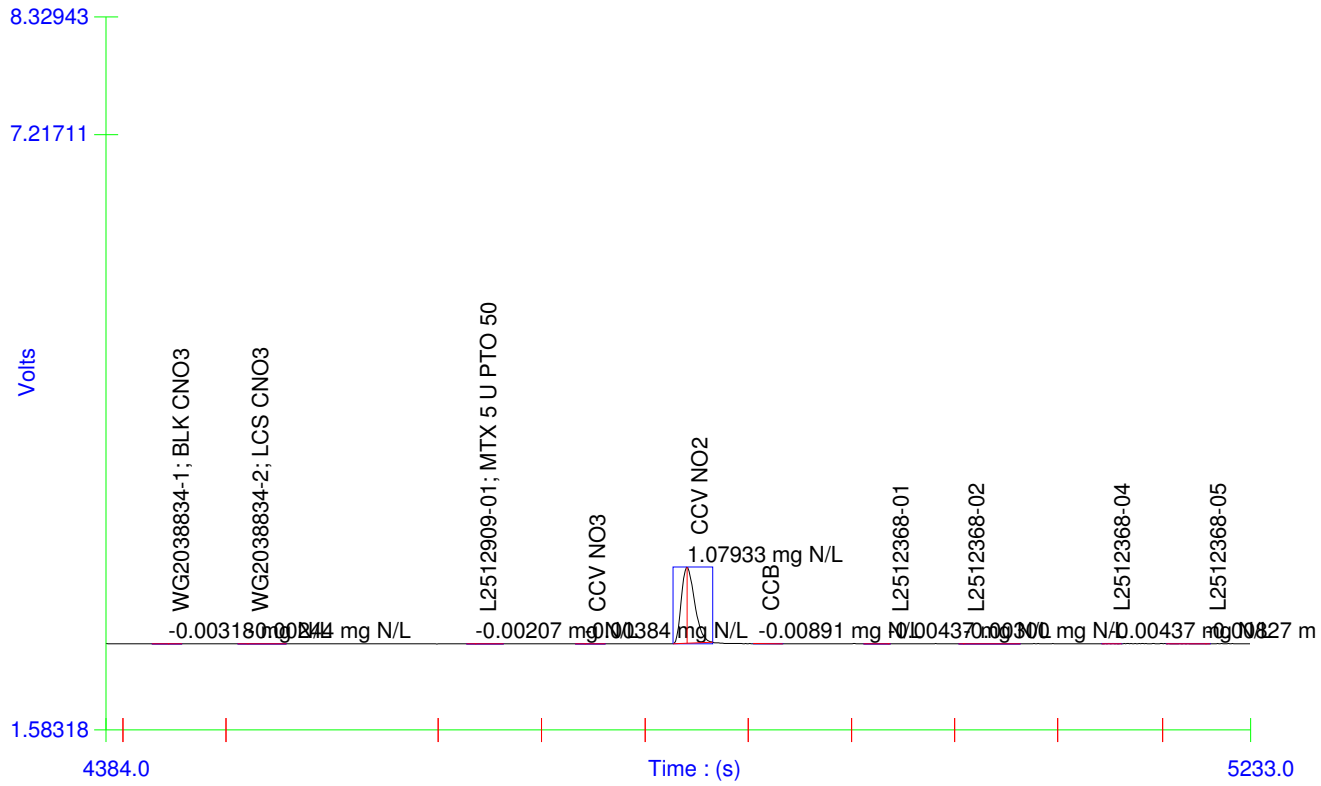
Channel 2 (NO2) - Set: 5 / 9



Author: MRM

Date : 3/11/2025

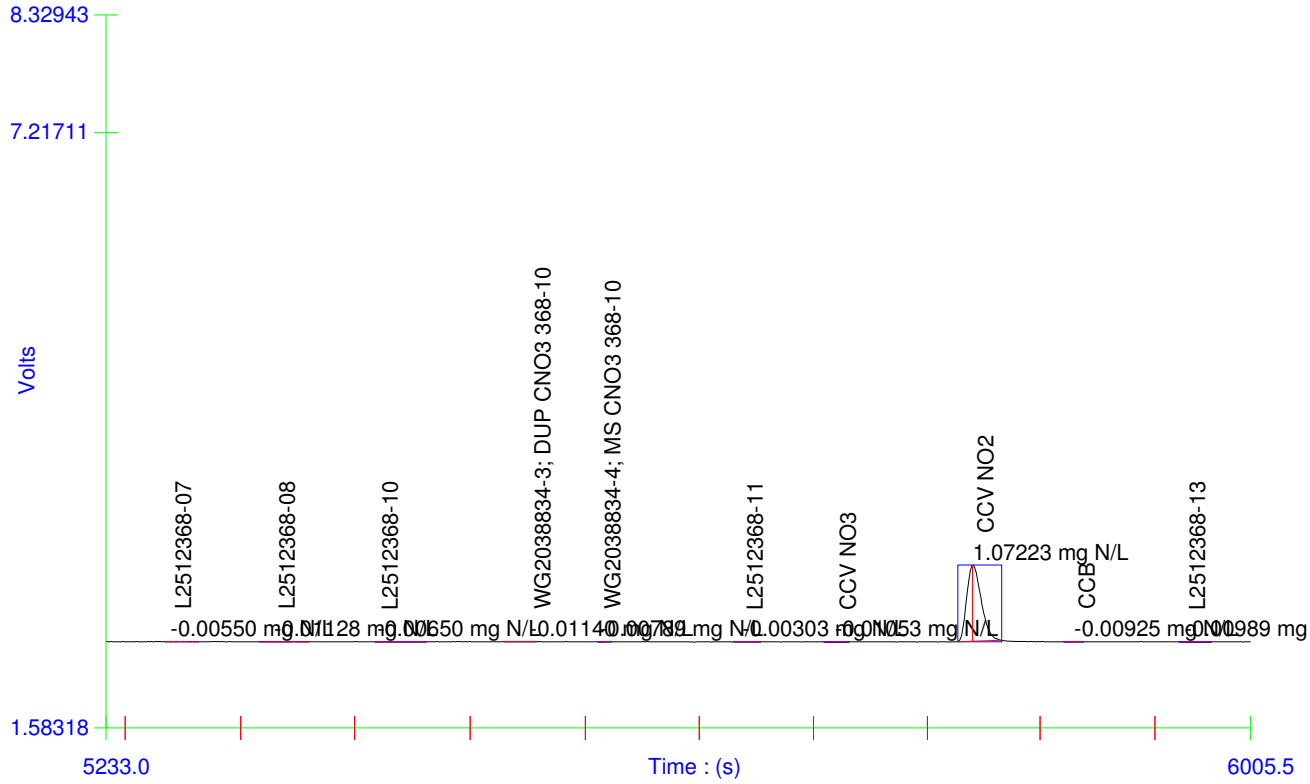
Channel 2 (NO2) - Set: 6 / 9



Author: MRM

Date : 3/11/2025

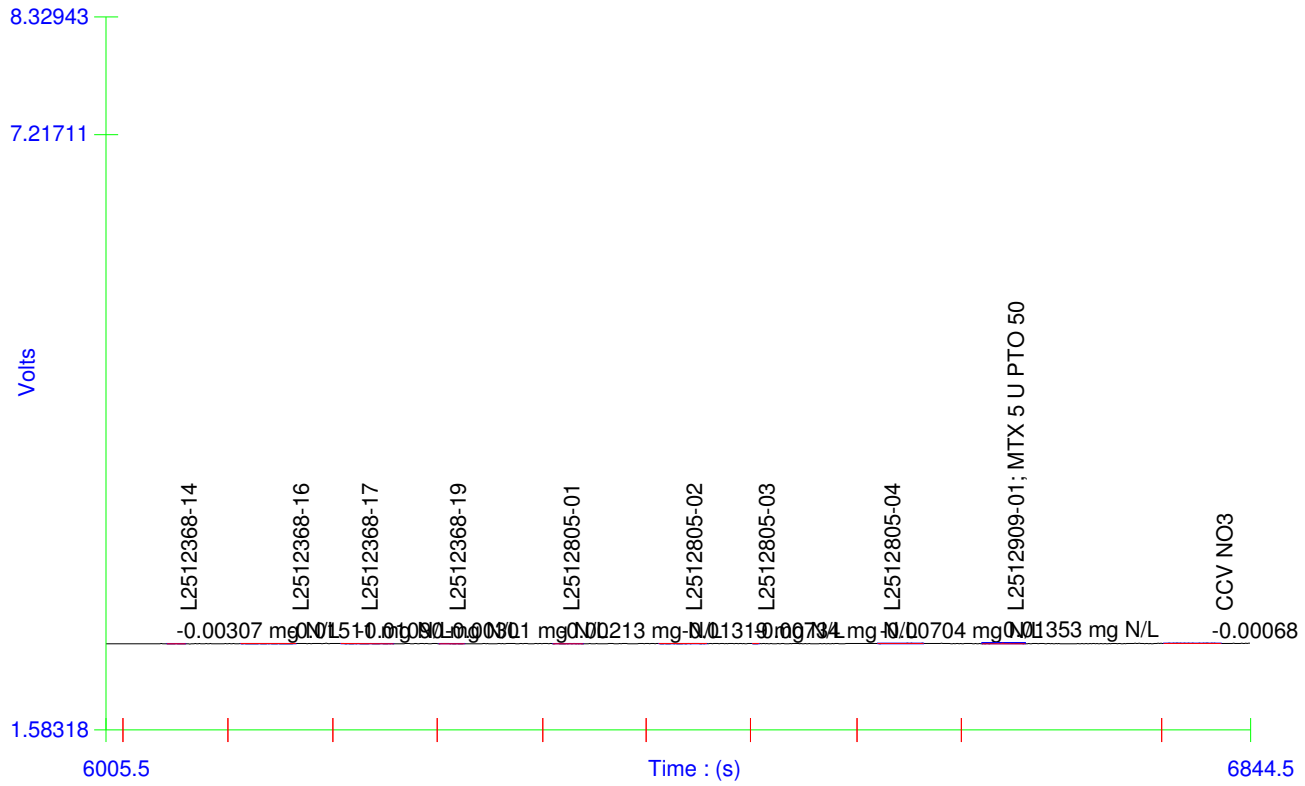
Channel 2 (NO2) - Set: 7 / 9



Author: MRM

Date : 3/11/2025

Channel 2 (NO2) - Set: 8 / 9



Author: MRM

Date : 3/11/2025

Channel 2 (NO2) - Set: 9 / 9

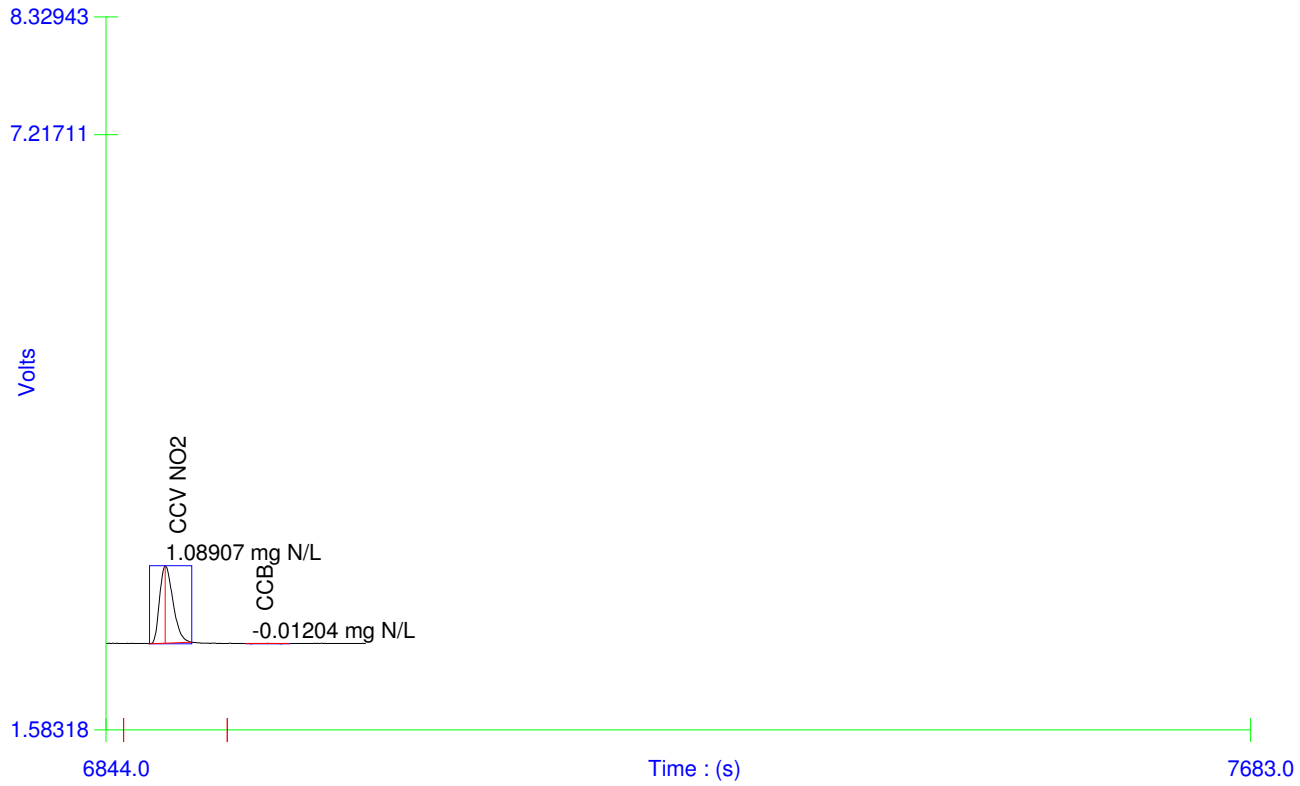



Table : 1 (NO3+NO2)

| | Known Conc. (mg/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 8.00000 | 1 | 17.67598 | 1.34189 | 0.0 | 0.8 | 7.93368 | 3/11/2025 | 4:35:47 AM |
| 2 | 4.00000 | 1 | 8.97384 | 0.68445 | 0.0 | -0.4 | 4.01459 | 3/11/2025 | 4:37:05 AM |
| 3 | 1.00000 | 1 | 2.30651 | 0.17822 | 0.0 | -1.2 | 1.01189 | 3/11/2025 | 4:38:22 AM |
| 4 | 0.40000 | 1 | 0.96560 | 0.07098 | 0.0 | -1.9 | 0.40800 | 3/11/2025 | 4:39:41 AM |
| 5 | 0.20000 | 1 | 0.56414 | 0.03652 | 0.0 | -12.0 | 0.22719 | 3/11/2025 | 4:40:59 AM |
| 6 | 0.10000 | 1 | 0.27721 | 0.02021 | 0.0 | 1.6 | 0.09797 | 3/11/2025 | 4:42:17 AM |
| 7 | 0.00000 | 1 | 0.02793 | 0.00236 | | | -0.01429 | 3/11/2025 | 4:43:34 AM |

Figure : 1 (NO3+NO2)

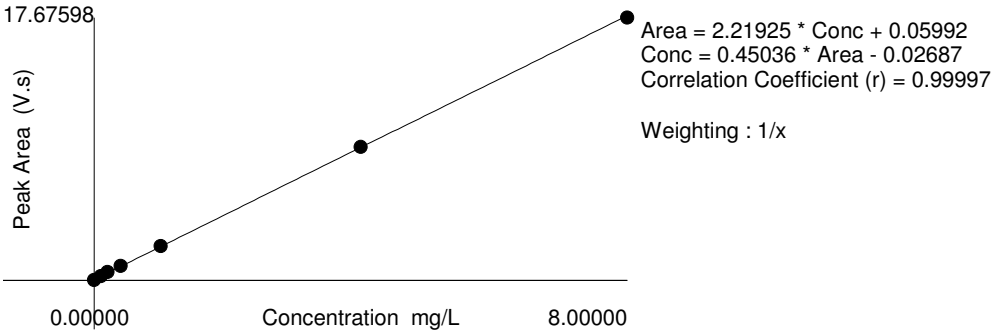
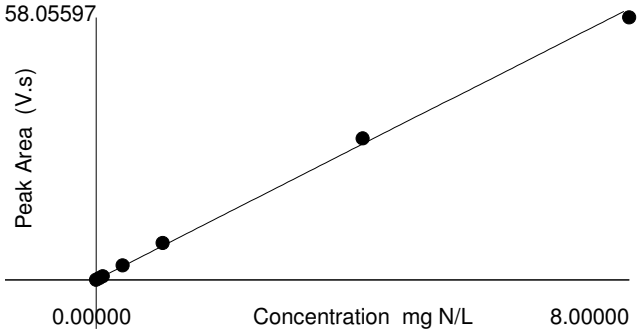


Table : 2 (Nitrite)

| | Known Conc. (mg N/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg N/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 8.00000 | 1 | 58.05597 | 4.79023 | 0.0 | 3.3 | 7.72324 | 3/11/2025 | 4:44:51 AM |
| 2 | 4.00000 | 1 | 31.27039 | 2.73485 | 0.0 | -4.1 | 4.15723 | 3/11/2025 | 4:46:09 AM |
| 3 | 1.00000 | 1 | 8.12286 | 0.71463 | 0.0 | -7.7 | 1.07557 | 3/11/2025 | 4:47:26 AM |
| 4 | 0.40000 | 1 | 3.21743 | 0.28075 | 0.0 | -5.7 | 0.42250 | 3/11/2025 | 4:48:43 AM |
| 5 | 0.10000 | 1 | 0.80416 | 0.06910 | 0.0 | -1.1 | 0.10121 | 3/11/2025 | 4:50:02 AM |
| 6 | 0.05000 | 1 | 0.39643 | 0.03482 | 0.0 | 5.7 | 0.04693 | 3/11/2025 | 4:51:20 AM |
| 7 | 0.00000 | 1 | 0.01113 | 0.00322 | | | -0.00436 | 3/11/2025 | 4:52:36 AM |

Figure : 2 (Nitrite)




Area = 7.49776 * Conc + 0.04542
Conc = 0.13313 * Area - 0.00585
Correlation Coefficient (r) = 0.99994

Weighting : 1/x

# Quality Control

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 8A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-10 | | |
| **Matrix Spike** | : WG2038834-4 | **MS Analysis Date** | : 03/11/25 06:07 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Nitrogen, Nitrate/Nitrite | 1.3 | 4 | 4.8 | 88 | | | | | 80-120 | 20 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 8A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-10 | **Analysis Date** | : 03/11/25 06:05 |
| **Dup Sample ID** | : WG2038834-3 | **DUP Analysis Date** | : 03/11/25 06:06 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Nitrogen, Nitrate/Nitrite | 1.3 | 1.2 | 8 | 20 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2038834-2 | **LCS Analysis Date** | : 03/11/25 05:49 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Nitrogen, Nitrate/Nitrite | 5.00 | 4.90 | 98. | | | | | 90-110 | 20 |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, Nitrate | 14797-55-8 | 0.1 | 0.0228 | mg/l | 90-110 | | 83-113 | 6 | 6 | 353.2 | 48 hours | 1 - Plastic 250ml unpreserved |
| Nitrogen, Nitrate | 14797-55-8 | 0.1 | 0.0228 | mg/l | 90-110 | | 83-113 | 17 | 17 | 4500NO3-F | 48 hours | 1 - Plastic 250ml unpreserved |
| Nitrogen, Nitrite | NONE | 0.05 | 0.0143 | mg/l | 90-110 | 20 | 80-120 | 20 | 20 | 353.2 | 48 hours | 1 - Plastic 250ml unpreserved |
| Nitrogen, Nitrite | NONE | 0.05 | 0.0143 | mg/l | 90-110 | 20 | 80-120 | 20 | 20 | 4500NO3-F | 48 hours | 1 - Plastic 250ml unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11468-1
**Page:** 1

**WETCHEM (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, Nitrate | 14797-55-8 | 1 | 0.261 | mg/kg | 90-110 | 20 | 80-120 | 20 | 20 | 4500NO3-F | 48 hours | 1 - Glass 250ml/8oz unpreserved |
| Nitrogen, Nitrite | NONE | 1 | 0.282 | mg/kg | 90-110 | 20 | 80-120 | 20 | 20 | 4500NO3-F | 48 hours | 1 - Glass 250ml/8oz unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

## Calculations of Nitrogen, Nitrate

Aqueous Samples:
Compute sample N in NO3 concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

Calculate results by using reading on Channel 1 (NO3+NO2) and Channel 2 (NO2)

NO3 mg/I = (NO3+NO2) mg/L - (NO2) mg/L

To compute final results for aqueous samples, multiply the direct reading by the dilution factor (also done using software)

(NO3)-N mg/L = mg/L direct reading x dilution factor

## Calculations of Nitrogen, Nitrite

Aqueous Samples:
Compute sample N in NO2 concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

Calculate results by using reading on Channel 2 (NO2)

To compute final results for aqueous samples, multiply the direct reading by the dilution factor (also done using software)

(NO2)-N mg/L = mg/L direct reading x dilution factor

# Sequence Logs

Date: MRM
03112025

| Cup #: | Sample ID: | Comments: |
|---|---|---|
| 1 | ICV NO3 5.0 | |
| 2 | ICV NO2 5.0 | |
| 3 | ICV NO3 0.5 | |
| 4 | ICV NO2 0.5 | |
| 5 | ICB | |
| 6 | DILUTER CHCK 8 PPM | |
| 7 | BLANK NO3 | |
| 8 | LCS NO3 | |
| 9 | BLANK NO2 | |
| 10 | LCS NO2 | |
| 11 | WG2038832-1; BLK NO3 SOIL5.1664 | |
| 12 | WG2038832-2; LCS NO3 SOIL 5.1337 | |
| 13 | WG2038833-1; BLK NO2 SOIL 5.2110 | |
| 14 | WG2038833-2; LCS NO2 SOIL 5.2711 | |
| 15 | L2511730-01; 5.1035 | |
| 16 | WG2038832-3; DUP NO3 730-01 5.3950 | |
| 17 | WG2038832-4; MS NO3 730-01 5.3190 | |
| 18 | WG2038833-3; DUP NO2 730-01 5.3950 | |
| 19 | WG2038833-4; MS NO2 730-01 5.1564 | |
| 20 | L2512011-01; 5.0110 | |
| 21 | L2512080-01; 5.7754 | |
| 22 | L2512723-01; 5.9862 | |
| 23 | L2512736-01; 5.4622 | |
| 24 | L2512930-01; 5.9859 | |
| 25 | WG2038834-1; BLK CNO3 | |
| 26 | WG2038834-2; LCS CNO3 | |
| 27 | L2512909-01; MTX 5 U PTO 50 | |
| 28 | L2512368-01 | |
| 29 | L2512368-02 | |
| 30 | L2512368-04 | |
| 31 | L2512368-05 | |
| 32 | L2512368-07 | |
| 33 | L2512368-08 | |
| 34 | L2512368-10 | |
| 35 | WG2038834-3; DUP CNO3 368-10 | |
| 36 | WG2038834-4; MS CNO3 368-10 | |
| 37 | L2512368-11 | |
| 38 | L2512368-13 | |
| 39 | L2512368-14 | |
| 40 | L2512368-16 | |
| 41 | L2512368-17 | |
| 42 | L2512368-19 | |
| 43 | L2512805-01 | |

44 L2512805-02
45 L2512805-03
46 L2512805-04

# Total Dissolved Solids Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-01 | Date Collected | : 03/05/25 11:20 |
| Client ID | : 5A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 12:24 |
| Sample Matrix | : WATER | Dilution Factor | : 1.3 |
| Analytical Method | : 121,2540C | Analyst | : SMD |
| Lab File ID | : WG2038597.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 110 | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-02 | Date Collected | : 03/05/25 11:25 |
| Client ID | : 5B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 12:24 |
| Sample Matrix | : WATER | Dilution Factor | : 1.3 |
| Analytical Method | : 121,2540C | Analyst | : SMD |
| Lab File ID | : WG2038597.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 130 | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-04 | Date Collected | : 03/05/25 09:25 |
| Client ID | : 6A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 11:21 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2540C | Analyst | : SMD |
| Lab File ID | : WG2038487.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 140 | 10 | 3.1 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-05 | Date Collected | : 03/05/25 09:27 |
| Client ID | : 6B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 11:21 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2540C | Analyst | : SMD |
| Lab File ID | : WG2038487.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 150 | 10 | 3.1 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-07 | Date Collected | : 03/05/25 08:15 |
| Client ID | : 7A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 11:21 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2540C | Analyst | : SMD |
| Lab File ID | : WG2038487.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 330 | 10 | 3.1 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-08 | Date Collected | : 03/05/25 08:13 |
| Client ID | : 7B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 11:21 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2540C | Analyst | : SMD |
| Lab File ID | : WG2038487.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 160 | 10 | 3.1 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-10 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 12:24 |
| Sample Matrix | : WATER | Dilution Factor | : 1.3 |
| Analytical Method | : 121,2540C | Analyst | : SMD |
| Lab File ID | : WG2038597.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 110 | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-11 | Date Collected | : 03/05/25 16:45 |
| Client ID | : 8B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 12:24 |
| Sample Matrix | : WATER | Dilution Factor | : 1.3 |
| Analytical Method | : 121,2540C | Analyst | : SMD |
| Lab File ID | : WG2038597.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 89. | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-13 | Date Collected | : 03/05/25 14:10 |
| Client ID | : 9A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 11:21 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2540C | Analyst | : SMD |
| Lab File ID | : WG2038487.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 120 | 10 | 3.1 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-14 | Date Collected | : 03/05/25 15:15 |
| Client ID | : 9B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 12:24 |
| Sample Matrix | : WATER | Dilution Factor | : 1.3 |
| Analytical Method | : 121,2540C | Analyst | : SMD |
| Lab File ID | : WG2038597.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 180 | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-16 | Date Collected | : 03/05/25 12:45 |
| Client ID | : 10A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 12:24 |
| Sample Matrix | : WATER | Dilution Factor | : 1.3 |
| Analytical Method | : 121,2540C | Analyst | : SMD |
| Lab File ID | : WG2038597.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 140 | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-17 | Date Collected | : 03/05/25 12:55 |
| Client ID | : 10B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 12:24 |
| Sample Matrix | : WATER | Dilution Factor | : 1.3 |
| Analytical Method | : 121,2540C | Analyst | : SMD |
| Lab File ID | : WG2038597.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 150 | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-19 | Date Collected | : 03/05/25 00:00 |
| Client ID | : DUP001 | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 11:21 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2540C | Analyst | : SMD |
| Lab File ID | : WG2038487.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 130 | 10 | 3.1 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038487-1 | Date Collected | : NA |
| Client ID | : WG2038487-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/10/25 11:21 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2540C | Analyst | : SMD |
| Lab File ID | : WG2038487.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | ND | 10 | 3.1 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038487-3 | Date Collected | : 03/04/25 00:01 |
| Client ID | : WG2038487-3 DUP | Date Received | : 03/04/25 |
| Sample Location | : | Date Analyzed | : 03/10/25 11:21 |
| Sample Matrix | : WATER | Dilution Factor | : 1.3 |
| Analytical Method | : 121,2540C | Analyst | : SMD |
| Lab File ID | : WG2038487.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 620 | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038487-4 | Date Collected | : 03/04/25 08:00 |
| Client ID | : WG2038487-4 DUP | Date Received | : 03/04/25 |
| Sample Location | : | Date Analyzed | : 03/10/25 11:21 |
| Sample Matrix | : WATER | Dilution Factor | : 1.3 |
| Analytical Method | : 121,2540C | Analyst | : SMD |
| Lab File ID | : WG2038487.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 420 | 13 | 4.0 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038597-1 | Date Collected | : NA |
| Client ID | : WG2038597-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/10/25 12:24 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2540C | Analyst | : SMD |
| Lab File ID | : WG2038597.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | ND | 10 | 3.1 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038597-3 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8ADUP | Date Received | : 03/05/25 |
| Sample Location | : | Date Analyzed | : 03/10/25 12:24 |
| Sample Matrix | : WATER | Dilution Factor | : 1.3 |
| Analytical Method | : 121,2540C | Analyst | : SMD |
| Lab File ID | : WG2038597.pdf | Instrument ID | : BALANCE#22 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| NONE | Solids, Total Dissolved | 100 | 13 | 4.0 | |

# Sample Raw Data

Pace Analytical Services

# Wet Chemistry Gravimetric ELN

Printed: MAR-12-25 08:11:33

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **WorkGroup** | WG2038487 | **Temp In (C)** | 180 | **Temp In (C)** | 180 | **Temp In (C)** | | **Temp In (C)** | | **Temp In (C)** | |
| **Title** | Solids, Total Dissolved | **Temp Out (C)** | 180 | **Temp Out (C)** | 180 | **Temp Out (C)** | | **Temp Out (C)** | | **Temp Out (C)** | |
| **Method** | SM2540C | **Time In** | 11-MAR-25 14:07 | **Time In** | 11-MAR-25 17:03 | **Time In** | | **Time In** | | **Time In** | |
| **Instrument** | BALANCE#22 | **Time Out** | 11-MAR-25 16:15 | **Time Out** | 12-MAR-25 07:22 | **Time Out** | | **Time Out** | | **Time Out** | |
| | | **Evaporation** | **Temp In (C)** 90 | **Time In** 10-MAR-25 14:15 | | | | | **LCS Lot #** 012925-D | **TrueValue** 500 | **Units** mg/l |

| Sample # | Analysis Date | Analyst | Cup ID | Filter Lot | Tare Weight (gm) | Sample Volume (ml) | Net Weight (1) (gm) | Net Weight (2) (gm) | Net Weight (3) (gm) | Net Weight (4) (gm) | Net Weight (5) (gm) | Result mg/L | Dil | Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L2507641-32 | 10-MAR-25 11:21 | SONJA DAYN | EJ | 78981823 | 57.6986 | 100 | 57.7326 | 57.7329 | | | | 340.00 | 1 | |
| L2507641-33 | 10-MAR-25 11:21 | SONJA DAYN | S | 78981823 | 69.8848 | 100 | 69.9211 | 69.9214 | | | | 363.00 | 1 | |
| L2511824-05 | 10-MAR-25 11:21 | SONJA DAYN | A | 78981823 | 56.8178 | 80 | 56.8656 | 56.8653 | | | | 593.75 | 1.3 | |
| L2511824-09 | 10-MAR-25 11:21 | SONJA DAYN | RA | 78981823 | 73.347 | 80 | 73.379 | 73.3788 | | | | 397.50 | 1.3 | |
| L2511824-10 | 10-MAR-25 11:21 | SONJA DAYN | VII | 78981823 | 66.9793 | 80 | 67.0419 | 67.0421 | | | | 782.50 | 1.3 | |
| L2511824-11 | 10-MAR-25 11:21 | SONJA DAYN | AA2 | 78981823 | 64.1018 | 80 | 64.137 | 64.137 | | | | 440.00 | 1.3 | |
| L2511824-12 | 10-MAR-25 11:21 | SONJA DAYN | IE | 78981823 | 60.4625 | 80 | 60.4948 | 60.4947 | | | | 402.50 | 1.3 | |
| L2512264-05 | 10-MAR-25 11:21 | SONJA DAYN | V12 | 78981823 | 63.1324 | 80 | 63.1655 | 63.1658 | | | | 413.75 | 1.3 | |
| L2512264-06 | 10-MAR-25 11:21 | SONJA DAYN | V2 | 78981823 | 63.1972 | 80 | 63.2164 | 63.2163 | | | | 238.75 | 1.3 | |
| L2512293-01 | 10-MAR-25 11:21 | SONJA DAYN | K9 | 78981823 | 62.3879 | 80 | 62.4125 | 62.4128 | | | | 307.50 | 1.3 | T2 |
| L2512293-02 | 10-MAR-25 11:21 | SONJA DAYN | K8 | 78981823 | 66.4353 | 80 | 66.4448 | 66.4451 | | | | 118.75 | 1.3 | |
| L2512358-08 | 10-MAR-25 11:21 | SONJA DAYN | K10 | 78981823 | 69.9116 | 80 | 69.956 | 69.9558 | | | | 552.50 | 1.3 | |
| L2512368-04 | 10-MAR-25 11:21 | SONJA DAYN | 11 | 78981823 | 65.1969 | 100 | 65.2109 | 65.2108 | | | | 139.00 | 1 | |
| L2512368-05 | 10-MAR-25 11:21 | SONJA DAYN | 1 | 78981823 | 63.4874 | 100 | 63.5025 | 63.5029 | | | | 151.00 | 1 | |
| L2512368-07 | 10-MAR-25 11:21 | SONJA DAYN | A1 | 78981823 | 67.5511 | 100 | 67.5843 | 67.5846 | | | | 332.00 | 1 | |
| L2512368-08 | 10-MAR-25 11:21 | SONJA DAYN | R9 | 78981823 | 62.9547 | 100 | 62.971 | 62.9706 | | | | 159.00 | 1 | |
| L2512368-13 | 10-MAR-25 11:21 | SONJA DAYN | R12 | 78981823 | 67.4252 | 100 | 67.4377 | 67.438 | | | | 125.00 | 1 | |
| L2512368-19 | 10-MAR-25 11:21 | SONJA DAYN | K4 | 78981823 | 62.8384 | 100 | 62.8514 | 62.8518 | | | | 130.00 | 1 | |
| WG2038487-1 | 10-MAR-25 11:21 | SONJA DAYN | L7 | 78981823 | 64.387 | 100 | 64.3874 | 64.3871 | | | | 1.00 | 1 | |
| WG2038487-2 | 10-MAR-25 11:21 | SONJA DAYN | CA | 78981823 | 58.857 | 50 | 58.8814 | 58.8814 | | | | 488.00 | 2 | |
| WG2038487-3 | 10-MAR-25 11:21 | SONJA DAYN | E | 78981823 | 59.1913 | 80 | 59.2412 | 59.2409 | | | | 620.00 | 1.3 | |
| WG2038487-4 | 10-MAR-25 11:21 | SONJA DAYN | EG | 78981823 | 62.824 | 80 | 62.8577 | 62.8579 | | | | 421.25 | 1.3 | |

Pace Analytical Services

# Wet Chemistry Gravimetric ELN

Printed: MAR-11-25 14:46:53

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **WorkGroup** | WG2038597 | **Temp In (C)** | 180 | **Temp In (C)** | 180 | **Temp In (C)** | | **Temp In (C)** | | **Temp In (C)** | |
| **Title** | Solids, Total Dissolved | **Temp Out (C)** | 180 | **Temp Out (C)** | 180 | **Temp Out (C)** | | **Temp Out (C)** | | **Temp Out (C)** | |
| **Method** | SM2540C | **Time In** | 11-MAR-25 08:50 | **Time In** | 11-MAR-25 11:41 | **Time In** | | **Time In** | | **Time In** | |
| **Instrument** | BALANCE#22 | **Time Out** | 11-MAR-25 11:00 | **Time Out** | 11-MAR-25 14:07 | **Time Out** | | **Time Out** | | **Time Out** | |
| | | | | | | | | | **LCS Lot #** | **TrueValue** | **Units** |
| | | **Evaporation** | **Temp In (C)** | **Time In** | | | | | 012925-D | 500 | mg/l |
| | | | 90 | 10-MAR-25 15:26 | | | | | | | |

| Sample # | Analysis Date | Analyst | Cup ID | Filter Lot | Tare Weight (gm) | Sample Volume (ml) | Net Weight (1) (gm) | Net Weight (2) (gm) | Net Weight (3) (gm) | Net Weight (4) (gm) | Net Weight (5) (gm) | Result mg/L | Dil | Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L2512358-01 | 10-MAR-25 12:24 | SONJA DAYN | QM | 78981823 | 106.8723 | 80 | 106.9155 | 106.9154 | | | | 538.75 | 1.3 | |
| L2512368-01 | 10-MAR-25 12:24 | SONJA DAYN | SW | 78981823 | 130.2039 | 80 | 130.2127 | 130.2131 | | | | 110.00 | 1.3 | |
| L2512368-02 | 10-MAR-25 12:24 | SONJA DAYN | LN | 78981823 | 147.3943 | 80 | 147.4044 | 147.4047 | | | | 126.25 | 1.3 | |
| L2512368-10 | 10-MAR-25 12:24 | SONJA DAYN | MQ | 78981823 | 89.4352 | 80 | 89.4439 | 89.4441 | | | | 108.75 | 1.3 | |
| L2512368-11 | 10-MAR-25 12:24 | SONJA DAYN | VI | 78981823 | 68.4665 | 80 | 68.4736 | 68.474 | | | | 88.75 | 1.3 | |
| L2512368-14 | 10-MAR-25 12:24 | SONJA DAYN | R4 | 78981823 | 65.9871 | 80 | 66.0016 | 66.002 | | | | 181.25 | 1.3 | |
| L2512368-16 | 10-MAR-25 12:24 | SONJA DAYN | AD 2 | 78981823 | 128.8735 | 80 | 128.8848 | 128.8849 | | | | 141.25 | 1.3 | |
| L2512368-17 | 10-MAR-25 12:24 | SONJA DAYN | FL | 78981823 | 64.2272 | 80 | 64.2392 | 64.2395 | | | | 150.00 | 1.3 | |
| WG2038597-1 | 10-MAR-25 12:24 | SONJA DAYN | C5 | 78981823 | 65.1782 | 100 | 65.1783 | 65.178 | | | | -2.00 | 1 | |
| WG2038597-2 | 10-MAR-25 12:24 | SONJA DAYN | BW | 78981823 | 116.1128 | 50 | 116.1365 | 116.1364 | | | | 472.00 | 2 | |
| WG2038597-3 | 10-MAR-25 12:24 | SONJA DAYN | K1 | 78981823 | 70.7095 | 80 | 70.7179 | 70.7177 | | | | 102.50 | 1.3 | |

# Quality Control

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : NA | **Analysis Date** | : 03/10/25 11:21 |
| **Dup Sample ID** | : WG2038487-3 | **DUP Analysis Date** | : 03/10/25 11:21 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Solids, Total Dissolved | 590 | 620 | 5 | 10 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : NA | **Analysis Date** | : 03/10/25 11:21 |
| **Dup Sample ID** | : WG2038487-4 | **DUP Analysis Date** | : 03/10/25 11:21 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Solids, Total Dissolved | 400 | 420 | 5 | 10 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 8A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-10 | **Analysis Date** | : 03/10/25 12:24 |
| **Dup Sample ID** | : WG2038597-3 | **DUP Analysis Date** | : 03/10/25 12:24 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Solids, Total Dissolved | 110 | 100 | 10 | 10 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2038487-2 | **LCS Analysis Date** | : 03/10/25 11:21 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Solids, Total Dissolved | 500. | 490. | 98. | | | | | 80-120 | 10 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2038597-2 | **LCS Analysis Date** | : 03/10/25 12:24 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Solids, Total Dissolved | 500. | 470. | 94. | | | | | 80-120 | 10 |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Solids, Total Dissolved | NONE | 10 | 3.07 | mg/l | 80-120 | | | 10 | 10 | 2540C | 7 days | 1 - Plastic 500ml unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

# Calculations of TDS

$$\text{mgTDS/L} = \frac{(A - B) \times 1000}{\text{Sample volume, (L)}}$$

Where:

A = Final weight (weight of dish + dried residue, g)
B = Initial weight (weight of clean dish, g)

# Sulfate
# Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-01 | Date Collected | : 03/05/25 11:20 |
| Client ID | : 5A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 14:20 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2039177.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 16. | 10 | 1.4 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-02 | Date Collected | : 03/05/25 11:25 |
| Client ID | : 5B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 14:20 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2039177.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 19. | 10 | 1.4 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-04 | Date Collected | : 03/05/25 09:25 |
| Client ID | : 6A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 14:20 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2039177.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 18. | 10 | 1.4 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-05 | Date Collected | : 03/05/25 09:27 |
| Client ID | : 6B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 14:20 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2039177.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 11. | 10 | 1.4 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-07 | Date Collected | : 03/05/25 08:15 |
| Client ID | : 7A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 14:20 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2039177.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 40. | 10 | 1.4 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-08 | Date Collected | : 03/05/25 08:13 |
| Client ID | : 7B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 14:20 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2039177.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 13. | 10 | 1.4 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-10 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/12/25 11:30 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2039602.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/12/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 13. | 10 | 1.4 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-11 | Date Collected | : 03/05/25 16:45 |
| Client ID | : 8B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 14:20 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2039177.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 8.9 | 10 | 1.4 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-13 | Date Collected | : 03/05/25 14:10 |
| Client ID | : 9A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 14:20 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2039177.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 12. | 10 | 1.4 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-14 | Date Collected | : 03/05/25 15:15 |
| Client ID | : 9B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 14:20 |
| Sample Matrix | : WATER | Dilution Factor | : 2 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2039177.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 36. | 20 | 2.7 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-16 | Date Collected | : 03/05/25 12:45 |
| Client ID | : 10A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 14:20 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2039177.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 13. | 10 | 1.4 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-17 | Date Collected | : 03/05/25 12:55 |
| Client ID | : 10B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 14:20 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2039177.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 17. | 10 | 1.4 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-19 | Date Collected | : 03/05/25 00:00 |
| Client ID | : DUP001 | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 14:20 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2039177.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 13. | 10 | 1.4 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2039177-1 | Date Collected | : NA |
| Client ID | : WG2039177-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/11/25 14:20 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2039177.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 2.2 | 10 | 1.4 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2039177-3 | Date Collected | : 03/05/25 09:15 |
| Client ID | : WG2039177-3 DUP | Date Received | : 03/05/25 |
| Sample Location | : | Date Analyzed | : 03/11/25 14:20 |
| Sample Matrix | : WATER | Dilution Factor | : 2 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2039177.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 37. | 20 | 2.7 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2039602-1 | Date Collected | : NA |
| Client ID | : WG2039602-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/12/25 11:30 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2039602.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/12/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 2.1 | 10 | 1.4 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2039602-3 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8ADUP | Date Received | : 03/05/25 |
| Sample Location | : | Date Analyzed | : 03/12/25 11:30 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500SO4-E | Analyst | : MRW |
| Lab File ID | : WG2039602.csv | Instrument ID | : SPEC6 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/12/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 14808-79-8 | Sulfate | 12. | 10 | 1.4 | |

# Sample Raw Data

PACE ANALYTICAL LABS

# WET CHEMISTRY DEPARTMENT

## S U L F A T E

Last Change 3/5/13
File SO4-L.xlt

Curve/spike/ccv;R-4295
LCS;R-4296
**Reagent;lot A4320**

**Sample Number:** _____

**Product:** SO4-4500
**Curve Calibration Date :** 03/11/25
**Curve Identifier:** 3/11/2025
**Analysis Analyte:** Sulfate
**Analysis Date:** 3/11/2025 14:20
**Preparation Date:** 3/11/2025 14:20
**Technician:** MRW
**Work group:** WG2039177
**RL:** 10 mg/l
**Cell:** 2.5 cm

**Client:** _____
**Analysis:** Sulfate, SO4
**Method:** SM 4500SO4-E
**Instrument:** SPEC6
**Wavelength:** 420 nm
**Spike Volume(ml):** 0.5
**Spike Concentration (mg/l):** 1000

| Standard ID | Mean signal (pk area) abs | Dilution | Calc-ed Result |
|---|---|---|---|
| 0 | 0.000 | 1.0 | 1.85 |
| 10 | 0.130 | 1.0 | 8.17 |
| 20 | 0.354 | 1.0 | 19.1 |
| 40 | 0.804 | 1.0 | 40.9 |

**Calibration Curve**
Volume: 25 ml

| Slope | y-intercept |
|---|---|
| 0.020571 | -0.038 |

**Correlation Coefficient**
0.995160

**ICV/LCS Concentration (mg/l) =** 20.0000

| | Sample number | Sample Volume (ml) | Final Volume (ml) | Bkgd. Abs. | Gross Abs. | Net Absorbance | RESULT (mg/l) | Dilution Factor | RL Multiplier | FINAL RESULT (mg/l) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | ICB | 25 | 25 | 0 | 0.005 | 0.005 | 2.239 | 1 | 1.0 | 2.2 | Recovery |
| | ICV | 25 | 25 | 0 | 0.347 | 0.347 | 18.704 | 1 | 1.0 | 18.7 | 94% |
| SAMP | L2512325-02 | 12.5 | 25 | 0.005 | 0.328 | 0.323 | 17.548 | 1 | 2.0 | 35.1 | |
| SAMP | L2512325-06 | 25 | 25 | 0.007 | 0.316 | 0.309 | 16.874 | 1 | 1.0 | 16.9 | |
| SAMP | L2512325-07 | 25 | 25 | 0.018 | 0.421 | 0.403 | 21.399 | 1 | 1.0 | 21.4 | |
| SAMP | L2512325-08 | 25 | 25 | 0.002 | 0.253 | 0.251 | 14.082 | 1 | 1.0 | 14.1 | |
| SAMP | L2512325-09 | 25 | 25 | 0.013 | 0.801 | 0.788 | 39.934 | 1 | 1.0 | 39.9 | |
| SAMP | L2512368-01 | 25 | 25 | 0.003 | 0.305 | 0.302 | 16.537 | 1 | 1.0 | 16.5 | |
| SAMP | L2512368-02 | 25 | 25 | 0.002 | 0.348 | 0.346 | 18.655 | 1 | 1.0 | 18.7 | |
| SAMP | L2512368-04 | 25 | 25 | 0.01 | 0.332 | 0.322 | 17.500 | 1 | 1.0 | 17.5 | |
| | CCV1 | 25 | 25 | 0 | 0.344 | 0.344 | 18.559 | 1 | 1.0 | 18.6 | |
| | CCB1 | 25 | 25 | 0 | 0.006 | 0.006 | 2.287 | 1 | 1.0 | 2.3 | |
| SAMP | L2512368-05 | 25 | 25 | 0.002 | 0.195 | 0.193 | 11.290 | 1 | 1.0 | 11.3 | |
| SAMP | L2512368-07 | 25 | 25 | 0.005 | 0.801 | 0.796 | 40.319 | 1 | 1.0 | 40.3 | |
| SAMP | L2512368-08 | 25 | 25 | 0.004 | 0.24 | 0.236 | 13.360 | 1 | 1.0 | 13.4 | |
| SAMP | L2512368-11 | 25 | 25 | 0.012 | 0.156 | 0.144 | 8.931 | 1 | 1.0 | 8.9 | |
| SAMP | L2512368-13 | 25 | 25 | 0.002 | 0.219 | 0.217 | 12.445 | 1 | 1.0 | 12.4 | |
| SAMP | L2512368-14 | 12.5 | 25 | 0.003 | 0.333 | 0.330 | 17.885 | 1 | 2.0 | 35.8 | |
| SAMP | L2512368-16 | 25 | 25 | 0.001 | 0.224 | 0.223 | 12.734 | 1 | 1.0 | 12.7 | |
| SAMP | L2512368-17 | 25 | 25 | 0.012 | 0.316 | 0.304 | 16.633 | 1 | 1.0 | 16.6 | |
| SAMP | L2512368-19 | 25 | 25 | 0.003 | 0.224 | 0.221 | 12.638 | 1 | 1.0 | 12.6 | |
| SAMP | L2512607-01 | 25 | 25 | 0.002 | 0.137 | 0.135 | 8.497 | 1 | 1.0 | 8.5 | |
| | CCV2 | 25 | 25 | 0 | 0.34 | 0.340 | 18.367 | 1 | 1.0 | 18.4 | |
| | CCB2 | 25 | 25 | 0 | 0.007 | 0.007 | 2.335 | 1 | 1.0 | 2.3 | |
| SAMP | L2512607-02 | 25 | 25 | 0.003 | 0.213 | 0.210 | 12.108 | 1 | 1.0 | 12.1 | |
| | CCV3 | 25 | 25 | 0 | 0.342 | 0.342 | 18.463 | 1 | 1.0 | 18.5 | |
| | CCB3 | 25 | 25 | 0 | 0.007 | 0.007 | 2.335 | 1 | 1.0 | 2.3 | |
| | | 25 | 25 | | | | | 1 | 1.0 | | |
| BLANK | WG2039177-1 | 25 | 25 | 0.000 | 0.005 | 0.005 | 2.239 | 1 | 1.0 | 2.2 | |
| DUP | WG2039177-3 | 12.5 | 25 | 0.005 | 0.346 | 0.341 | 18.415 | 1 | 2.0 | 36.8 | L2512325-02 |

| | Sample number | sample volume | Final volume (ml) | Bkgd. Abs. | Gross Abs. | Absorbance | Sample Result mg/l | Spiked Volume | Spike conc. mg/l | Spike Result mg/l | Recovery % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MS | WG2039177-4 | 5 | 25 | 0.003 | 0.53 | 0.527 | 35.100 | 5 | 100.0000 | 137 | 102 |
| | | | | | | | | | | | L2512325-02 |
| LCS | WG2039177-2 | 25 | 25 | 0 | 0.347 | 0.347 | | 1 | 20.0000 | 19 | 94 |

PACE ANALYTICAL LABS

# WET CHEMISTRY DEPARTMENT

## S U L F A T E

Last Change 3/5/13
File SO4-L.xlt

Curve/spike/ccv;R-4295
LCS;R-4296
**Reagent;lot A4320**

**Sample Number:**_____

**Client:** _____
**Analysis: Sulfate, SO4**
**Method: SM 4500SO4-E**
**Instrument: SPEC6**
**Wavelength: 420 nm**
**Spike Volume(ml):0.5**
**Spike Concentration (mg/l):1000**

**Product: SO4-4500**
**Curve Calibration Date :**03/12/25
**Curve Identifier:** 3/12/2025
**Analysis Analyte: Sulfate**
**Analysis Date:** 3/12/2025 11:30
**Preparation Date:** 3/12/2025 11:30
**Technician:** MRW
**Work group:** WG2039602
**RL: 10 mg/l**
**Cell: 2.5 cm**

| Standard ID | Mean signal (pk area) abs | Dilution | Calc-ed Result |
|---|---|---|---|
| 0 | 0.000 | 1.0 | 1.83 |
| 10 | 0.132 | 1.0 | 8.21 |
| 20 | 0.356 | 1.0 | 19.0 |
| 40 | 0.810 | 1.0 | 40.9 |

**Calibration Curve**
Volume: 25 ml

| Slope | y-intercept |
|---|---|
| 0.020714 | -0.038 |

**Correlation Coefficient**
0.995223

**ICV/LCS Concentration (mg/l) =** 20.0000

| | Sample number | Sample Volume (ml) | Final Volume (ml) | Bkgd. Abs. | Gross Abs. | Net Absorbance | RESULT (mg/l) | Dilution Factor | RL Multiplier | FINAL RESULT (mg/l) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | ICB | 25 | 25 | 0 | 0.003 | 0.003 | 2.127 | 1 | 1.0 | 2.1 | Recovery |
| | ICV | 25 | 25 | 0 | 0.375 | 0.375 | 19.915 | 1 | 1.0 | 19.9 | 100% |
| SAMP | L2512368-10 | 25 | 25 | 0.002 | 0.237 | 0.235 | 13.220 | 1 | 1.0 | 13.2 | |
| SAMP | L2512607-03 | 25 | 25 | 0.005 | 0.335 | 0.330 | 17.763 | 1 | 1.0 | 17.8 | |
| SAMP | L2512607-04 | 25 | 25 | 0.004 | 0.324 | 0.320 | 17.285 | 1 | 1.0 | 17.3 | |
| SAMP | L2512607-05 | 25 | 25 | 0.007 | 0.275 | 0.268 | 14.798 | 1 | 1.0 | 14.8 | |
| SAMP | L2512607-06 | 25 | 25 | 0.011 | 0.013 | 0.002 | 2.079 | 1 | 1.0 | 2.1 | |
| SAMP | L2513363-01 | 10 | 25 | 0.007 | 0.302 | 0.295 | 16.089 | 1 | 2.5 | 40.2 | |
| SAMP | L2513363-02 | 10 | 25 | 0.014 | 0.447 | 0.433 | 22.688 | 1 | 2.5 | 56.7 | |
| SAMP | L2513363-03 | 25 | 25 | 0.007 | 0.345 | 0.338 | 18.146 | 1 | 1.0 | 18.1 | |
| | CCV1 | 25 | 25 | 0 | 0.374 | 0.374 | 19.867 | 1 | 1.0 | 19.9 | |
| | CCB1 | 25 | 25 | 0 | 0.004 | 0.004 | 2.175 | 1 | 1.0 | 2.2 | |
| SAMP | L2513363-04 | 25 | 25 | 0.067 | 0.072 | 0.005 | 2.223 | 1 | 1.0 | 2.2 | |
| SAMP | L2513363-05 | 10 | 25 | 0.008 | 0.453 | 0.445 | 23.262 | 1 | 2.5 | 58.2 | |
| SAMP | L2513363-06 | 25 | 25 | 0.063 | 0.165 | 0.102 | 6.861 | 1 | 1.0 | 6.9 | |
| SAMP | L2513363-07 | 2.5 | 25 | 0.005 | 0.195 | 0.190 | 11.069 | 1 | 10.0 | 110.7 | |
| SAMP | L2513363-08 | 12.5 | 25 | 0.006 | 0.42 | 0.414 | 21.780 | 1 | 2.0 | 43.6 | |
| SAMP | L2513363-09 | 10 | 25 | 0.008 | 0.534 | 0.526 | 27.135 | 1 | 2.5 | 67.8 | |
| SAMP | L2513422-02 | 2 | 25 | 0.009 | 0.615 | 0.606 | 30.960 | 1 | 12.5 | 387.0 | |
| | L2513561-01 | 25 | 25 | 0.057 | 0.17 | 0.113 | 7.387 | 1 | 1.0 | 7.4 | |
| SAMP | L2513848-01 | 25 | 25 | 0.042 | 0.082 | 0.040 | 3.896 | 1 | 1.0 | 3.9 | FILTERED |
| SAMP | L2513848-02 | 25 | 25 | 0.014 | 0.156 | 0.142 | 8.774 | 1 | 1.0 | 8.8 | FILTERED |
| | CCV2 | 25 | 25 | 0 | 0.374 | 0.374 | 19.867 | 1 | 1.0 | 19.9 | |
| | CCB2 | 25 | 25 | 0 | 0.006 | 0.006 | 2.271 | 1 | 1.0 | 2.3 | |
| SAMP | L2513848-03 | 25 | 25 | 0.015 | 0.052 | 0.037 | 3.753 | 1 | 1.0 | 3.8 | FILTERED |
| SAMP | L2513848-04 | 25 | 25 | 0.103 | 0.09 | -0.013 | 1.362 | 1 | 1.0 | 1.4 | |
| | CCV3 | 25 | 25 | 0 | 0.367 | 0.367 | 19.532 | 1 | 1.0 | 19.5 | |
| | CCB3 | 25 | 25 | 0 | 0.009 | 0.009 | 2.414 | 1 | 1.0 | 2.4 | |
| BLANK | WG2039602-1 | 25 | 25 | 0.000 | 0.003 | 0.003 | 2.127 | 1 | 1.0 | 2.1 | |
| DUP | WG2039602-3 | 25 | 25 | 0.001 | 0.203 | 0.202 | 11.643 | 1 | 1.0 | 11.6 | L2512368-10 |

| | Sample number | sample volume | Final volume (ml) | Bkgd. Abs. | Gross Abs. | Absorbance | Sample Result mg/l | Spiked Volume | Spike conc. mg/l | Spike Result mg/l | Recovery % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MS | WG2039602-4 | 12.5 | 25 | 0.003 | 0.504 | 0.501 | 13.200 | 12.5 | 40.0000 | 52 | 97 |
| | | | | | | | | | | | L2512368-10 |
| LCS | WG2039602-2 | 25 | 25 | 0 | 0.375 | 0.375 | | 1 | 20.0000 | 20 | 100 |

# Quality Control

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512325-02 | | |
| **Matrix Spike** | : WG2039177-4 | **MS Analysis Date** | : 03/11/25 14:20 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Sulfate | 35. | 100 | 140 | 102 | | | | | 55-147 | 14 |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 8A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-10 | | |
| **Matrix Spike** | : WG2039602-4 | **MS Analysis Date** | : 03/12/25 11:30 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Sulfate | 13. | 40 | 52. | 98 | | | | | 55-147 | 14 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : NA | **Analysis Date** | : 03/11/25 14:20 |
| **Dup Sample ID** | : WG2039177-3 | **DUP Analysis Date** | : 03/11/25 14:20 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Sulfate | 35 | 37. | 6 | 14 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 8A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-10 | **Analysis Date** | : 03/12/25 11:30 |
| **Dup Sample ID** | : WG2039602-3 | **DUP Analysis Date** | : 03/12/25 11:30 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Sulfate | 13. | 12. | 8 | 14 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2039177-2 | **LCS Analysis Date** | : 03/11/25 14:20 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Sulfate | 20.0 | 19.0 | 95. | | | | | 90-110 | 14 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2039602-2 | **LCS Analysis Date** | : 03/12/25 11:30 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Sulfate | 20.0 | 20.0 | 100. | | | | | 90-110 | 14 |

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**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 14808-79-8 | 10 | 1.37 | mg/l | 90-110 | | 55-147 | 14 | 14 | 4500SO4-E | 28 days | 1 - Plastic 500ml unpreserved |
| Sulfate | 14808-79-8 | 10 | 1.37 | mg/l | 90-110 | | 55-147 | 14 | 14 | 9038 | 28 days | 1 - Plastic 500ml unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11468-1
**Page:** 1

**WETCHEM (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 14808-79-8 | 100 | 13.6 | mg/kg | 80-121 | 12 | 22-183 | 12 | 12 | 9038 | 28 days | 1 - Glass 250ml/8oz unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

# Calculations of Sulfate

Aqueous samples:

Calculate the concentration value of the sample directly from the standard curve.

$$mgSO_4/L = \frac{\text{absorbance - y-intercept}}{\text{slope}} \times \text{Dilution Factor}$$

If sample has a background absorbance, it has to be subtracted before calculation.

# Alkalinity Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-01 | Date Collected | : 03/05/25 11:20 |
| Client ID | : 5A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 06:56 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MRM |
| Lab File ID | : 250310.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 60.3 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-02 | Date Collected | : 03/05/25 11:25 |
| Client ID | : 5B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 06:59 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MRM |
| Lab File ID | : 250310.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 40.0 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-04 | Date Collected | : 03/05/25 09:25 |
| Client ID | : 6A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 07:01 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MRM |
| Lab File ID | : 250310.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 68.9 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-05 | Date Collected | : 03/05/25 09:27 |
| Client ID | : 6B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 07:03 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MRM |
| Lab File ID | : 250310.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 41.5 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-07 | Date Collected | : 03/05/25 08:15 |
| Client ID | : 7A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 07:05 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MRM |
| Lab File ID | : 250310.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 229. | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-08 | Date Collected | : 03/05/25 08:13 |
| Client ID | : 7B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 07:11 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MRM |
| Lab File ID | : 250310.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 91.6 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-10 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 07:15 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MRM |
| Lab File ID | : 250310.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 24.5 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-11 | Date Collected | : 03/05/25 16:45 |
| Client ID | : 8B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 07:18 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MRM |
| Lab File ID | : 250310.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 24.4 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-13 | Date Collected | : 03/05/25 14:10 |
| Client ID | : 9A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 07:20 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MRM |
| Lab File ID | : 250310.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 20.3 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-14 | Date Collected | : 03/05/25 15:15 |
| Client ID | : 9B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 07:21 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MRM |
| Lab File ID | : 250310.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 67.8 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-16 | Date Collected | : 03/05/25 12:45 |
| Client ID | : 10A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 07:24 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MRM |
| Lab File ID | : 250310.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 44.5 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-17 | Date Collected | : 03/05/25 12:55 |
| Client ID | : 10B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 07:26 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MRM |
| Lab File ID | : 250310.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 25.5 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-19 | Date Collected | : 03/05/25 00:00 |
| Client ID | : DUP001 | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 07:28 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MRM |
| Lab File ID | : 250310.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | 50.6 | 2.00 | NA | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038003-1 | Date Collected | : NA |
| Client ID | : WG2038003-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/10/25 06:49 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MRM |
| Lab File ID | : 250310.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |
| 71-52-3 | Alkalinity, Bicarbonate | ND | 2.00 | NA | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038003-3 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8ADUP | Date Received | : 03/05/25 |
| Sample Location | : | Date Analyzed | : 03/10/25 07:16 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,2320B | Analyst | : MRM |
| Lab File ID | : 250310.csv | Instrument ID | : TITR5 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg CaCO3/L | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 71-52-3 | Alkalinity, Bicarbonate | 24.6 | 2.00 | NA | |
| 3812-32-6 | Alkalinity, Carbonate | ND | 2.00 | NA | U |

# Sample Raw Data

# Calibration report

## Method

| | | | |
|---|---|---|---|
| **Method ID** | pH Cal. 7 4 10 | **Release state** | Released |
| **Name** | Calibration | **Modified by** | SystemInternal |
| **Modified on** | 10/3/2023 12:47:09 PM | | |

## Summary

### Samples

| | Sample ID | Name | Result | State |
|---|---|---|---|---|
| 1 | METTLER TOLEDO (Ref. 25°C) pH | pH | 7.00 | |
| 2 | METTLER TOLEDO (Ref. 25°C) pH | pH | 4.01 | |
| 3 | METTLER TOLEDO (Ref. 25°C) pH | pH | 10.00 | |

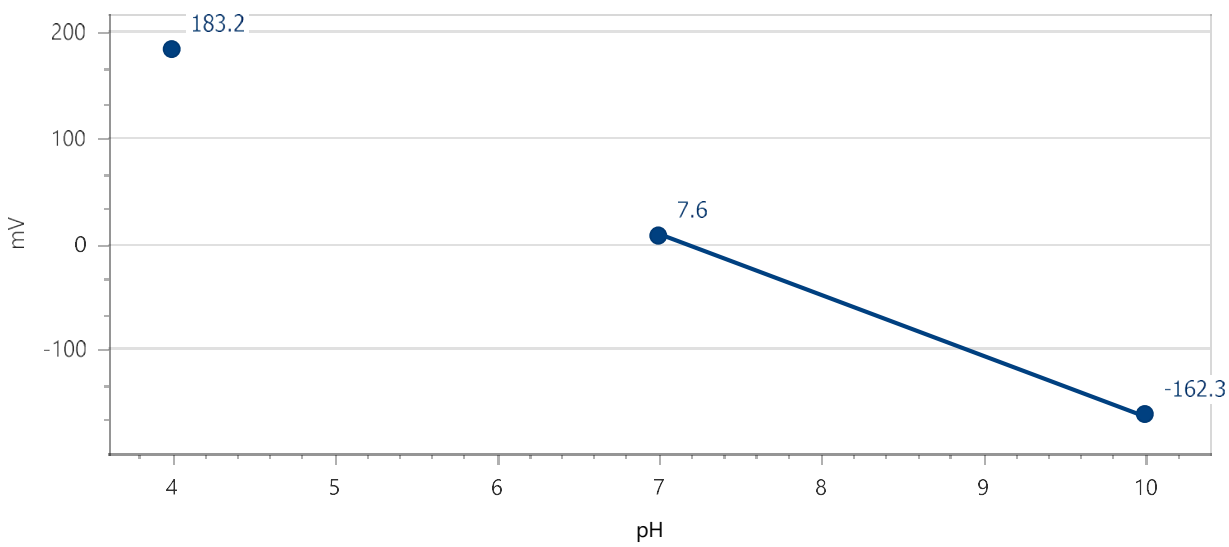
### Results

| | |
|---|---|
| **Zero point 1 Cal1.Z1** | 7.168 pH |
| **Slope 1 Cal1.S1** | -57.68 mV/pH |

### Calibration

| | |
|---|---|
| **Sensor** | Sensor DG111-SC |
| **Creation time** | 3/10/2025 4:16:36 AM |
| **Overall state** | OK |
| **Successful** | Yes |
| **Calib. temperature** | 25.0 °C |
| **SLOPECal** | -57.68 mV/pH |
| **ZEROCal** | 7.168 pH |

## Calibration Curve




## Used Instruments

# Calibration report

| | | | |
|---|---|---|---|
| **Name** | T7 Excellence Titrator | **Serial number** | C329519495 |

## Responsible User

| Time | Login name | Full name |
|---|---|---|
| 3/10/2025 4:11:56 AM | SystemInternal | System internal account |

# Titration report

## Method

| | | | |
|---|---|---|---|
| **Method ID** | pH Measure | **Release state** | Released |
| **Name** | Measure | **Modified by** | SystemInternal |
| **Modified on** | 2/23/2024 9:31:05 AM | | |

## Summary

### Samples

| | Sample ID | Name | Result | State |
|---|---|---|---|---|
| 1 | -- | Sample size | 0 mL | |
| | | Potential R1 | 7.02 pH | OK |

## Used Instruments

| | | | |
|---|---|---|---|
| **Name** | T7 Excellence Titrator | **Serial number** | C329519495 |

## Responsible User

| Time | Login name | Full name |
|---|---|---|
| 3/10/2025 4:29:47 AM | SystemInternal | System internal account |

# Titration report

## Method

| | | | |
|---|---|---|---|
| **Method ID** | Alk Total (2) | **Release state** | Released |
| **Name** | EP/EP | **Modified by** | SystemInternal |
| **Modified on** | 10/14/2023 11:44:43 AM | | |

## Summary

### Samples

| | Sample ID | Name | Result | State |
|---|---|---|---|---|
| 1 | Rinse,MRM | Sample size | 50 mL | |
| | | Potential R4 | 7.83 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.010 mL | OK |
| | | Consumption 4.2 R3 | 1.025 mL | OK |
| | | Content R5 | 20.200 mg/L | OK |
| | | ALK LOW R6 | 19.900 mg/L | OK |
| 2 | Rinse,MRM | Sample size | 50 mL | |
| | | Potential R4 | 5.70 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.113 mL | OK |
| | | Consumption 4.2 R3 | 0.138 mL | OK |
| | | Content R5 | 2.260 mg/L | OK |
| | | ALK LOW R6 | 1.760 mg/L | OK |
| 3 | Rinse,MRM | Sample size | 50 mL | |
| | | Potential R4 | 3.86 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.003 mL | OK |
| | | Consumption 4.2 R3 | 0.002 mL | OK |
| | | Content R5 | 0.060 mg/L | OK |
| | | ALK LOW R6 | 0.080 mg/L | OK |
| 4 | WG2038002-1 | Sample size | 50 mL | |
| | | Potential R4 | 3.05 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | NaN mL | Not OK |
| | | Consumption 4.2 R3 | NaN mL | Not OK |
| | | Content R5 | NaN mg/L | Not OK |
| | | ALK LOW R6 | NaN mg/L | Not OK |
| 5 | WG2038002-2 | Sample size | 50 mL | |
| | | Potential R4 | 11.06 pH | OK |
| | | Consumption 8.3 R1 | 4.785 mL | OK |
| | | Consumption 4.5 R2 | 5.143 mL | OK |
| | | Consumption 4.2 R3 | 5.148 mL | OK |
| | | Content R5 | 102.860 mg/L | OK |
| | | ALK LOW R6 | 102.760 mg/L | OK |
| 6 | L2511871-01 | Sample size | 50 mL | |

# Titration report

| | | | | |
|---|---|---|---|---|
| | | Potential R4 | 6.54 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 4.459 mL | OK |
| | | Consumption 4.2 R3 | 4.485 mL | OK |
| | | Content R5 | 89.180 mg/L | OK |
| | | ALK LOW R6 | 88.660 mg/L | OK |
| 7 | L2511893-01 | Sample size | 50 mL | |
| | | Potential R4 | 4.24 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | NaN mL | Not OK |
| | | Consumption 4.2 R3 | 0.151 mL | OK |
| | | Content R5 | NaN mg/L | Not OK |
| | | ALK LOW R6 | NaN mg/L | Not OK |
| 8 | WG2038002-3 | Sample size | 50 mL | |
| | | Potential R4 | 4.28 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | NaN mL | Not OK |
| | | Consumption 4.2 R3 | 0.128 mL | OK |
| | | Content R5 | NaN mg/L | Not OK |
| | | ALK LOW R6 | NaN mg/L | Not OK |
| 9 | WG2038002-4 | Sample size | 50 mL | |
| | | Potential R4 | 4.70 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.302 mL | OK |
| | | Consumption 4.2 R3 | 0.702 mL | OK |
| | | Content R5 | 6.040 mg/L | OK |
| | | ALK LOW R6 | -1.960 mg/L | OK |
| 10 | L2511893-02 | Sample size | 50 mL | |
| | | Potential R4 | 4.26 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | NaN mL | Not OK |
| | | Consumption 4.2 R3 | 0.139 mL | OK |
| | | Content R5 | NaN mg/L | Not OK |
| | | ALK LOW R6 | NaN mg/L | Not OK |
| 11 | L2511893-03 | Sample size | 50 mL | |
| | | Potential R4 | 3.90 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | NaN mL | Not OK |
| | | Consumption 4.2 R3 | NaN mL | Not OK |
| | | Content R5 | NaN mg/L | Not OK |
| | | ALK LOW R6 | NaN mg/L | Not OK |
| 12 | L2511893-04 | Sample size | 50 mL | |
| | | Potential R4 | 5.73 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.112 mL | OK |
| | | Consumption 4.2 R3 | 0.162 mL | OK |
| | | Content R5 | 2.240 mg/L | OK |

# Titration report

| | | | | |
|---|---|---|---|---|
| | | ALK LOW R6 | 1.240 mg/L | OK |
| 13 | L2511893-04 | Sample size | 50 mL | |
| | | Potential R4 | 5.60 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.080 mL | OK |
| | | Consumption 4.2 R3 | 0.123 mL | OK |
| | | Content R5 | 1.600 mg/L | OK |
| | | ALK LOW R6 | 0.740 mg/L | OK |
| 14 | L2511963-01 | Sample size | 50 mL | |
| | | Potential R4 | 3.49 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | NaN mL | Not OK |
| | | Consumption 4.2 R3 | NaN mL | Not OK |
| | | Content R5 | NaN mg/L | Not OK |
| | | ALK LOW R6 | NaN mg/L | Not OK |
| 15 | L2511963-02 | Sample size | 50 mL | |
| | | Potential R4 | 5.84 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 6.741 mL | OK |
| | | Consumption 4.2 R3 | 6.866 mL | OK |
| | | Content R5 | 134.820 mg/L | OK |
| | | ALK LOW R6 | 132.320 mg/L | OK |
| 16 | L2511963-03 | Sample size | 50 mL | |
| | | Potential R4 | 5.66 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 3.269 mL | OK |
| | | Consumption 4.2 R3 | 3.387 mL | OK |
| | | Content R5 | 65.380 mg/L | OK |
| | | ALK LOW R6 | 63.020 mg/L | OK |
| 17 | L2511963-04 | Sample size | 50 mL | |
| | | Potential R4 | 5.17 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.514 mL | OK |
| | | Consumption 4.2 R3 | 0.569 mL | OK |
| | | Content R5 | 10.280 mg/L | OK |
| | | ALK LOW R6 | 9.180 mg/L | OK |
| 18 | L2511963-05 | Sample size | 50 mL | |
| | | Potential R4 | 5.58 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.509 mL | OK |
| | | Consumption 4.2 R3 | 1.582 mL | OK |
| | | Content R5 | 30.180 mg/L | OK |
| | | ALK LOW R6 | 28.720 mg/L | OK |
| 19 | L2511963-06 | Sample size | 50 mL | |
| | | Potential R4 | 6.09 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 7.413 mL | OK |

# Titration report

| | | | | |
|---|---|---|---|---|
| | | Consumption 4.2 R3 | 7.527 mL | OK |
| | | Content R5 | 148.260 mg/L | OK |
| | | ALK LOW R6 | 145.980 mg/L | OK |
| 20 | L2511963-07 | Sample size | 50 mL | |
| | | Potential R4 | 5.94 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.285 mL | OK |
| | | Consumption 4.2 R3 | 2.326 mL | OK |
| | | Content R5 | 45.700 mg/L | OK |
| | | ALK LOW R6 | 44.880 mg/L | OK |
| 21 | L2511963-08 | Sample size | 50 mL | |
| | | Potential R4 | 6.10 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 3.584 mL | OK |
| | | Consumption 4.2 R3 | 3.694 mL | OK |
| | | Content R5 | 71.680 mg/L | OK |
| | | ALK LOW R6 | 69.480 mg/L | OK |
| 22 | WG2038003-2 | Sample size | 50 mL | |
| | | Potential R4 | 11.99 pH | OK |
| | | Consumption 8.3 R1 | 4.867 mL | OK |
| | | Consumption 4.5 R2 | 5.199 mL | OK |
| | | Consumption 4.2 R3 | 5.203 mL | OK |
| | | Content R5 | 103.980 mg/L | OK |
| | | ALK LOW R6 | 103.900 mg/L | OK |
| 23 | WG2038003-1 | Sample size | 50 mL | |
| | | Potential R4 | 4.28 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.010 mL | OK |
| | | Consumption 4.2 R3 | 0.009 mL | OK |
| | | Content R5 | 0.200 mg/L | OK |
| | | ALK LOW R6 | 0.220 mg/L | OK |
| 24 | L2512368-01 | Sample size | 50 mL | |
| | | Potential R4 | 5.76 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 3.016 mL | OK |
| | | Consumption 4.2 R3 | 3.030 mL | OK |
| | | Content R5 | 60.320 mg/L | OK |
| | | ALK LOW R6 | 60.040 mg/L | OK |
| 25 | L2512368-02 | Sample size | 50 mL | |
| | | Potential R4 | 5.77 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.999 mL | OK |
| | | Consumption 4.2 R3 | 2.013 mL | OK |
| | | Content R5 | 39.980 mg/L | OK |
| | | ALK LOW R6 | 39.700 mg/L | OK |
| 26 | L2512368-04 | Sample size | 50 mL | |
| | | Potential R4 | 5.96 pH | OK |

# Titration report

| | | | | |
|---|---|---|---|---|
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 3.445 mL | OK |
| | | Consumption 4.2 R3 | 3.463 mL | OK |
| | | Content R5 | 68.900 mg/L | OK |
| | | ALK LOW R6 | 68.540 mg/L | OK |
| 27 | L2512368-05 | Sample size | 50 mL | |
| | | Potential R4 | 5.79 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.073 mL | OK |
| | | Consumption 4.2 R3 | 2.085 mL | OK |
| | | Content R5 | 41.460 mg/L | OK |
| | | ALK LOW R6 | 41.220 mg/L | OK |
| 28 | L2512368-07 | Sample size | 50 mL | |
| | | Potential R4 | 6.35 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 11.448 mL | OK |
| | | Consumption 4.2 R3 | 11.583 mL | OK |
| | | Content R5 | 228.960 mg/L | OK |
| | | ALK LOW R6 | 226.260 mg/L | OK |
| 29 | L2512368-08 | Sample size | 50 mL | |
| | | Potential R4 | 6.02 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 4.579 mL | OK |
| | | Consumption 4.2 R3 | 4.627 mL | OK |
| | | Content R5 | 91.580 mg/L | OK |
| | | ALK LOW R6 | 90.620 mg/L | OK |
| 30 | L2512368-10 | Sample size | 50 mL | |
| | | Potential R4 | 5.65 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.226 mL | OK |
| | | Consumption 4.2 R3 | 1.236 mL | OK |
| | | Content R5 | 24.520 mg/L | OK |
| | | ALK LOW R6 | 24.320 mg/L | OK |
| 31 | WG2038003-3 | Sample size | 50 mL | |
| | | Potential R4 | 5.64 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.229 mL | OK |
| | | Consumption 4.2 R3 | 1.240 mL | OK |
| | | Content R5 | 24.580 mg/L | OK |
| | | ALK LOW R6 | 24.360 mg/L | OK |
| 32 | L2512368-11 | Sample size | 50 mL | |
| | | Potential R4 | 5.75 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.220 mL | OK |
| | | Consumption 4.2 R3 | 1.225 mL | OK |
| | | Content R5 | 24.400 mg/L | OK |
| | | ALK LOW R6 | 24.300 mg/L | OK |

# Titration report

| | | | | |
|---|---|---|---|---|
| 33 | L2512368-13 | Sample size | 50 mL | |
| | | Potential R4 | 5.56 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.013 mL | OK |
| | | Consumption 4.2 R3 | 1.032 mL | OK |
| | | Content R5 | 20.260 mg/L | OK |
| | | ALK LOW R6 | 19.880 mg/L | OK |
| 34 | L2512368-14 | Sample size | 50 mL | |
| | | Potential R4 | 6.95 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 3.391 mL | OK |
| | | Consumption 4.2 R3 | 3.399 mL | OK |
| | | Content R5 | 67.820 mg/L | OK |
| | | ALK LOW R6 | 67.660 mg/L | OK |
| 35 | L2512368-16 | Sample size | 50 mL | |
| | | Potential R4 | 5.72 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.223 mL | OK |
| | | Consumption 4.2 R3 | 2.270 mL | OK |
| | | Content R5 | 44.460 mg/L | OK |
| | | ALK LOW R6 | 43.520 mg/L | OK |
| 36 | L2512368-17 | Sample size | 50 mL | |
| | | Potential R4 | 5.71 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.274 mL | OK |
| | | Consumption 4.2 R3 | 1.283 mL | OK |
| | | Content R5 | 25.480 mg/L | OK |
| | | ALK LOW R6 | 25.300 mg/L | OK |
| 37 | L2512368-19 | Sample size | 50 mL | |
| | | Potential R4 | 5.73 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.528 mL | OK |
| | | Consumption 4.2 R3 | 2.584 mL | OK |
| | | Content R5 | 50.560 mg/L | OK |
| | | ALK LOW R6 | 49.440 mg/L | OK |
| 38 | WG2038004-2 | Sample size | 50 mL | |
| | | Potential R4 | 11.75 pH | OK |
| | | Consumption 8.3 R1 | 4.893 mL | OK |
| | | Consumption 4.5 R2 | 5.216 mL | OK |
| | | Consumption 4.2 R3 | 5.216 mL | OK |
| | | Content R5 | 104.320 mg/L | OK |
| | | ALK LOW R6 | 104.320 mg/L | OK |
| 39 | WG2038004-1 | Sample size | 50 mL | |
| | | Potential R4 | 5.96 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 0.001 mL | OK |
| | | Consumption 4.2 R3 | 0.009 mL | OK |

# Titration report

| | | | | |
|---|---|---|---|---|
| | | Content R5 | 0.020 mg/L | OK |
| | | ALK LOW R6 | -0.140 mg/L | OK |
| 40 | L25012325-01 | Sample size | 50 mL | |
| | | Potential R4 | 5.93 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 3.255 mL | OK |
| | | Consumption 4.2 R3 | 3.277 mL | OK |
| | | Content R5 | 65.100 mg/L | OK |
| | | ALK LOW R6 | 64.660 mg/L | OK |
| 41 | L25012325-02 | Sample size | 50 mL | |
| | | Potential R4 | 5.81 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.634 mL | OK |
| | | Consumption 4.2 R3 | 2.663 mL | OK |
| | | Content R5 | 52.680 mg/L | OK |
| | | ALK LOW R6 | 52.100 mg/L | OK |
| 42 | WG2038004-3 | Sample size | 50 mL | |
| | | Potential R4 | 5.80 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.586 mL | OK |
| | | Consumption 4.2 R3 | 2.611 mL | OK |
| | | Content R5 | 51.720 mg/L | OK |
| | | ALK LOW R6 | 51.220 mg/L | OK |
| 43 | L25012325-03 | Sample size | 50 mL | |
| | | Potential R4 | 5.96 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 4.223 mL | OK |
| | | Consumption 4.2 R3 | 4.275 mL | OK |
| | | Content R5 | 84.460 mg/L | OK |
| | | ALK LOW R6 | 83.420 mg/L | OK |
| 44 | L25012325-04 | Sample size | 50 mL | |
| | | Potential R4 | 6.38 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 9.012 mL | OK |
| | | Consumption 4.2 R3 | 9.120 mL | OK |
| | | Content R5 | 180.240 mg/L | OK |
| | | ALK LOW R6 | 178.080 mg/L | OK |
| 45 | L25012325-05 | Sample size | 50 mL | |
| | | Potential R4 | 5.72 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.534 mL | OK |
| | | Consumption 4.2 R3 | 1.548 mL | OK |
| | | Content R5 | 30.680 mg/L | OK |
| | | ALK LOW R6 | 30.400 mg/L | OK |
| 46 | L25012325-06 | Sample size | 50 mL | |
| | | Potential R4 | 5.80 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |

# Titration report

| | | | | |
|---|---|---|---|---|
| | | Consumption 4.5 R2 | 2.005 mL | OK |
| | | Consumption 4.2 R3 | 2.019 mL | OK |
| | | Content R5 | 40.100 mg/L | OK |
| | | ALK LOW R6 | 39.820 mg/L | OK |
| 47 | L25012325-07 | Sample size | 50 mL | |
| | | Potential R4 | 5.46 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.221 mL | OK |
| | | Consumption 4.2 R3 | 1.248 mL | OK |
| | | Content R5 | 24.420 mg/L | OK |
| | | ALK LOW R6 | 23.880 mg/L | OK |
| 48 | L25012325-08 | Sample size | 50 mL | |
| | | Potential R4 | 5.64 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 1.108 mL | OK |
| | | Consumption 4.2 R3 | 1.122 mL | OK |
| | | Content R5 | 22.160 mg/L | OK |
| | | ALK LOW R6 | 21.880 mg/L | OK |
| 49 | L25012325-09 | Sample size | 50 mL | |
| | | Potential R4 | 5.86 pH | OK |
| | | Consumption 8.3 R1 | NaN mL | Not OK |
| | | Consumption 4.5 R2 | 2.578 mL | OK |
| | | Consumption 4.2 R3 | 2.605 mL | OK |
| | | Content R5 | 51.560 mg/L | OK |
| | | ALK LOW R6 | 51.020 mg/L | OK |
| 50 | CCV | Sample size | 50 mL | |
| | | Potential R4 | 11.32 pH | OK |
| | | Consumption 8.3 R1 | 4.786 mL | OK |
| | | Consumption 4.5 R2 | 5.127 mL | OK |
| | | Consumption 4.2 R3 | 5.127 mL | OK |
| | | Content R5 | 102.540 mg/L | OK |
| | | ALK LOW R6 | 102.540 mg/L | OK |
| 51 | CCB | Sample size | 50 mL | |
| | | Potential R4 | 5.36 pH | OK |
| | | Consumption 8.3 R1 | 0.044 mL | OK |
| | | Consumption 4.5 R2 | 0.001 mL | OK |
| | | Consumption 4.2 R3 | 0.001 mL | OK |
| | | Content R5 | 0.020 mg/L | OK |
| | | ALK LOW R6 | 0.020 mg/L | OK |
| 52 | -- | Sample size | 50 mL [12,15] | |

## Statistics

### R1

| | | | |
|---|---|---|---|
| **Mean** | NaN mL | | |
| **Maximum** | 4.893 mL | **Minimum** | 0.044 mL |

# Titration report

| | | | |
|---|---|---|---|
| **Standard deviation** | NaN mL | **Rel. standard deviation** | NaN % |
| **Total samples** | 51 | **Samples excluded** | 0 |

### R2

| | | | |
|---|---|---|---|
| **Mean** | NaN mL | | |
| **Maximum** | 11.448 mL | **Minimum** | 0.001 mL |
| **Standard deviation** | NaN mL | **Rel. standard deviation** | NaN % |
| **Total samples** | 51 | **Samples excluded** | 0 |

### R3

| | | | |
|---|---|---|---|
| **Mean** | NaN mL | | |
| **Maximum** | 11.583 mL | **Minimum** | 0.001 mL |
| **Standard deviation** | NaN mL | **Rel. standard deviation** | NaN % |
| **Total samples** | 51 | **Samples excluded** | 0 |

### R4

| | | | |
|---|---|---|---|
| **Mean** | 6.00 pH | | |
| **Maximum** | 11.99 pH | **Minimum** | 3.05 pH |
| **Standard deviation** | 1.84 pH | **Rel. standard deviation** | 30.613 % |
| **Total samples** | 51 | **Samples excluded** | 0 |

### R5

| | | | |
|---|---|---|---|
| **Mean** | NaN mg/L | | |
| **Maximum** | 228.960 mg/L | **Minimum** | 0.020 mg/L |
| **Standard deviation** | NaN mg/L | **Rel. standard deviation** | NaN % |
| **Total samples** | 51 | **Samples excluded** | 0 |

### R6

| | | | |
|---|---|---|---|
| **Mean** | NaN mg/L | | |
| **Maximum** | 226.260 mg/L | **Minimum** | -1.960 mg/L |
| **Standard deviation** | NaN mg/L | **Rel. standard deviation** | NaN % |
| **Total samples** | 51 | **Samples excluded** | 0 |

## Used Instruments

| | | | |
|---|---|---|---|
| **Name** | T7 Excellence Titrator | **Serial number** | C329519495 |

## Responsible User

| Time | Login name | Full name |
|---|---|---|
| 3/10/2025 5:10:41 AM | SystemInternal | System internal account |

(12) Unfinished sample
(15) Termination due to error

# Quality Control

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 8A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-10 | **Analysis Date** | : 03/10/25 07:15 |
| **Dup Sample ID** | : WG2038003-3 | **DUP Analysis Date** | : 03/10/25 07:16 |

| Parameter | Sample Concentration (mg CaCO3/L) | Duplicate Concentration (mg CaCO3/L) | RPD | RPD Limit |
|---|---|---|---|---|
| Alkalinity, Carbonate | ND | ND | NC | 10 |
| Alkalinity, Bicarbonate | 24.5 | 24.6 | 0 | 9 |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alkalinity, Total | 471-34-1 | 2 | | mg CaCO3/L | 90-110 | 10 | 86-116 | 10 | 10 | 2320B | 14 days | 1 - Plastic 250ml unpreserved/No Headspace |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

## Calculations of Alkalinity

$$\text{Alkalinity, mg } CaCO_3/L = \frac{A \times N \times 50{,}000}{\text{mL Sample}}$$

Where:

A = mL of the standard acid titrated

N = normality of the standard acid

Results are calculated using Mettler Toledo software.

Standard sample size is 50mL, 0.02N Sulfuric acid for titration

# Sequence Logs

| | | | | | |
|---|---|---|---|---|---|
| CAL | 250310 | LCS 7.00 | 7.02 | INT: | MRM/MKT |
| pH 4 | 3484 | Titrant: | 4298 | | |
| pH 7 | 3386 | LCS: | 3530 | | |
| pH 10 | 3482 | MS: | 3529 | | |
| LCS | 3523 | | | | |

| | | | |
|---|---|---|---|
| 1 | Rinse,MRM | 42 | WG2038004-3 |
| 2 | Rinse,MRM | 43 | L25012325-03 |
| 3 | Rinse,MRM | 44 | L25012325-04 |
| 4 | WG2038002-1 | 45 | L25012325-05 |
| 5 | WG2038002-2 | 46 | L25012325-06 |
| 6 | L2511871-01 | 47 | L25012325-07 |
| 7 | L2511893-01 | 48 | L25012325-08 |
| 8 | WG2038002-3 | 49 | L25012325-09 |
| 9 | WG2038002-4 | 50 | CCV |
| 10 | L2511893-02 | 51 | CCB |
| 11 | L2511893-03 | | |
| 12 | L2511893-04 | | |
| 13 | L2511893-04 | | |
| 14 | L2511963-01 | | |
| 15 | L2511963-02 | | |
| 16 | L2511963-03 | | |
| 17 | L2511963-04 | | |
| 18 | L2511963-05 | | |
| 19 | L2511963-06 | | |
| 20 | L2511963-07 | | |
| 21 | L2511963-08 | | |
| 22 | WG2038003-2 | | |
| 23 | WG2038003-1 | | |
| 24 | L2512368-01 | | |
| 25 | L2512368-02 | | |
| 26 | L2512368-04 | | |
| 27 | L2512368-05 | | |
| 28 | L2512368-07 | | |
| 29 | L2512368-08 | | |
| 30 | L2512368-10 | | |
| 31 | WG2038003-3 | | |
| 32 | L2512368-11 | | |
| 33 | L2512368-13 | | |
| 34 | L2512368-14 | | |
| 35 | L2512368-16 | | |
| 36 | L2512368-17 | | |
| 37 | L2512368-19 | | |
| 38 | WG2038004-2 | | |
| 39 | WG2038004-1 | | |
| 40 | L25012325-01 | | |
| 41 | L25012325-02 | | |

# Chloride Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-01 | Date Collected | : 03/05/25 11:20 |
| Client ID | : 5A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 14:17 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250310-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 17. | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-02 | Date Collected | : 03/05/25 11:25 |
| Client ID | : 5B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 14:18 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250310-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 26. | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-04 | Date Collected | : 03/05/25 09:25 |
| Client ID | : 6A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 14:19 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250310-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 15. | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-05 | Date Collected | : 03/05/25 09:27 |
| Client ID | : 6B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 14:20 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250310-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 26. | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-07 | Date Collected | : 03/05/25 08:15 |
| Client ID | : 7A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 14:20 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250310-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 21. | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-08 | Date Collected | : 03/05/25 08:13 |
| Client ID | : 7B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 15:43 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250310-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 20. | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-10 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 14:28 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250310-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 22. | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-11 | Date Collected | : 03/05/25 16:45 |
| Client ID | : 8B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 14:25 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250310-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 8.9 | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-13 | Date Collected | : 03/05/25 14:10 |
| Client ID | : 9A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 14:25 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250310-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 20. | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-14 | Date Collected | : 03/05/25 15:15 |
| Client ID | : 9B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 14:26 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250310-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 9.5 | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-16 | Date Collected | : 03/05/25 12:45 |
| Client ID | : 10A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 14:27 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250310-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 17. | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-17 | Date Collected | : 03/05/25 12:55 |
| Client ID | : 10B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 14:30 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250310-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 30. | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-19 | Date Collected | : 03/05/25 00:00 |
| Client ID | : DUP001 | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 14:31 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250310-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 18. | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038586-1 | Date Collected | : NA |
| Client ID | : WG2038586-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/10/25 13:57 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250310-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | ND | 1.0 | 0.89 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038586-3 | Date Collected | : 03/05/25 09:15 |
| Client ID | : WG2038586-3 DUP | Date Received | : 03/05/25 |
| Sample Location | : | Date Analyzed | : 03/10/25 14:07 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250310-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 14. | 1.0 | 0.89 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038587-1 | Date Collected | : NA |
| Client ID | : WG2038587-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/10/25 14:01 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250310-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | ND | 1.0 | 0.89 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038587-3 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8ADUP | Date Received | : 03/05/25 |
| Sample Location | : | Date Analyzed | : 03/10/25 14:28 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500CL-E | Analyst | : JER |
| Lab File ID | : CL250310-A1 | Instrument ID | : LACHAT3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16887-00-6 | Chloride | 22. | 1.0 | 0.89 | |

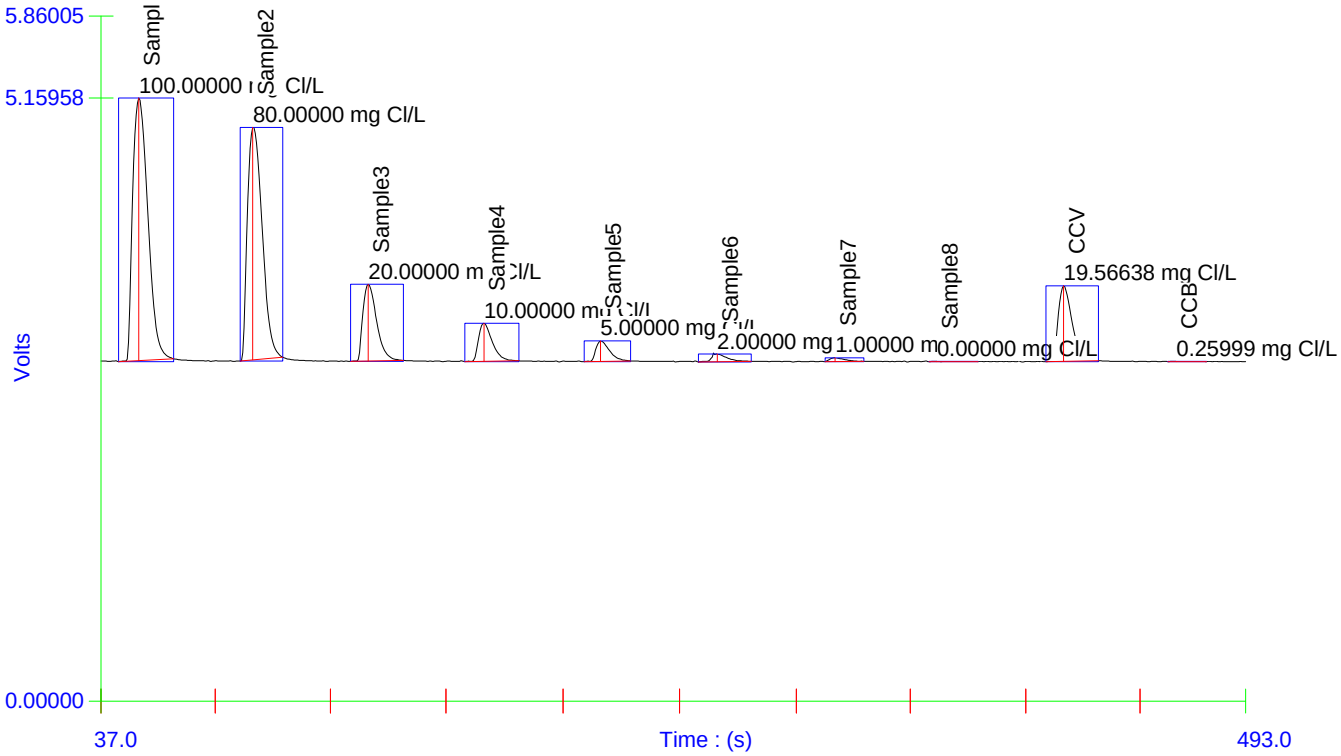
# Sample Raw Data

Author: Date : 3/10/2025

Original Run Filename: OM_3-10-2025_01-34-58PM.OMN Created: 3/10/2025 1:34:58 PM
Original Run Author's Signature: [a1wetcheminstrument]
Current Run Filename: OM_3-10-2025_01-34-58PM.OMN Last Modified: 3/10/2025 1:46:15 PM
Current Run Author's Signature: [a1wetcheminstrument]
Description: Default New Run

| Sample | Rep. | Cup No. | Channel 1 Chloride-CH3 (mg Cl/L) | ADF | MDF | Weight |
|---|---|---|---|---|---|---|
| Sample1 | 1 | S1 | 100.00000 | | | |
| Sample2 | 1 | S2 | 80.00000 | | | |
| Sample3 | 1 | S3 | 20.00000 | | | |
| Sample4 | 1 | S4 | 10.00000 | | | |
| Sample5 | 1 | S5 | 5.00000 | | | |
| Sample6 | 1 | S6 | 2.00000 | | | |
| Sample7 | 1 | S7 | 1.00000 | | | |
| Sample8 | 1 | S9 | 0.00000 | | | |
| CCV | 1 | S3 | 19.56638 | | | |
| | | Known Conc: | 20.00000 | | | |
| | | Calibration: | Table/Fig. : 1 | | | |
| CCB | 1 | S9 | 0.25999 | | | |
| | | Known Conc: | 0.00000 | | | |
| ~~ICV 5~~ | ~~1~~ | ~~1~~ | ~~4.62652~~ | | | |
| ~~ICV 30~~ | ~~1~~ | ~~2~~ | ~~34.87274~~ | | | |
| ~~ICV 80~~ | ~~1~~ | ~~3~~ | ~~85.24500~~ | | | |

Channel 1 (Chloride) - Set: 1 / 2



Author: Date : 3/10/2025

Channel 1 (Chloride) - Set: 2 / 2

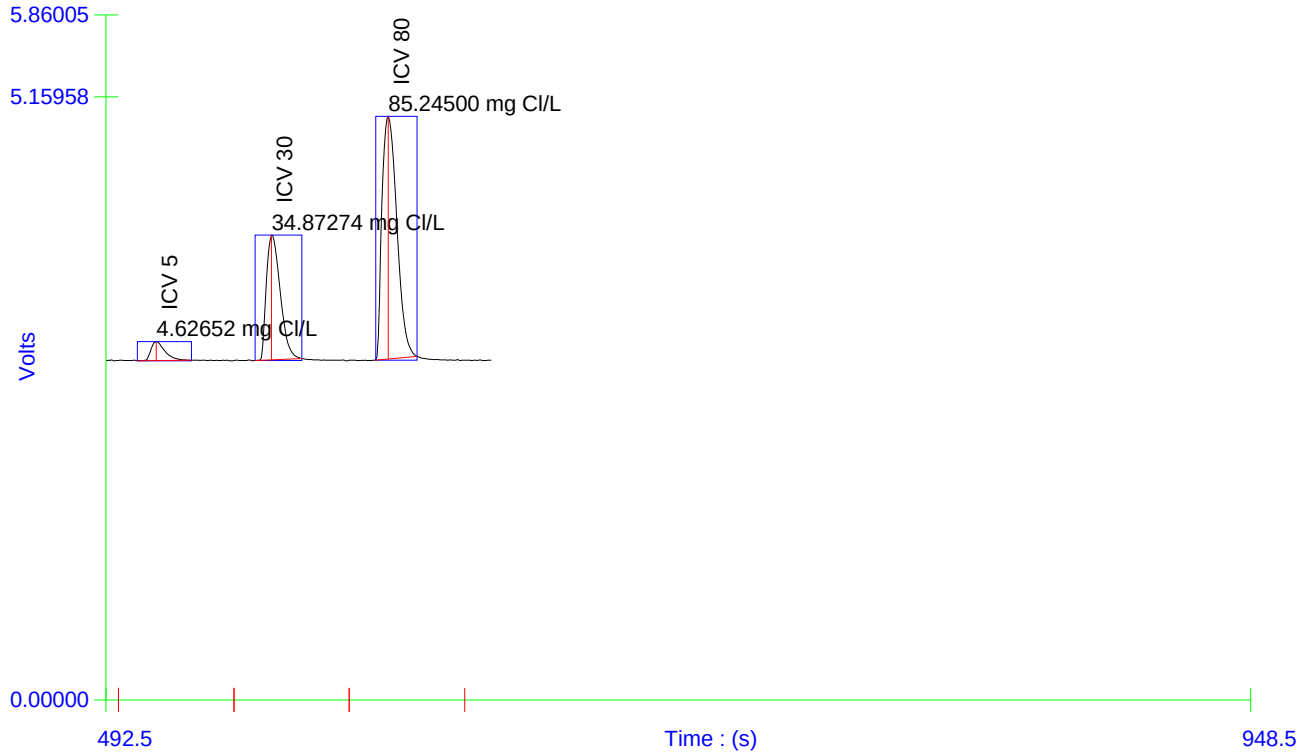
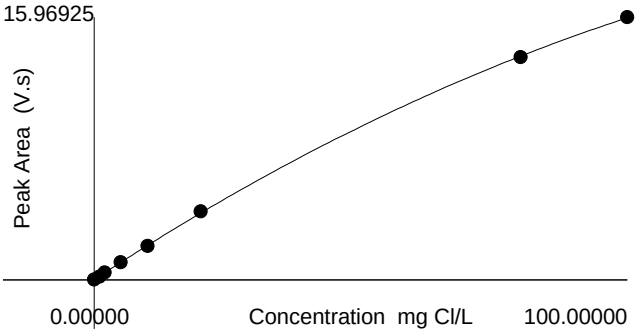



Table : 1 (Chloride-CH3)

| | Known Conc. (mg Cl/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg Cl/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.00000 | 1 | 15.96925 | 2.24514 | 0.0 | -0.2 | 99.66056 | 3/10/2025 | 1:35:48 PM |
| 2 | 80.00000 | 1 | 13.54304 | 1.98743 | 0.0 | 0.5 | 80.48557 | 3/10/2025 | 1:36:34 PM |
| 3 | 20.00000 | 1 | 4.15592 | 0.65599 | 0.0 | -2.2 | 19.99320 | 3/10/2025 | 1:37:20 PM |
| 4 | 10.00000 | 1 | 2.05801 | 0.32667 | 0.0 | 2.1 | 9.44973 | 3/10/2025 | 1:38:06 PM |
| 5 | 5.00000 | 1 | 1.08536 | 0.17347 | 0.0 | -0.6 | 4.93040 | 3/10/2025 | 1:38:53 PM |
| 6 | 2.00000 | 1 | 0.45496 | 0.06524 | 0.0 | -0.7 | 2.12607 | 3/10/2025 | 1:39:40 PM |
| 7 | 1.00000 | 1 | 0.21212 | 0.03123 | 0.0 | 11.9 | 1.07200 | 3/10/2025 | 1:40:27 PM |
| 8 | 0.00000 | 1 | 0.02798 | 0.00322 | | | 0.28245 | 3/10/2025 | 1:41:12 PM |

Figure : 1 (Chloride-CH3)




Area = - 0.00054 * Conc^2 + 0.21265 * Conc + 0.02856
Conc = 0.12351 * Area^2 + 4.25821 * Area + 0.16320
Correlation Coefficient (r) = 0.99997

Weighting : None

Author: Date : 3/10/2025

Original Run Filename: OM_3-10-2025_01-49-14PM.OMN Created: 3/10/2025 1:49:14 PM
Original Run Author's Signature: [a1wetcheminstrument]
Current Run Filename: OM_3-10-2025_01-49-14PM.OMN Last Modified: 3/10/2025 3:47:00 PM
Current Run Author's Signature: [a1wetcheminstrument]
Description: Default New Run

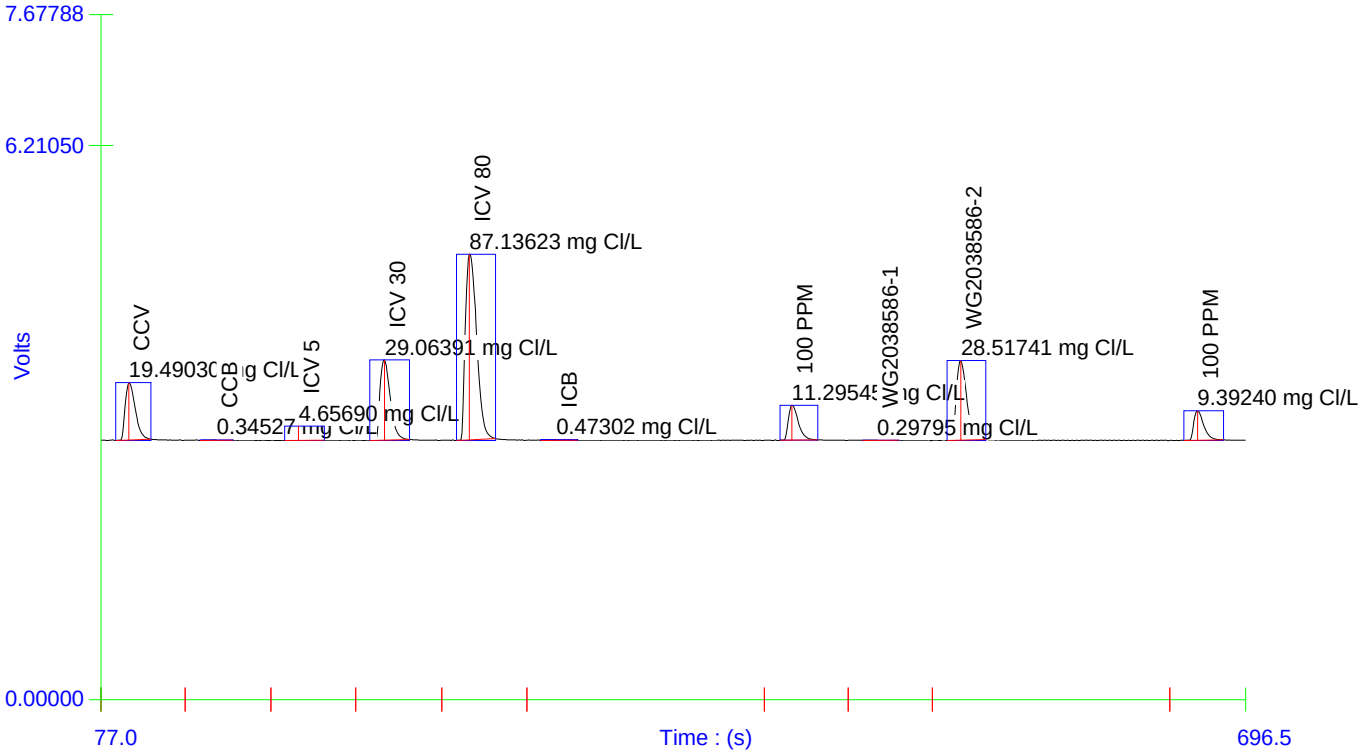
| Sample | Rep. | Cup No. | Channel 1 Chloride-CH3 (mg Cl/L) | ADF | MDF | Weight | |
|---|---|---|---|---|---|---|---|
| CCV | 1 | S3 | 19.49030 | | | | |
| | | Known Conc: | 20.00000 | | | | |
| | | Calibration: | Table/Fig. : 1 | | | | |
| CCB | 1 | S9 | 0.34527 | | | | |
| | | Known Conc: | 0.00000 | | | | |
| ICV 5 | 1 | 1 | 4.65690 | | | | 93% |
| ICV 30 | 1 | 2 | 29.06391 | | | | 97% |
| ICV 80 | 1 | 3 | 87.13623 | | | | 109% |
| ICB | 1 | 4 | 0.47302 | | | | |
| 100 PPM | 1 | 5 | 112.95445 | 10.00 | | | |
| WG2038586-1 | 1 | 6 | 0.29795 | | | | |
| WG2038586-2 | 1 | 7 | 28.51741 | | | | 95% |
| 100 PPM | 1 | 5 | 93.92395 | 10.00 | | | 94% |
| WG2038587/91-1 | 1 | 8 | 0.25487 | | | | |
| WG2038587/91-2 | 1 | 9 | 28.01378 | | | | 93% |
| CCV | 1 | S3 | 19.72502 | | | | |
| | | Known Conc: | 20.00000 | | | | |
| CCB | 1 | S9 | 0.30681 | | | | |
| | | Known Conc: | 0.00000 | | | | |
| WG2038588-1 | 1 | 10 | 0.28175 | | | | |
| WG2038588-2 | 1 | 11 | 28.47902 | | | | 95% |
| L2512211-01 | 1 | 12 | 75.02927 | | | | |
| L2512325-01 | 1 | 13 | 20.54533 | | | | |
| L2512325-02 | 1 | 14 | 13.35623 | | | | |
| WG2038586-3 | 1 | 15 | 13.64002 | | | | |
| WG2038586-4 | 1 | 16 | 33.47472 | | | | |
| L2512325-03 | 1 | 17 | 3.17936 | | | | |
| L2512325-04 | 1 | 18 | 18.25417 | | | | |
| L2512325-05 | 1 | 19 | 25.12484 | 10.00 | | | |
| CCV | 1 | S3 | 19.97446 | | | | |
| | | Known Conc: | 20.00000 | | | | |
| CCB | 1 | S9 | 0.29537 | | | | |
| | | Known Conc: | 0.00000 | | | | |
| L2512325-06 | 1 | 20 | 16.60983 | | | | |
| L2512325-07 | 1 | 21 | 11.92675 | | | | |
| L2512325-08 | 1 | 22 | 28.85244 | | | | |
| L2512325-09 | 1 | 23 | 13.25386 | | | | |
| L2512368-01 | 1 | 24 | 17.35587 | | | | |
| L2512368-02 | 1 | 25 | 25.68924 | | | | |
| L2512368-04 | 1 | 26 | 15.05875 | | | | |
| L2512368-05 | 1 | 27 | 26.49604 | | | | |
| L2512368-07 | 1 | 28 | 21.08410 | | | | |
| L2512368-08 | 1 | 29 | 19.02737 | 10.00 | | | |
| CCV | 1 | S3 | 19.29315 | | | | |
| | | Known Conc: | 20.00000 | | | | |
| CCB | 1 | S9 | 0.33487 | | | | |
| | | Known Conc: | 0.00000 | | | | |
| L2512368-11 | 1 | 30 | 8.93344 | | | | |
| L2512368-13 | 1 | 31 | 20.38471 | | | | |
| L2512368-14 | 1 | 32 | 9.46422 | | | | |
| L2512368-16 | 1 | 33 | 17.43419 | | | | |
| L2512368-10 | 1 | 34 | 22.11875 | | | | |
| WG2038587-3 | 1 | 35 | 22.18250 | | | | |
| WG2038587-4 | 1 | 36 | 41.27805 | | | | |
| L2512368-17 | 1 | 37 | 30.37080 | | | | |
| L2512368-19 | 1 | 38 | 18.23026 | | | | |
| L2512607-01 | 1 | 39 | 62.54364 | 10.00 | | | |
| CCV | 1 | S3 | 19.72431 | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | 0.37187 | | | |
| | Known Conc: | | 0.00000 | | | |
| L2512607-02 | 1 | 40 | 9.81660 | | | |
| L2512607-03 | 1 | 41 | 89.89074 | | | |
| L2512607-04 | 1 | 42 | 18.73596 | | | |
| L2512607-05 | 1 | 43 | 39.88650 | | | |
| L2512607-06 | 1 | 44 | 0.39565 | | | |
| L2512628-01 | 1 | 45 | 60.50602 | | | |
| L2512691-01 | 1 | 46 | 98.84050 | | | |
| L2512719-01 | 1 | 47 | 5.70050 | | | |
| L2512722-01 | 1 | 48 | 4.81241 | | | |
| L2512805-01 | 1 | 49 | 8.89736 | 10.00 | | |
| CCV | 1 | S3 | 19.61129 | | | |
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | 0.33806 | | | |
| | Known Conc: | | 0.00000 | | | |
| L2512805-02 | 1 | 50 | 8.52155 | | | |
| L2512805-03 | 1 | 51 | 52.81780 | | | |
| L2512805-04 | 1 | 52 | 20.99358 | | | |
| L2513057-01 | 1 | 53 | 158.26495 | | | |
| L2513065-04 | 1 | 54 | 41.27007 | | | |
| WG2038591-3 | 1 | 55 | 40.62307 | | | |
| WG2038591-4 | 1 | 56 | 58.90486 | | | |
| L2512537-01 | 1 | 57 | 186.39691 | | | |
| L2512537-02 | 1 | 58 | 148.47467 | | | |
| L2512537-03 | 1 | 59 | 295.42386 | 10.00 | | |
| CCV | 1 | S3 | 19.52503 | | | |
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | 0.28138 | | | |
| | Known Conc: | | 0.00000 | | | |
| L2512537-04 | 1 | 60 | 168.05667 | 10.00 | | |
| L2512537-05 | 1 | 61 | 313.05109 | 10.00 | | |
| L2512537-06 | 1 | 62 | 18.09588 | 10.00 | | |
| L2512537-07 | 1 | 63 | 293.08731 | 10.00 | | |
| L2512537-08 | 1 | 64 | 6.03152 | 10.00 | | |
| L2512537-10 | 1 | 65 | 7.87554 | 10.00 | | |
| L2512537-11 | 1 | 66 | 1137.67761 | 10.00 | | |
| L2512537-12 | 1 | 67 | 245.98703 | 10.00 | | |
| L2512537-13 | 1 | 68 | 527.60291 | 10.00 | | |
| L2512537-14 | 1 | 69 | 34.02346 | 10.00 | | |
| CCV | 1 | S3 | 19.79565 | | | |
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | 0.24566 | | | |
| | Known Conc: | | 0.00000 | | | |
| L2512537-15 | 1 | 70 | 279.77924 | 10.00 | | |
| L2512537-16 | 1 | 71 | 265.34833 | 10.00 | | |
| WG2038588-5 | 1 | 72 | 259.86627 | 10.00 | | |
| WG2038588-6 | 1 | 73 | 274.23730 | 10.00 | | |
| L2512575-01 | 1 | 74 | 175.11519 | | | |
| WG2038588-3 | 1 | 75 | 174.62100 | | | |
| WG2038588-4 | 1 | 76 | 255.57358 | 10.00 | | |
| L2512575-02 | 1 | 77 | 232.78658 | 10.00 | | |
| L2513065-01 | 1 | 78 | 8.44184 | | | |
| L2513065-02 | 1 | 79 | 50.51891 | 10.00 | | |
| CCV | 1 | S3 | 19.60471 | | | |
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | 0.31496 | | | |
| | Known Conc: | | 0.00000 | | | |
| L2513065-03 | 1 | 80 | 55.86851 | | | |
| WG2038585-1 | 1 | 81 | 4.82065 | | | 0.10064 g |
| WG2038585-2 | 1 | 82 | 378.08371 | | | 0.10175 g 96% |
| L2512249-01 | 1 | 83 | 9.92988 | | | 0.10069 g |
| WG2038585-3 | 1 | 84 | 7.27763 | | | 0.10122 g |
| WG2038585-4 | 1 | 85 | 380.85968 | | | 0.10066 g |
| L2512325-05 | 1 | 19 | 26.96771 | | | |
| L2512368-08 | 1 | 29 | 19.73096 | | | |
| L2512607-01 | 1 | 39 | 65.87840 | | | |

Author: Date : 3/10/2025

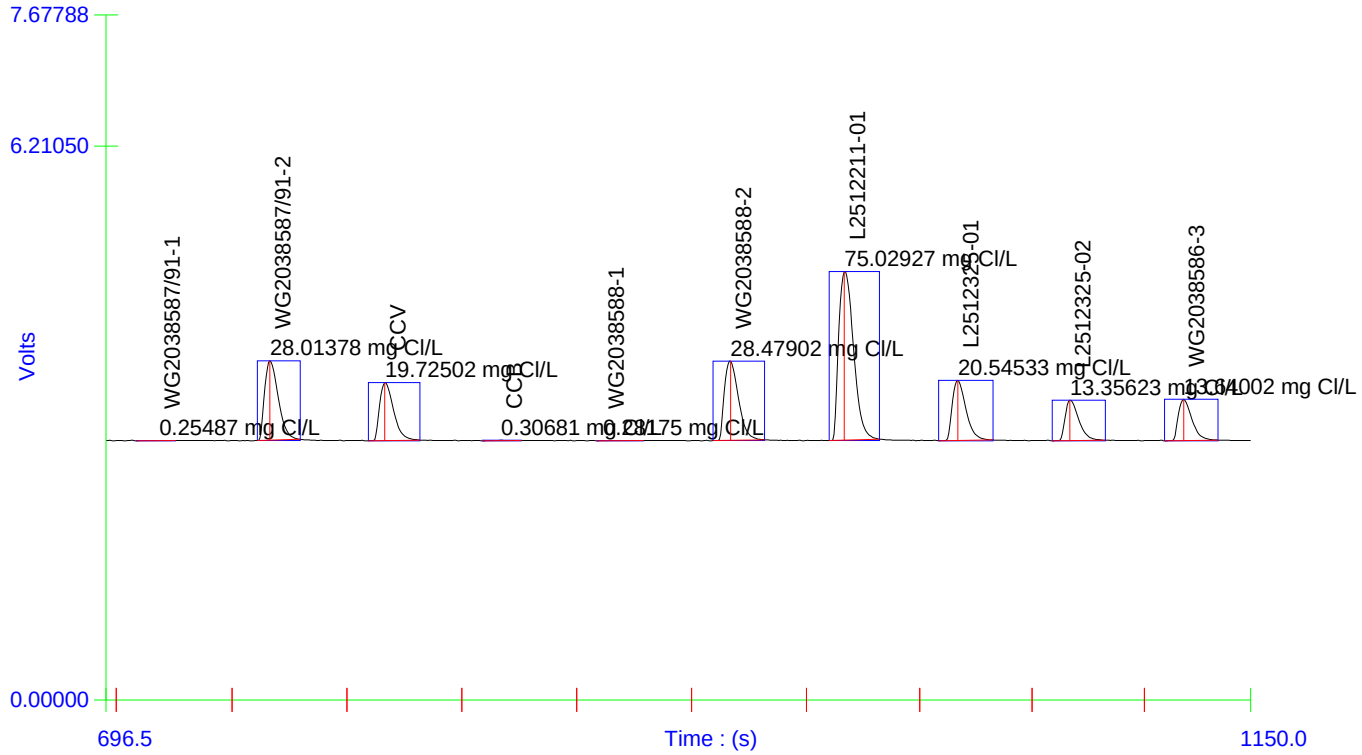
| | | | | | | |
|---|---|---|---|---|---|---|
| L2512691-01 | 1 | 46 | 97.50237 | | | |
| CCV | 1 | S3 | 20.24296 | | | |
| | Known Conc: | | 20.00000 | | | |

Channel 1 (Chloride) - Set: 1 / 11

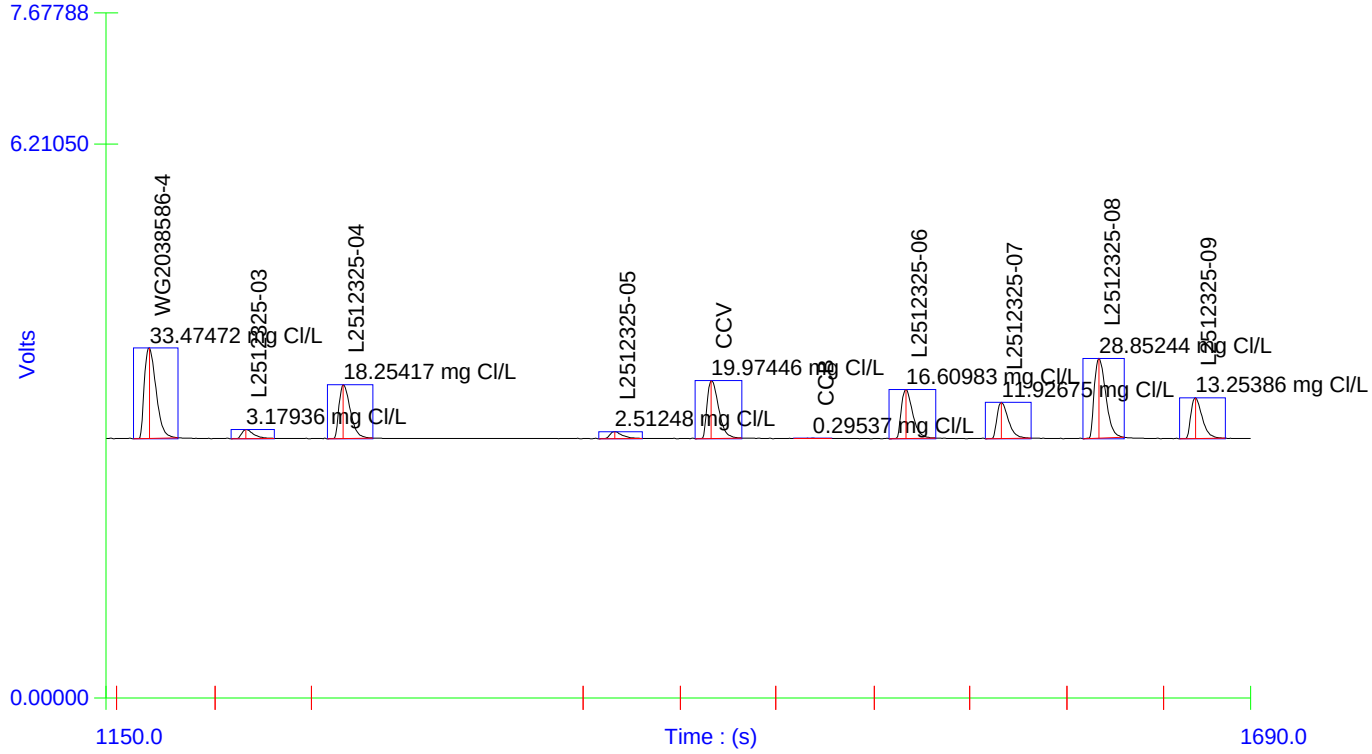


Author: Date : 3/10/2025

Channel 1 (Chloride) - Set: 2 / 11

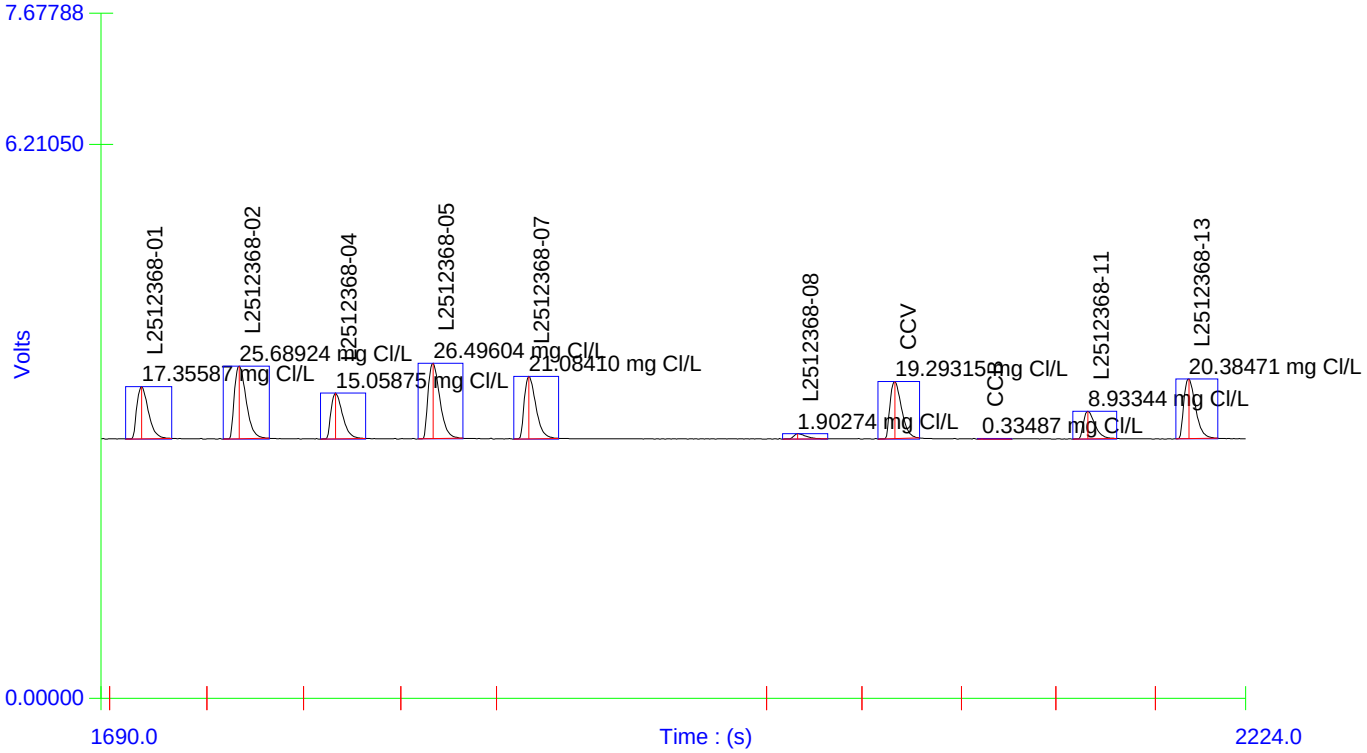



Channel 1 (Chloride) - Set: 3 / 11



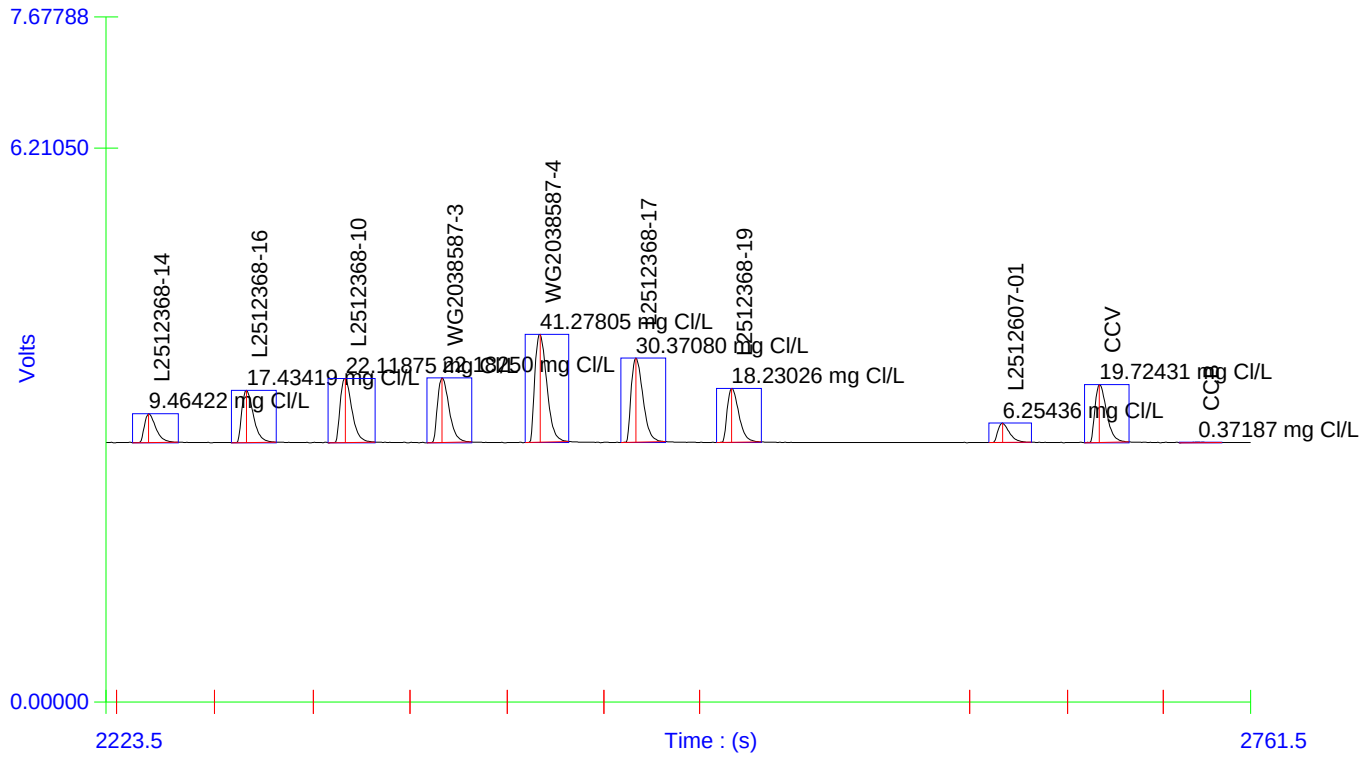
Author: Date : 3/10/2025

Channel 1 (Chloride) - Set: 4 / 11

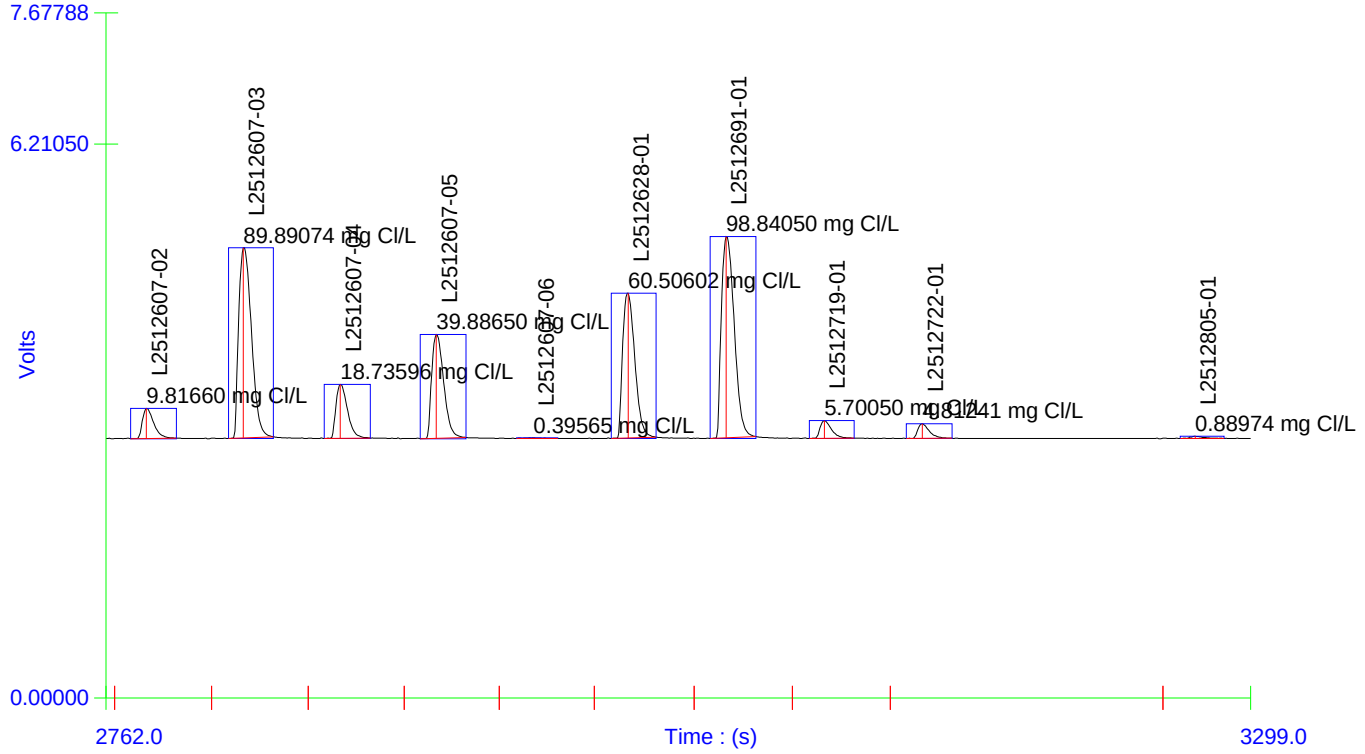


Author: Date : 3/10/2025

Channel 1 (Chloride) - Set: 5 / 11

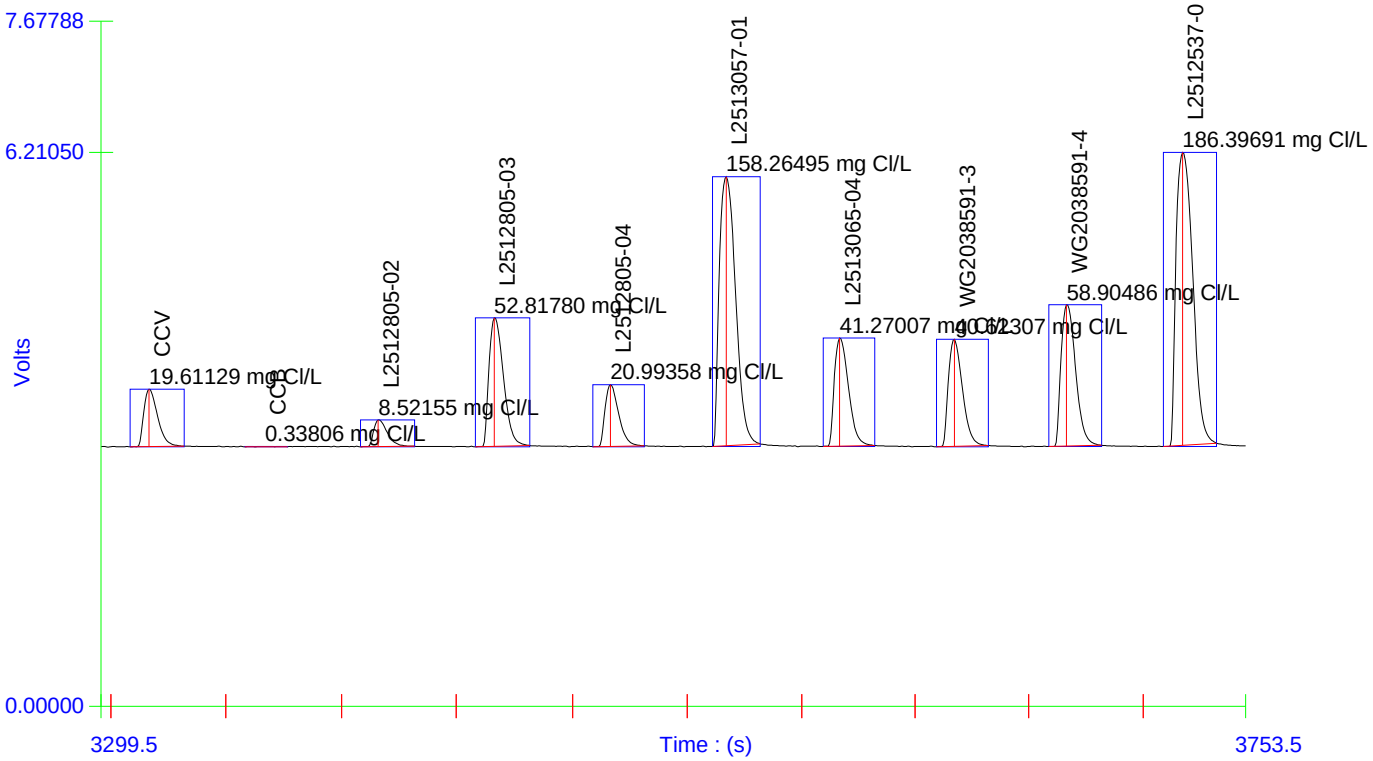



Channel 1 (Chloride) - Set: 6 / 11



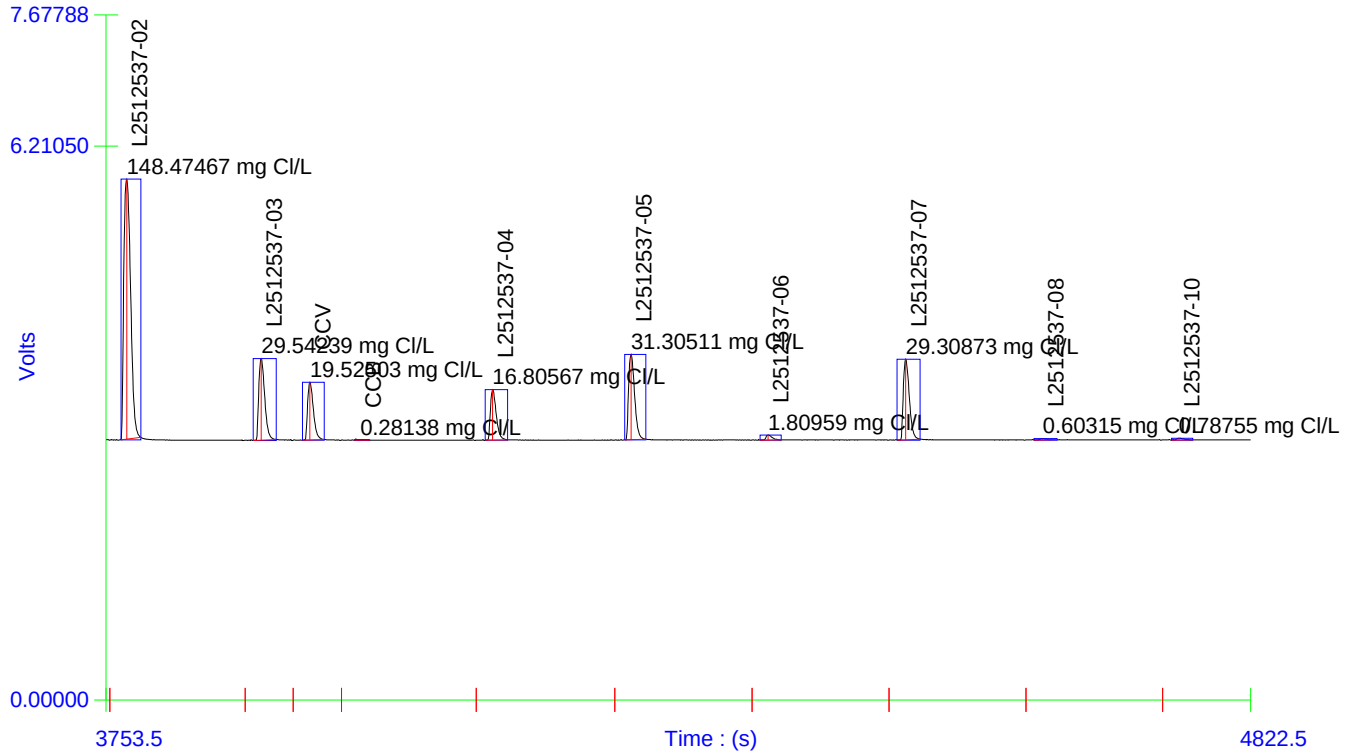
Author: Date : 3/10/2025

Channel 1 (Chloride) - Set: 7 / 11

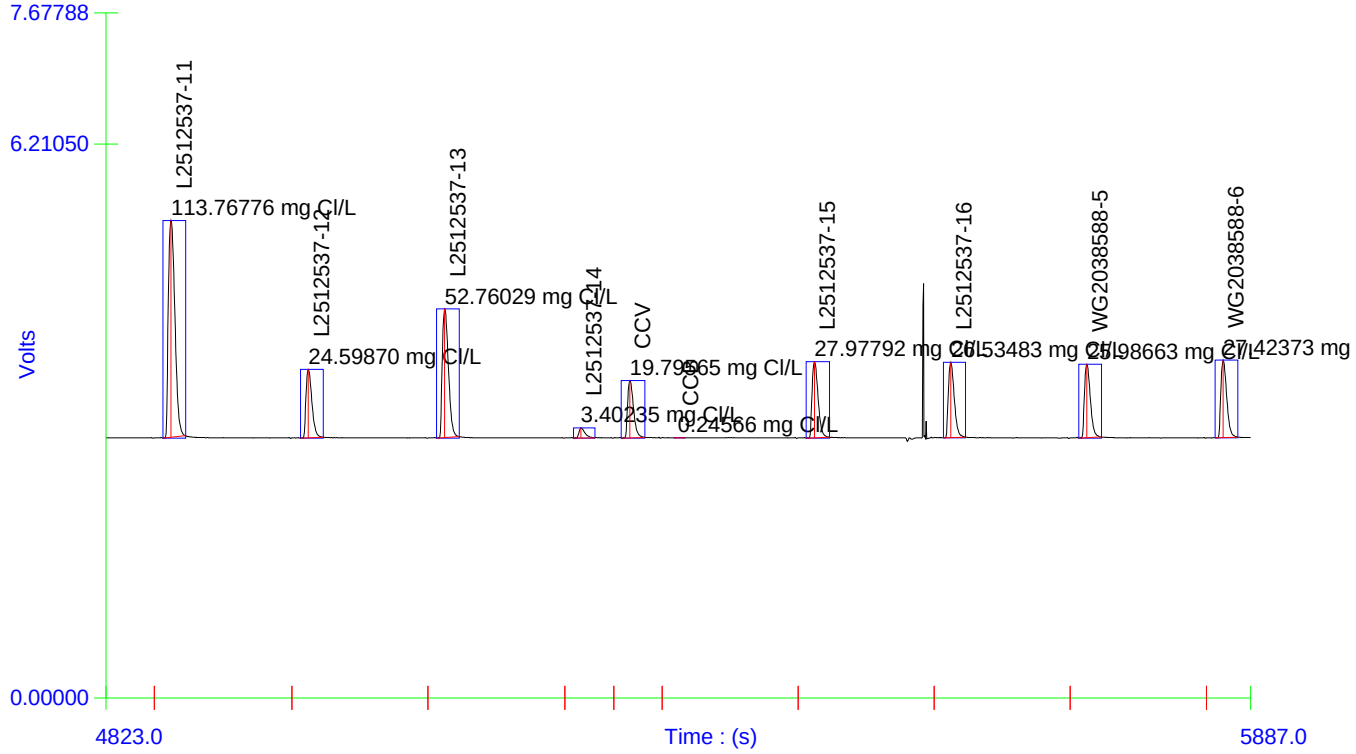


Author: Date : 3/10/2025

Channel 1 (Chloride) - Set: 8 / 11

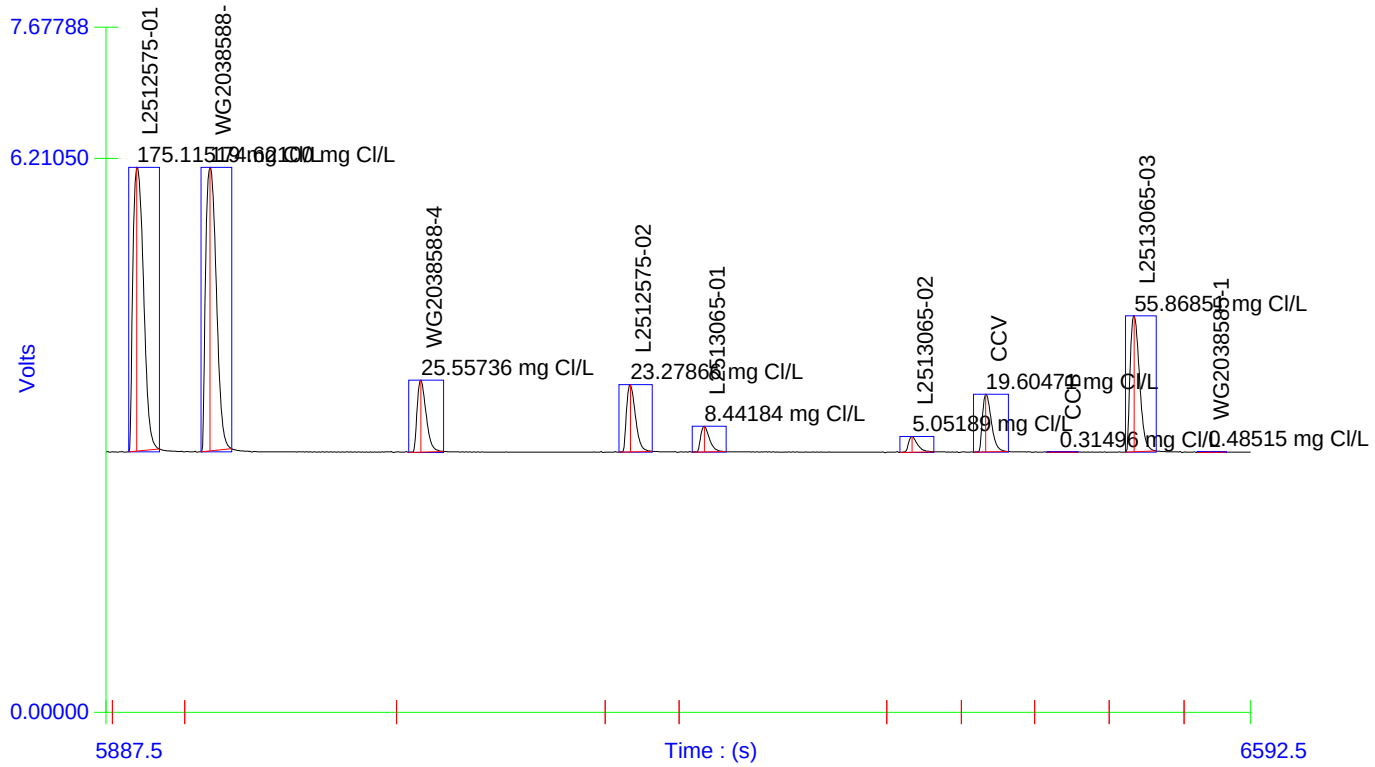



Channel 1 (Chloride) - Set: 9 / 11



Author: Date : 3/10/2025

Channel 1 (Chloride) - Set: 10 / 11



Author: Date : 3/10/2025

Channel 1 (Chloride) - Set: 11 / 11

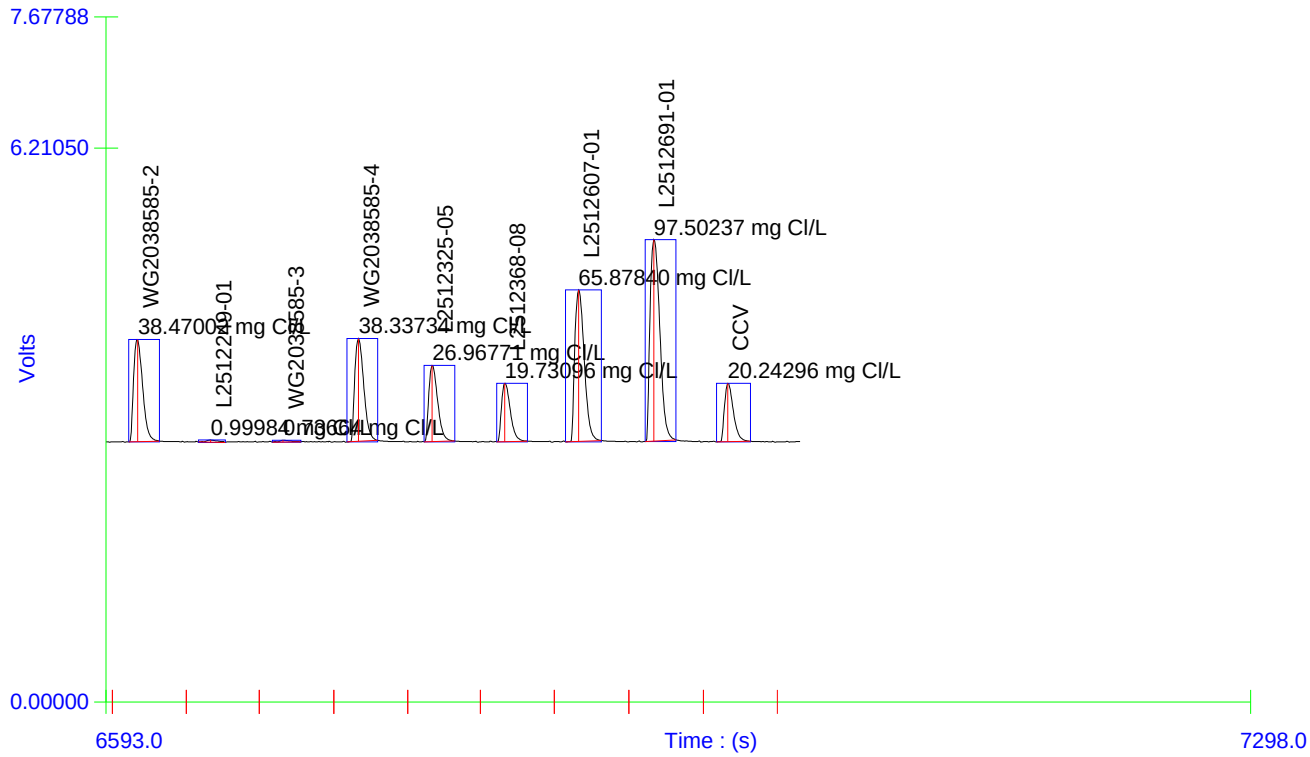
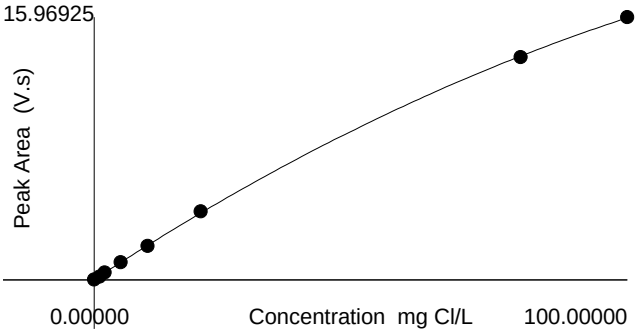



Table : 1 (Chloride-CH3)

| | Known Conc. (mg Cl/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg Cl/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.00000 | 1 | 15.96925 | 2.24514 | 0.0 | -0.2 | 99.66056 | 3/10/2025 | 1:35:48 PM |
| 2 | 80.00000 | 1 | 13.54304 | 1.98743 | 0.0 | 0.5 | 80.48557 | 3/10/2025 | 1:36:34 PM |
| 3 | 20.00000 | 1 | 4.15592 | 0.65599 | 0.0 | -2.2 | 19.99320 | 3/10/2025 | 1:37:20 PM |
| 4 | 10.00000 | 1 | 2.05801 | 0.32667 | 0.0 | 2.1 | 9.44973 | 3/10/2025 | 1:38:06 PM |
| 5 | 5.00000 | 1 | 1.08536 | 0.17347 | 0.0 | -0.6 | 4.93040 | 3/10/2025 | 1:38:53 PM |
| 6 | 2.00000 | 1 | 0.45496 | 0.06524 | 0.0 | -0.7 | 2.12607 | 3/10/2025 | 1:39:40 PM |
| 7 | 1.00000 | 1 | 0.21212 | 0.03123 | 0.0 | 11.9 | 1.07200 | 3/10/2025 | 1:40:27 PM |
| 8 | 0.00000 | 1 | 0.02798 | 0.00322 | | | 0.28245 | 3/10/2025 | 1:41:12 PM |

Figure : 1 (Chloride-CH3)




Area = - 0.00054 * Conc^2 + 0.21265 * Conc + 0.02856
Conc = 0.12351 * Area^2 + 4.25821 * Area + 0.16320
Correlation Coefficient (r) = 0.99997

Weighting : None

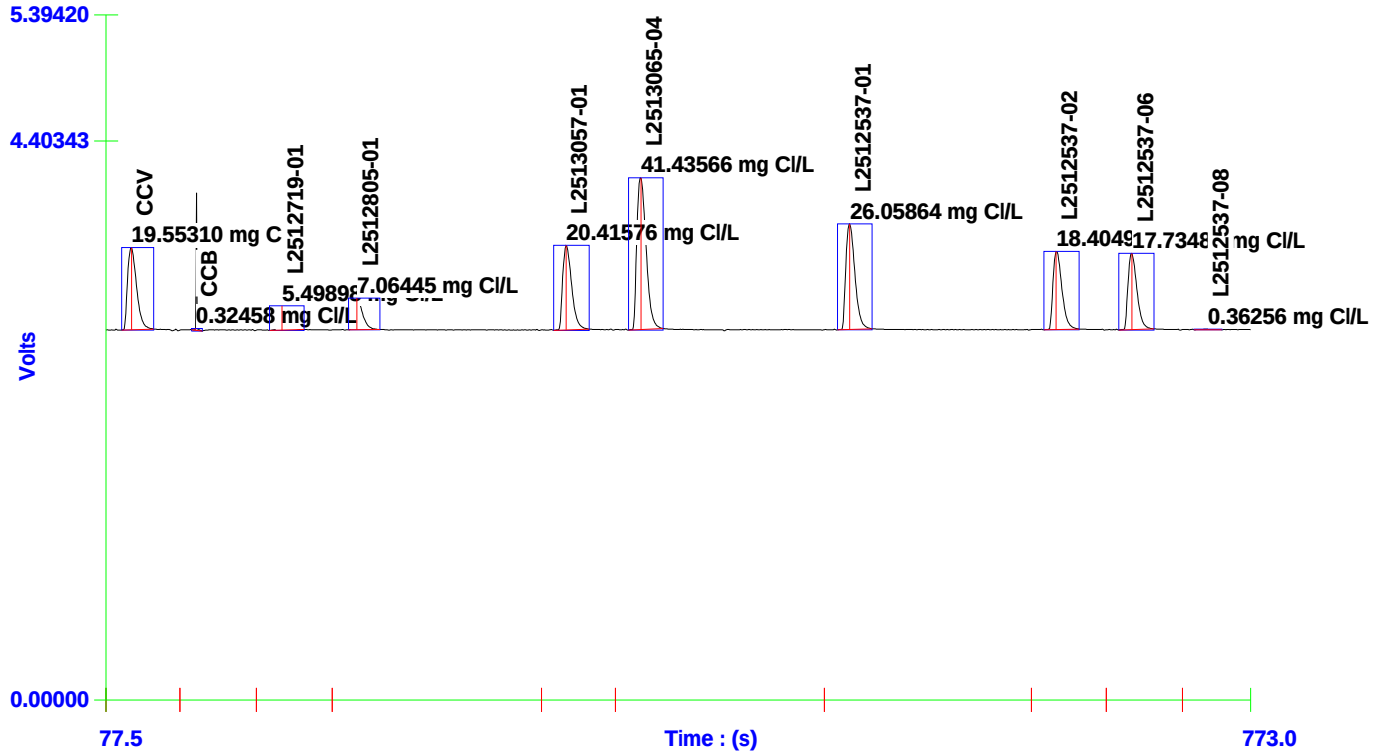
Author: Date : 3/10/2025

Original Run Filename: OM_3-10-2025_03-48-34PM.OMN Created: 3/10/2025 3:48:34 PM
Original Run Author's Signature: [a1wetcheminstrument]
Current Run Filename: OM_3-10-2025_03-48-34PM.OMN Last Modified: 3/10/2025 4:16:34 PM
Current Run Author's Signature: [a1wetcheminstrument]
Description: Default New Run

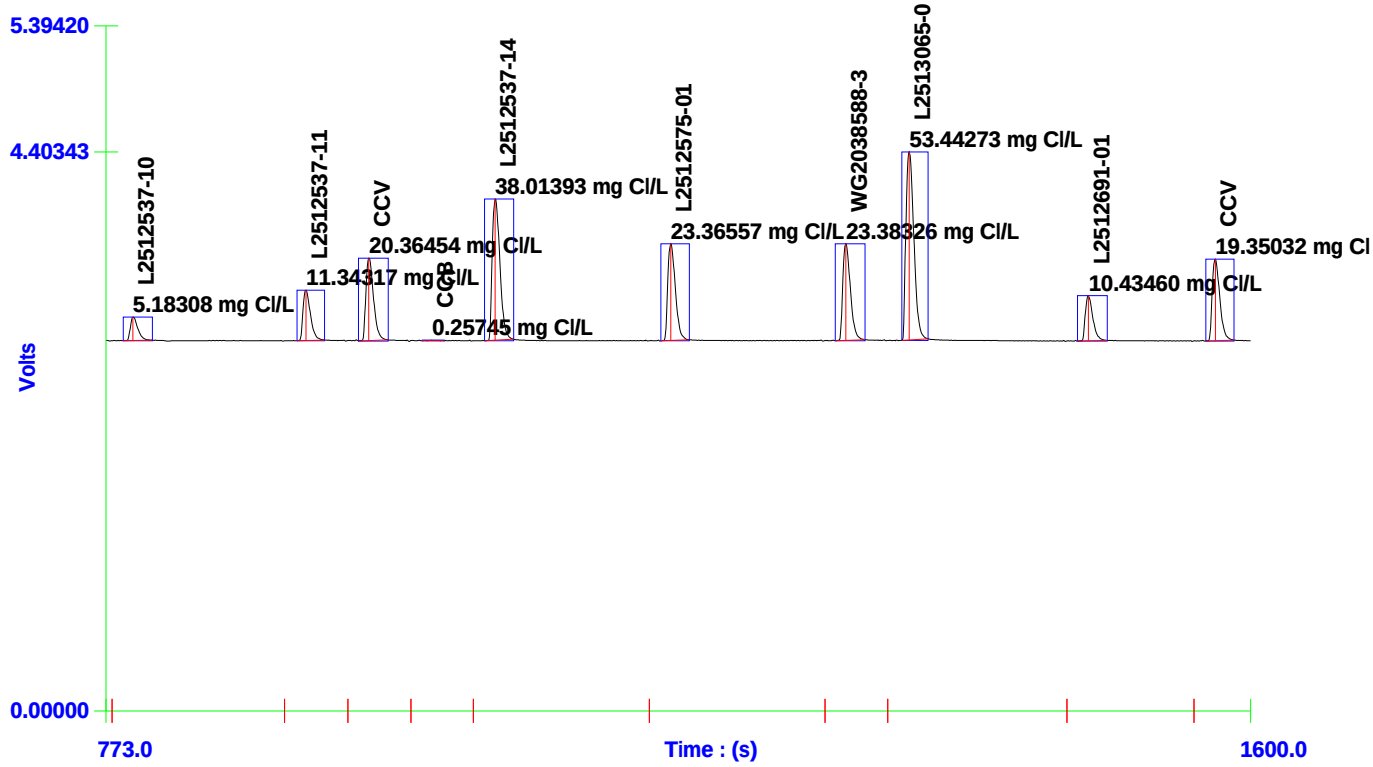
| Sample | Rep. | Cup No. | Channel 1 Chloride-CH3 (mg Cl/L) | ADF | MDF | Weight |
|---|---|---|---|---|---|---|
| CCV | 1 | S3 | 19.55310 | | | |
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | 0.32458 | | | |
| | Known Conc: | | 0.00000 | | | |
| | Calibration: | | Table/Fig. : 1 | | | |
| L2512719-01 | 1 | 47 | 5.49898 | | | |
| L2512805-01 | 1 | 49 | 7.06445 | | | |
| L2513057-01 | 1 | 53 | 204.15756 | 10.00 | | |
| L2513065-04 | 1 | 54 | 41.43566 | | | |
| L2512537-01 | 1 | 57 | 260.58640 | 10.00 | | |
| L2512537-02 | 1 | 58 | 184.04930 | 10.00 | | |
| L2512537-06 | 1 | 62 | 17.73482 | | | |
| L2512537-08 | 1 | 64 | 0.36256 | | | |
| L2512537-10 | 1 | 65 | 5.18308 | | | |
| L2512537-11 | 1 | 66 | 1134.31677 | 100.00 | | |
| CCV | 1 | S3 | 20.36454 | | | |
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | 0.25745 | | | |
| | Known Conc: | | 0.00000 | | | |
| L2512537-14 | 1 | 69 | 38.01393 | | | |
| L2512575-01 | 1 | 74 | 233.65573 | 10.00 | | |
| WG2038588-3 | 1 | 75 | 233.83264 | 10.00 | | |
| L2513065-02 | 1 | 79 | 53.44273 | | | |
| L2512691-01 | 1 | 46 | 104.34604 | 10.00 | | |
| CCV | 1 | S3 | 19.35032 | | | |
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | 0.38501 | | | |
| | Known Conc: | | 0.00000 | | | |

Author: Date : 3/10/2025

Channel 1 (Chloride) - Set: 1 / 3




Channel 1 (Chloride) - Set: 2 / 3



Author: Date : 3/10/2025

Channel 1 (Chloride) - Set: 3 / 3

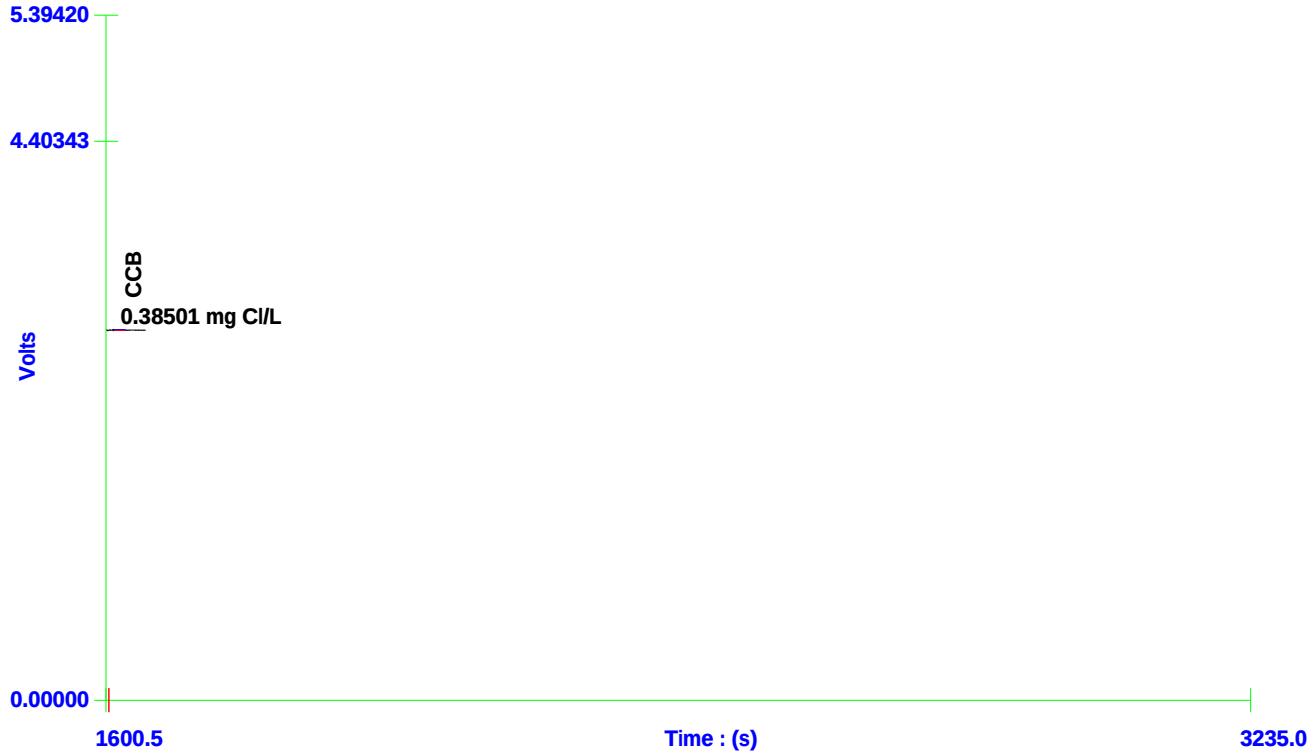
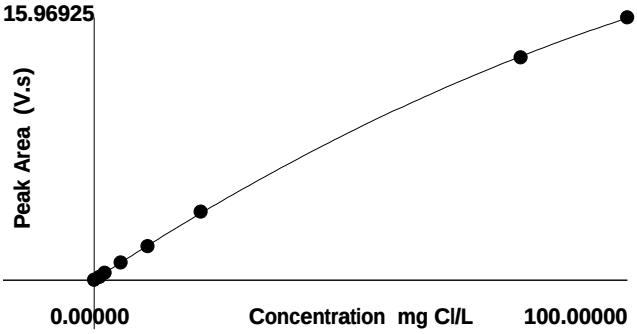



Table : 1 (Chloride-CH3)

| | Known Conc. (mg Cl/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg Cl/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.00000 | 1 | 15.96925 | 2.24514 | 0.0 | -0.2 | 99.66056 | 3/10/2025 | 1:35:48 PM |
| 2 | 80.00000 | 1 | 13.54304 | 1.98743 | 0.0 | 0.5 | 80.48557 | 3/10/2025 | 1:36:34 PM |
| 3 | 20.00000 | 1 | 4.15592 | 0.65599 | 0.0 | -2.2 | 19.99320 | 3/10/2025 | 1:37:20 PM |
| 4 | 10.00000 | 1 | 2.05801 | 0.32667 | 0.0 | 2.1 | 9.44973 | 3/10/2025 | 1:38:06 PM |
| 5 | 5.00000 | 1 | 1.08536 | 0.17347 | 0.0 | -0.6 | 4.93040 | 3/10/2025 | 1:38:53 PM |
| 6 | 2.00000 | 1 | 0.45496 | 0.06524 | 0.0 | -0.7 | 2.12607 | 3/10/2025 | 1:39:40 PM |
| 7 | 1.00000 | 1 | 0.21212 | 0.03123 | 0.0 | 11.9 | 1.07200 | 3/10/2025 | 1:40:27 PM |
| 8 | 0.00000 | 1 | 0.02798 | 0.00322 | | | 0.28245 | 3/10/2025 | 1:41:12 PM |

Figure : 1 (Chloride-CH3)




Area = - 0.00054 * Conc^2 + 0.21265 * Conc + 0.02856
Conc = 0.12351 * Area^2 + 4.25821 * Area + 0.16320
Correlation Coefficient (r) = 0.99997

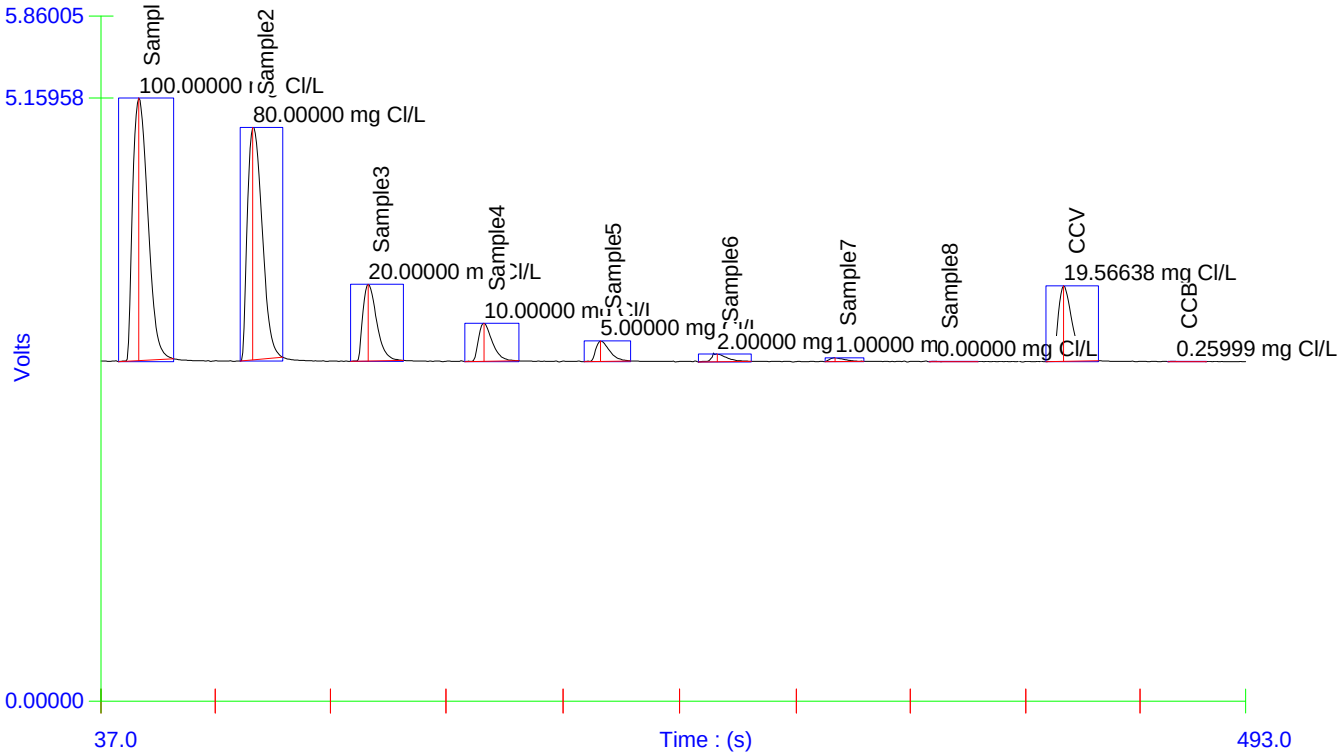
Weighting : None

Author: Date : 3/10/2025

Original Run Filename: OM_3-10-2025_01-34-58PM.OMN Created: 3/10/2025 1:34:58 PM
Original Run Author's Signature: [a1wetcheminstrument]
Current Run Filename: OM_3-10-2025_01-34-58PM.OMN Last Modified: 3/10/2025 1:46:15 PM
Current Run Author's Signature: [a1wetcheminstrument]
Description: Default New Run

| Sample | Rep. | Cup No. | Channel 1 Chloride-CH3 (mg Cl/L) | ADF | MDF | Weight |
|---|---|---|---|---|---|---|
| Sample1 | 1 | S1 | 100.00000 | | | |
| Sample2 | 1 | S2 | 80.00000 | | | |
| Sample3 | 1 | S3 | 20.00000 | | | |
| Sample4 | 1 | S4 | 10.00000 | | | |
| Sample5 | 1 | S5 | 5.00000 | | | |
| Sample6 | 1 | S6 | 2.00000 | | | |
| Sample7 | 1 | S7 | 1.00000 | | | |
| Sample8 | 1 | S9 | 0.00000 | | | |
| CCV | 1 | S3 | 19.56638 | | | |
| | | Known Conc: | 20.00000 | | | |
| | | Calibration: | Table/Fig. : 1 | | | |
| CCB | 1 | S9 | 0.25999 | | | |
| | | Known Conc: | 0.00000 | | | |
| ~~ICV 5~~ | ~~1~~ | ~~1~~ | ~~4.62652~~ | | | |
| ~~ICV 30~~ | ~~1~~ | ~~2~~ | ~~34.87274~~ | | | |
| ~~ICV 80~~ | ~~1~~ | ~~3~~ | ~~85.24500~~ | | | |

Channel 1 (Chloride) - Set: 1 / 2



Author: Date : 3/10/2025

Channel 1 (Chloride) - Set: 2 / 2

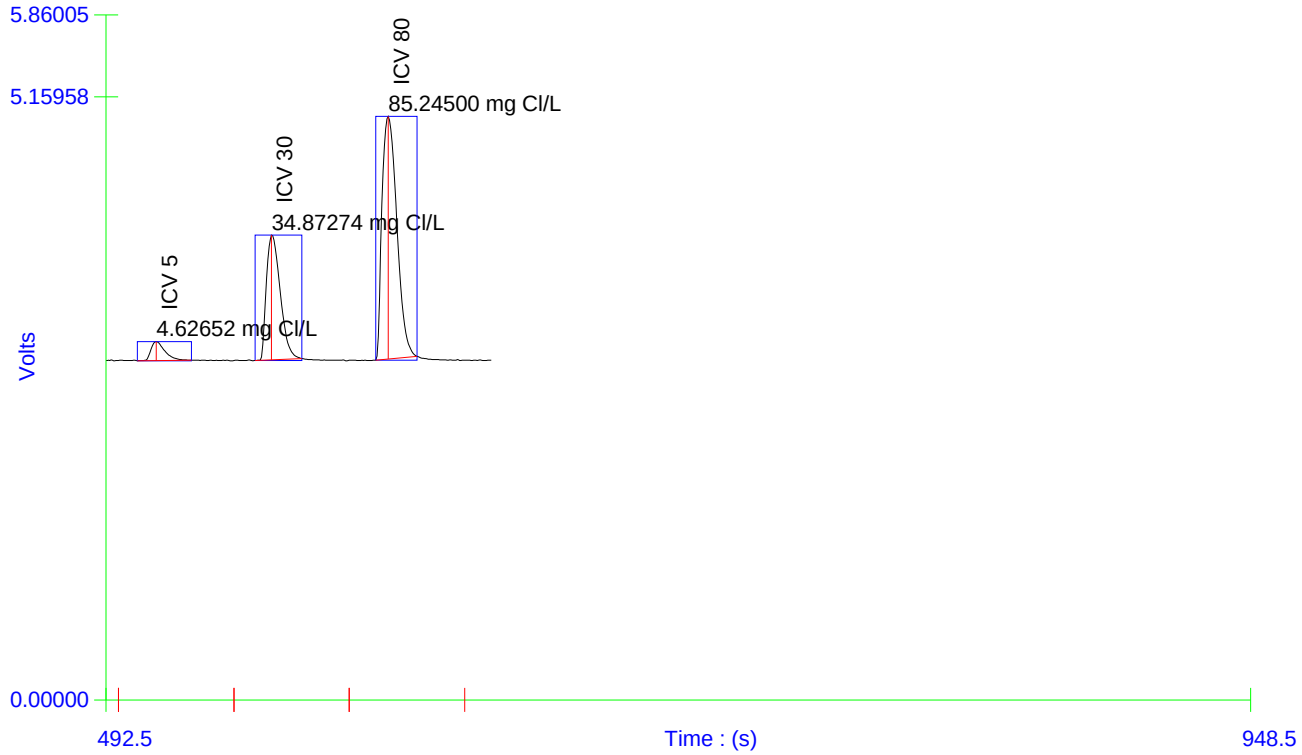
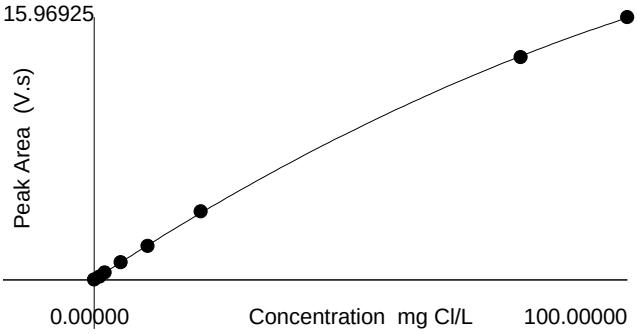



Table : 1 (Chloride-CH3)

| | Known Conc. (mg Cl/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg Cl/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.00000 | 1 | 15.96925 | 2.24514 | 0.0 | -0.2 | 99.66056 | 3/10/2025 | 1:35:48 PM |
| 2 | 80.00000 | 1 | 13.54304 | 1.98743 | 0.0 | 0.5 | 80.48557 | 3/10/2025 | 1:36:34 PM |
| 3 | 20.00000 | 1 | 4.15592 | 0.65599 | 0.0 | -2.2 | 19.99320 | 3/10/2025 | 1:37:20 PM |
| 4 | 10.00000 | 1 | 2.05801 | 0.32667 | 0.0 | 2.1 | 9.44973 | 3/10/2025 | 1:38:06 PM |
| 5 | 5.00000 | 1 | 1.08536 | 0.17347 | 0.0 | -0.6 | 4.93040 | 3/10/2025 | 1:38:53 PM |
| 6 | 2.00000 | 1 | 0.45496 | 0.06524 | 0.0 | -0.7 | 2.12607 | 3/10/2025 | 1:39:40 PM |
| 7 | 1.00000 | 1 | 0.21212 | 0.03123 | 0.0 | 11.9 | 1.07200 | 3/10/2025 | 1:40:27 PM |
| 8 | 0.00000 | 1 | 0.02798 | 0.00322 | | | 0.28245 | 3/10/2025 | 1:41:12 PM |

Figure : 1 (Chloride-CH3)




Area = - 0.00054 * Conc^2 + 0.21265 * Conc + 0.02856
Conc = 0.12351 * Area^2 + 4.25821 * Area + 0.16320
Correlation Coefficient (r) = 0.99997

Weighting : None

Author: Date : 3/10/2025

Original Run Filename: OM_3-10-2025_01-49-14PM.OMN Created: 3/10/2025 1:49:14 PM
Original Run Author's Signature: [a1wetcheminstrument]
Current Run Filename: OM_3-10-2025_01-49-14PM.OMN Last Modified: 3/10/2025 3:47:00 PM
Current Run Author's Signature: [a1wetcheminstrument]
Description: Default New Run

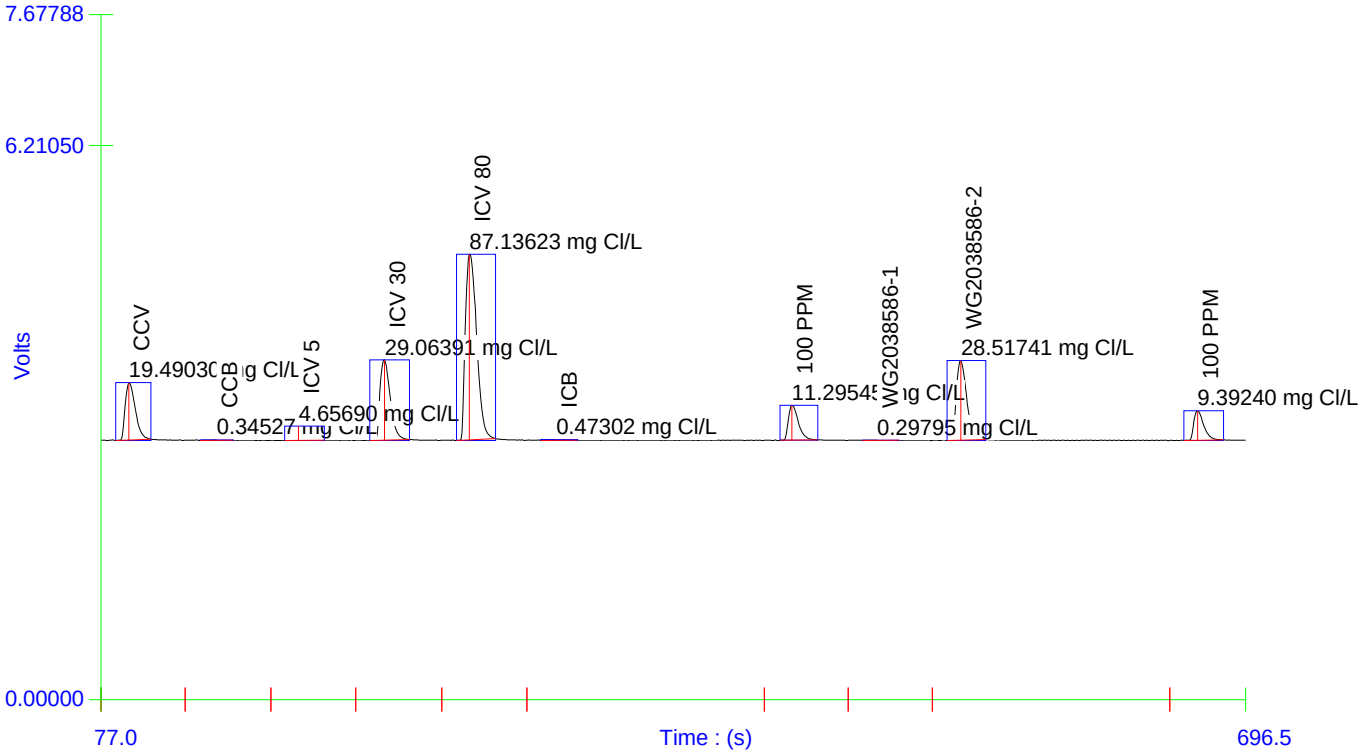
| Sample | Rep. | Cup No. | Channel 1 Chloride-CH3 (mg Cl/L) | ADF | MDF | Weight | |
|---|---|---|---|---|---|---|---|
| CCV | 1 | S3 | 19.49030 | | | | |
| | | Known Conc: | 20.00000 | | | | |
| | | Calibration: | Table/Fig. : 1 | | | | |
| CCB | 1 | S9 | 0.34527 | | | | |
| | | Known Conc: | 0.00000 | | | | |
| ICV 5 | 1 | 1 | 4.65690 | | | | 93% |
| ICV 30 | 1 | 2 | 29.06391 | | | | 97% |
| ICV 80 | 1 | 3 | 87.13623 | | | | 109% |
| ICB | 1 | 4 | 0.47302 | | | | |
| 100 PPM | 1 | 5 | 112.95445 | 10.00 | | | |
| WG2038586-1 | 1 | 6 | 0.29795 | | | | |
| WG2038586-2 | 1 | 7 | 28.51741 | | | | 95% |
| 100 PPM | 1 | 5 | 93.92395 | 10.00 | | | 94% |
| WG2038587/91-1 | 1 | 8 | 0.25487 | | | | |
| WG2038587/91-2 | 1 | 9 | 28.01378 | | | | 93% |
| CCV | 1 | S3 | 19.72502 | | | | |
| | | Known Conc: | 20.00000 | | | | |
| CCB | 1 | S9 | 0.30681 | | | | |
| | | Known Conc: | 0.00000 | | | | |
| WG2038588-1 | 1 | 10 | 0.28175 | | | | |
| WG2038588-2 | 1 | 11 | 28.47902 | | | | 95% |
| L2512211-01 | 1 | 12 | 75.02927 | | | | |
| L2512325-01 | 1 | 13 | 20.54533 | | | | |
| L2512325-02 | 1 | 14 | 13.35623 | | | | |
| WG2038586-3 | 1 | 15 | 13.64002 | | | | |
| WG2038586-4 | 1 | 16 | 33.47472 | | | | |
| L2512325-03 | 1 | 17 | 3.17936 | | | | |
| L2512325-04 | 1 | 18 | 18.25417 | | | | |
| L2512325-05 | 1 | 19 | 25.12484 | 10.00 | | | |
| CCV | 1 | S3 | 19.97446 | | | | |
| | | Known Conc: | 20.00000 | | | | |
| CCB | 1 | S9 | 0.29537 | | | | |
| | | Known Conc: | 0.00000 | | | | |
| L2512325-06 | 1 | 20 | 16.60983 | | | | |
| L2512325-07 | 1 | 21 | 11.92675 | | | | |
| L2512325-08 | 1 | 22 | 28.85244 | | | | |
| L2512325-09 | 1 | 23 | 13.25386 | | | | |
| L2512368-01 | 1 | 24 | 17.35587 | | | | |
| L2512368-02 | 1 | 25 | 25.68924 | | | | |
| L2512368-04 | 1 | 26 | 15.05875 | | | | |
| L2512368-05 | 1 | 27 | 26.49604 | | | | |
| L2512368-07 | 1 | 28 | 21.08410 | | | | |
| L2512368-08 | 1 | 29 | 19.02737 | 10.00 | | | |
| CCV | 1 | S3 | 19.29315 | | | | |
| | | Known Conc: | 20.00000 | | | | |
| CCB | 1 | S9 | 0.33487 | | | | |
| | | Known Conc: | 0.00000 | | | | |
| L2512368-11 | 1 | 30 | 8.93344 | | | | |
| L2512368-13 | 1 | 31 | 20.38471 | | | | |
| L2512368-14 | 1 | 32 | 9.46422 | | | | |
| L2512368-16 | 1 | 33 | 17.43419 | | | | |
| L2512368-10 | 1 | 34 | 22.11875 | | | | |
| WG2038587-3 | 1 | 35 | 22.18250 | | | | |
| WG2038587-4 | 1 | 36 | 41.27805 | | | | |
| L2512368-17 | 1 | 37 | 30.37080 | | | | |
| L2512368-19 | 1 | 38 | 18.23026 | | | | |
| L2512607-01 | 1 | 39 | 62.54364 | 10.00 | | | |
| CCV | 1 | S3 | 19.72431 | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | 0.37187 | | | |
| | Known Conc: | | 0.00000 | | | |
| L2512607-02 | 1 | 40 | 9.81660 | | | |
| L2512607-03 | 1 | 41 | 89.89074 | | | |
| L2512607-04 | 1 | 42 | 18.73596 | | | |
| L2512607-05 | 1 | 43 | 39.88650 | | | |
| L2512607-06 | 1 | 44 | 0.39565 | | | |
| L2512628-01 | 1 | 45 | 60.50602 | | | |
| L2512691-01 | 1 | 46 | 98.84050 | | | |
| L2512719-01 | 1 | 47 | 5.70050 | | | |
| L2512722-01 | 1 | 48 | 4.81241 | | | |
| L2512805-01 | 1 | 49 | 8.89736 | 10.00 | | |
| CCV | 1 | S3 | 19.61129 | | | |
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | 0.33806 | | | |
| | Known Conc: | | 0.00000 | | | |
| L2512805-02 | 1 | 50 | 8.52155 | | | |
| L2512805-03 | 1 | 51 | 52.81780 | | | |
| L2512805-04 | 1 | 52 | 20.99358 | | | |
| L2513057-01 | 1 | 53 | 158.26495 | | | |
| L2513065-04 | 1 | 54 | 41.27007 | | | |
| WG2038591-3 | 1 | 55 | 40.62307 | | | |
| WG2038591-4 | 1 | 56 | 58.90486 | | | |
| L2512537-01 | 1 | 57 | 186.39691 | | | |
| L2512537-02 | 1 | 58 | 148.47467 | | | |
| L2512537-03 | 1 | 59 | 295.42386 | 10.00 | | |
| CCV | 1 | S3 | 19.52503 | | | |
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | 0.28138 | | | |
| | Known Conc: | | 0.00000 | | | |
| L2512537-04 | 1 | 60 | 168.05667 | 10.00 | | |
| L2512537-05 | 1 | 61 | 313.05109 | 10.00 | | |
| L2512537-06 | 1 | 62 | 18.09588 | 10.00 | | |
| L2512537-07 | 1 | 63 | 293.08731 | 10.00 | | |
| L2512537-08 | 1 | 64 | 6.03152 | 10.00 | | |
| L2512537-10 | 1 | 65 | 7.87554 | 10.00 | | |
| L2512537-11 | 1 | 66 | 1137.67761 | 10.00 | | |
| L2512537-12 | 1 | 67 | 245.98703 | 10.00 | | |
| L2512537-13 | 1 | 68 | 527.60291 | 10.00 | | |
| L2512537-14 | 1 | 69 | 34.02346 | 10.00 | | |
| CCV | 1 | S3 | 19.79565 | | | |
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | 0.24566 | | | |
| | Known Conc: | | 0.00000 | | | |
| L2512537-15 | 1 | 70 | 279.77924 | 10.00 | | |
| L2512537-16 | 1 | 71 | 265.34833 | 10.00 | | |
| WG2038588-5 | 1 | 72 | 259.86627 | 10.00 | | |
| WG2038588-6 | 1 | 73 | 274.23730 | 10.00 | | |
| L2512575-01 | 1 | 74 | 175.11519 | | | |
| WG2038588-3 | 1 | 75 | 174.62100 | | | |
| WG2038588-4 | 1 | 76 | 255.57358 | 10.00 | | |
| L2512575-02 | 1 | 77 | 232.78658 | 10.00 | | |
| L2513065-01 | 1 | 78 | 8.44184 | | | |
| L2513065-02 | 1 | 79 | 50.51891 | 10.00 | | |
| CCV | 1 | S3 | 19.60471 | | | |
| | Known Conc: | | 20.00000 | | | |
| CCB | 1 | S9 | 0.31496 | | | |
| | Known Conc: | | 0.00000 | | | |
| L2513065-03 | 1 | 80 | 55.86851 | | | |
| WG2038585-1 | 1 | 81 | 4.82065 | | | 0.10064 g |
| WG2038585-2 | 1 | 82 | 378.08371 | | | 0.10175 g 96% |
| L2512249-01 | 1 | 83 | 9.92988 | | | 0.10069 g |
| WG2038585-3 | 1 | 84 | 7.27763 | | | 0.10122 g |
| WG2038585-4 | 1 | 85 | 380.85968 | | | 0.10066 g |
| L2512325-05 | 1 | 19 | 26.96771 | | | |
| L2512368-08 | 1 | 29 | 19.73096 | | | |
| L2512607-01 | 1 | 39 | 65.87840 | | | |

Author: Date : 3/10/2025

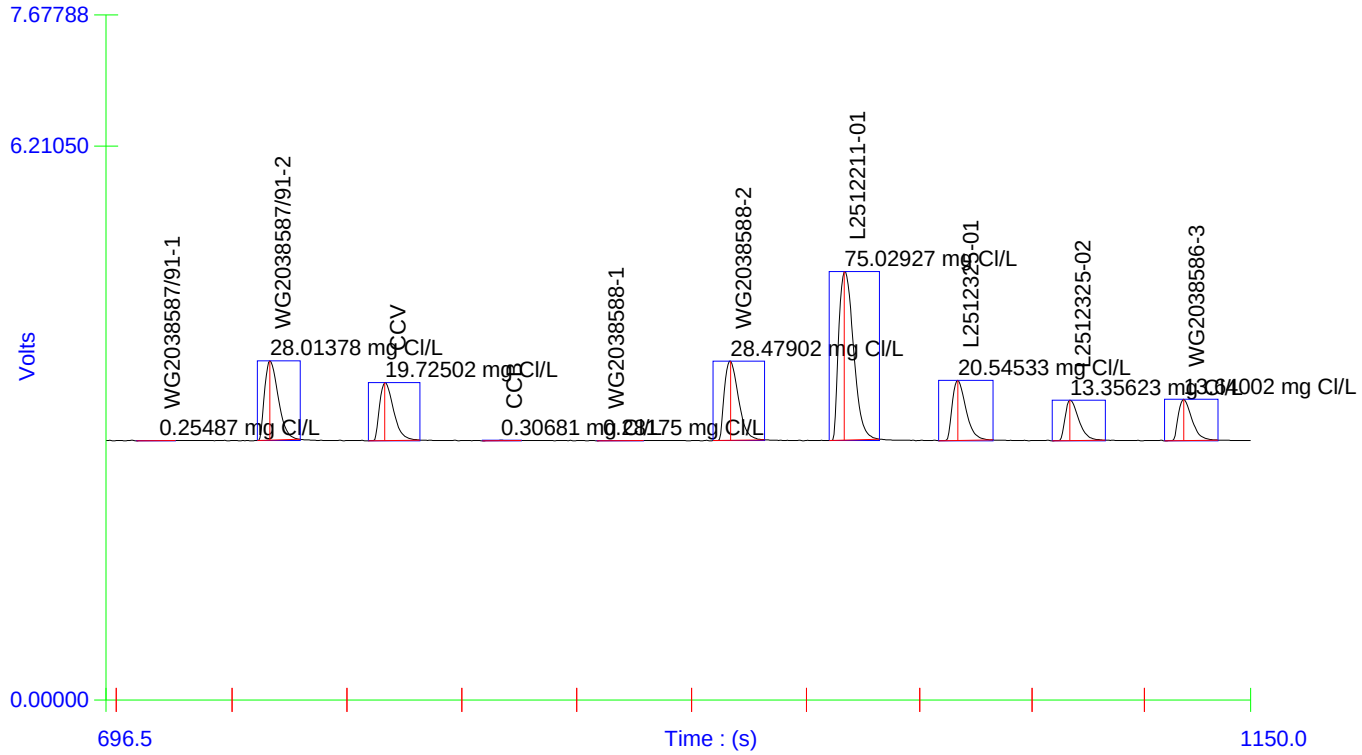
| | | | | | | |
|---|---|---|---|---|---|---|
| L2512691-01 | 1 | 46 | 97.50237 | | | |
| CCV | 1 | S3 | 20.24296 | | | |
| | Known Conc: | | 20.00000 | | | |

Channel 1 (Chloride) - Set: 1 / 11

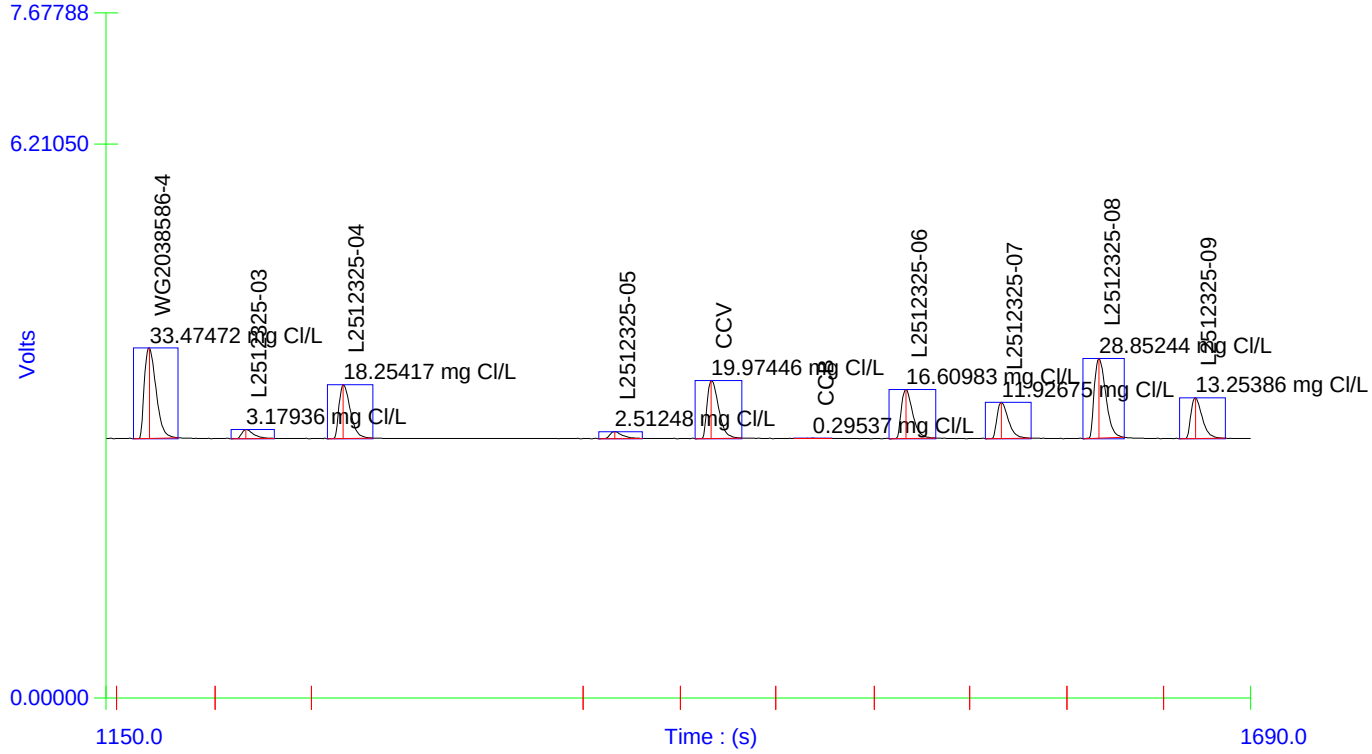


Author: Date : 3/10/2025

Channel 1 (Chloride) - Set: 2 / 11

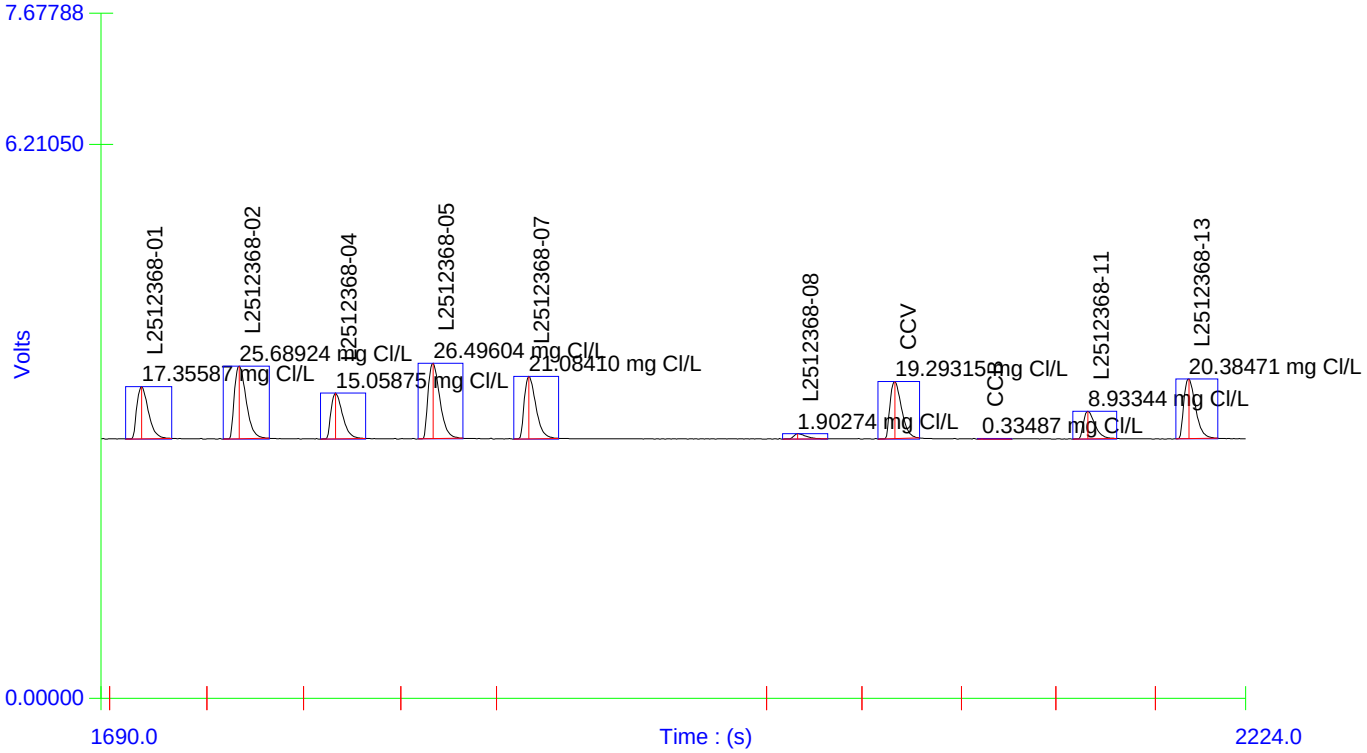



Channel 1 (Chloride) - Set: 3 / 11



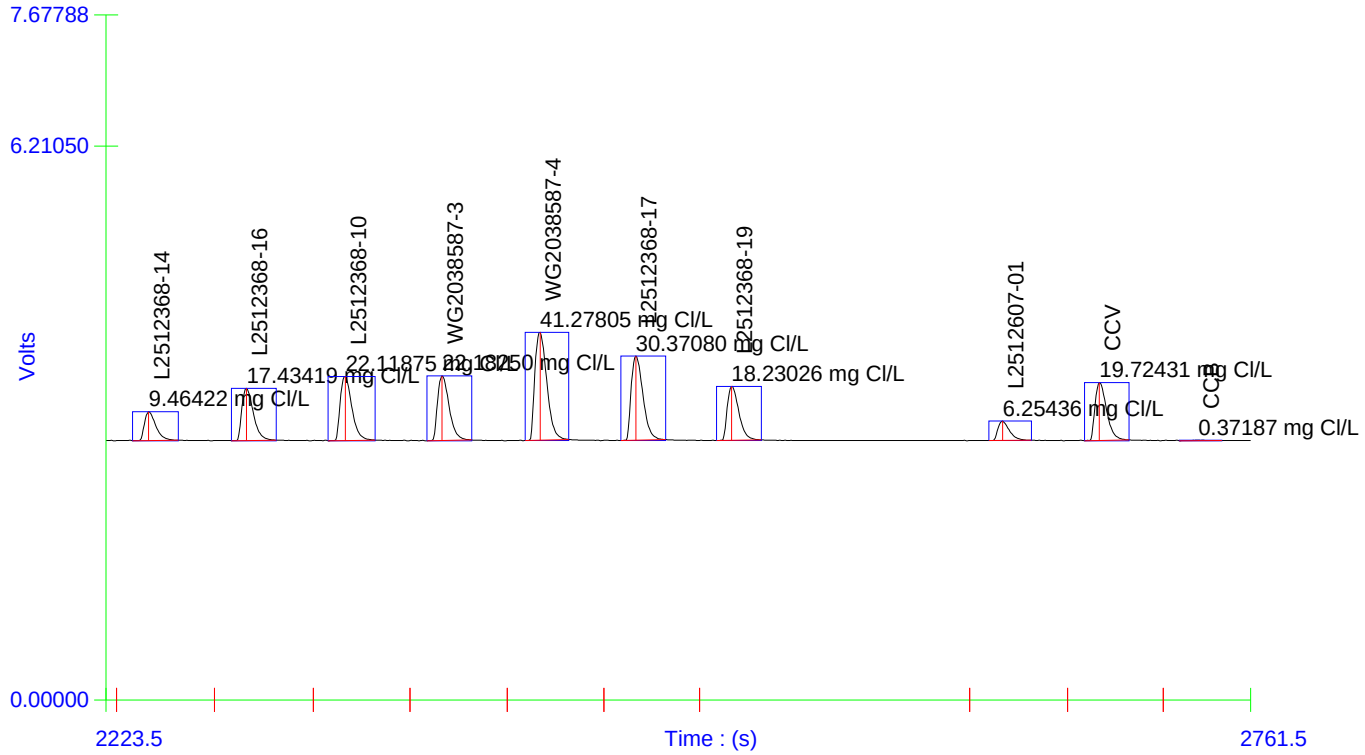
Author: Date : 3/10/2025

Channel 1 (Chloride) - Set: 4 / 11

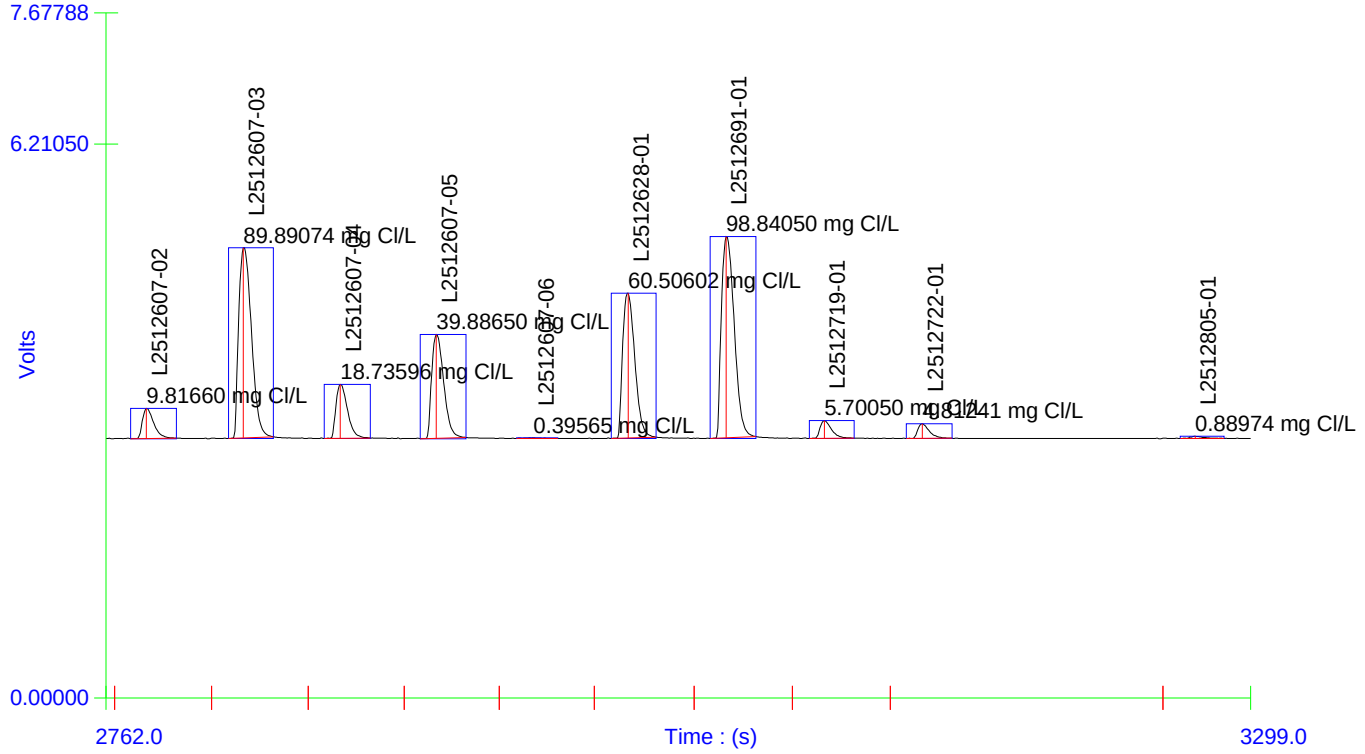


Author: Date : 3/10/2025

Channel 1 (Chloride) - Set: 5 / 11



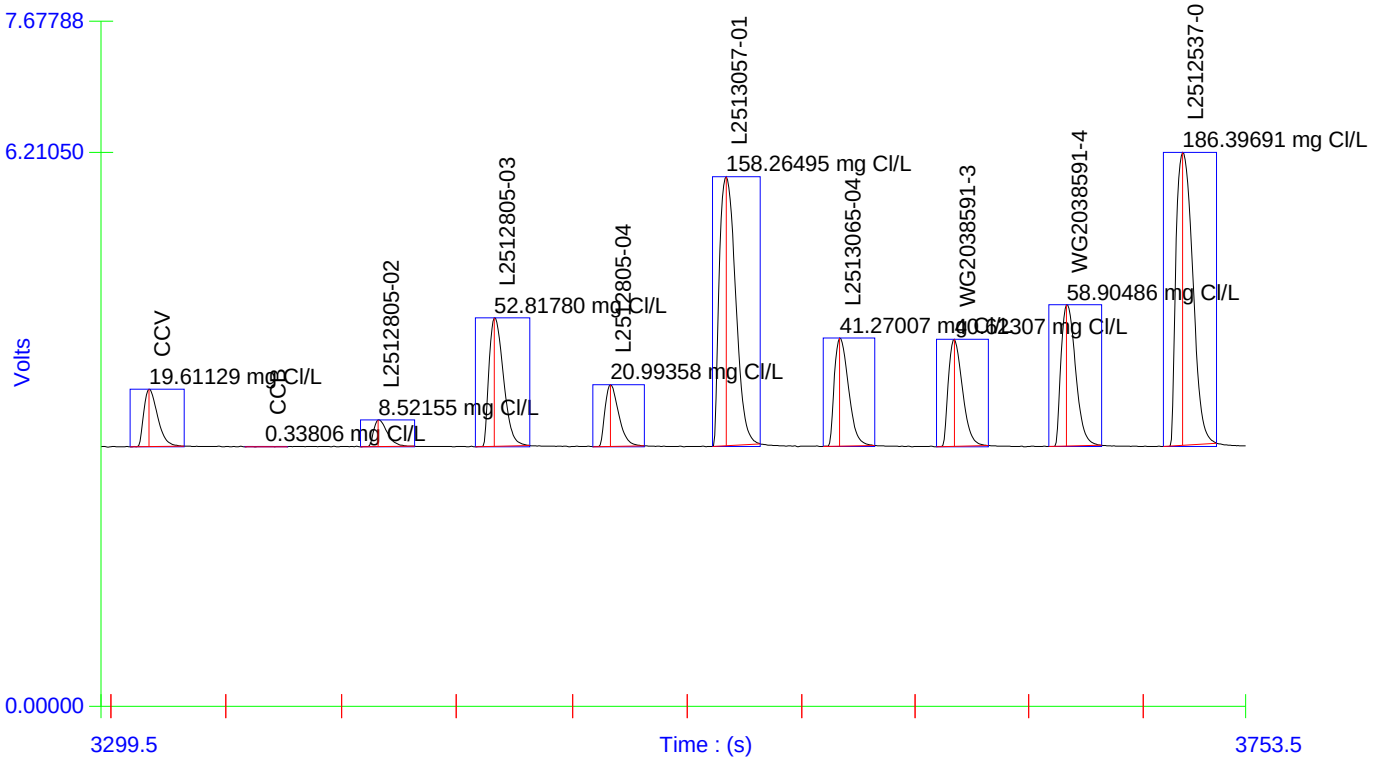

Channel 1 (Chloride) - Set: 6 / 11



Author:

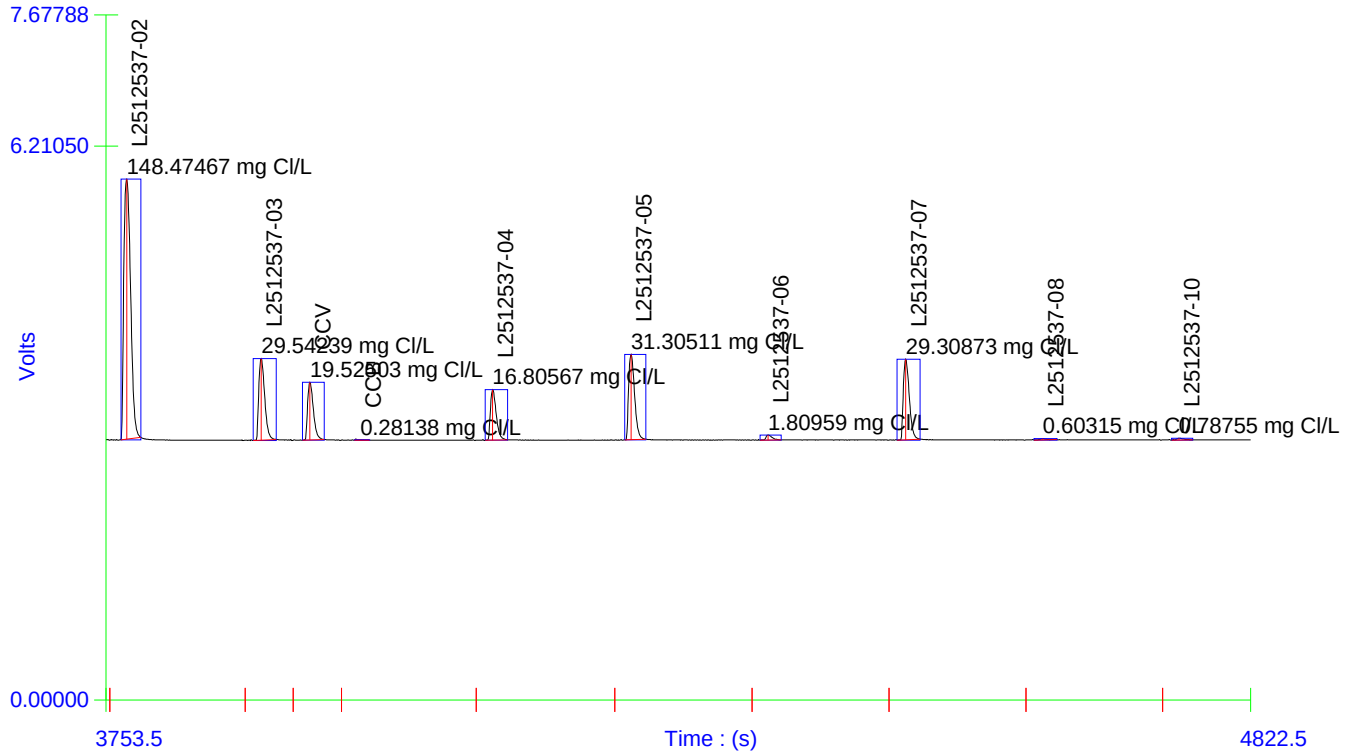
Date : 3/10/2025

Channel 1 (Chloride) - Set: 7 / 11

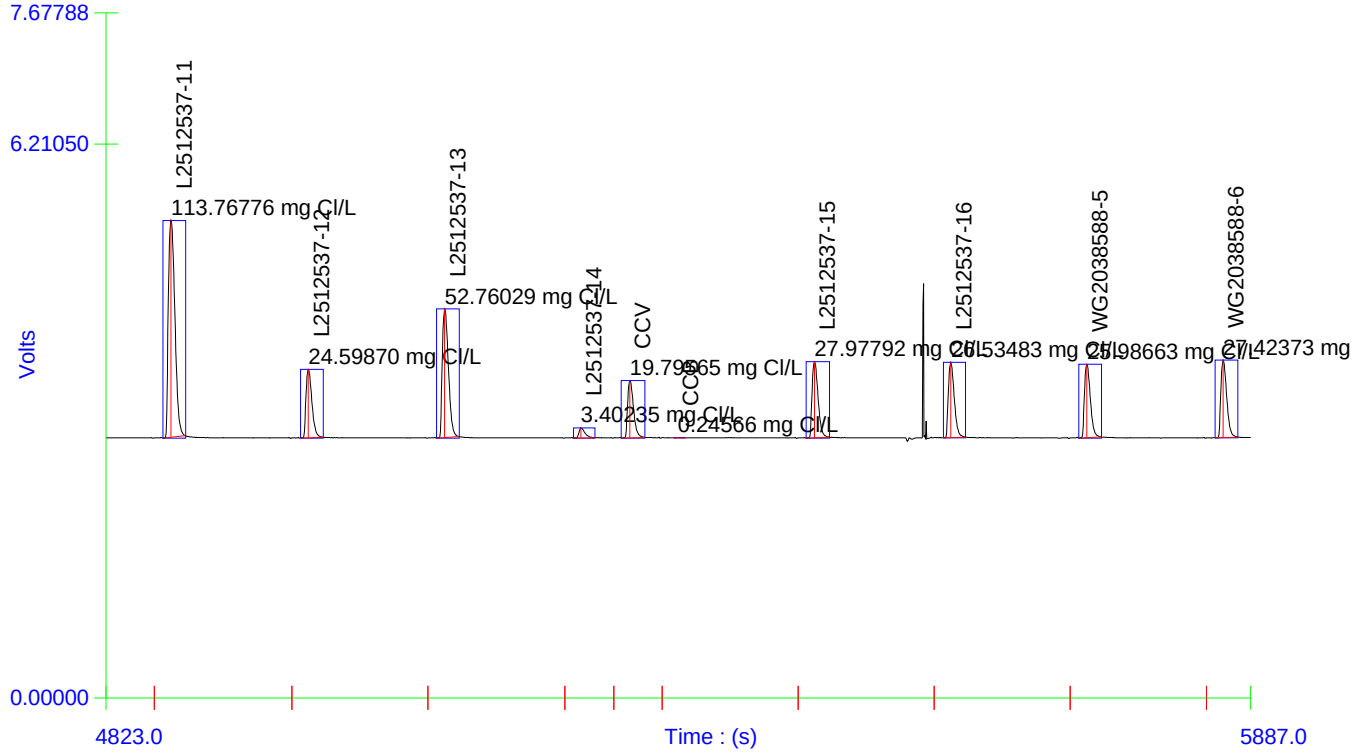


Author: Date : 3/10/2025

Channel 1 (Chloride) - Set: 8 / 11

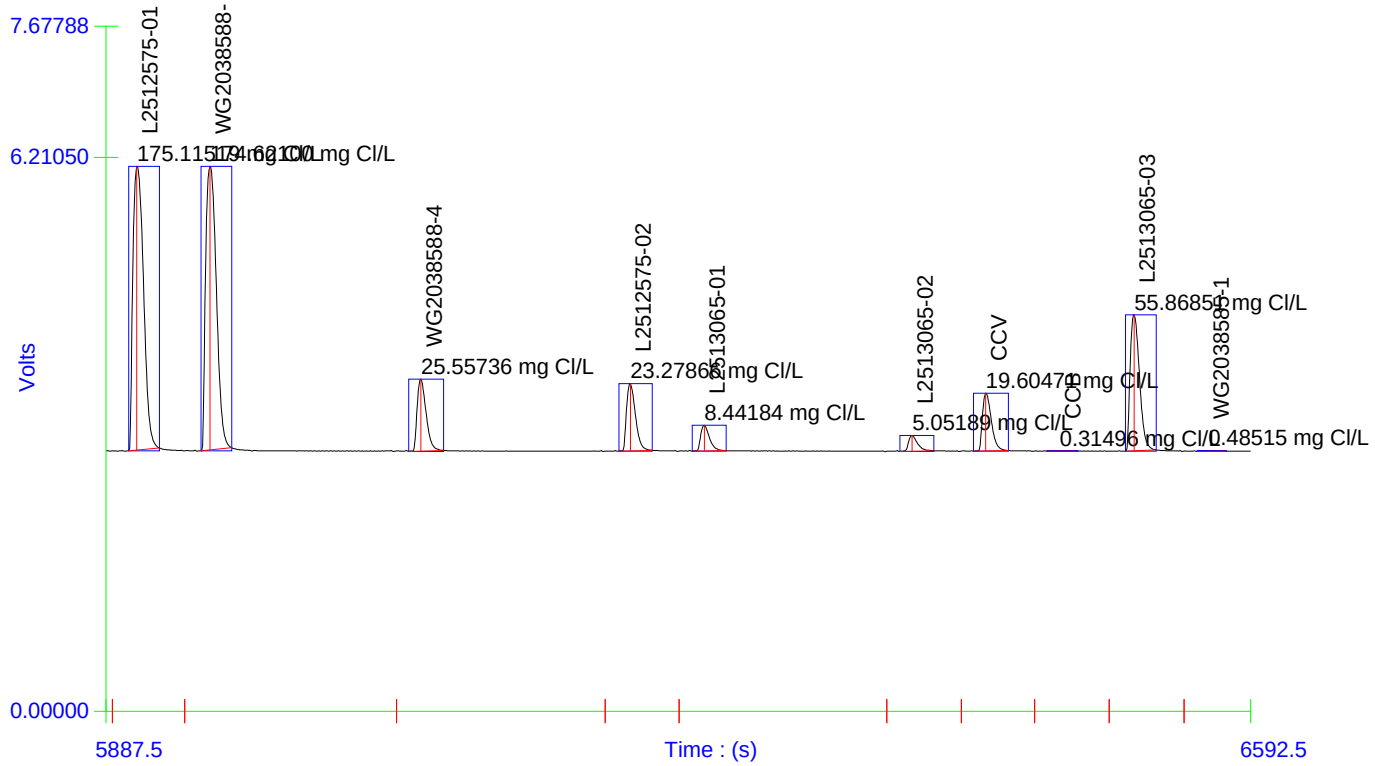



Channel 1 (Chloride) - Set: 9 / 11



Author: Date : 3/10/2025

Channel 1 (Chloride) - Set: 10 / 11



Author: Date : 3/10/2025

Channel 1 (Chloride) - Set: 11 / 11

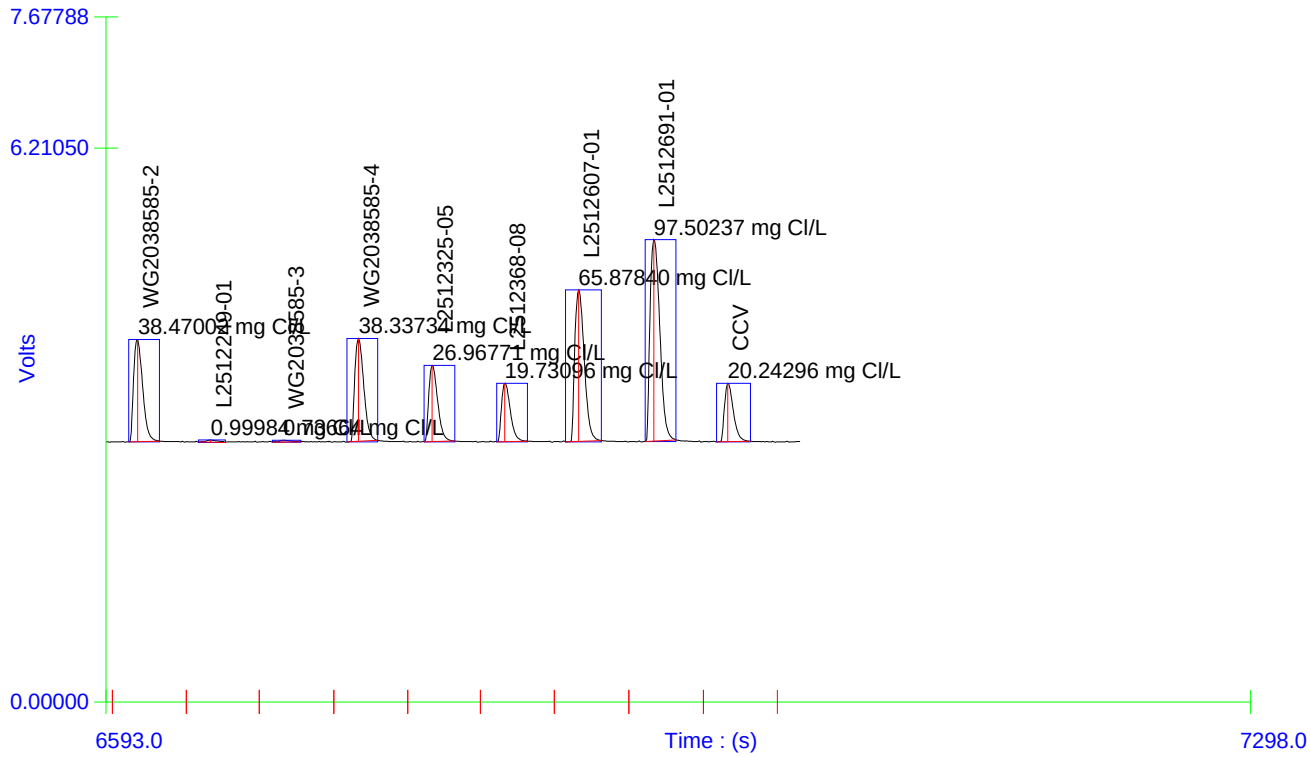
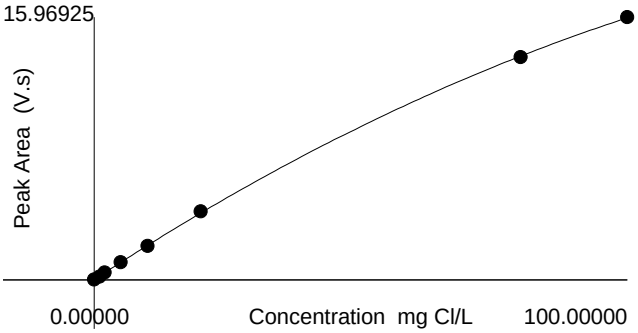



Table : 1 (Chloride-CH3)

| | Known Conc. (mg Cl/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg Cl/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.00000 | 1 | 15.96925 | 2.24514 | 0.0 | -0.2 | 99.66056 | 3/10/2025 | 1:35:48 PM |
| 2 | 80.00000 | 1 | 13.54304 | 1.98743 | 0.0 | 0.5 | 80.48557 | 3/10/2025 | 1:36:34 PM |
| 3 | 20.00000 | 1 | 4.15592 | 0.65599 | 0.0 | -2.2 | 19.99320 | 3/10/2025 | 1:37:20 PM |
| 4 | 10.00000 | 1 | 2.05801 | 0.32667 | 0.0 | 2.1 | 9.44973 | 3/10/2025 | 1:38:06 PM |
| 5 | 5.00000 | 1 | 1.08536 | 0.17347 | 0.0 | -0.6 | 4.93040 | 3/10/2025 | 1:38:53 PM |
| 6 | 2.00000 | 1 | 0.45496 | 0.06524 | 0.0 | -0.7 | 2.12607 | 3/10/2025 | 1:39:40 PM |
| 7 | 1.00000 | 1 | 0.21212 | 0.03123 | 0.0 | 11.9 | 1.07200 | 3/10/2025 | 1:40:27 PM |
| 8 | 0.00000 | 1 | 0.02798 | 0.00322 | | | 0.28245 | 3/10/2025 | 1:41:12 PM |

Figure : 1 (Chloride-CH3)




Area = - 0.00054 * Conc^2 + 0.21265 * Conc + 0.02856
Conc = 0.12351 * Area^2 + 4.25821 * Area + 0.16320
Correlation Coefficient (r) = 0.99997

Weighting : None

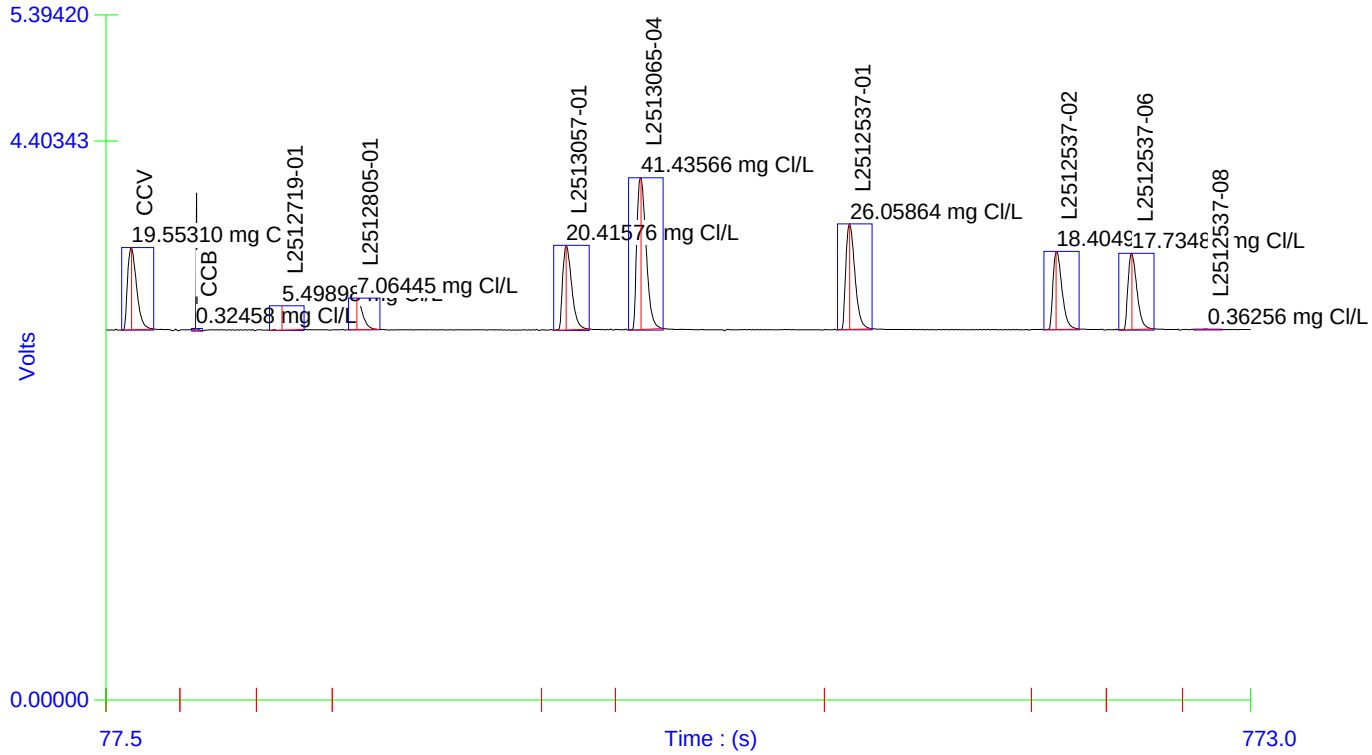
Author: Date : 3/10/2025

Original Run Filename: OM_3-10-2025_03-48-34PM.OMN Created: 3/10/2025 3:48:34 PM
Original Run Author's Signature: [a1wetcheminstrument]
Current Run Filename: OM_3-10-2025_03-48-34PM.OMN Last Modified: 3/10/2025 4:16:34 PM
Current Run Author's Signature: [a1wetcheminstrument]
Description: Default New Run

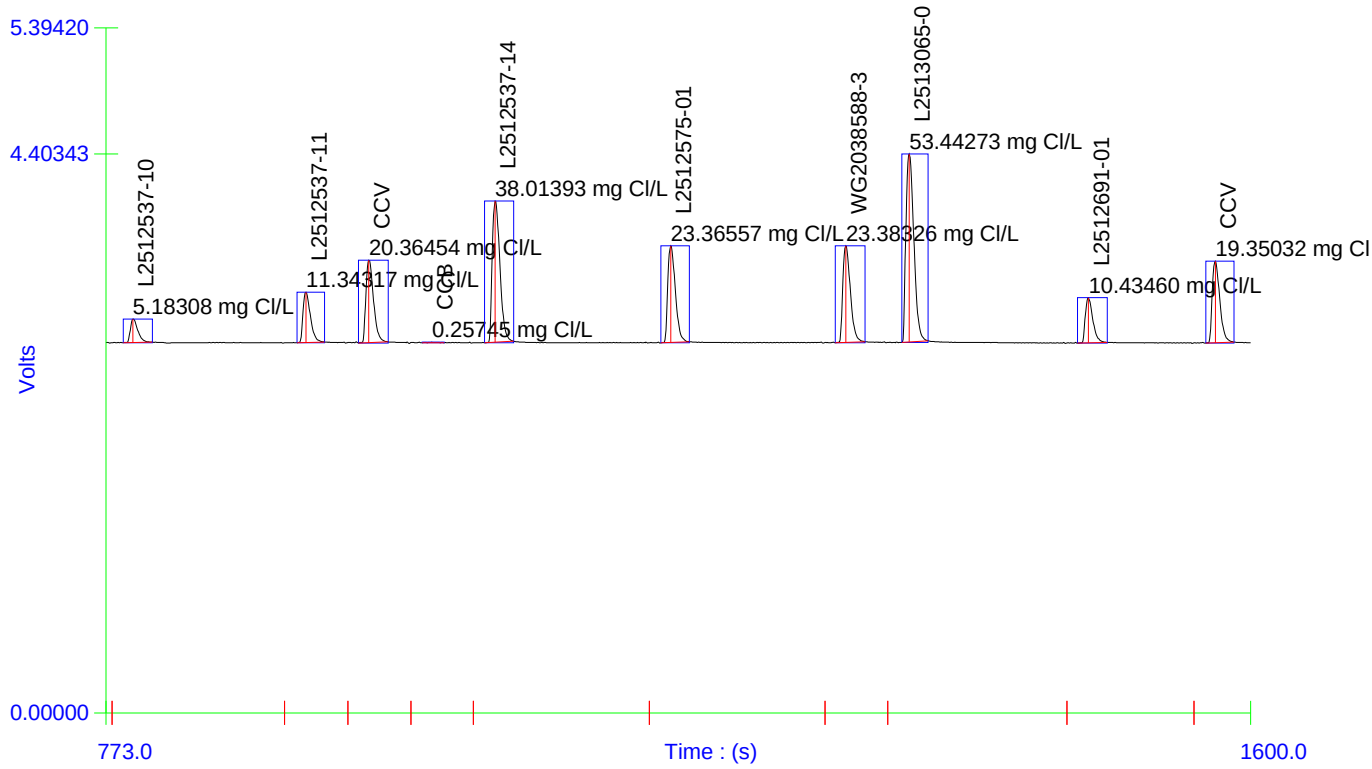
| Sample | Rep. | Cup No. | Channel 1 Chloride-CH3 (mg Cl/L) | ADF | MDF | Weight |
|---|---|---|---|---|---|---|
| CCV | 1 | S3 | 19.55310 | | | |
| | | Known Conc: | 20.00000 | | | |
| CCB | 1 | S9 | 0.32458 | | | |
| | | Known Conc: | 0.00000 | | | |
| | | Calibration: | Table/Fig. : 1 | | | |
| L2512719-01 | 1 | 47 | 5.49898 | | | |
| L2512805-01 | 1 | 49 | 7.06445 | | | |
| L2513057-01 | 1 | 53 | 204.15756 | 10.00 | | |
| L2513065-04 | 1 | 54 | 41.43566 | | | |
| L2512537-01 | 1 | 57 | 260.58640 | 10.00 | | |
| L2512537-02 | 1 | 58 | 184.04930 | 10.00 | | |
| L2512537-06 | 1 | 62 | 17.73482 | | | |
| L2512537-08 | 1 | 64 | 0.36256 | | | |
| L2512537-10 | 1 | 65 | 5.18308 | | | |
| L2512537-11 | 1 | 66 | 1134.31677 | 100.00 | | |
| CCV | 1 | S3 | 20.36454 | | | |
| | | Known Conc: | 20.00000 | | | |
| CCB | 1 | S9 | 0.25745 | | | |
| | | Known Conc: | 0.00000 | | | |
| L2512537-14 | 1 | 69 | 38.01393 | | | |
| L2512575-01 | 1 | 74 | 233.65573 | 10.00 | | |
| WG2038588-3 | 1 | 75 | 233.83264 | 10.00 | | |
| L2513065-02 | 1 | 79 | 53.44273 | | | |
| L2512691-01 | 1 | 46 | 104.34604 | 10.00 | | |
| CCV | 1 | S3 | 19.35032 | | | |
| | | Known Conc: | 20.00000 | | | |
| CCB | 1 | S9 | 0.38501 | | | |
| | | Known Conc: | 0.00000 | | | |

Author: Date : 3/10/2025

Channel 1 (Chloride) - Set: 1 / 3




Channel 1 (Chloride) - Set: 2 / 3



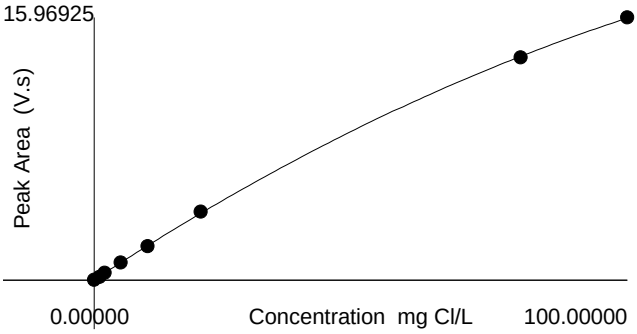
Author: Date : 3/10/2025

Channel 1 (Chloride) - Set: 3 / 3

Table : 1 (Chloride-CH3)

| | Known Conc. (mg Cl/L) | Rep. | Peak Area (V.s) | Peak Height (V) | % RSD | % Residual | Det. Conc (mg Cl/L) | Detection Date | Detection Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.00000 | 1 | 15.96925 | 2.24514 | 0.0 | -0.2 | 99.66056 | 3/10/2025 | 1:35:48 PM |
| 2 | 80.00000 | 1 | 13.54304 | 1.98743 | 0.0 | 0.5 | 80.48557 | 3/10/2025 | 1:36:34 PM |
| 3 | 20.00000 | 1 | 4.15592 | 0.65599 | 0.0 | -2.2 | 19.99320 | 3/10/2025 | 1:37:20 PM |
| 4 | 10.00000 | 1 | 2.05801 | 0.32667 | 0.0 | 2.1 | 9.44973 | 3/10/2025 | 1:38:06 PM |
| 5 | 5.00000 | 1 | 1.08536 | 0.17347 | 0.0 | -0.6 | 4.93040 | 3/10/2025 | 1:38:53 PM |
| 6 | 2.00000 | 1 | 0.45496 | 0.06524 | 0.0 | -0.7 | 2.12607 | 3/10/2025 | 1:39:40 PM |
| 7 | 1.00000 | 1 | 0.21212 | 0.03123 | 0.0 | 11.9 | 1.07200 | 3/10/2025 | 1:40:27 PM |
| 8 | 0.00000 | 1 | 0.02798 | 0.00322 | | | 0.28245 | 3/10/2025 | 1:41:12 PM |

Figure : 1 (Chloride-CH3)




Area = - 0.00054 * Conc^2 + 0.21265 * Conc + 0.02856
Conc = 0.12351 * Area^2 + 4.25821 * Area + 0.16320
Correlation Coefficient (r) = 0.99997

Weighting : None

# Quality Control

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512325-02 | | |
| **Matrix Spike** | : WG2038586-4 | **MS Analysis Date** | : 03/10/25 14:08 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Chloride | 13. | 20 | 33. | 100 | | | | | 58-140 | 7 |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 8A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-10 | | |
| **Matrix Spike** | : WG2038587-4 | **MS Analysis Date** | : 03/10/25 14:29 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Chloride | 22. | 20 | 41. | 95 | | | | | 58-140 | 7 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : NA | **Analysis Date** | : 03/10/25 14:07 |
| **Dup Sample ID** | : WG2038586-3 | **DUP Analysis Date** | : 03/10/25 14:07 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Chloride | 13 | 14. | 7 | 7 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 8A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-10 | **Analysis Date** | : 03/10/25 14:28 |
| **Dup Sample ID** | : WG2038587-3 | **DUP Analysis Date** | : 03/10/25 14:28 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Chloride | 22. | 22. | 0 | 7 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2038586-2 | **LCS Analysis Date** | : 03/10/25 13:58 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Chloride | 30.0 | 28.0 | 93. | | | | | 90-110 | 7 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2038587-2 | **LCS Analysis Date** | : 03/10/25 14:01 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Chloride | 30.0 | 28.0 | 93. | | | | | 90-110 | 7 |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 16887-00-6 | 1 | 0.2 | mg/l | 90-110 | | 58-140 | 7 | 7 | 4500CL-E | 28 days | 1 - Plastic 250ml unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11468-1
**Page:** 1

**WETCHEM (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 16887-00-6 | 10 | 3.73 | mg/kg | 89-109 | 35 | 62-129 | 35 | 35 | 9251 | 28 days | 1 - Glass 250ml/8oz unpreserved |
| Chloride | 16887-00-6 | 10 | 3.73 | mg/kg | 90-110 | 35 | 62-129 | 35 | 35 | 4500CL-E | 28 days | 1 - Glass 250ml/8oz unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

# Calculations of Chloride

Aqueous samples:

Compute sample Chloride concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

Calculate results by using reading on Channel 2 (Chloride)

To compute the final results for aqueous samples, multiply the direct reading by the dilution factor. (also done using software)

Cl mg/L = mg/L direct reading x dilution factor

# Sequence Logs

TITLE CI 031025 JOR

Project No. _____ 16

Book No. _____ Confidenti

From Page No. ____

1 ICUS
2 30
3 80
4 FCB
5 100 ppm 100
6 WG 20385 86-1 BIM
7 -2 LCS
8 WG 20385 87/91-1 BIM
9 -2 LCS
10 WG 20385 88-1 BIM
11 -2 LCS
12 12211-01
13 12325-01
14 -02
15 WG 20385 80-3 OUP
16 -4 MS
17 12325-03
18 -04
19 -05
20 -06
21 -07
22 -08
23 -09
24 12368-01
25 -02
26 -04
27 -05
28 -07
29 -08
30 -11
31 -13
32 -14
33 -16
34 -10
35 WG 20385 87-3 OUP
36 -4 MS
37 12368-17
38 12368-19
39 12607-01
40 -02
41 -03
42 -04
43 -05
44 -06 FB
45 12628-01
46 12691-01
47 12719-01
48 12722-01
49 12805-01
50 -02
51 -03
52 -04
53 13057-01
54 ~~12~~ 13065-04
55 WG 20385 91-3 OUP
56 -4 MS
57 12537-01
58 -02
59 -03
60 -04
61 -05
62 -06
63 -07
64 -08 FB
65 -10
66 -11
67 -12
68 -13
69 -14
70 -15
71 -16
72 WG 20385 88-5
73 -6
74 12575-01
75 WG 20385 88-3 PUP
76 WG 20385 88-4 MS
77 12575-03
78 13065-01
79 -02
80 -03
81 WG 20385 85-1 BIM .100
82 -2 LCS .101
83 12249-01 .10069
84 WG 20385 85-3 OUP .1012
85 -4 MS .1006

To Page No. ____

Witnessed & Understood by me, | Date | Invented by: | Date

Recorded by:

TITLE CI 031025 JOR

Project No. _____ 16

Book No. _____ Confidenti

From Page No. ____

1 ECU 5
2 30
3 80
4 FCB
5 100ppm 100
6 WG 20385586-1 BIK
7 -2 LCS
8 WG 20385587/91-1 BIK
9 -2 LCS
10 WG 20385588-1 BIK
11 -2 LCS
12 12241-01
13 12325-01
14 -02
15 WG 20385580-3 DUP
16 -4 MS
17 12325-03
18 -04
19 -05
20 -06
21 -07
22 -08
23 -09
24 12368-01
25 -02
26 -04
27 -05
28 -07
29 -08
30 -11
31 -13
32 -14
33 -16
34 -10
35 WG 20385587-3 DUP
36 -4 MS
37 12368-17
38 12368-19
39 12607-01
40 -02
41 -03
42 -04
43 -05
44 -06 FB
45 12628-01
46 12691-01
47 12719-01
48 12722-01
49 12805-01
50 -02
51 -03
52 -04
53 13057-01
54 13065-04
55 WG 20385591-3 DUP
56 -4 MS
57 12537-01
58 -02
59 -03
60 -04
61 -05
62 -06
63 -07
64 -08 FB
65 -10
66 -11
67 -12
68 -13
69 -14
70 -15
71 -16
72 WG 20385588-5
73 -6
74 12575-01
75 WG 20385588-3 DUP
76 WG 20385588-4 MS
77 12575-03
78 13065-01
79 -02
80 -03
81 WG 20385585-1 BIK .1006
82 -2 LCS .1017
83 12249-01 .10069
84 WG 20385585-3 DUP .10122
85 -4 MS .1006

To Page No. ____

Witnessed & Understood by me, | Date | Invented by: | Date

Recorded by:

# Fluoride Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-01 | Date Collected | : 03/05/25 11:20 |
| Client ID | : 5A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 07:12 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2038381.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.08 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-02 | Date Collected | : 03/05/25 11:25 |
| Client ID | : 5B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 07:12 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2038381.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.04 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-04 | Date Collected | : 03/05/25 09:25 |
| Client ID | : 6A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 07:12 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2038381.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.09 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-05 | Date Collected | : 03/05/25 09:27 |
| Client ID | : 6B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 07:12 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2038381.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.05 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-07 | Date Collected | : 03/05/25 08:15 |
| Client ID | : 7A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 07:07 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2038422.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.10 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-08 | Date Collected | : 03/05/25 08:13 |
| Client ID | : 7B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 07:12 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2038381.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.09 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-10 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 07:07 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2038422.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.03 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-11 | Date Collected | : 03/05/25 16:45 |
| Client ID | : 8B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 07:07 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2038422.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.08 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-13 | Date Collected | : 03/05/25 14:10 |
| Client ID | : 9A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 07:07 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2038422.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.03 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-14 | Date Collected | : 03/05/25 15:15 |
| Client ID | : 9B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 07:07 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2038422.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.08 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-16 | Date Collected | : 03/05/25 12:45 |
| Client ID | : 10A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 07:07 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2038422.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.03 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-17 | Date Collected | : 03/05/25 12:55 |
| Client ID | : 10B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 07:07 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2038422.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.05 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-19 | Date Collected | : 03/05/25 00:00 |
| Client ID | : DUP001 | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 07:07 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2038422.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.03 | 0.20 | 0.01 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038381-1 | Date Collected | : NA |
| Client ID | : WG2038381-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/10/25 07:12 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2038381.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | ND | 0.20 | 0.01 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038381-3 | Date Collected | : 03/05/25 09:27 |
| Client ID | : 6BDUP | Date Received | : 03/05/25 |
| Sample Location | : | Date Analyzed | : 03/10/25 07:12 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2038381.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/10/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.05 | 0.20 | 0.02 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038422-1 | Date Collected | : NA |
| Client ID | : WG2038422-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/11/25 07:07 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2038422.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | ND | 0.20 | 0.01 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038422-3 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8ADUP | Date Received | : 03/05/25 |
| Sample Location | : | Date Analyzed | : 03/11/25 07:07 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500F-BC | Analyst | : DTH |
| Lab File ID | : WG2038422.csv | Instrument ID | : |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 16984-48-8 | Fluoride | 0.04 | 0.20 | 0.02 | J |

# Sample Raw Data

PACE ANALYTICAL LABS

# WET CHEMISTRY DEPARTMENT

## F L U O R I D E

| Last Change 03/4/13 |
|---|
| File Flouride.xlt |

**Sample Number:** _____

**Client:** _____

**Analysis:** FLUORIDE
**Method:** SM 4500F-BC
**LCS Concentration (mg/l):** 2
**Spike Concentration (mg/l):** 1

**Product:** F-4500
**Analysis Analyte:** Fluoride,
**Analysis Date:** 3/11/2025 7:07
**Technician:** DTH
**Work group:** WG2038422
**RL:** 0.20 mg/L
**Distillation Date:** 3/11/2025 0:55

| Standard ID mg/L | Log Std-d | Reading mV | Result, Curve | Antilog Result | % Recovery | Calibration Curve | |
|---|---|---|---|---|---|---|---|
| | | | | | | Slope | y-intercept |
| 0.2 | -0.699 | 125.1 | -0.712 | 0.1942 | 97 | -59.0394389 | 83.075 |
| 0.5 | -0.301 | 100.3 | -0.292 | 0.5108 | 102 | | |
| 1.0 | 0.000 | 82.5 | 0.010 | 1.0227 | 102 | Correlation | Coefficient |
| 10 | 1.000 | 24.4 | 0.994 | 9.859 | 99 | 0.99987889 | |

| | Sample number | Sample Volume (ml) | Distill Volume (ml) | Flask | Reagent | Dilution Factor | Meter Reading | RL Multiplier | FINAL RESULT (mg/l) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ICB | 50 | 50 | | YES | 1.00 | 0 | 1.00 | 0.00 | Recovery |
| | ICV | 50 | 50 | | YES | 1.00 | 0.972 | 1.00 | 0.97 | 97% |
| SAMP | L2512368-07 | 50 | 50 | | YES | 1.00 | 0.0971 | 1.00 | 0.10 | |
| SAMP | L2512368-10 | 50 | 50 | | YES | 1.00 | 0.0332 | 1.00 | 0.03 | |
| SAMP | L2512368-11 | 50 | 50 | | YES | 1.00 | 0.0813 | 1.00 | 0.08 | |
| SAMP | L2512368-13 | 50 | 50 | | YES | 1.00 | 0.028 | 1.00 | 0.03 | |
| SAMP | L2512368-14 | 50 | 50 | | YES | 1.00 | 0.0799 | 1.00 | 0.08 | |
| SAMP | L2512368-16 | 50 | 50 | | YES | 1.00 | 0.0267 | 1.00 | 0.03 | |
| SAMP | L2512368-17 | 50 | 50 | | YES | 1.00 | 0.0497 | 1.00 | 0.05 | |
| SAMP | L2512368-19 | 50 | 50 | | YES | 1.00 | 0.0289 | 1.00 | 0.03 | |
| SAMP | L2512607-06 | 50 | 50 | | YES | 1.00 | 0.0105 | 1.00 | 0.01 | |
| | L2512712-01 | 50 | 50 | | YES | 1.00 | 0.224 | 1.00 | 0.22 | |
| | CCV | 50 | 50 | | YES | 1.00 | 0.961 | 1.00 | 0.96 | |
| | CCB | 50 | 50 | | YES | 1.00 | 0 | 1.00 | 0.00 | |
| | CCV | 50 | 50 | | YES | 1.00 | 0.968 | 1.00 | 0.97 | |
| | CCB | 50 | 50 | | YES | 1.00 | 0 | 1.00 | 0.00 | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| BLANK | WG2038422-1 | 50 | 50 | | YES | 1.00 | 0 | 1.00 | 0.00 | |
| DUP | WG2038422-3 | 50 | 50 | | YES | 1.00 | 0.0365 | 1.00 | 0.04 | L2512368-10 |

| | Sample number | sample volume | Distill volume (ml) | Flask | Reagent | Sample Result mg/l | Meter Reading | Spike conc. mg/l | Spike Result mg/l | Recovery % |
|---|---|---|---|---|---|---|---|---|---|---|
| MS | WG2038422-4 | 50 | 50 | | YES | .03 | 0.987 | 1 | 0.99 | 96 |
| LCS | WG2038422-2 | 5 | 50 | | YES | | 1.83 | 2 | 1.83 | 92 |

last sample

PACE ANALYTICAL LABS

# WET CHEMISTRY DEPARTMENT

## F L U O R I D E

| Last Change 03/4/13 |
|---|
| File Flouride.xlt |

**Sample Number:** _____

**Client:** _____

**Analysis:** FLUORIDE
**Method:** SM 4500F-BC
**LCS Concentration (mg/l):** 2
**Spike Concentration (mg/l):** 1

**Product:** F-4500
**Analysis Analyte:** Fluoride,
**Analysis Date:** 3/10/2025 7:12
**Technician:** DTH
**Work group:** WG2038381
**RL:** 0.20 mg/L
**Distillation Date:** 3/10/2025 2:46

| Standard ID mg/L | Log Std-d | Reading mV | Result, Curve | Antilog Result | % Recovery | Calibration Curve | |
|---|---|---|---|---|---|---|---|
| | | | | | | Slope | y-intercept |
| 0.2 | -0.699 | 124 | -0.713 | 0.1938 | 97 | -58.8937324 | 82.025 |
| 0.5 | -0.301 | 99.1 | -0.290 | 0.5129 | 103 | | |
| 1.0 | 0.000 | 81.5 | 0.009 | 1.0207 | 102 | Correlation | Coefficient |
| 10 | 1.000 | 23.5 | 0.994 | 9.857 | 99 | 0.99986401 | |

| | Sample number | Sample Volume (ml) | Distill Volume (ml) | Flask | Reagent | Dilution Factor | Meter Reading | RL Multiplier | FINAL RESULT (mg/l) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ICB | 50 | 50 | | YES | 1.00 | 0 | 1.00 | 0.00 | Recovery |
| | ICV | 50 | 50 | | YES | 1.00 | 0.998 | 1.00 | 1.00 | 100% |
| SAMP | L2512368-01 | 50 | 50 | | YES | 1.00 | 0.0772 | 1.00 | 0.08 | |
| SAMP | L2512368-02 | 50 | 50 | | YES | 1.00 | 0.0376 | 1.00 | 0.04 | |
| SAMP | L2512368-04 | 50 | 50 | | YES | 1.00 | 0.0859 | 1.00 | 0.09 | |
| SAMP | L2512368-05 | 50 | 50 | | YES | 1.00 | 0.0501 | 1.00 | 0.05 | |
| SAMP | L2512368-08 | 50 | 50 | | YES | 1.00 | 0.0865 | 1.00 | 0.09 | |
| | CCV | 50 | 50 | | YES | 1.00 | 0.976 | 1.00 | 0.98 | |
| | CCB | 50 | 50 | | YES | 1.00 | 0 | 1.00 | 0.00 | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| | | | | | | 1.00 | | 1.00 | | |
| BLANK | WG2038381-1 | 50 | 50 | | YES | 1.00 | 0 | 1.00 | 0.00 | |
| DUP | WG2038381-3 | 50 | 50 | | YES | 1.00 | 0.0505 | 1.00 | 0.05 | L2512368-05 |

| | Sample number | sample volume | Distill volume (ml) | Flask | Reagent | Sample Result mg/l | Meter Reading | Spike conc. mg/l | Spike Result mg/l | Recovery % |
|---|---|---|---|---|---|---|---|---|---|---|
| MS | WG2038381-4 | 50 | 50 | | YES | .05 | 0.926 | 1 | 0.93 | 88 |
| LCS | WG2038381-2 | 50 | 50 | | YES | | 1.72 | 2 | 1.72 | 86 |

last sample

# Quality Control

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 6B | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-05 | | |
| **Matrix Spike** | : WG2038381-4 | **MS Analysis Date** | : 03/10/25 07:12 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Fluoride | 0.05J | 1 | 0.93 | 93 | | | | | 69-124 | 13 |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 8A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-10 | | |
| **Matrix Spike** | : WG2038422-4 | **MS Analysis Date** | : 03/11/25 07:07 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Fluoride | 0.03J | 1 | 0.99 | 99 | | | | | 69-124 | 13 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 6B | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-05 | **Analysis Date** | : 03/10/25 07:12 |
| **Dup Sample ID** | : WG2038381-3 | **DUP Analysis Date** | : 03/10/25 07:12 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Fluoride | 0.05J | 0.05J | NC | 13 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 8A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-10 | **Analysis Date** | : 03/11/25 07:07 |
| **Dup Sample ID** | : WG2038422-3 | **DUP Analysis Date** | : 03/11/25 07:07 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Fluoride | 0.03J | 0.04J | NC | 13 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2038381-2 | **LCS Analysis Date** | : 03/10/25 07:12 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Fluoride | 2.00 | 1.70 | 86. | | | | | 78-120 | 13 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2038422-2 | **LCS Analysis Date** | : 03/11/25 07:07 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Fluoride | 2.00 | 1.80 | 92. | | | | | 78-120 | 13 |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | 16984-48-8 | 0.2 | 0.017 | mg/l | 78-120 | | 69-124 | 13 | 13 | 4500F-BC | 28 days | 1 - Plastic 500ml unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11468-1
**Page:** 1

**WETCHEM (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | 16984-48-8 | 10 | 1.04 | mg/kg | 80-120 | | 70-130 | 20 | 20 | 4500F-BC | 28 days | 1 - Glass 250ml/8oz unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

# Calculations of Fluoride

When the volume of the distillate is the same as the volume of the sample used, the direct determination of Fluoride concentration is the instrument's result.

However, when analyzing soil samples or high level samples requiring a dilution, the following equations apply:

**For liquids:**

Fluoride, mg/L = (mg F-/L) X (Volume of Distillate, mL)/ Volume of Sample, mL

**For solids:**

Fluoride, mg/Kg = (mg F-/L) X (Volume of Distillate, mL)/Weight of Sample, gm

To calculate final result for soil samples based on dry weight, multiply final result on 100 and divide on %TS (in %)

# Sample Preparation

Project No. _____
ential Book No. _____ TITLE _____

age No. _____

WG 2038422

WG2038422

Analyst: DTH
Date & Time: 3/11/25 7:07
ICV:F 120024-100 ppm
LCS:F 120024-100 ppm
Spike:F 120024-100 ppm
Curve:WC- 3567
TISAB III: R- 4322

| STD | mV |
|---|---|
| 0.2 | 125.1 |
| 0.5 | 100.3 |
| 1.0 | 82.5 |
| 10.0 | 24.4 |

| Sample | Volume | Final Volume | Meter |
|---|---|---|---|
| | 50m | 50mL | |
| ICV | | | 0.978 |
| ICB | | | 0.0 |
| Blank | | | 0.0 |
| 12368-07 | | | ~~1.63~~ DTH 3/11/25 0.0971 |
| -10 | | | 0.0332 |
| -Dup 10 | | | 0.0365 |
| -MS 10 | | | 0.987 |
| -11 | | | 0.0813 |
| -13 | | | 0.0280 |
| -14 | | | 0.0799 |
| -16 | | | 0.0267 |
| CCV ~~-17~~ | | | 0.961 |
| CCB ~~-18~~ | | | 0.0 |
| ~~-17~~ | | | 0.0497 |
| -19 | | | 0.0289 |
| 12607-01 | | | 0.0105 |
| 12712-01 | | | 0.224 |
| ~~CCV~~ DTH LCS | | | 1.83 |
| ~~CCB~~ 3/11/25 | | | ~~0.968~~ DTH 3/11/25 |
| CCV | | | 0.968 |
| CCB | | | 0.0 |

To Page No. _____

essed & Understood by me, | Date | Invented by: | Date
Recorded by:

From Page No.

| Tube | Sample | Volume | Final Volume | Block | Comments |
|---|---|---|---|---|---|
| 1 | Blank | 50mL | 50mL | Phord #2 | DTH 3/11/25 00:55 |
| 2 | LCS | | | | 1.0mL F122024-100ppm |
| 3 | 12365-07 | | | | |
| 4 | -10 | | | | |
| 5 | -Dup-10 | | | | |
| 6 | MS 10 | | | | 0.5mL F122024-100ppm |
| 7 | -11 | | | | |
| 8 | -13 | | | | |
| 9 | -14 | | | | |
| 10 | -16 | | | | |
| 11 | -17 | | | Phord #3 | |
| 12 | -19 | | | | |
| 13 | 12607-01 | | | | |
| 14 | 12712-01 | | | | |
| 15 | | | | | |

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Recorded by:

3 Project No. _____

nfidential Book No. _____ TITLE _____

om Page No. ____

WG2037155

Analyst: DTH
Date & Time: 3/6/25 4:22
ICV:F 122024-100ppm
LCS:F 122024-100ppm
Spike:F 122024-100ppm
Curve:WC- 3567
TISAB III: R- 4322

| STD | MV |
|---|---|
| 0.2 | 125.0 |
| 0.5 | 100.4 |
| 1.0 | 82.7 |
| 10.0 | 23.8 |

| Sample | Volume | Final Volume | Meter |
|---|---|---|---|
| ICV | 50mL | 50mL | 0.993 |
| ICB | | | 0.00 |
| Blank | | | 0.00 |
| LCS | | | 1.86 |
| LCS-D | | | 1.86 |
| 11732-01 | | | 0.511 |
| -02 | | | 0.519 |
| CCV | | | 0.995 |
| CCB | | | 0.0 |

WG2038381

Analyst: DTH
Date & Time: 3/10/25 7:12
ICV:F 122024-100ppm
LCS:F 122024-100ppm
Spike:F 122024-100ppm
Curve:WC- 3567
TISAB III: R- 4322

| STD | MV |
|---|---|
| 0.2 | 124.0 |
| 0.5 | 99.1 |
| 1.0 | 81.5 |
| 10.0 | 23.5 |

| Sample | Volume | Final Volume | Meter |
|---|---|---|---|
| ICV | 50mL | 50mL | 0.998 |
| ICB | | | 0.0 |
| Blank | | | 0.0 |
| LCS | | | 1.72 |
| 12368-01 | | | 0.0772 |
| -02 | | | 0.0376 |
| -04 | | | 0.0859 |
| -05 | | | 0.0501 |
| -Dpo5 | | | 0.0505 |
| MS05 | | | 0.926 |
| -08 | | | 0.0865 |
| CCV | | | 0.976 |
| CCB | | | 0.0 |

To Page No. ____

Witnessed & Understood by me, | Date | Invented by: | Date

Recorded by:

Project No.
TITLE
Book No.
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From Page No.

| Tube | Sample | Volume | Final Volume | Block | Comments 00:5 |
|---|---|---|---|---|---|
| 1 | Blank | 50 ML | 50 ML | Phenol #2 | DTH 03/06/2 |
| 2 | LCS | | | | 1.0 ML ~~F012~~ F122 DTH 3/6/25 |
| 3 | 11529-01 | | | | |
| 4 | 11919-01 | | | | |
| 5 | 02 | | | | |
| 6 | 04 | | | | |
| 7 | 05 | | | | |
| 8 | 07 | | | | |
| 9 | 08 | | | | |
| 10 | 11944-01 | | | | |
| 11 | -03 | | | Phenol #3 | |
| 12 | -03 | | | | |
| 13 | -04 | | | | |
| 14 | -05 | | | | |
| 15 | -06 | | | | |
| 16 | Dup06 | | | | |
| 17 | MS06 | | | | 0.5mL F122024-10 |
| 18 | 07 | | | | |
| 19 | 08 | | | | |
| 20 | 09 | | | | |
| 1 | Blank | 50mL | 50mL | Phenol #2 ~~3/6/25~~ | DTH 2:463 |
| 2 | LCS | | | | 1.0mL F122024-10 |
| 3 | 12368-01 | | | | |
| 4 | -02 | | | | |
| 5 | -04 | | | | |
| 6 | -05 | | | | |
| 7 | -Dup05 | | | | |
| 8 | -MS 05 | | | | 0.5mL F122024-10 |
| 9 | -04 | | | | |

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| Witnessed & Understood by me, | Date | Invented by: | Date |
|---|---|---|---|
| | | Recorded by: | |

# Phosphates
# Analysis

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-01 | Date Collected | : 03/05/25 11:20 |
| Client ID | : 5A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 15:57 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : MEF |
| Lab File ID | : PHOS031125-WG2038925.csv | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.138 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-02 | Date Collected | : 03/05/25 11:25 |
| Client ID | : 5B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:00 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : MEF |
| Lab File ID | : PHOS031125-WG2038925.csv | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.037 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-04 | Date Collected | : 03/05/25 09:25 |
| Client ID | : 6A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:01 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : MEF |
| Lab File ID | : PHOS031125-WG2038925.csv | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.074 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-05 | Date Collected | : 03/05/25 09:27 |
| Client ID | : 6B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:02 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : MEF |
| Lab File ID | : PHOS031125-WG2038925.csv | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.049 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-07 | Date Collected | : 03/05/25 08:15 |
| Client ID | : 7A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:03 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : MEF |
| Lab File ID | : PHOS031125-WG2038925.csv | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.098 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-08 | Date Collected | : 03/05/25 08:13 |
| Client ID | : 7B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:04 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : MEF |
| Lab File ID | : PHOS031125-WG2038925.csv | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.101 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-10 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:05 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : MEF |
| Lab File ID | : PHOS031125-WG2038925.csv | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.040 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-11 | Date Collected | : 03/05/25 16:45 |
| Client ID | : 8B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:07 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : MEF |
| Lab File ID | : PHOS031125-WG2038925.csv | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.169 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-13 | Date Collected | : 03/05/25 14:10 |
| Client ID | : 9A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:08 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : MEF |
| Lab File ID | : PHOS031125-WG2038925.csv | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.055 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-14 | Date Collected | : 03/05/25 15:15 |
| Client ID | : 9B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:11 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : MEF |
| Lab File ID | : PHOS031125-WG2038925.csv | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.319 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-16 | Date Collected | : 03/05/25 12:45 |
| Client ID | : 10A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:12 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : MEF |
| Lab File ID | : PHOS031125-WG2038925.csv | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.058 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-17 | Date Collected | : 03/05/25 12:55 |
| Client ID | : 10B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:13 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : MEF |
| Lab File ID | : PHOS031125-WG2038925.csv | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.037 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-19 | Date Collected | : 03/05/25 00:00 |
| Client ID | : DUP001 | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 16:13 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : MEF |
| Lab File ID | : PHOS031125-WG2038925.csv | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.071 | 0.031 | 0.012 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038925-1 | Date Collected | : NA |
| Client ID | : WG2038925-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/11/25 15:48 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : MEF |
| Lab File ID | : PHOS031125-WG2038925.csv | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.018 | 0.031 | 0.012 | J |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038925-3 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8ADUP | Date Received | : 03/05/25 |
| Sample Location | : | Date Analyzed | : 03/11/25 16:06 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 121,4500P-E(M) | Analyst | : MEF |
| Lab File ID | : PHOS031125-WG2038925.csv | Instrument ID | : SEAL2 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : 03/11/25 |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 7723-14-0 | Phosphate, Total | 0.043 | 0.031 | 0.012 | |

# Sample Raw Data

# AQ2 Tray Report

| | |
|---|---|
| **Software version :** | 2.4.5 |
| **Report requested by :** | MFlaherty |
| **Date \ Time :** | 11-Mar-2025 16:17:49 |
| **Tray number :** | 1 |
| **Tray name :** | WG2038925 |

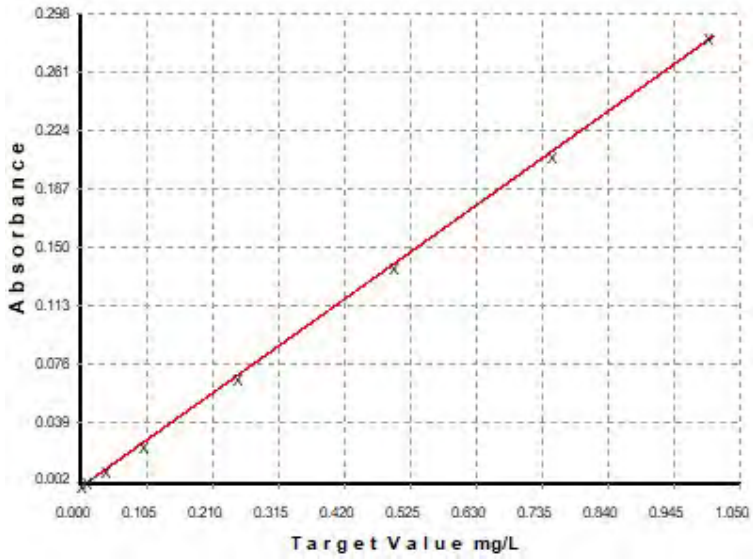
## T-Phos 1

### Calibration Chart

| Type | Absorbance | Calc mg/L | Target mg/L | % Error |
|---|---|---|---|---|
| S1 | 0.0016 | 0.006 | 0.000 | |
| S90 | 0.0042 | 0.015 | 0.010 | 47.68 |
| S91 | 0.0112 | 0.040 | 0.040 | -0.93 |
| S92 | 0.0272 | 0.097 | 0.100 | -3.25 |
| S93 | 0.0690 | 0.245 | 0.250 | -1.88 |
| S94 | 0.1396 | 0.496 | 0.500 | -0.77 |
| S95 | 0.2092 | 0.743 | 0.750 | -0.89 |
| S96 | 0.2837 | 1.008 | 1.000 | 0.84 |
| S0 | 0.0016 | 0.006 | 0.000 | |

| | |
|---|---|
| Polynomial Order : | 1 |
| Correlation Coefficient : | 0.9999 |
| Carryover(%) : | -0.0 |
| Calibration equation: | y = bx + a |
| y =: | Concentration mg/L |
| x =: | Measured absorbance |
| a =: | -2.408141E-05 |
| b =: | 3.554085E+00 |
| Date & Time : | 11-Mar-2025 15:45:39 |

### Calibration Graph




### Reagents

| Reagent Name | Batch Number | Operator | Expiry Date |
|---|---|---|---|
| TP Working Color | TP Color-03102025 | EYA | 31-Mar-2025 00:00:00 |
| TP Ascorbic | TP Ascorbic-03102025 | MEF | 17-Mar-2025 00:00:00 |

### Test Results

| Cup | Type | ID | Sample Details | Result | Units | QC Pro | Raw Data | Auto Dil. | Man Dil. | User | Time & Date |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | S1 | Standard 1 | | 0.002 | | | 0.001604 | | | EYA | 11-Mar-2025 15:37:53 |
| | S90 | Standard 90 | | 0.004 | | | 0.004162 | | | EYA | 11-Mar-2025 15:38:51 |
| | S91 | Standard 91 | | 0.011 | | | 0.011156 | | | EYA | 11-Mar-2025 15:39:49 |
| | S92 | Standard 92 | | 0.027 | | | 0.027230 | | | EYA | 11-Mar-2025 15:40:47 |
| | S93 | Standard 93 | | 0.069 | | | 0.069026 | | | EYA | 11-Mar-2025 15:41:45 |
| | S94 | Standard 94 | | 0.140 | | | 0.139603 | | | EYA | 11-Mar-2025 15:42:44 |
| | S95 | Standard 95 | | 0.209 | | | 0.209163 | | | EYA | 11-Mar-2025 15:43:42 |
| | S96 | Standard 96 | | 0.284 | | | 0.283731 | | | EYA | 11-Mar-2025 15:44:41 |
| | S0 | Standard 0 | | 0.002 | | | 0.001582 | | | EYA | 11-Mar-2025 15:45:39 |
| 2 | ICV | ICV | 11-MAR-2025 08-34 | 0.502 | mg/L | | 0.141227 | | | EYA | 11-Mar-2025 15:46:38 |
| 3 | ICB | ICB | 11-MAR-2025 08-34 | 0.004 | mg/L | | 0.001122 | | | EYA | 11-Mar-2025 15:47:39 |
| 4 | U1 | WG2038925-1O | 11-MAR-2025 08-34 | 0.006ELL | mg/L | | 0.001604 | | | EYA | 11-Mar-2025 15:48:40 |
| 5 | U2 | WG2038925-2O | 11-MAR-2025 08-34 | 0.504 | mg/L | | 0.141835 | | | EYA | 11-Mar-2025 15:49:38 |
| 6 | U3 | L2512325-01O | 11-MAR-2025 08-34 | 0.035 | mg/L | | 0.009861 | | | EYA | 11-Mar-2025 15:50:37 |
| 7 | U4 | L2512325-04O | 11-MAR-2025 08-34 | 0.066 | mg/L | | 0.018568 | | | EYA | 11-Mar-2025 15:51:36 |
| 8 | U5 | L2512325-05O | 11-MAR-2025 08-34 | 0.008 | mg/L | | 0.002125 | | | EYA | 11-Mar-2025 15:52:35 |
| 9 | U6 | L2512325-06O | 11-MAR-2025 08-34 | 0.019 | mg/L | | 0.005404 | | | EYA | 11-Mar-2025 15:53:34 |
| 10 | U7 | L2512325-07O | 11-MAR-2025 08-34 | 0.079 | mg/L | | 0.022312 | | | EYA | 11-Mar-2025 15:54:33 |
| 11 | U8 | L2512325-08O | 11-MAR-2025 08-34 | 0.009 | mg/L | | 0.002524 | | | EYA | 11-Mar-2025 15:55:32 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 12 | U9 | L2512325-09O | 11-MAR-2025 08-34 | 0.033 | mg/L | 0.009382 | EYA | 11-Mar-2025 15:56:31 |
| 13 | U10 | L2512368-01O | 11-MAR-2025 08-34 | 0.045 | mg/L | 0.012528 | EYA | 11-Mar-2025 15:57:29 |
| | CCV | CCV | | 0.499 | mg/L | 0.140420 | EYA | 11-Mar-2025 15:58:28 |
| | CCB | CCB | | 0.005 | mg/L | 0.001411 | EYA | 11-Mar-2025 15:59:29 |
| 14 | U11 | L2512368-02O | 11-MAR-2025 08-34 | 0.012 | mg/L | 0.003348 | EYA | 11-Mar-2025 16:00:30 |
| 15 | U12 | L2512368-04O | 11-MAR-2025 08-34 | 0.024 | mg/L | 0.006729 | EYA | 11-Mar-2025 16:01:28 |
| 16 | U13 | L2512368-05O | 11-MAR-2025 08-34 | 0.016 | mg/L | 0.004561 | EYA | 11-Mar-2025 16:02:27 |
| 17 | U14 | L2512368-07O | 11-MAR-2025 08-34 | 0.032 | mg/L | 0.009119 | EYA | 11-Mar-2025 16:03:25 |
| 18 | U15 | L2512368-08O | 11-MAR-2025 08-34 | 0.033 | mg/L | 0.009244 | EYA | 11-Mar-2025 16:04:23 |
| 19 | U16 | L2512368-10O | 11-MAR-2025 08-34 | 0.013 | mg/L | 0.003637 | EYA | 11-Mar-2025 16:05:24 |
| 20 | U17 | WG2038925-3O | 11-MAR-2025 08-34 | 0.014 | mg/L | 0.003844 | EYA | 11-Mar-2025 16:06:24 |
| 21 | U18 | WG2038925-4O | 11-MAR-2025 08-34 | 0.514 | mg/L | 0.144740 | EYA | 11-Mar-2025 16:06:57 |
| 22 | U19 | L2512368-11O | 11-MAR-2025 08-34 | 0.055 | mg/L | 0.015470 | EYA | 11-Mar-2025 16:07:55 |
| 23 | U20 | L2512368-13O | 11-MAR-2025 08-34 | 0.018 | mg/L | 0.004963 | EYA | 11-Mar-2025 16:08:46 |
| | CCV | CCV | | 0.494 | mg/L | 0.138923 | EYA | 11-Mar-2025 16:09:37 |
| | CCB | CCB | | 0.004 | mg/L | 0.001242 | EYA | 11-Mar-2025 16:10:29 |
| 24 | U21 | L2512368-14O | 11-MAR-2025 08-34 | 0.104 | mg/L | 0.029273 | EYA | 11-Mar-2025 16:11:20 |
| 25 | U22 | L2512368-16O | 11-MAR-2025 08-34 | 0.019 | mg/L | 0.005388 | EYA | 11-Mar-2025 16:12:11 |
| 26 | U23 | L2512368-17O | 11-MAR-2025 08-34 | 0.012 | mg/L | 0.003274 | EYA | 11-Mar-2025 16:13:02 |
| 27 | U24 | L2512368-19O | 11-MAR-2025 08-34 | 0.023 | mg/L | 0.006594 | EYA | 11-Mar-2025 16:13:54 |
| | CCV | CCV | | 0.503 | mg/L | 0.141515 | EYA | 11-Mar-2025 16:14:45 |
| | CCB | CCB | | 0.006 | mg/L | 0.001676 | EYA | 11-Mar-2025 16:15:36 |

# Quality Control

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 8A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-10 | | |
| **Matrix Spike** | : WG2038925-4 | **MS Analysis Date** | : 03/11/25 16:06 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Phosphate, Total | 0.040 | 1.53 | 1.58 | 101 | | | | | 80-120 | 15 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 8A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-10 | **Analysis Date** | : 03/11/25 16:05 |
| **Dup Sample ID** | : WG2038925-3 | **DUP Analysis Date** | : 03/11/25 16:06 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Phosphate, Total | 0.040 | 0.043 | 7 | 15 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2038925-2 | **LCS Analysis Date** | : 03/11/25 15:49 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Phosphate, Total | 1.53 | 1.55 | 101. | | | | | 84-118 | 15 |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phosphorus, Total | 7723-14-0 | 0.01 | 0.004 | mg/l | 80-120 | | 75-125 | 20 | 20 | 4500P-E | 28 days | 1 - Plastic 500ml H2SO4 preserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11468-1
**Page:** 1

**WETCHEM (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phosphorus, Total | 7723-14-0 | 5 | 1.67 | mg/kg | 52-148 | 20 | 75-125 | 20 | 20 | 4500P-E | 28 days | 1 - Glass 250ml/8oz unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phosphorus, Orthophosphate | 7723-14-0 | 0.005 | 0.001 | mg/l | 90-110 | | 80-120 | 20 | 20 | 4500P-E | 48 hours | 1 - Plastic 500ml unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11468-1
**Page:** 1

**WETCHEM (SOIL)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phosphorus, Orthophosphate | 7723-14-0 | 0.05 | 0.05 | mg/kg | | | | | | 4500P-E | 48 hours | 1 - Glass 250ml/8oz unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

# Calculations of TPhosphorus

Aqueous samples:

Calculate the concentration value of the sample directly from the standard curve. All calculations are done by SEAL (segmant flow spectrometer).

$$\text{Mg TPhosphorus/L} = \frac{\text{absorbance - y-intercept}}{\text{slope}} \times \text{Dilution Factor}$$

# Wet Chemistry
# By
# IC Methods

# Results

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-01 | Date Collected | : 03/05/25 11:20 |
| Client ID | : 5A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 23:38 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : AVT, |
| Lab File ID | : WG2038790-91-92-93 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | 0.072 | 0.050 | 0.013 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-02 | Date Collected | : 03/05/25 11:25 |
| Client ID | : 5B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/10/25 23:50 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : AVT, |
| Lab File ID | : WG2038790-91-92-93 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | 0.063 | 0.050 | 0.013 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-04 | Date Collected | : 03/05/25 09:25 |
| Client ID | : 6A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 00:02 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : AVT, |
| Lab File ID | : WG2038790-91-92-93 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | 0.070 | 0.050 | 0.013 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-05 | Date Collected | : 03/05/25 09:27 |
| Client ID | : 6B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 00:14 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : AVT, |
| Lab File ID | : WG2038790-91-92-93 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | 0.066 | 0.050 | 0.013 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-07 | Date Collected | : 03/05/25 08:15 |
| Client ID | : 7A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 00:26 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : AVT, |
| Lab File ID | : WG2038790-91-92-93 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | 0.307 | 0.050 | 0.013 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-08 | Date Collected | : 03/05/25 08:13 |
| Client ID | : 7B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 00:38 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : AVT, |
| Lab File ID | : WG2038790-91-92-93 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | 0.072 | 0.050 | 0.013 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-10 | Date Collected | : 03/05/25 16:20 |
| Client ID | : 8A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 00:50 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : AVT, |
| Lab File ID | : WG2038790-91-92-93 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | 0.098 | 0.050 | 0.013 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-11 | Date Collected | : 03/05/25 16:45 |
| Client ID | : 8B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 01:38 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : AVT, |
| Lab File ID | : WG2038790-91-92-93 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | 0.057 | 0.050 | 0.013 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-13 | Date Collected | : 03/05/25 14:10 |
| Client ID | : 9A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 01:50 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : AVT, |
| Lab File ID | : WG2038790-91-92-93 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | 0.069 | 0.050 | 0.013 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-14 | Date Collected | : 03/05/25 15:15 |
| Client ID | : 9B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 02:03 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : AVT, |
| Lab File ID | : WG2038790-91-92-93 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | 0.053 | 0.050 | 0.013 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-16 | Date Collected | : 03/05/25 12:45 |
| Client ID | : 10A | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 02:15 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : AVT, |
| Lab File ID | : WG2038790-91-92-93 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | 0.087 | 0.050 | 0.013 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-17 | Date Collected | : 03/05/25 12:55 |
| Client ID | : 10B | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 02:27 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : AVT, |
| Lab File ID | : WG2038790-91-92-93 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | 0.074 | 0.050 | 0.013 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : L2512368-19 | Date Collected | : 03/05/25 00:00 |
| Client ID | : DUP001 | Date Received | : 03/05/25 |
| Sample Location | : MIDDLE ISLAND | Date Analyzed | : 03/11/25 02:39 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : AVT, |
| Lab File ID | : WG2038790-91-92-93 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | 0.084 | 0.050 | 0.013 | |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038792-1 | Date Collected | : NA |
| Client ID | : WG2038792-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/10/25 16:22 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : AVT, |
| Lab File ID | : WG2038792-93 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | ND | 0.050 | 0.013 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038793-1 | Date Collected | : NA |
| Client ID | : WG2038793-1BLANK | Date Received | : NA |
| Sample Location | : | Date Analyzed | : 03/10/25 16:46 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : AVT, |
| Lab File ID | : WG2038792-93 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | ND | 0.050 | 0.013 | U |

# Form 1
# WETCHEM

| | | | |
|---|---|---|---|
| Client | : P. W. Grosser | Lab Number | : L2512368 |
| Project Name | : ROANOKE SAND AND GRAVEL | Project Number | : BSD1504 |
| Lab ID | : WG2038793-4 | Date Collected | : 03/06/25 10:24 |
| Client ID | : WG2038793-4 DUP | Date Received | : 03/06/25 |
| Sample Location | : | Date Analyzed | : 03/11/25 03:27 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 44,300.0 | Analyst | : AVT, |
| Lab File ID | : WG2038790-91-92-93 | Instrument ID | : IC3 |
| Sample Amount | : | %Solids | : N/A |
| Digestion Method | : | Date Digested | : |

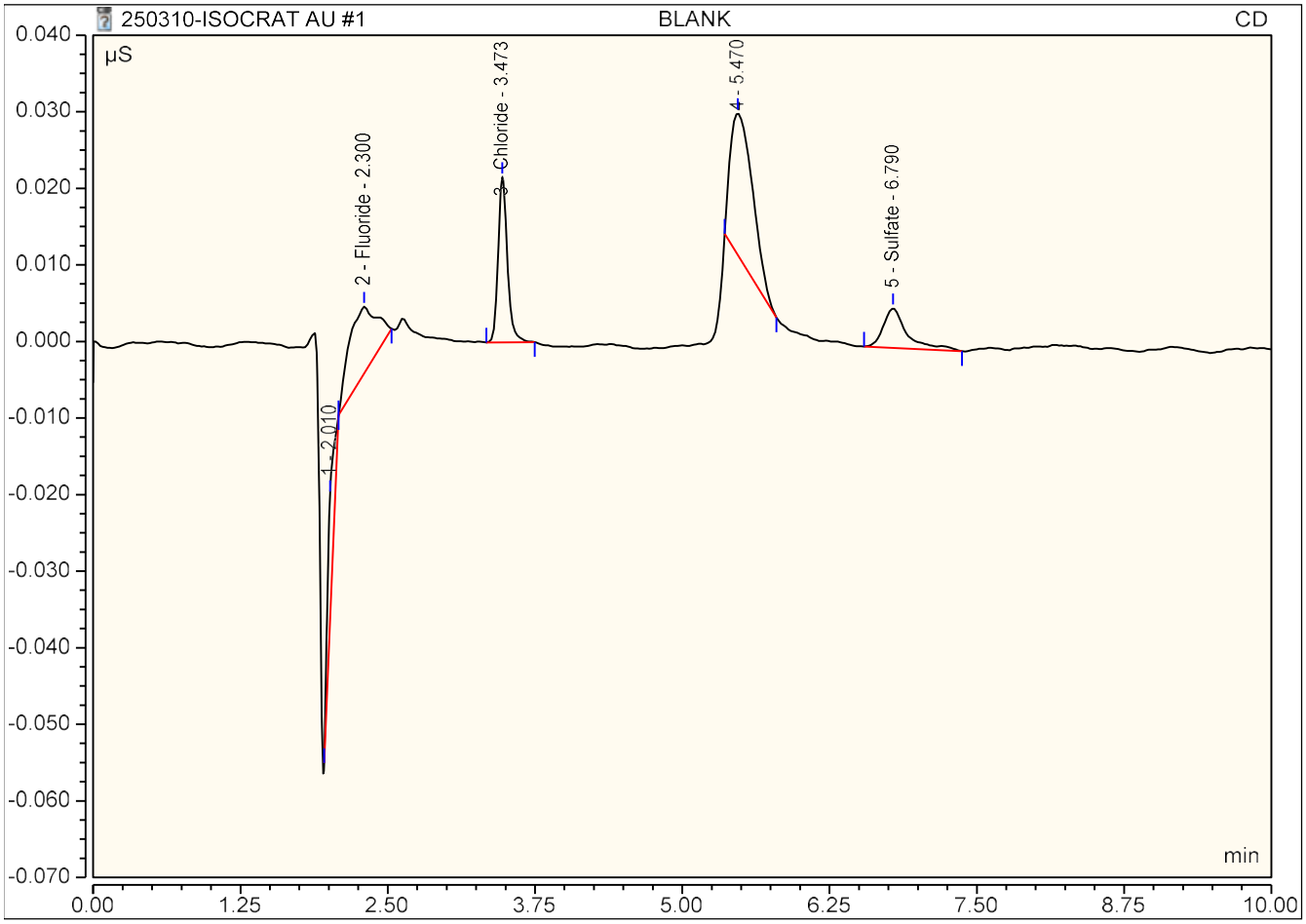
| | | mg/l | | | |
|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Qualifier |
| 24959-67-9 | Bromide | 0.048 | 0.050 | 0.013 | J |

# Sample Raw Data

## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **BLANK** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **06-Mar-2025 / 18:55** | *Run Time:* | **10.00** |

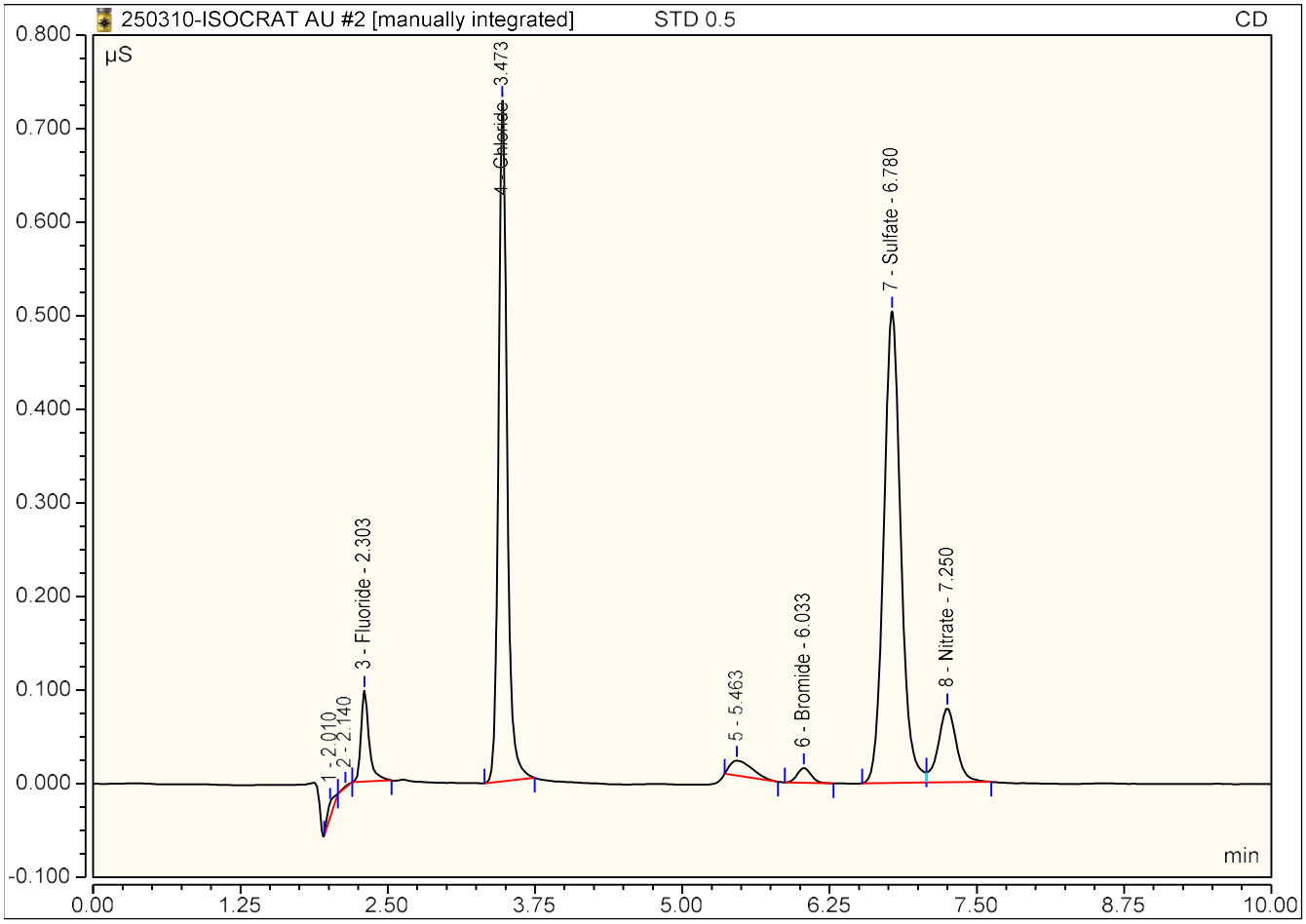
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.002 | 0.009 | 0.0293 |
| 3 | 3.47 | **Chloride** | BMB | 0.002 | 0.022 | 0.0946 |
| 5 | 6.79 | **Sulfate** | BMB | 0.001 | 0.005 | 0.2070 |
| | | **TOTAL:** | | 0.01 | 0.04 | 0.33 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 0.5** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **06-Mar-2025 / 19:07** | *Run Time:* | **10.00** |

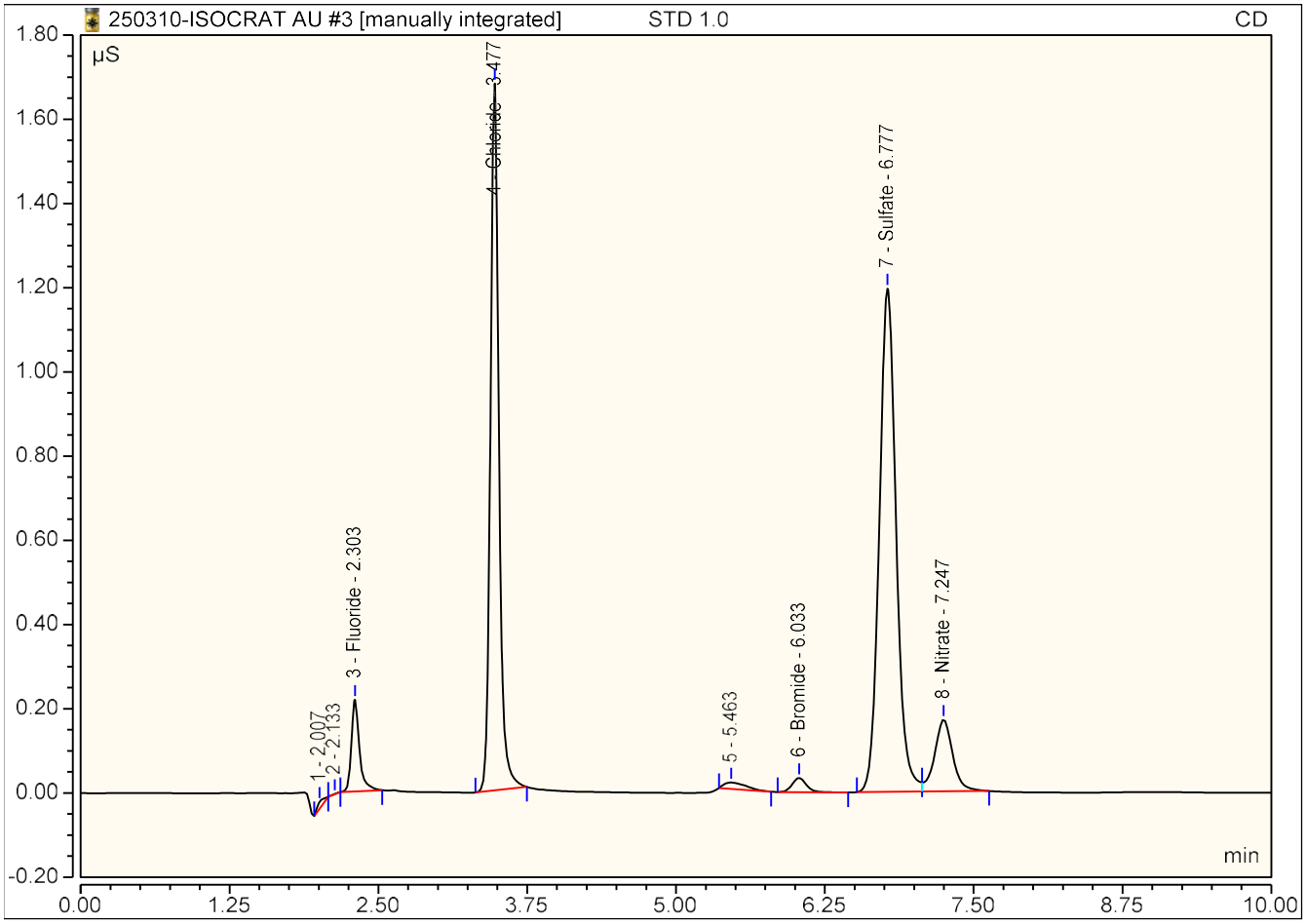
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB | 0.008 | 0.097 | 0.0395 |
| 4 | 3.47 | **Chloride** | BMB | 0.062 | 0.727 | 0.2684 |
| 6 | 6.03 | **Bromide** | BMB | 0.002 | 0.016 | 0.0514 |
| 7 | 6.78 | **Sulfate** | BM * | 0.084 | 0.504 | 0.5313 |
| 8 | 7.25 | **Nitrate** | MB* | 0.014 | 0.079 | 0.0463 |
| **TOTAL:** | | | | 0.17 | 1.42 | 0.94 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 1.0** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **06-Mar-2025 / 19:19** | *Run Time:* | **10.00** |

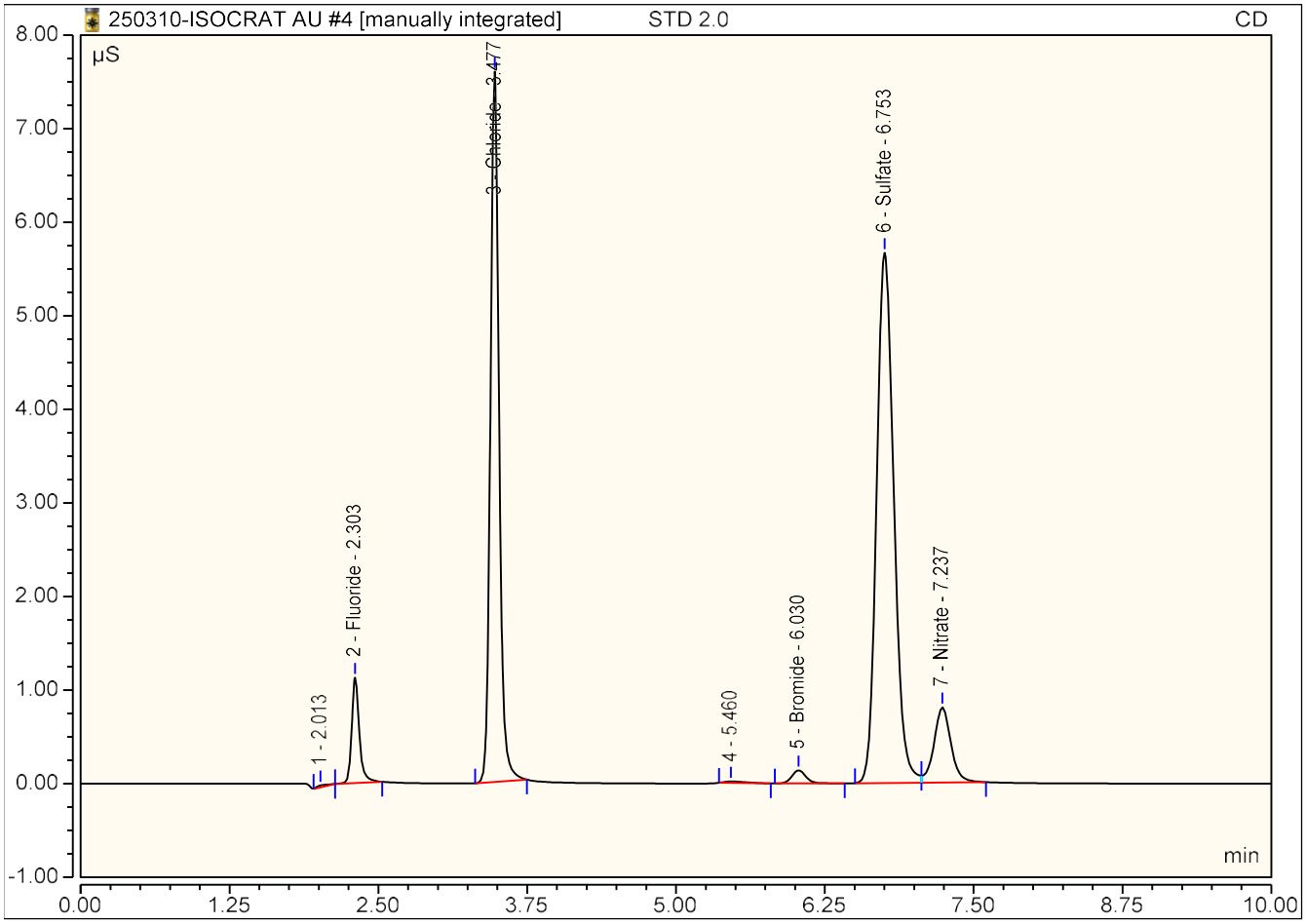
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB | 0.017 | 0.218 | 0.0573 |
| 4 | 3.48 | **Chloride** | BMB | 0.140 | 1.679 | 0.4952 |
| 6 | 6.03 | **Bromide** | BMB | 0.005 | 0.034 | 0.0721 |
| 7 | 6.78 | **Sulfate** | BM * | 0.195 | 1.195 | 0.9629 |
| 8 | 7.25 | **Nitrate** | MB* | 0.030 | 0.170 | 0.0651 |
| | | **TOTAL:** | | 0.39 | 3.30 | 1.65 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 2.0** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **06-Mar-2025 / 19:31** | *Run Time:* | **10.00** |

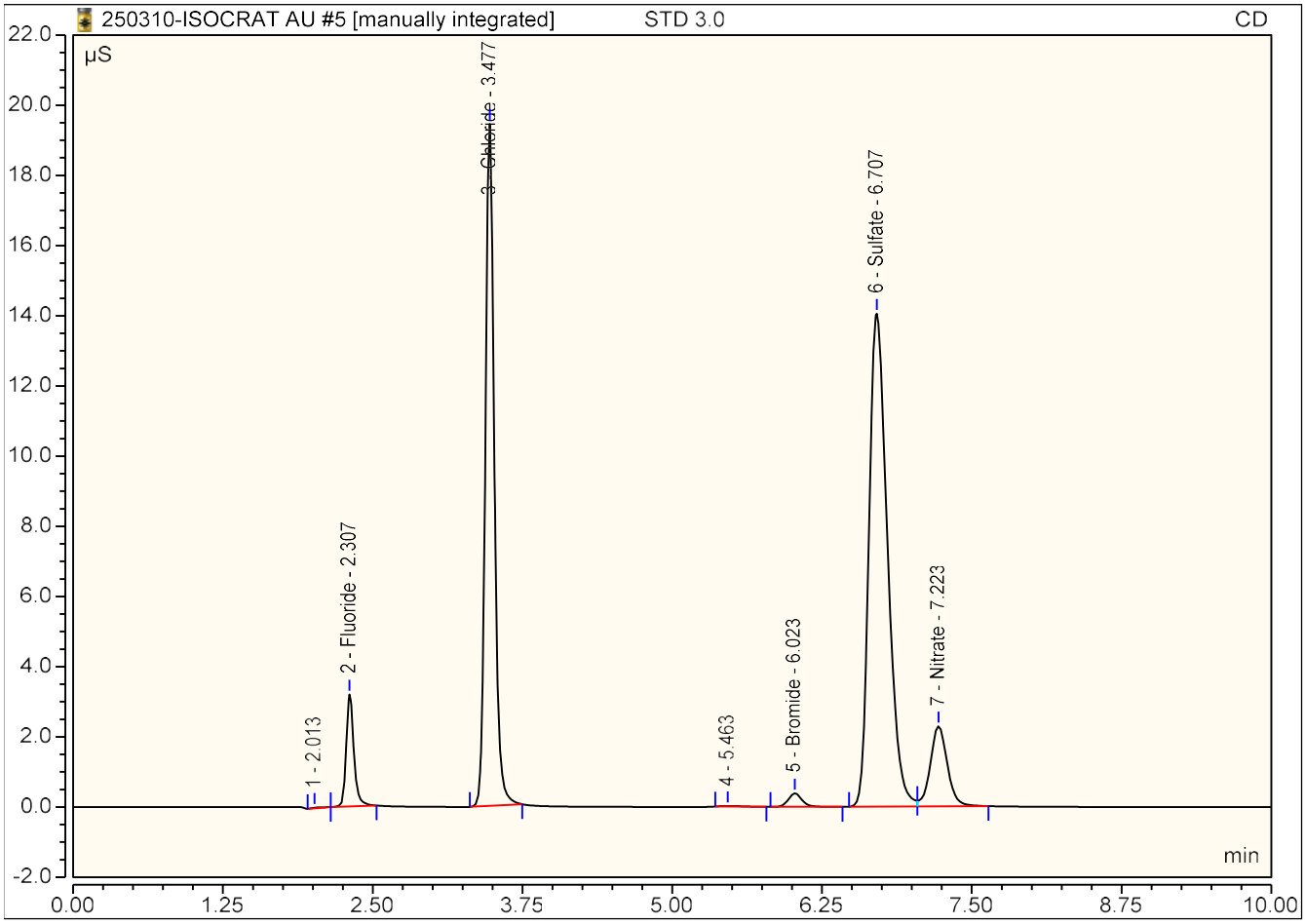
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.082 | 1.127 | 0.1825 |
| 3 | 3.48 | **Chloride** | BMB | 0.643 | 7.591 | 1.9581 |
| 5 | 6.03 | **Bromide** | BMB | 0.019 | 0.141 | 0.1900 |
| 6 | 6.75 | **Sulfate** | BM * | 0.945 | 5.665 | 3.8903 |
| 7 | 7.24 | **Nitrate** | MB* | 0.133 | 0.804 | 0.1855 |
| **TOTAL:** | | | | 1.82 | 15.33 | 6.41 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 3.0** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **06-Mar-2025 / 19:43** | *Run Time:* | **10.00** |

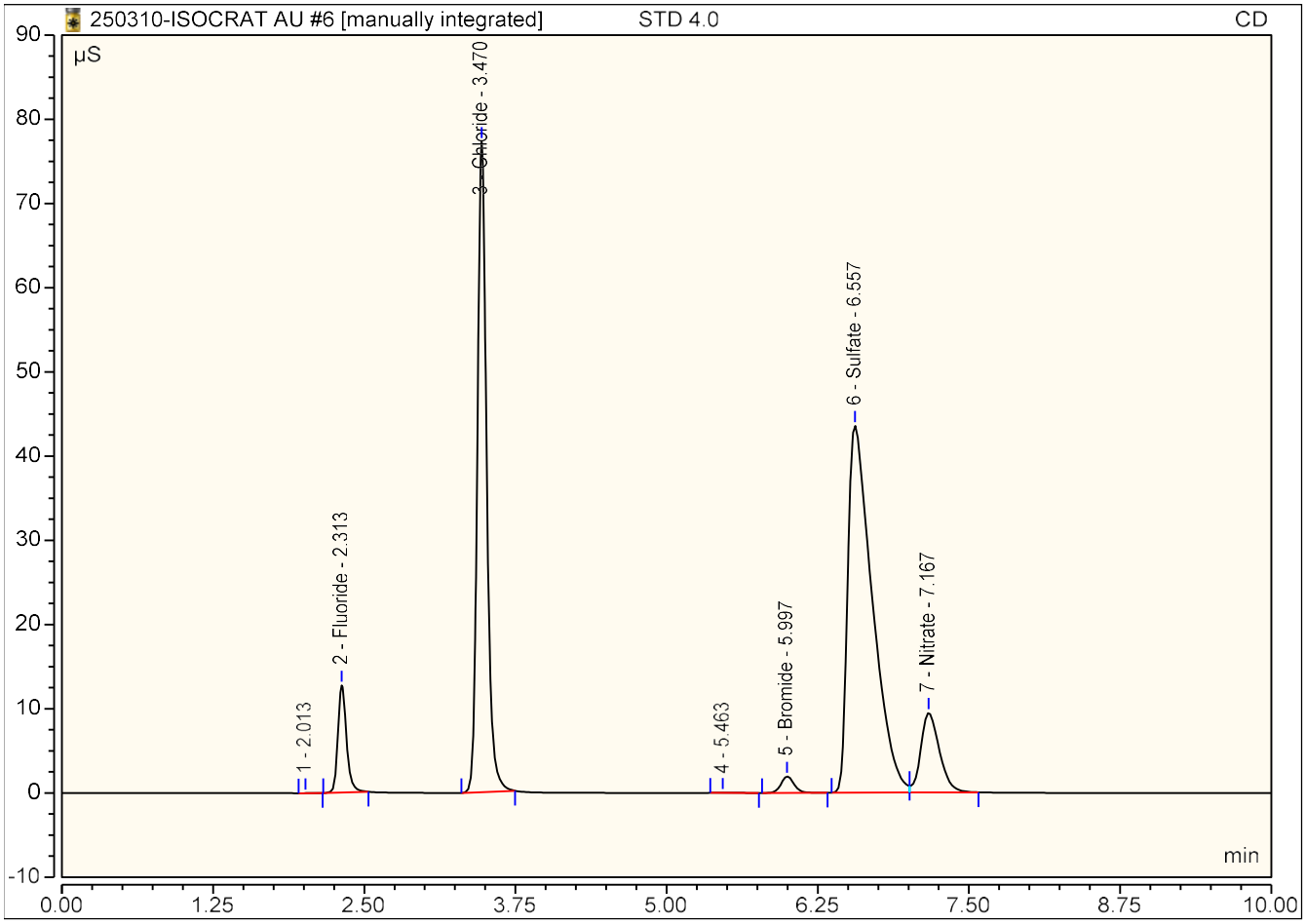
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.236 | 3.190 | 0.4771 |
| 3 | 3.48 | **Chloride** | BMB | 1.680 | 19.436 | 4.9752 |
| 5 | 6.02 | **Bromide** | BMB | 0.052 | 0.388 | 0.4486 |
| 6 | 6.71 | **Sulfate** | BM * | 2.500 | 14.051 | 9.9595 |
| 7 | 7.22 | **Nitrate** | MB* | 0.377 | 2.284 | 0.4697 |
| | | **TOTAL:** | | 4.85 | 39.35 | 16.33 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 4.0** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **06-Mar-2025 / 19:55** | *Run Time:* | **10.00** |

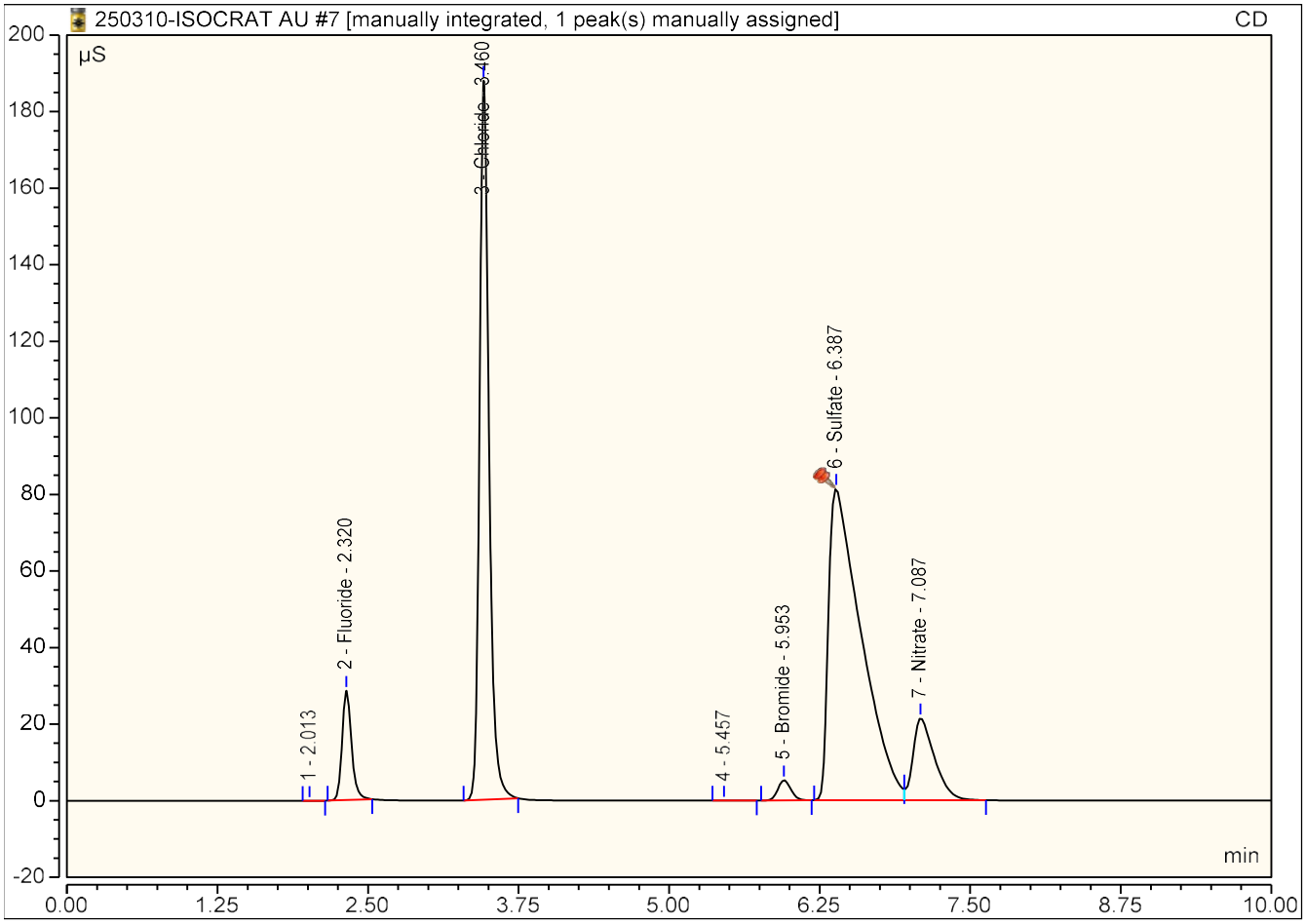
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 1.043 | 12.703 | 2.0262 |
| 3 | 3.47 | **Chloride** | BMB | 6.876 | 77.211 | 20.0817 |
| 5 | 6.00 | **Bromide** | BMB | 0.248 | 1.949 | 2.0130 |
| 6 | 6.56 | **Sulfate** | BM * | 10.261 | 43.563 | 40.2455 |
| 7 | 7.17 | **Nitrate** | MB* | 1.694 | 9.469 | 2.0084 |
| **TOTAL:** | | | | 20.12 | 144.90 | 66.37 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 5.0** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **06-Mar-2025 / 20:08** | *Run Time:* | **10.00** |

| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 2.589 | 28.581 | 4.9924 |
| 3 | 3.46 | **Chloride** | BMB | 17.155 | 187.803 | 49.9715 |
| 5 | 5.95 | **Bromide** | BMB | 0.672 | 5.286 | 5.3987 |
| 6 | 6.39 | **Sulfate** | BM *^ | 25.551 | 81.356 | 99.9104 |
| 7 | 7.09 | **Nitrate** | MB* | 4.428 | 21.412 | 5.2029 |
| | | **TOTAL:** | | 50.39 | 324.44 | 165.48 |



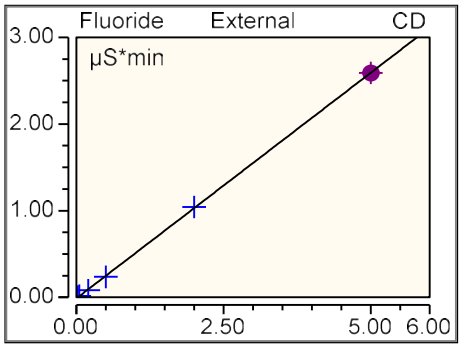
## Calibration Batch Report

| | | | |
|---|---|---|---|
| *Sequence:* | **250310-ISOCRAT AU** | *Injection Volume:* | **25.00** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **06-Mar-2025 / 20:08** | *Run Time:* | **10** |

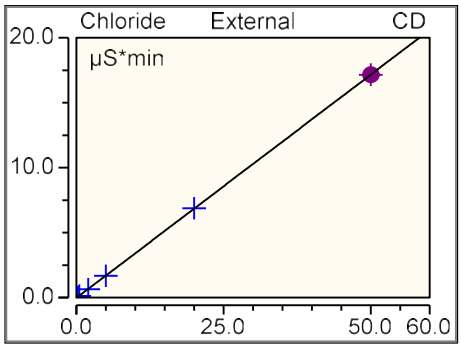
**Calibration Summary**

| Peak Name | Eval.Type | Cal.Type | Points | Offset (C0) | Slope (C1) | Curve (C2) | Coeff.Det. % |
|---|---|---|---|---|---|---|---|
| Fluoride | Area | in, WithOffse | 6.000 | -0.013 | 0.521 | 0.000 | 99.9904 |
| Chloride | Area | in, WithOffse | 6.000 | -0.031 | 0.344 | 0.000 | 99.9995 |
| Bromide | Area | in, WithOffse | 5.000 | -0.004 | 0.125 | 0.000 | 99.8514 |
| Sulfate | Area | in, WithOffse | 6.000 | -0.052 | 0.256 | 0.000 | 99.9989 |
| Nitrate | Area | in, WithOffse | 5.000 | -0.025 | 0.856 | 0.000 | 99.9317 |
| | | **AVERAGE:** | | -0.0250 | 0.4205 | 0.0000 | 99.9544 |

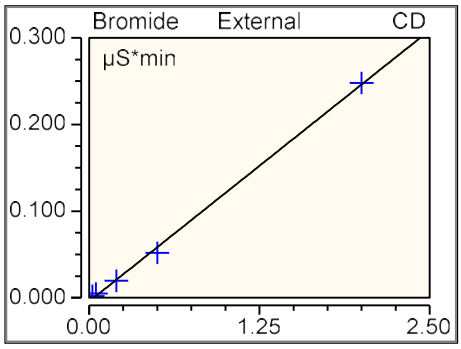
| Injection Name | Ret.Time min CD | Area µS*min CD | Height µS CD | Amount CD |
|---|---|---|---|---|
| | Fluoride | Fluoride | Fluoride | Fluoride |
| STD 0.5 | 2.303 | 0.0077 | 0.097 | 0.040 |
| STD 1.0 | 2.303 | 0.0170 | 0.218 | 0.057 |
| STD 2.0 | 2.303 | 0.0823 | 1.127 | 0.183 |
| STD 3.0 | 2.307 | 0.2358 | 3.190 | 0.477 |
| STD 4.0 | 2.313 | 1.0431 | 12.703 | 2.026 |
| STD 5.0 | 2.320 | 2.5888 | 28.581 | 4.992 |
| **Average** | 2.308 | | | |
| **Rel. Std. Dev.** | 0.299 % | | | |



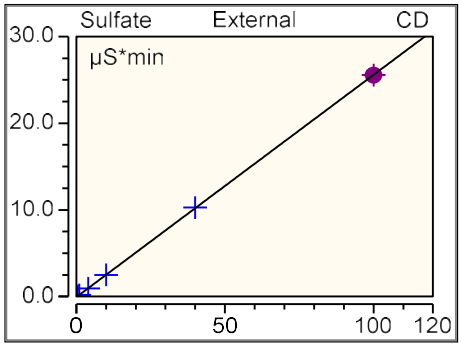

| Injection Name | Ret.Time min CD | Area µS*min CD | Height µS CD | Amount CD |
|---|---|---|---|---|
| | Chloride | Chloride | Chloride | Chloride |
| STD 0.5 | 3.473 | 0.0617 | 0.727 | 0.268 |
| STD 1.0 | 3.477 | 0.1397 | 1.679 | 0.495 |
| STD 2.0 | 3.477 | 0.6428 | 7.591 | 1.958 |
| STD 3.0 | 3.477 | 1.6804 | 19.436 | 4.975 |
| STD 4.0 | 3.470 | 6.8756 | 77.211 | 20.082 |
| STD 5.0 | 3.460 | 17.1549 | 187.803 | 49.971 |
| **Average** | 3.472 | | | |
| **Rel. Std. Dev.** | 0.189 % | | | |



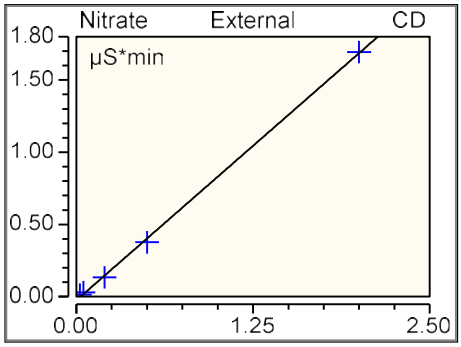

| Injection Name | Ret.Time min CD | Area µS*min CD | Height µS CD | Amount CD |
|---|---|---|---|---|
| | Bromide | Bromide | Bromide | Bromide |
| STD 0.5 | 6.033 | 0.0021 | 0.016 | 0.051 |
| STD 1.0 | 6.033 | 0.0047 | 0.034 | 0.072 |
| STD 2.0 | 6.030 | 0.0195 | 0.141 | 0.190 |
| STD 3.0 | 6.023 | 0.0519 | 0.388 | 0.449 |
| STD 4.0 | 5.997 | 0.2478 | 1.949 | 2.013 |
| STD 5.0 | 5.953 | 0.6720 | 5.286 | 5.399 |
| **Average** | 6.012 | | | |
| **Rel. Std. Dev.** | 0.528 % | | | |



| Injection Name | Ret.Time min CD | Area µS*min CD | Height µS CD | Amount CD |
|---|---|---|---|---|
| | Sulfate | Sulfate | Sulfate | Sulfate |
| STD 0.5 | 6.780 | 0.0843 | 0.504 | 0.531 |
| STD 1.0 | 6.777 | 0.1949 | 1.195 | 0.963 |
| STD 2.0 | 6.753 | 0.9451 | 5.665 | 3.890 |
| STD 3.0 | 6.707 | 2.5004 | 14.051 | 9.959 |
| STD 4.0 | 6.557 | 10.2614 | 43.563 | 40.246 |
| STD 5.0 | 6.387 | 25.5509 | 81.356 | 99.910 |
| **Average** | 6.660 | | | |
| **Rel. Std. Dev.** | 2.367 % | | | |



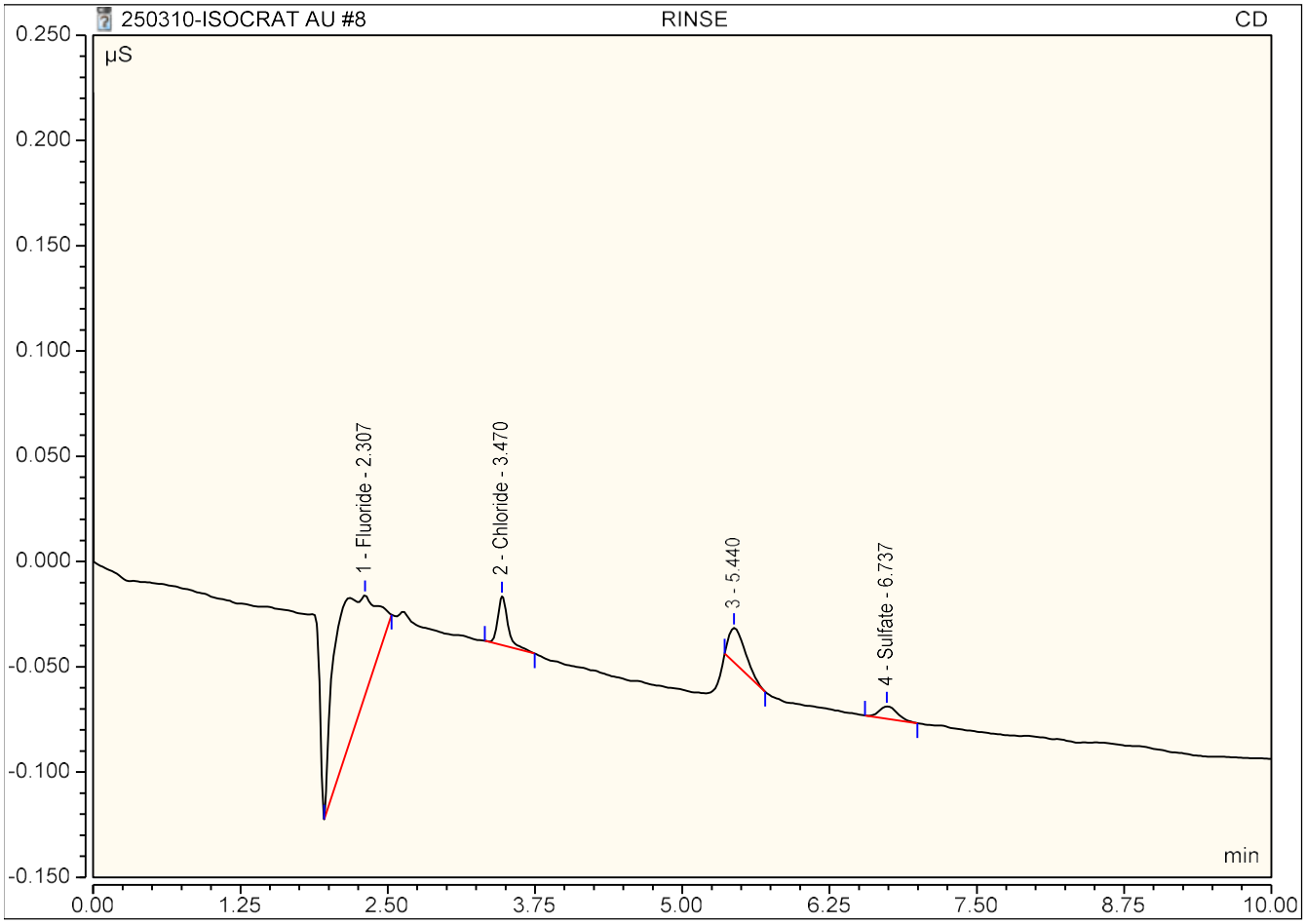

| Injection Name | Ret.Time min CD | Area µS*min CD | Height µS CD | Amount CD |
|---|---|---|---|---|
| | Nitrate | Nitrate | Nitrate | Nitrate |
| STD 0.5 | 7.250 | 0.0142 | 0.079 | 0.046 |
| STD 1.0 | 7.247 | 0.0302 | 0.170 | 0.065 |
| STD 2.0 | 7.237 | 0.1333 | 0.804 | 0.186 |
| STD 3.0 | 7.223 | 0.3766 | 2.284 | 0.470 |
| STD 4.0 | 7.167 | 1.6937 | 9.469 | 2.008 |
| STD 5.0 | 7.087 | 4.4282 | 21.412 | 5.203 |
| **Average** | 7.202 | | | |
| **Rel. Std. Dev.** | 0.889 % | | | |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **RINSE** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 15:22** | *Run Time:* | **10.00** |

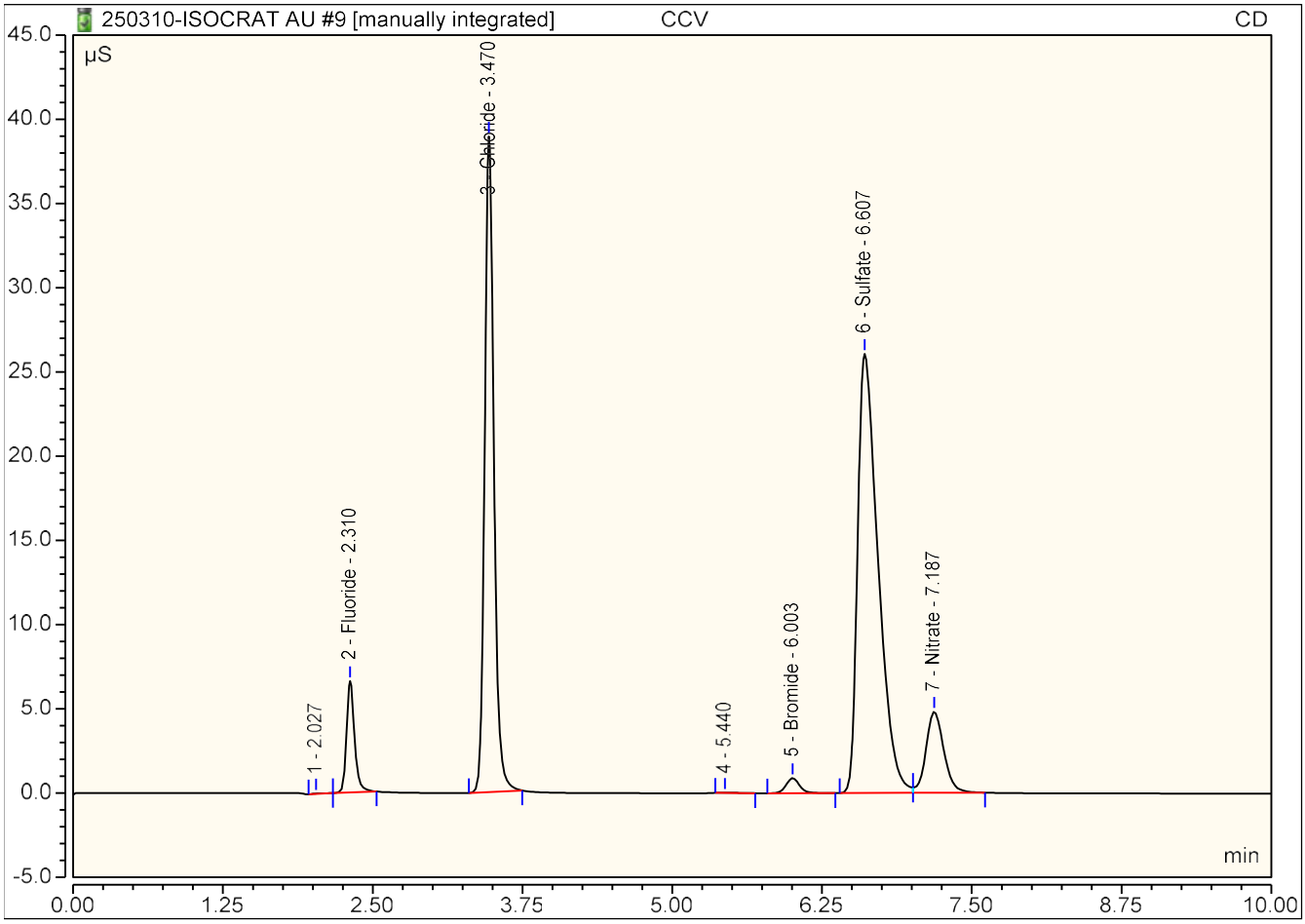
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 1 | 2.31 | **Fluoride** | BMB | 0.025 | 0.048 | 0.0731 |
| 2 | 3.47 | **Chloride** | BMB | 0.002 | 0.023 | 0.0956 |
| 4 | 6.74 | **Sulfate** | BMB | 0.001 | 0.006 | 0.2064 |
| | | **TOTAL:** | | 0.03 | 0.08 | 0.38 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 15:34** | *Run Time:* | **10.00** |

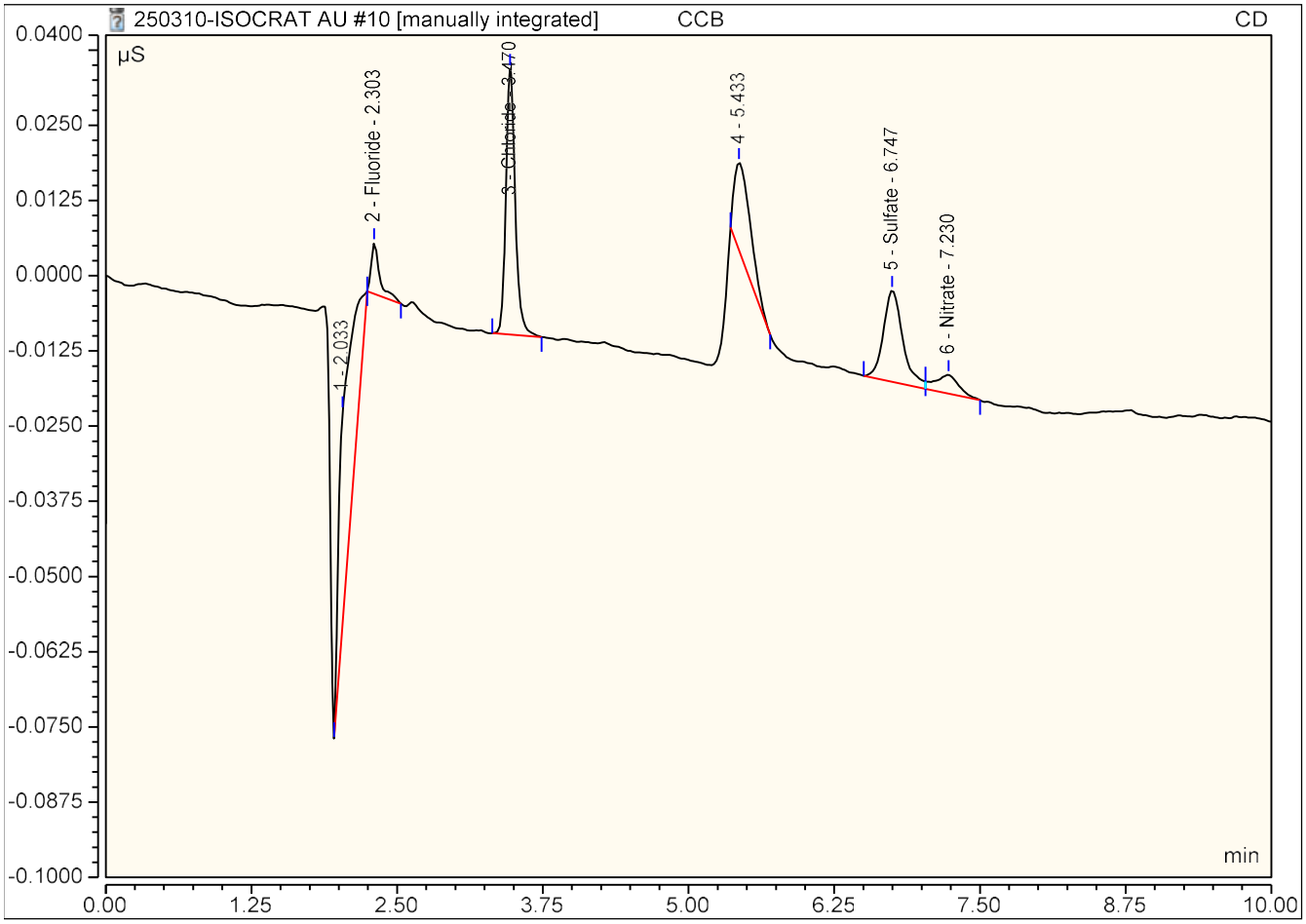
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.509 | 6.610 | 1.0020 |
| 3 | 3.47 | **Chloride** | BMB | 3.464 | 38.918 | 10.1605 |
| 5 | 6.00 | **Bromide** | BMB | 0.119 | 0.899 | 0.9823 |
| 6 | 6.61 | **Sulfate** | BM * | 5.160 | 26.066 | 20.3383 |
| 7 | 7.19 | **Nitrate** | MB* | 0.828 | 4.818 | 0.9973 |
| **TOTAL:** | | | | 10.08 | 77.31 | 33.48 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 15:46** | *Run Time:* | **10.00** |

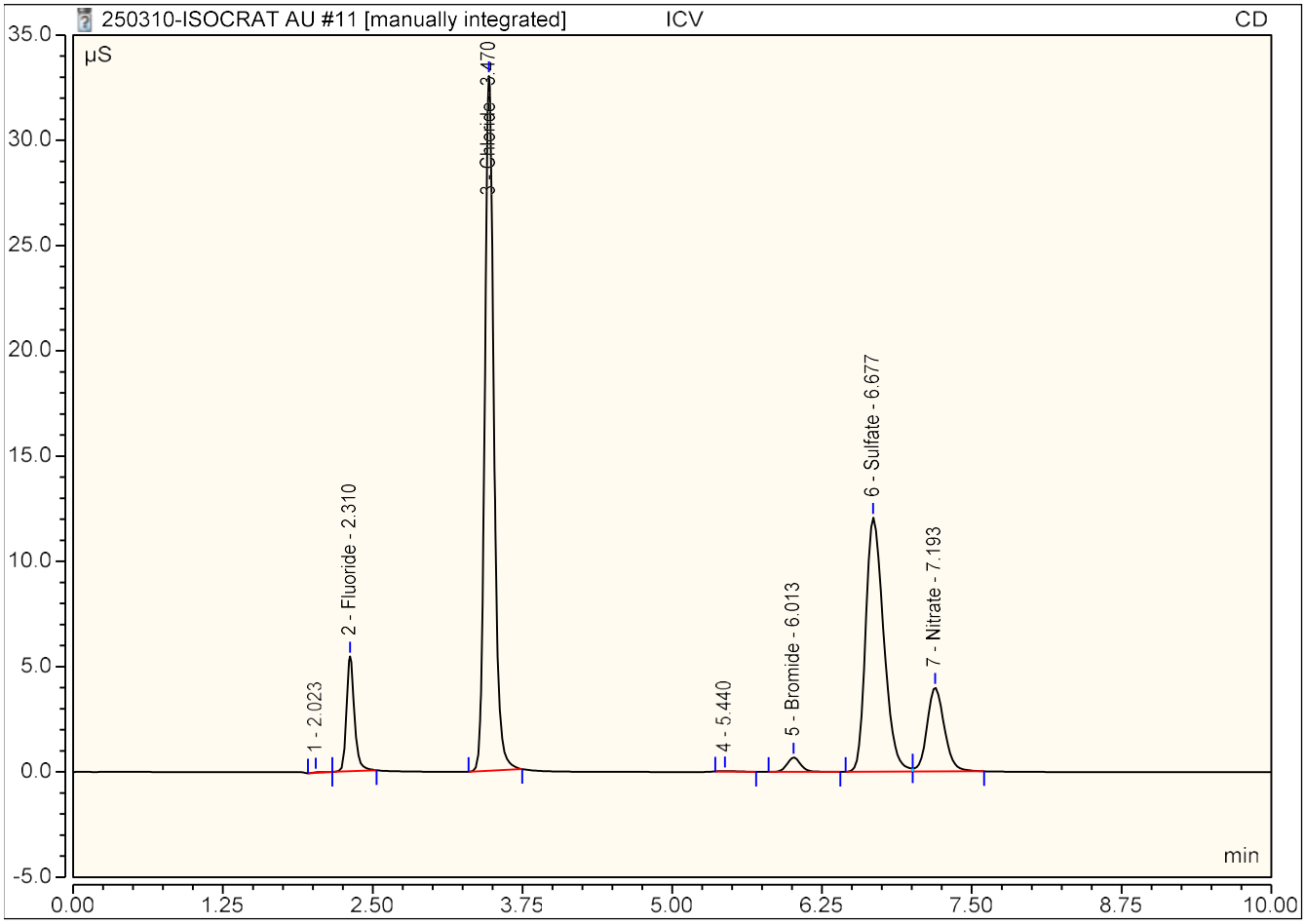
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.001 | 0.008 | 0.0260 |
| 3 | 3.47 | **Chloride** | BMB | 0.004 | 0.044 | 0.1007 |
| 5 | 6.75 | **Sulfate** | BM * | 0.003 | 0.015 | 0.2137 |
| 6 | 7.23 | **Nitrate** | MB* | 0.001 | 0.003 | 0.0306 |
| **TOTAL:** | | | | 0.01 | 0.07 | 0.37 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **ICV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 15:58** | *Run Time:* | **10.00** |

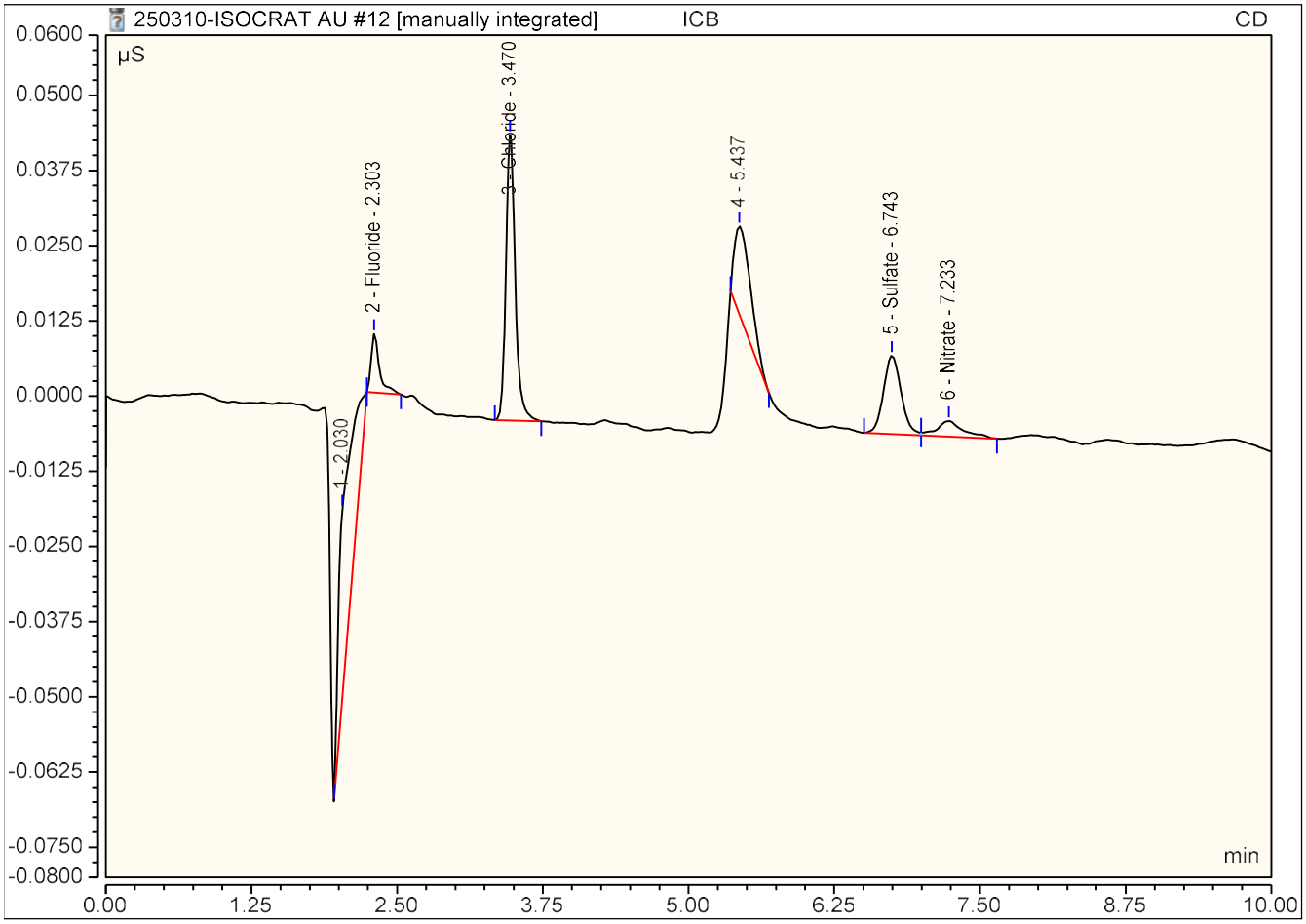
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.416 | 5.456 | 0.8225 |
| 3 | 3.47 | **Chloride** | BMB | 2.922 | 33.002 | 8.5868 |
| 5 | 6.01 | **Bromide** | BMB | 0.092 | 0.687 | 0.7676 |
| 6 | 6.68 | **Sulfate** | BM * | 2.106 | 12.067 | 8.4191 |
| 7 | 7.19 | **Nitrate** | MB* | 0.666 | 3.987 | 0.8080 |
| | | **TOTAL:** | | 6.20 | 55.20 | 19.40 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **ICB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 16:10** | *Run Time:* | **10.00** |

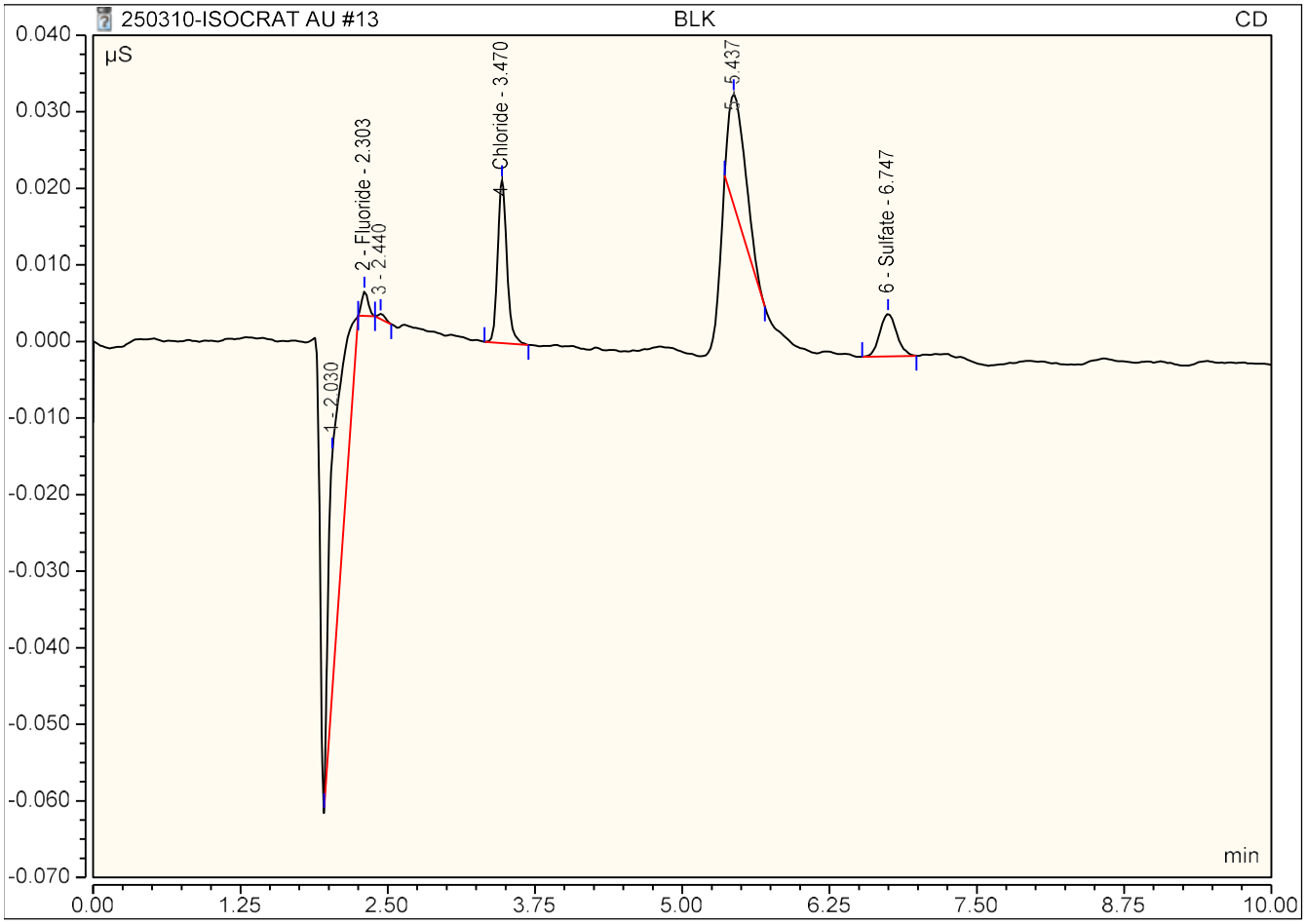
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.001 | 0.010 | 0.0262 |
| 3 | 3.47 | **Chloride** | BMB | 0.004 | 0.047 | 0.1016 |
| 5 | 6.74 | **Sulfate** | BM * | 0.002 | 0.013 | 0.2112 |
| 6 | 7.23 | **Nitrate** | MB* | 0.001 | 0.003 | 0.0306 |
| **TOTAL:** | | | | 0.01 | 0.07 | 0.37 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **BLK** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 16:22** | *Run Time:* | **10.00** |

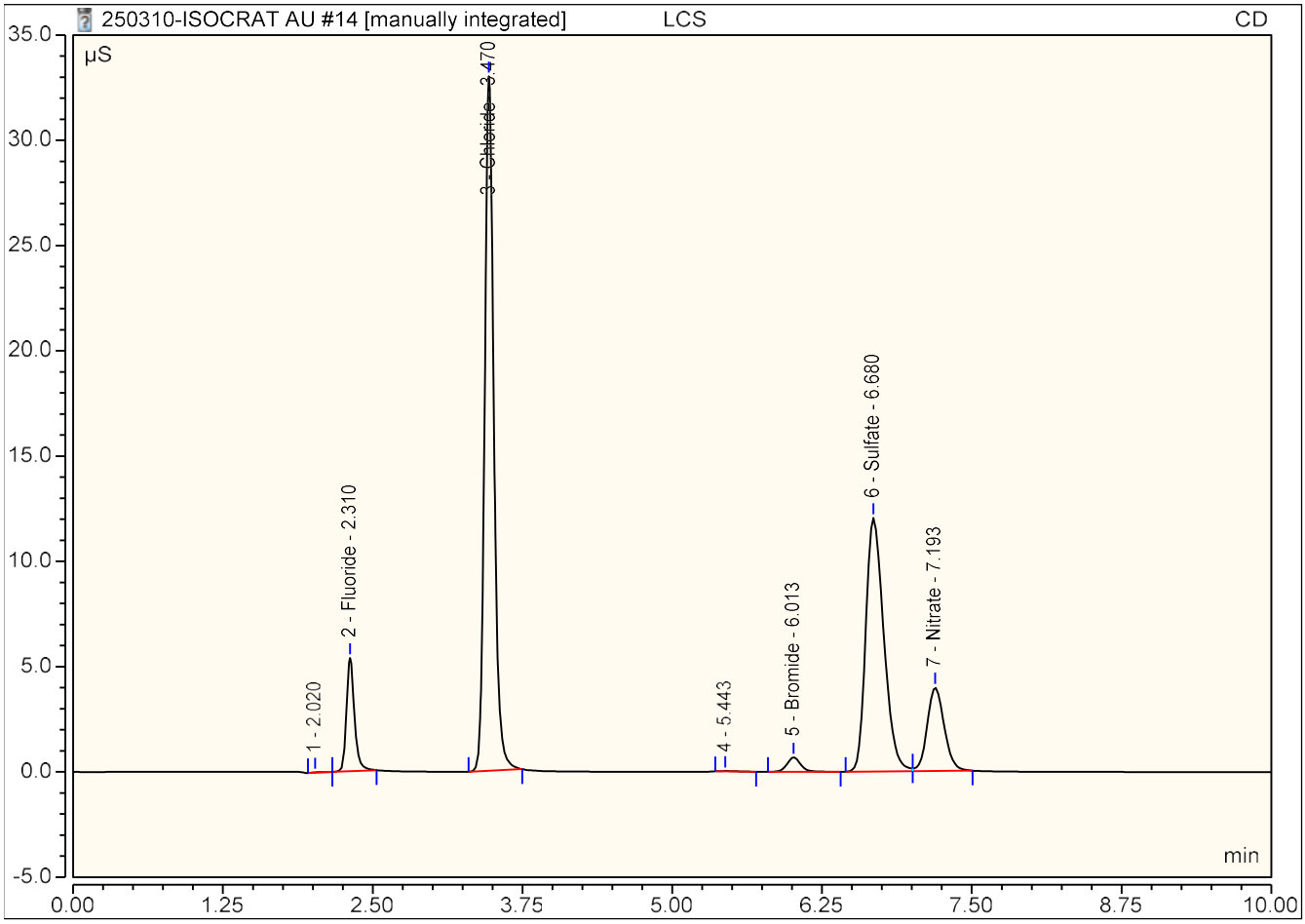
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.000 | 0.003 | 0.0251 |
| 4 | 3.47 | **Chloride** | BMB | 0.002 | 0.021 | 0.0945 |
| 6 | 6.75 | **Sulfate** | BMB | 0.001 | 0.006 | 0.2058 |
| | | **TOTAL:** | | 0.00 | 0.03 | 0.33 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **LCS** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 16:34** | *Run Time:* | **10.00** |

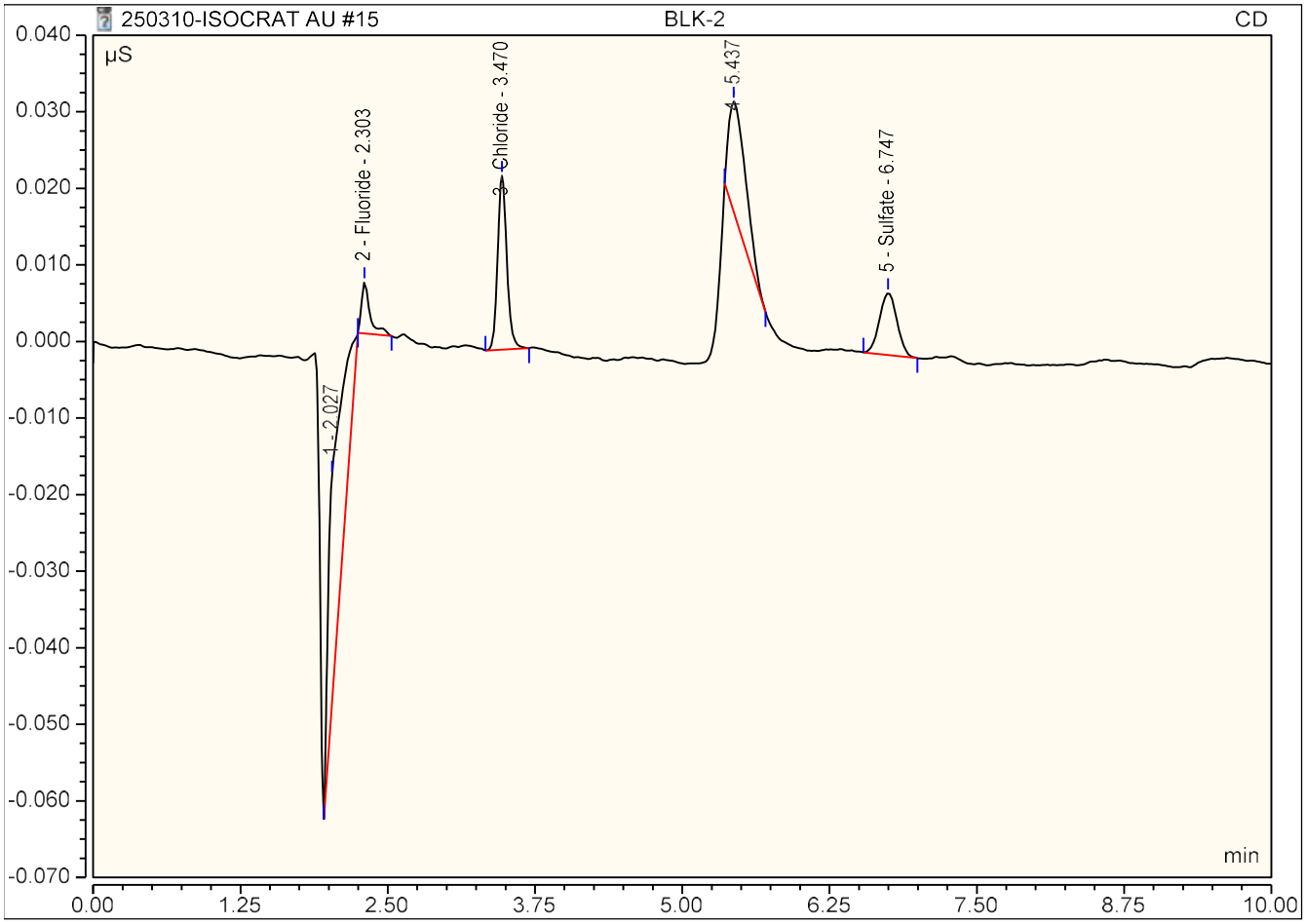
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.413 | 5.378 | 0.8170 |
| 3 | 3.47 | **Chloride** | BMB | 2.923 | 32.988 | 8.5887 |
| 5 | 6.01 | **Bromide** | BMB | 0.091 | 0.683 | 0.7598 |
| 6 | 6.68 | **Sulfate** | BM * | 2.097 | 12.039 | 8.3873 |
| 7 | 7.19 | **Nitrate** | MB* | 0.652 | 3.966 | 0.7914 |
| | | **TOTAL:** | | 6.18 | 55.05 | 19.34 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **BLK-2** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 16:46** | *Run Time:* | **10.00** |

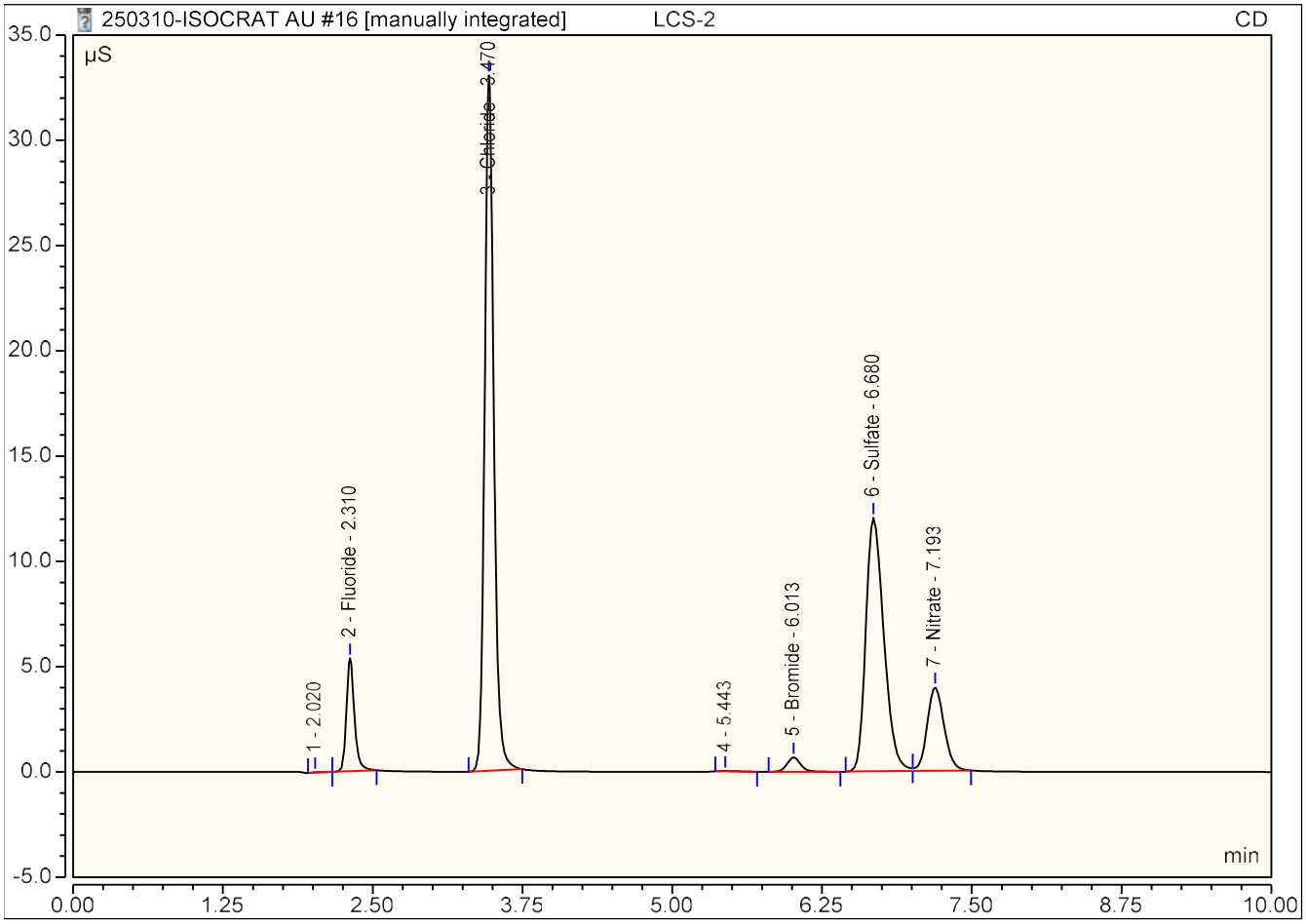
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.001 | 0.007 | 0.0258 |
| 3 | 3.47 | **Chloride** | BMB | 0.002 | 0.023 | 0.0948 |
| 5 | 6.75 | **Sulfate** | BMB | 0.001 | 0.008 | 0.2077 |
| **TOTAL:** | | | | 0.00 | 0.04 | 0.33 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **LCS-2** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 16:59** | *Run Time:* | **10.00** |

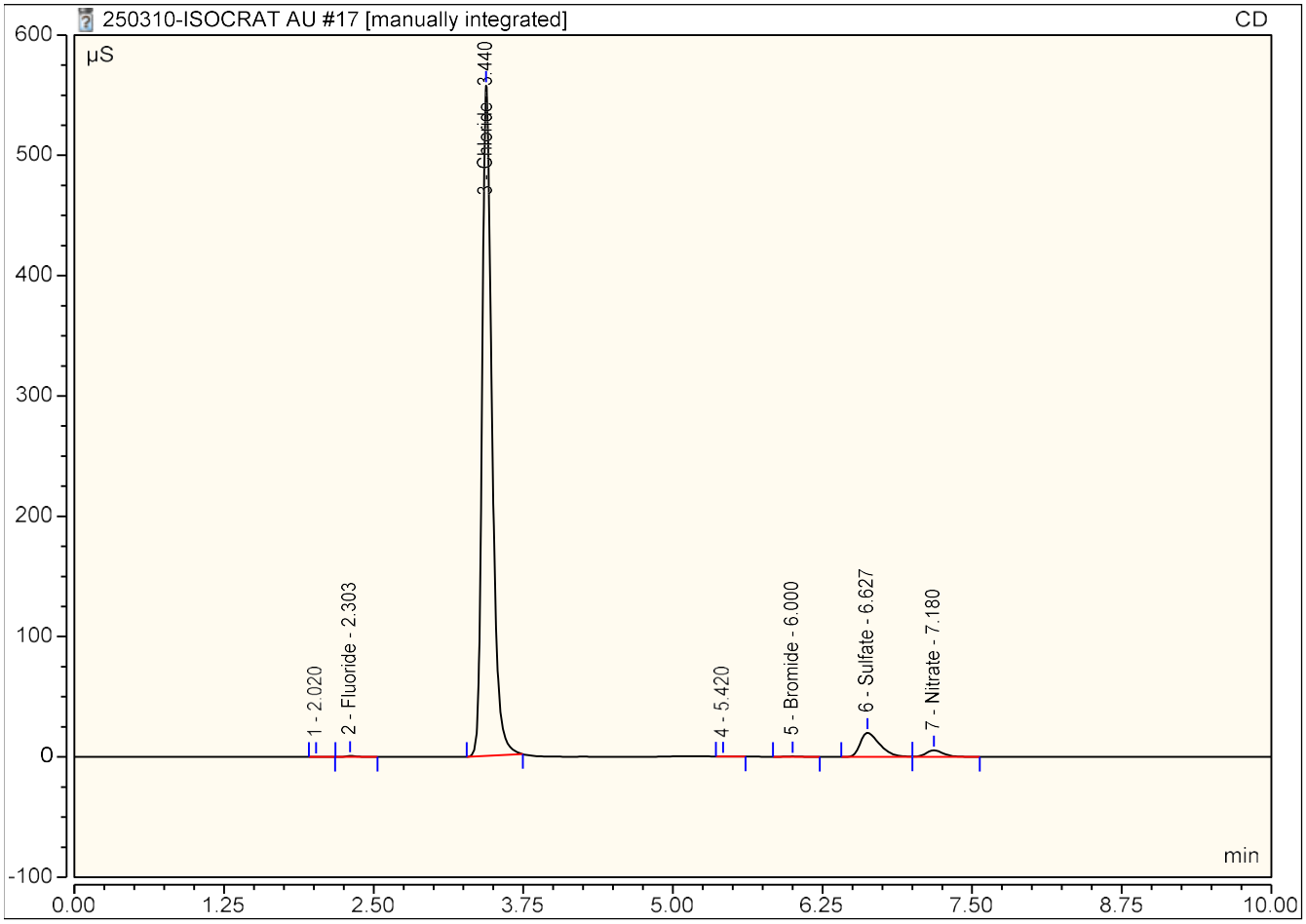
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.413 | 5.364 | 0.8169 |
| 3 | 3.47 | **Chloride** | BMB | 2.923 | 33.031 | 8.5869 |
| 5 | 6.01 | **Bromide** | BMB | 0.091 | 0.684 | 0.7576 |
| 6 | 6.68 | **Sulfate** | BM * | 2.097 | 12.048 | 8.3844 |
| 7 | 7.19 | **Nitrate** | MB* | 0.650 | 3.972 | 0.7895 |
| | | **TOTAL:** | | 6.17 | 55.10 | 19.34 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511911-07 CL SO4 BR** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 17:11** | *Run Time:* | **10.00** |

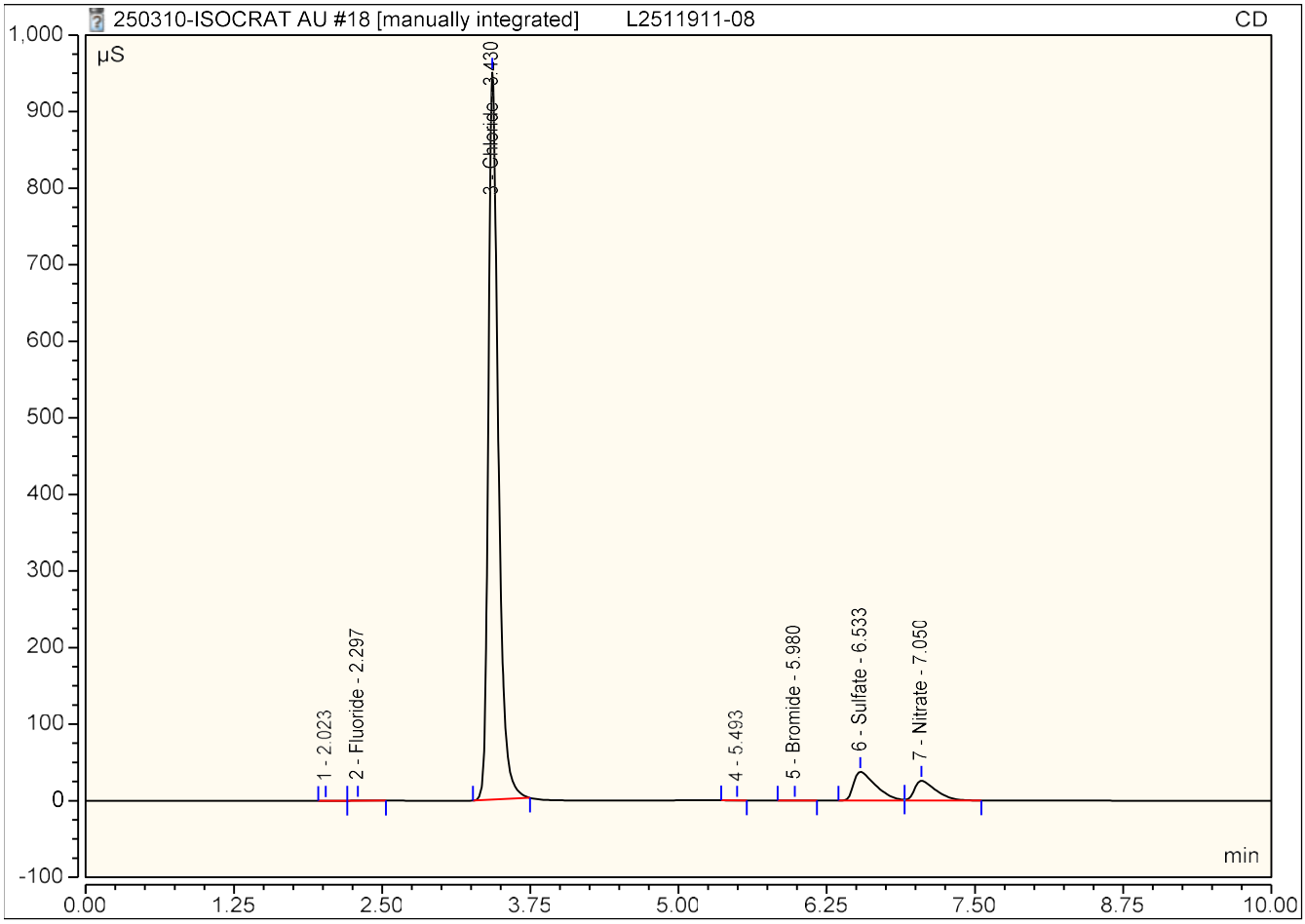
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.074 | 0.893 | 0.1671 |
| 3 | 3.44 | **Chloride** | BMB | 53.495 | 557.002 | 155.6392 |
| 5 | 6.00 | **Bromide** | BMB | 0.045 | 0.352 | 0.3950 |
| 6 | 6.63 | **Sulfate** | BM * | 3.774 | 20.041 | 14.9309 |
| 7 | 7.18 | **Nitrate** | MB* | 0.919 | 5.444 | 1.1038 |
| | | **TOTAL:** | | 58.31 | 583.73 | 172.24 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511911-08** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 17:23** | *Run Time:* | **10.00** |

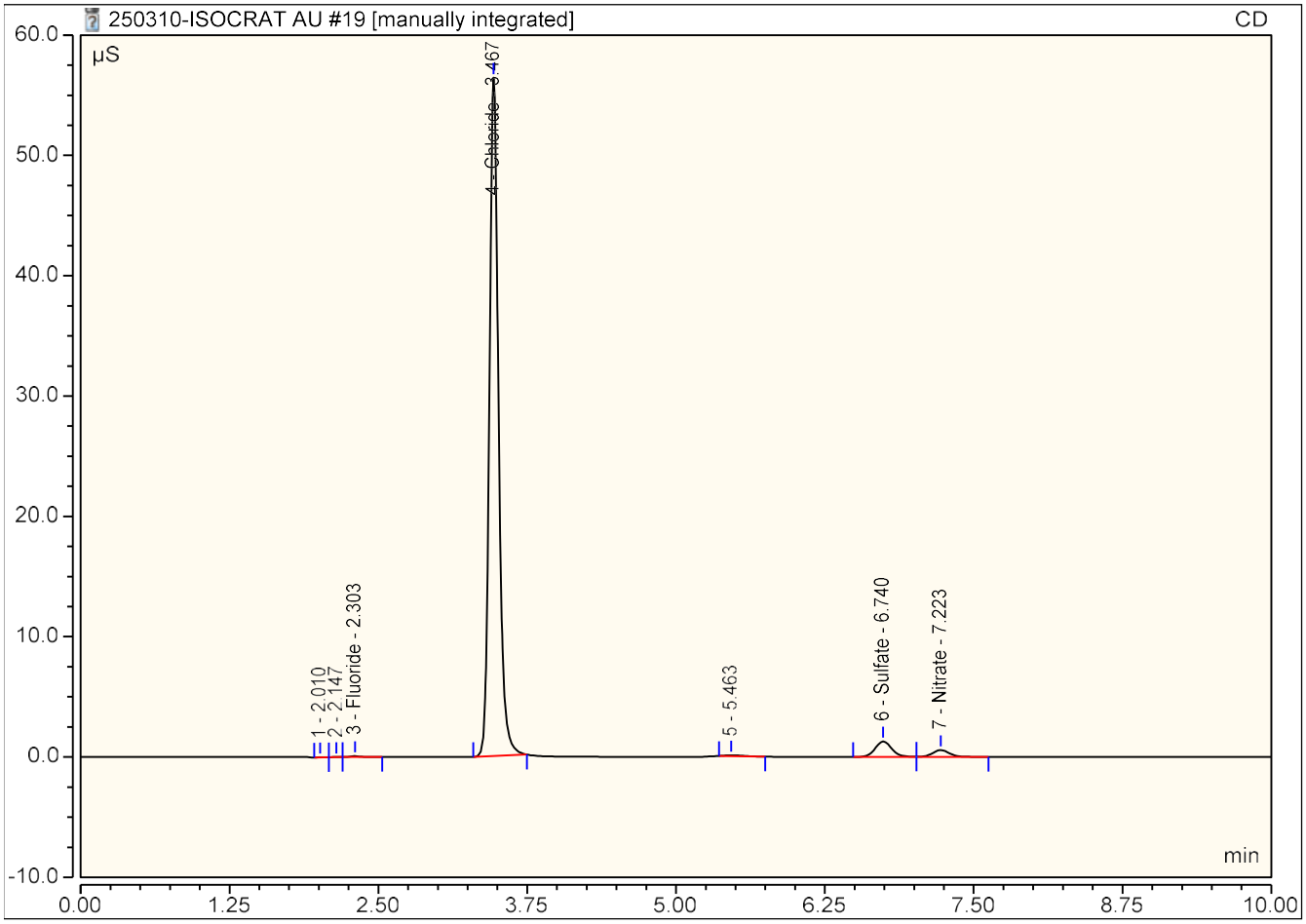
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.014 | 0.172 | 0.0524 |
| 3 | 3.43 | **Chloride** | BMB | 92.571 | 949.692 | 269.2638 |
| 5 | 5.98 | **Bromide** | BMB | 0.019 | 0.151 | 0.1842 |
| 6 | 6.53 | **Sulfate** | BM * | 8.137 | 37.511 | 31.9544 |
| 7 | 7.05 | **Nitrate** | MB* | 5.446 | 26.045 | 6.3922 |
| **TOTAL:** | | | | 106.19 | 1013.57 | 307.85 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2513130-01; 10X CL** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 17:35** | *Run Time:* | **10.00** |

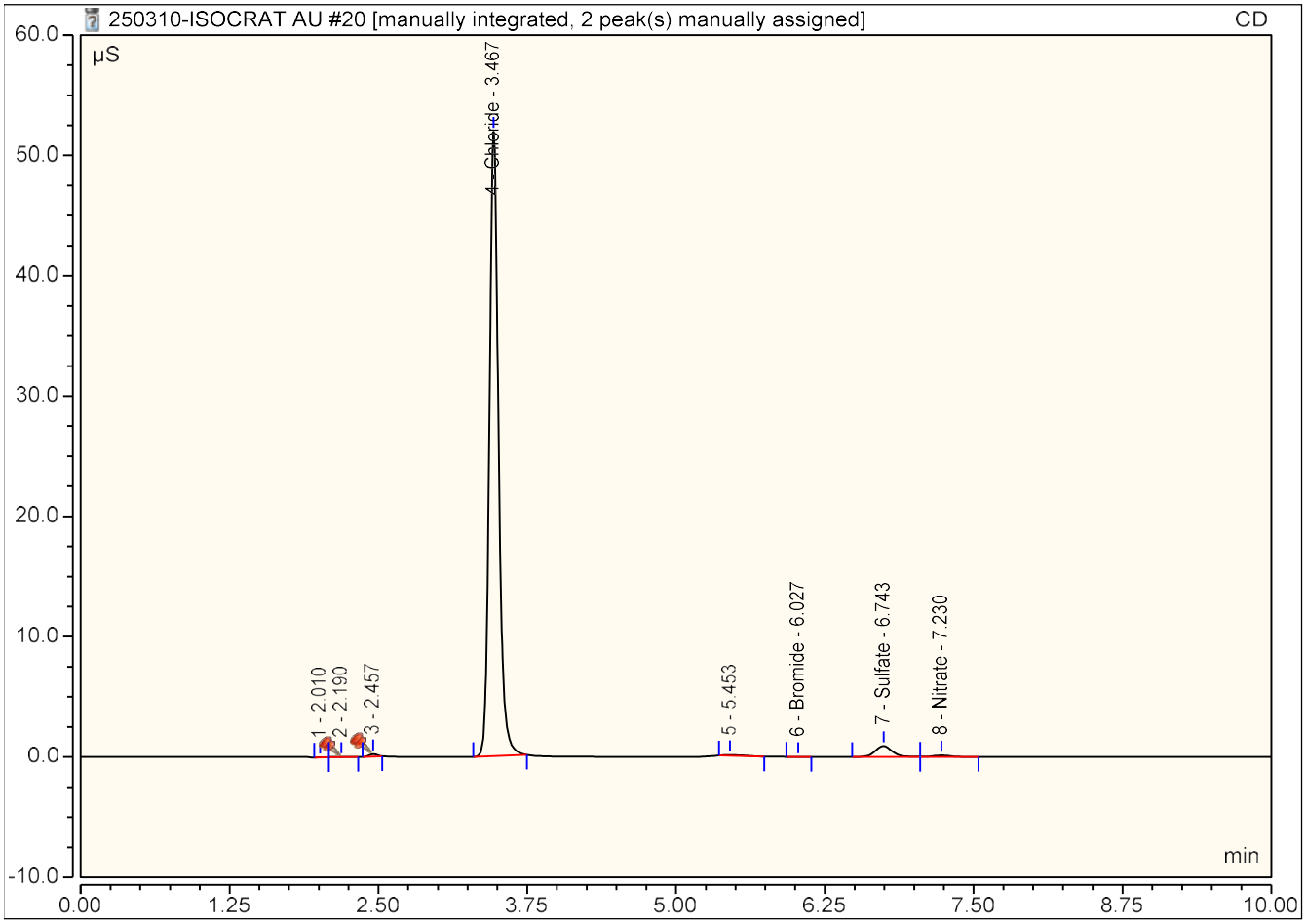
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB | 0.006 | 0.079 | 0.3687 |
| 4 | 3.47 | **Chloride** | BMB | 5.052 | 56.371 | 147.7753 |
| 6 | 6.74 | **Sulfate** | BM * | 0.210 | 1.293 | 10.2355 |
| 7 | 7.22 | **Nitrate** | MB* | 0.095 | 0.575 | 1.4072 |
| **TOTAL:** | | | | 5.36 | 58.32 | 159.79 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2513130-02; 10X** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 17:47** | *Run Time:* | **10.00** |

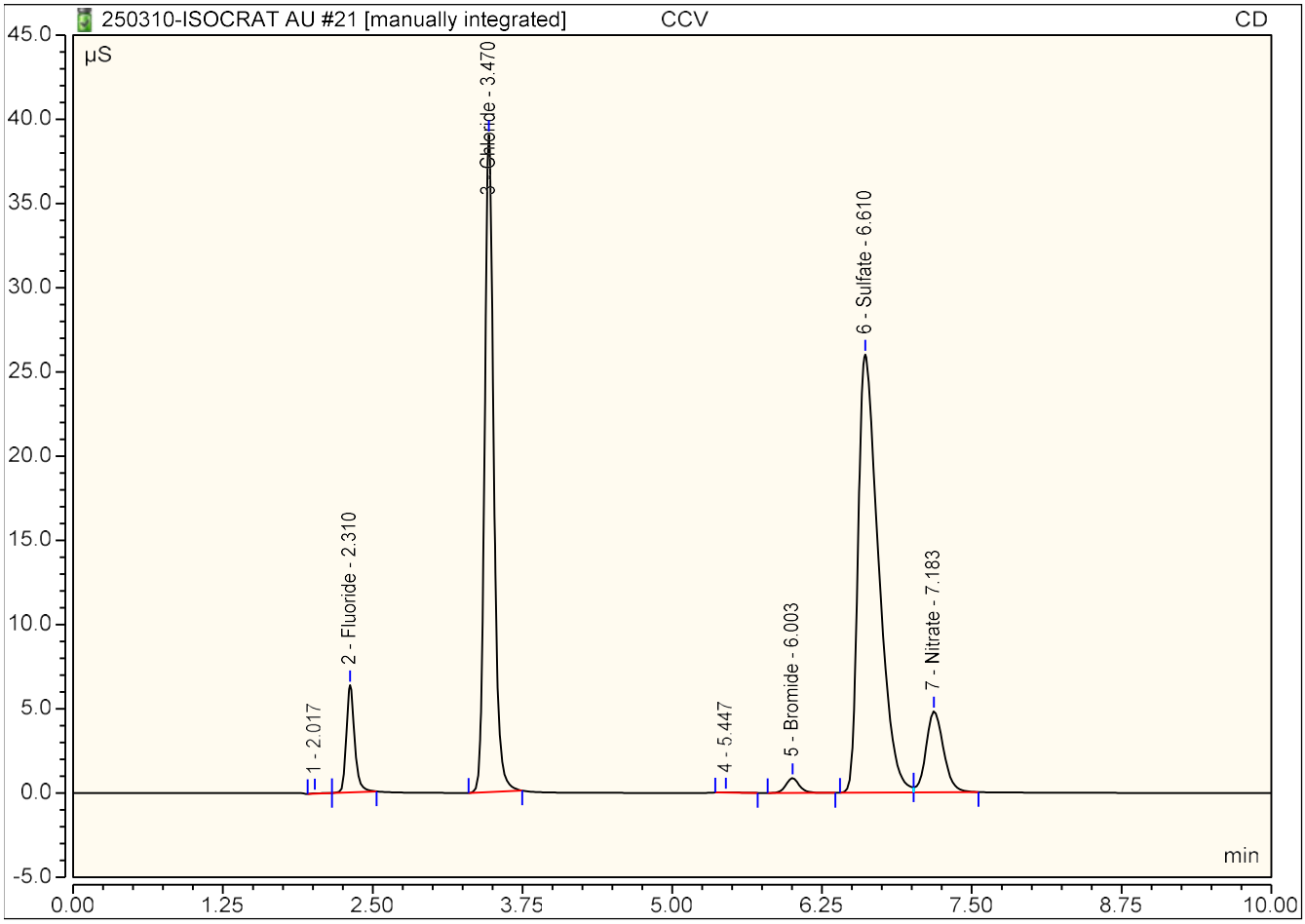
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 4 | 3.47 | **Chloride** | BMB | 4.645 | 51.914 | 135.9644 |
| 6 | 6.03 | **Bromide** | BMB | 0.000 | 0.001 | 0.3552 |
| 7 | 6.74 | **Sulfate** | BM * | 0.152 | 0.920 | 7.9633 |
| 8 | 7.23 | **Nitrate** | MB* | 0.022 | 0.127 | 0.5573 |
| **TOTAL:** | | | | 4.82 | 52.96 | 144.84 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 17:59** | *Run Time:* | **10.00** |

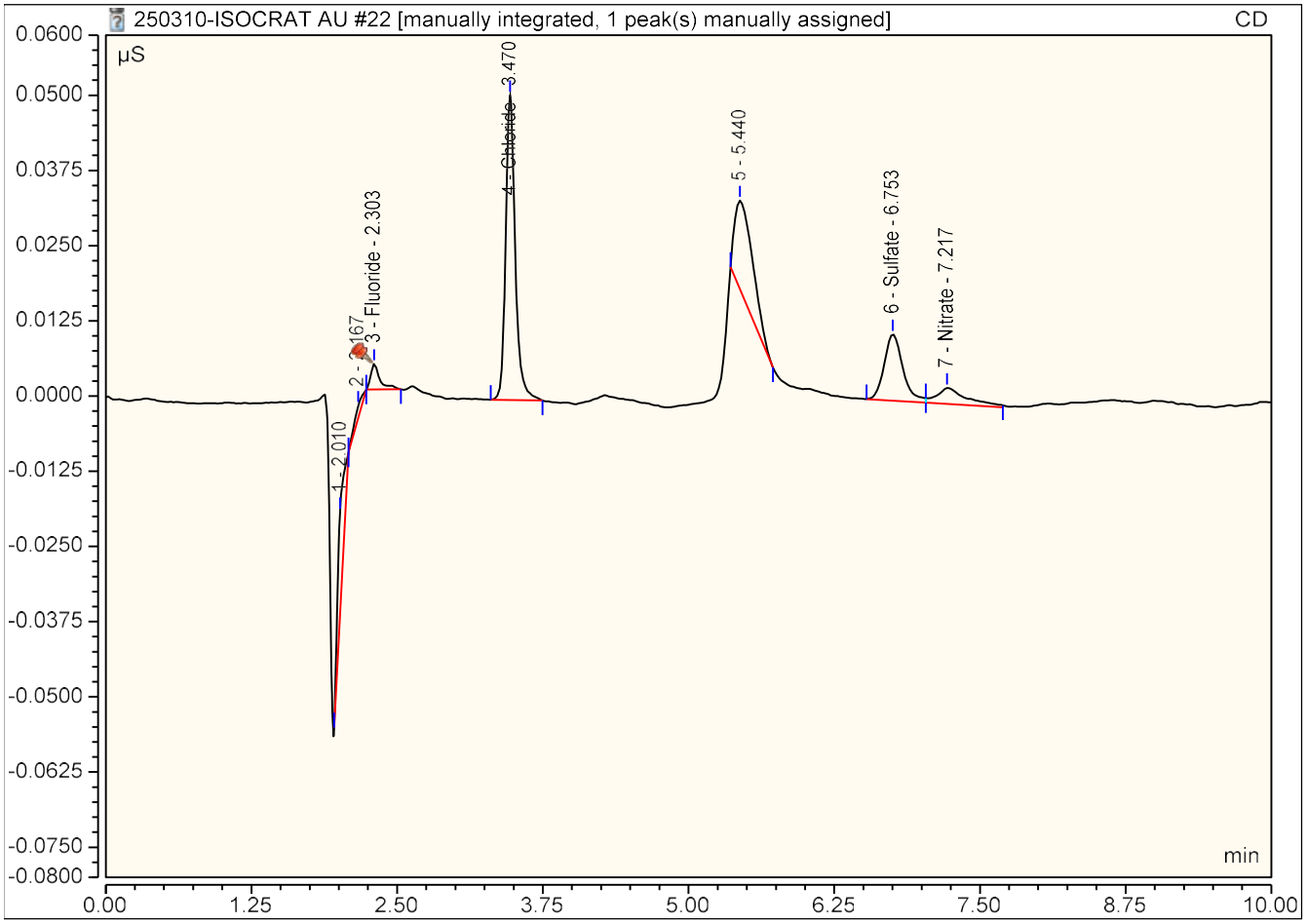
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.502 | 6.364 | 0.9881 |
| 3 | 3.47 | **Chloride** | BMB | 3.464 | 39.003 | 10.1627 |
| 5 | 6.00 | **Bromide** | BMB | 0.114 | 0.879 | 0.9476 |
| 6 | 6.61 | **Sulfate** | BM * | 5.156 | 26.014 | 20.3230 |
| 7 | 7.18 | **Nitrate** | MB* | 0.814 | 4.810 | 0.9812 |
| | | **TOTAL:** | | 10.05 | 77.07 | 33.40 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 18:11** | *Run Time:* | **10.00** |

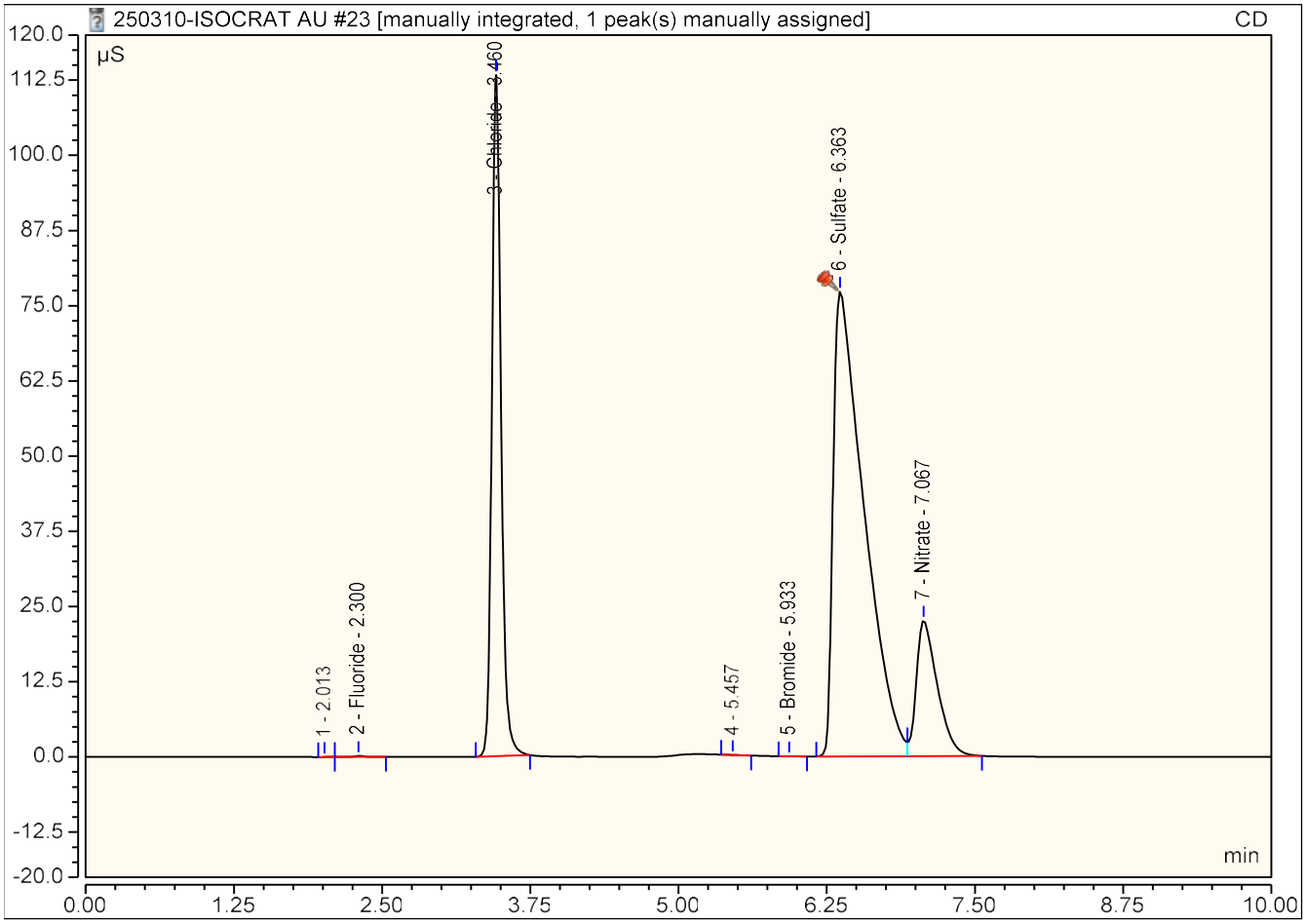
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB^ | 0.000 | 0.004 | 0.0254 |
| 4 | 3.47 | **Chloride** | BMB | 0.005 | 0.051 | 0.1027 |
| 6 | 6.75 | **Sulfate** | BM * | 0.002 | 0.011 | 0.2103 |
| 7 | 7.22 | **Nitrate** | M * | 0.001 | 0.003 | 0.0307 |
| **TOTAL:** | | | | 0.01 | 0.07 | 0.37 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512264-01 CL SO4 BR** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 18:23** | *Run Time:* | **10.00** |

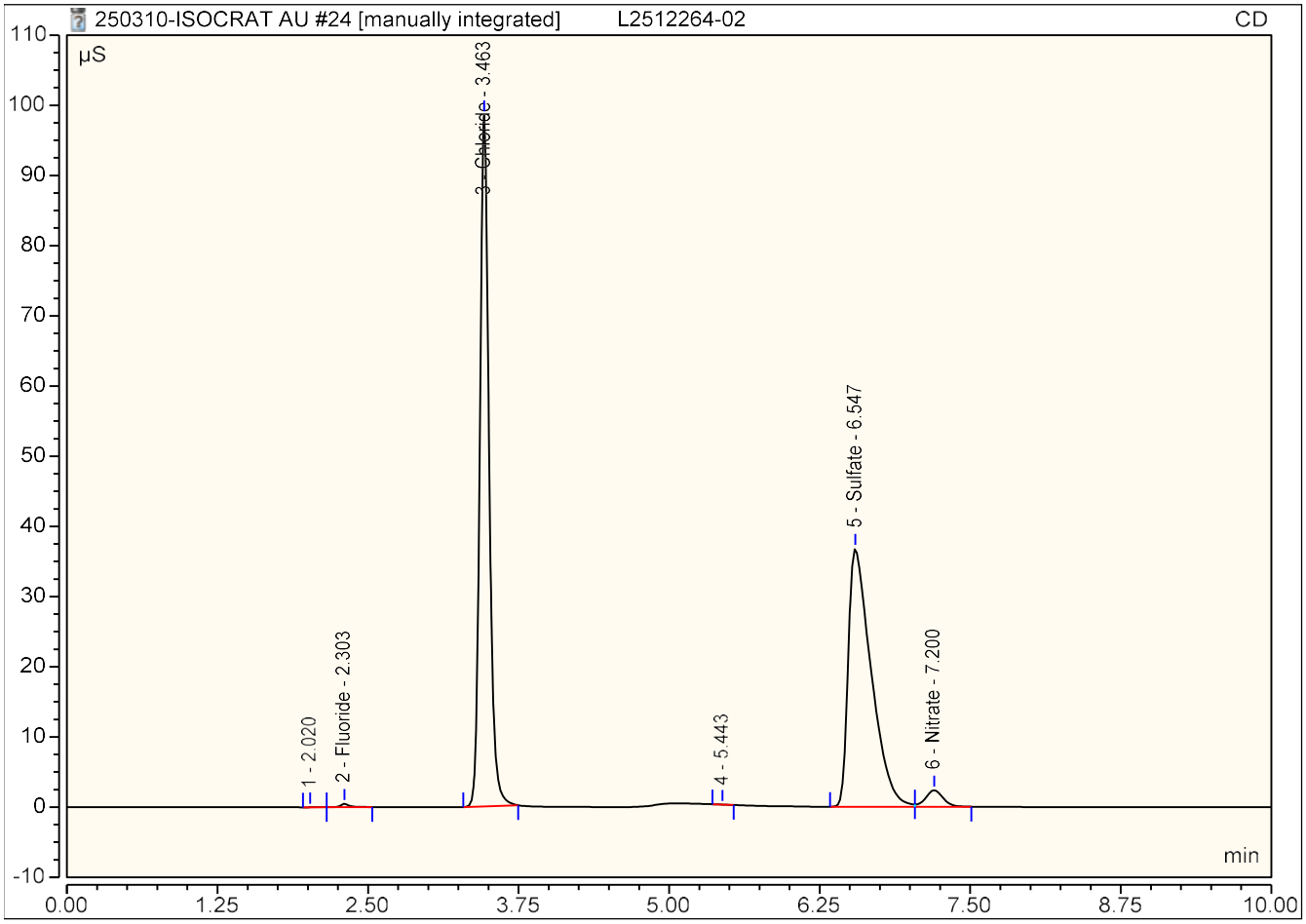
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.016 | 0.188 | 0.0550 |
| 3 | 3.46 | **Chloride** | BMB | 10.150 | 113.243 | 29.6021 |
| 5 | 5.93 | **Bromide** | BMB | 0.002 | 0.019 | 0.0528 |
| 6 | 6.36 | **Sulfate** | BM *^ | 23.312 | 77.288 | 91.1746 |
| 7 | 7.07 | **Nitrate** | MB* | 4.633 | 22.554 | 5.4421 |
| | | **TOTAL:** | | 38.11 | 213.29 | 126.33 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512264-02** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 18:35** | *Run Time:* | **10.00** |

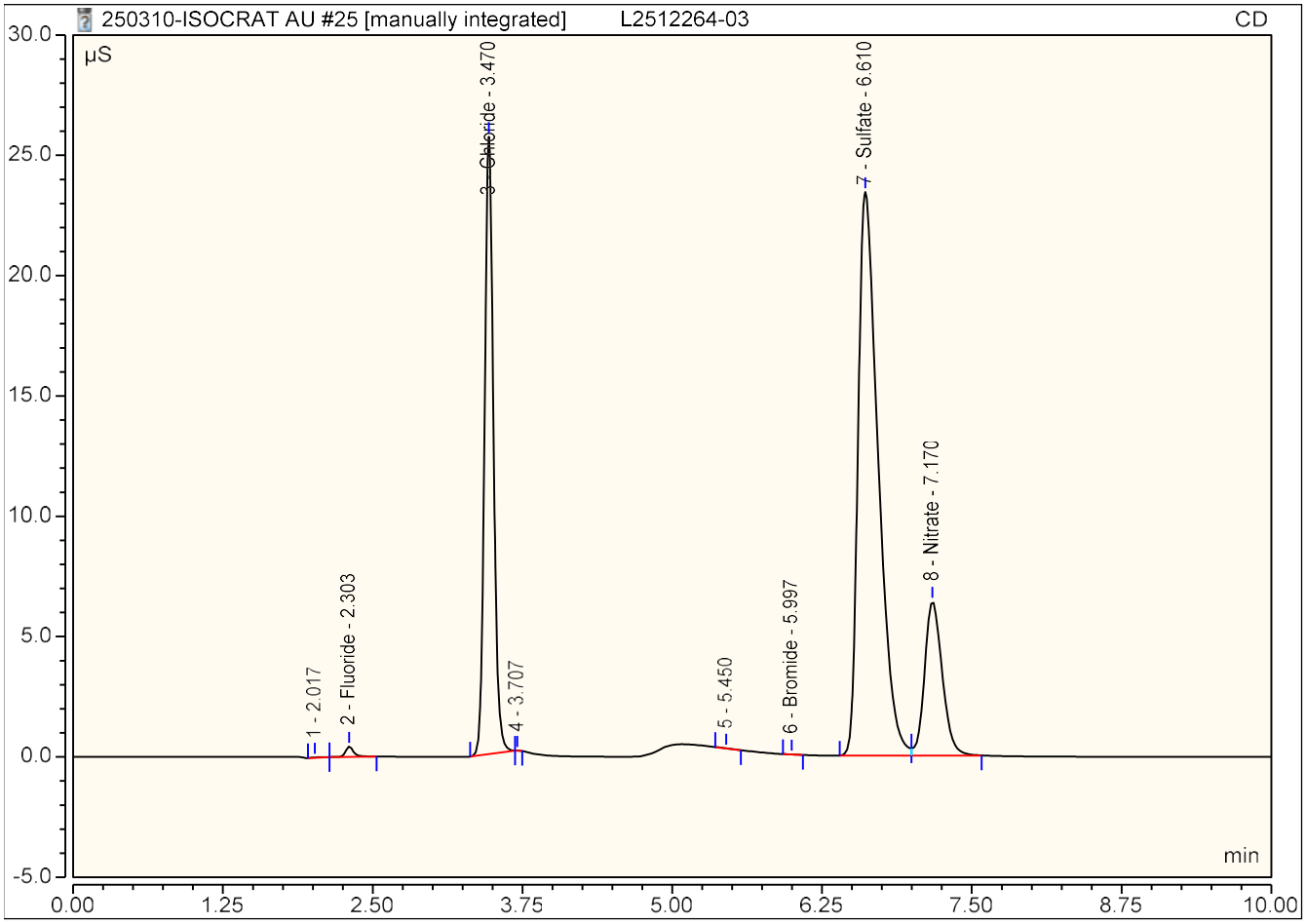
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.038 | 0.485 | 0.0972 |
| 3 | 3.46 | **Chloride** | BMB | 8.769 | 98.502 | 25.5874 |
| 5 | 6.55 | **Sulfate** | BM * | 8.136 | 36.794 | 31.9534 |
| 6 | 7.20 | **Nitrate** | MB* | 0.394 | 2.344 | 0.4903 |
| **TOTAL:** | | | | 17.34 | 138.13 | 58.13 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512264-03** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 18:47** | *Run Time:* | **10.00** |

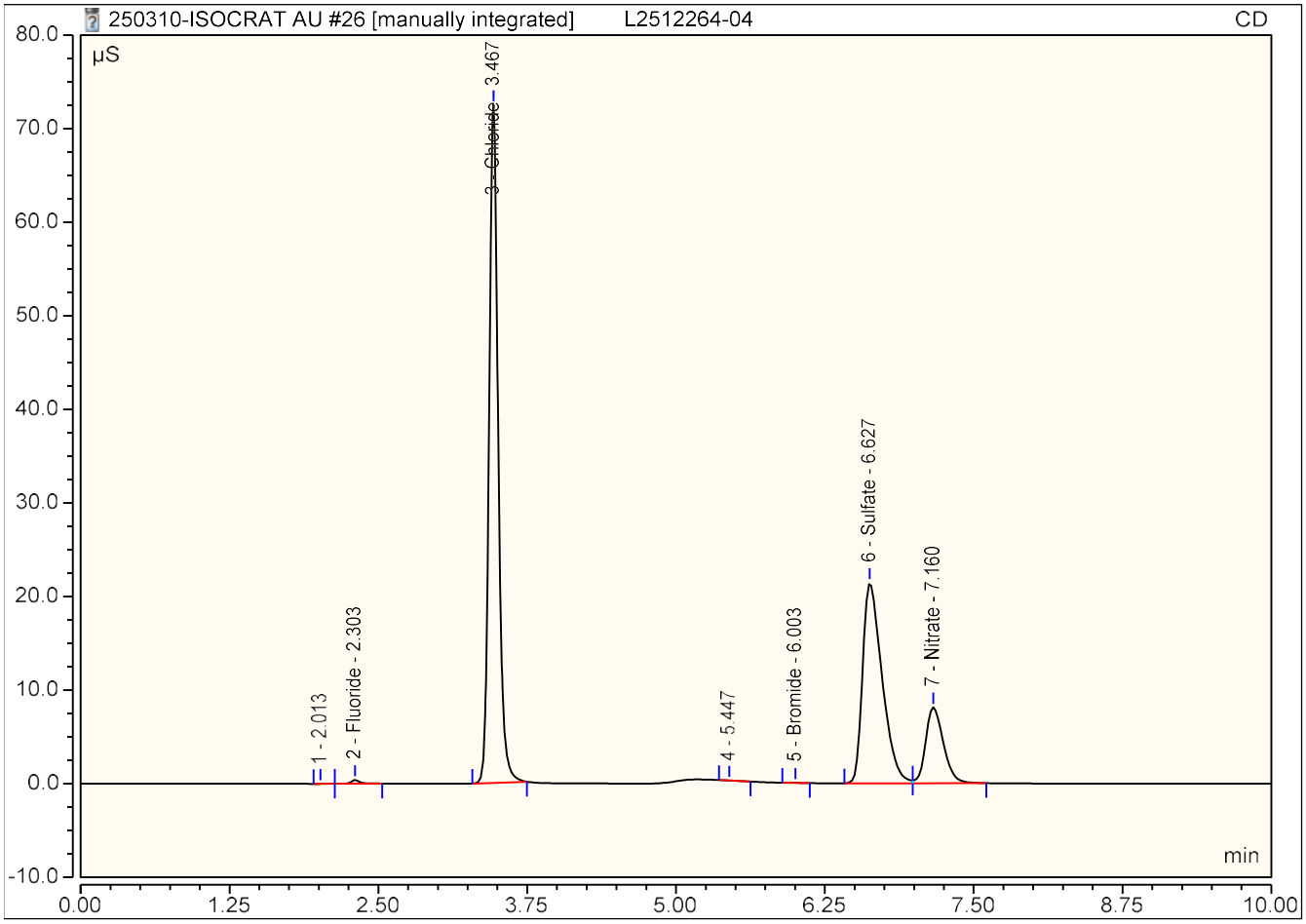
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.033 | 0.433 | 0.0888 |
| 3 | 3.47 | **Chloride** | BMB | 2.192 | 25.656 | 6.4640 |
| 6 | 6.00 | **Bromide** | BMB | 0.000 | 0.002 | 0.0360 |
| 7 | 6.61 | **Sulfate** | BM * | 4.551 | 23.420 | 17.9626 |
| 8 | 7.17 | **Nitrate** | MB* | 1.094 | 6.402 | 1.3078 |
| **TOTAL:** | | | | 7.87 | 55.91 | 25.86 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512264-04** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 19:00** | *Run Time:* | **10.00** |

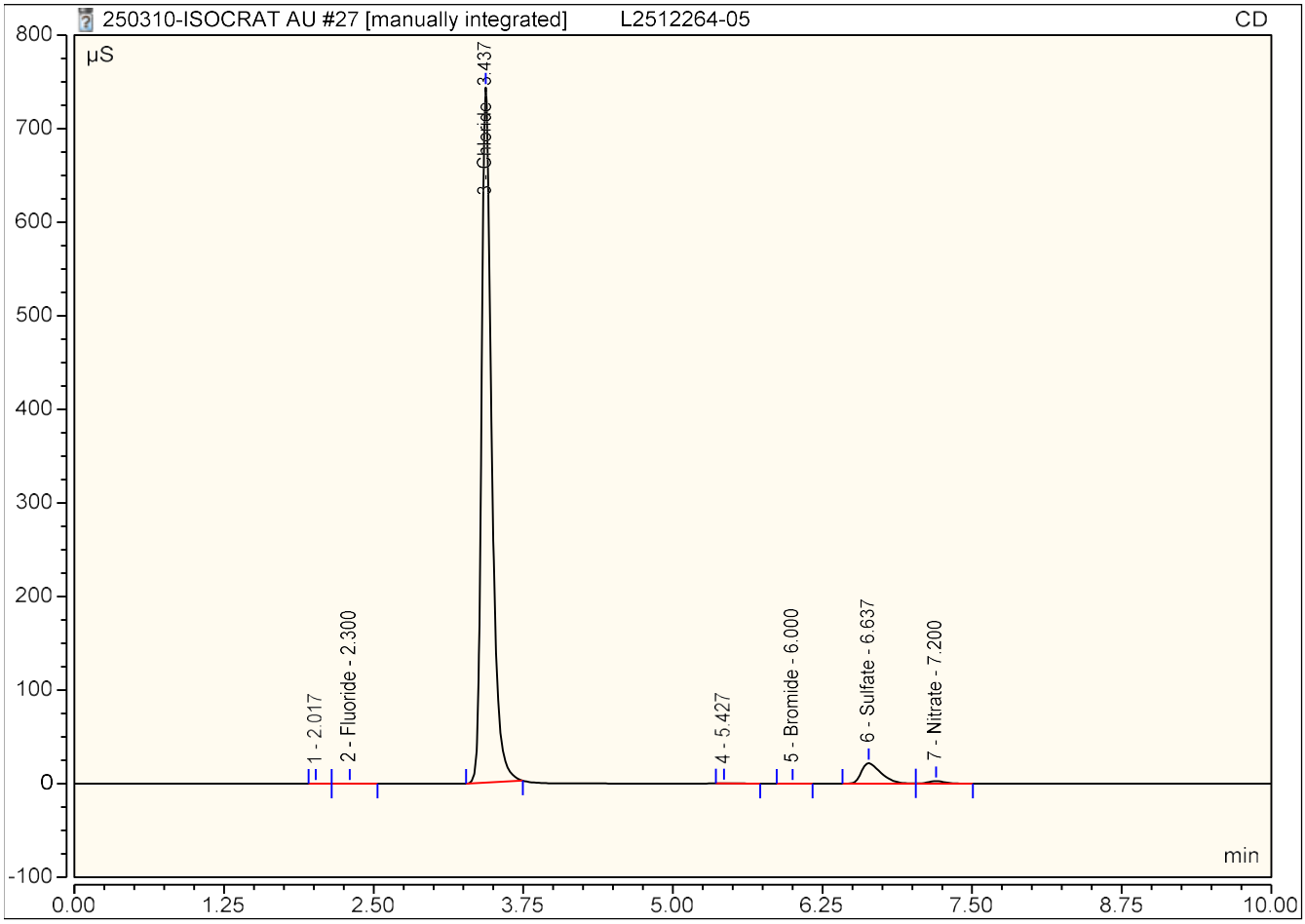
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.032 | 0.409 | 0.0865 |
| 3 | 3.47 | **Chloride** | BMB | 6.428 | 72.447 | 18.7790 |
| 5 | 6.00 | **Bromide** | BMB | 0.001 | 0.013 | 0.0451 |
| 6 | 6.63 | **Sulfate** | BM * | 4.068 | 21.414 | 16.0785 |
| 7 | 7.16 | **Nitrate** | MB* | 1.402 | 8.100 | 1.6671 |
| | | **TOTAL:** | | 11.93 | 102.38 | 36.66 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512264-05** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 19:12** | *Run Time:* | **10.00** |

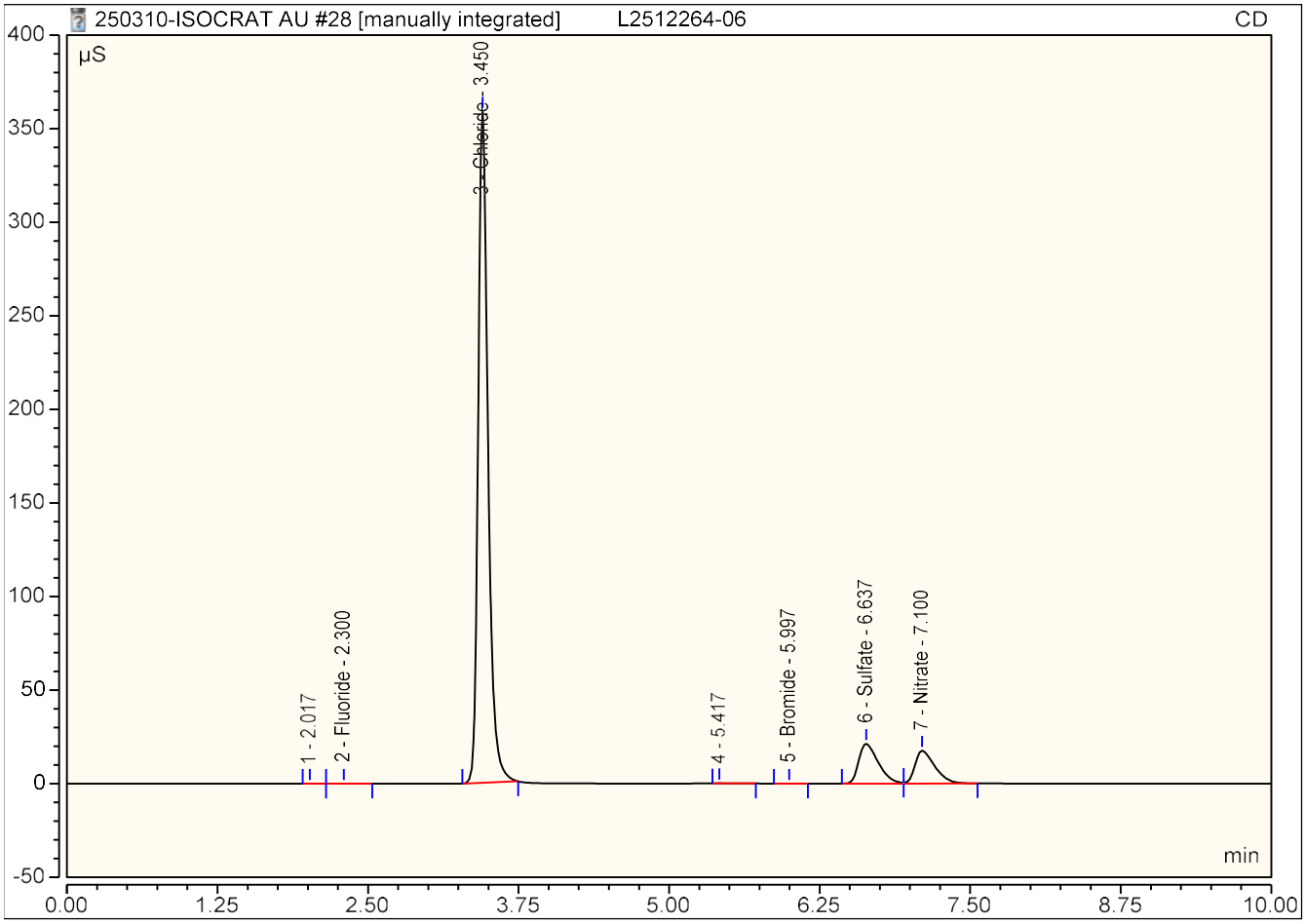
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.006 | 0.069 | 0.0367 |
| 3 | 3.44 | **Chloride** | BMB | 72.936 | 742.607 | 212.1711 |
| 5 | 6.00 | **Bromide** | BMB | 0.004 | 0.032 | 0.0657 |
| 6 | 6.64 | **Sulfate** | BM * | 4.176 | 21.856 | 16.4988 |
| 7 | 7.20 | **Nitrate** | MB* | 0.445 | 2.692 | 0.5493 |
| | | **TOTAL:** | | 77.57 | 767.26 | 229.32 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512264-06** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 19:24** | *Run Time:* | **10.00** |

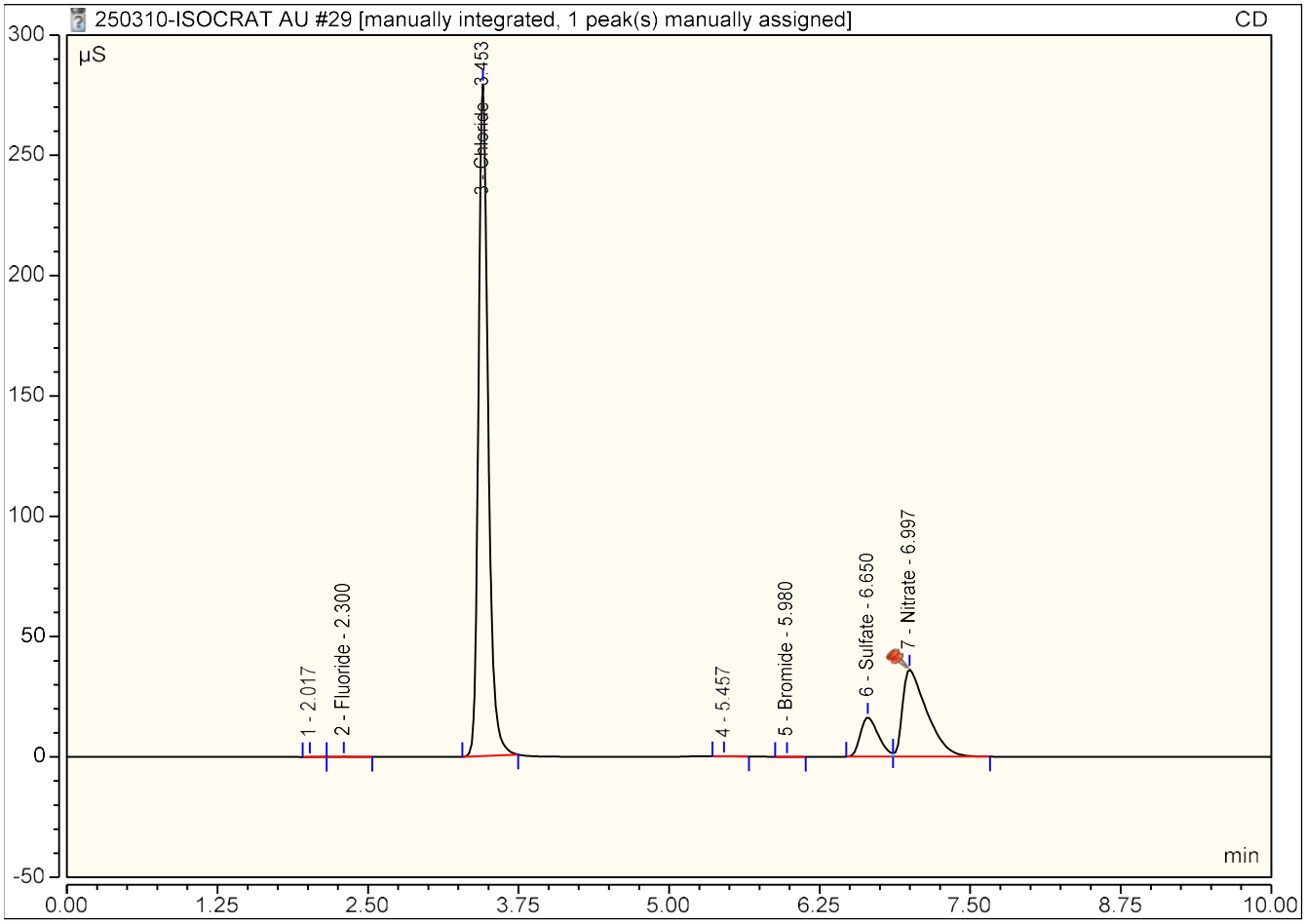
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.006 | 0.069 | 0.0365 |
| 3 | 3.45 | **Chloride** | BMB | 34.050 | 358.634 | 99.0999 |
| 5 | 6.00 | **Bromide** | BMB | 0.003 | 0.023 | 0.0566 |
| 6 | 6.64 | **Sulfate** | BM * | 3.992 | 21.323 | 15.7808 |
| 7 | 7.10 | **Nitrate** | MB* | 3.339 | 17.545 | 3.9300 |
| | | **TOTAL:** | | 41.39 | 397.59 | 118.90 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512607-01 BR** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 19:36** | *Run Time:* | **10.00** |

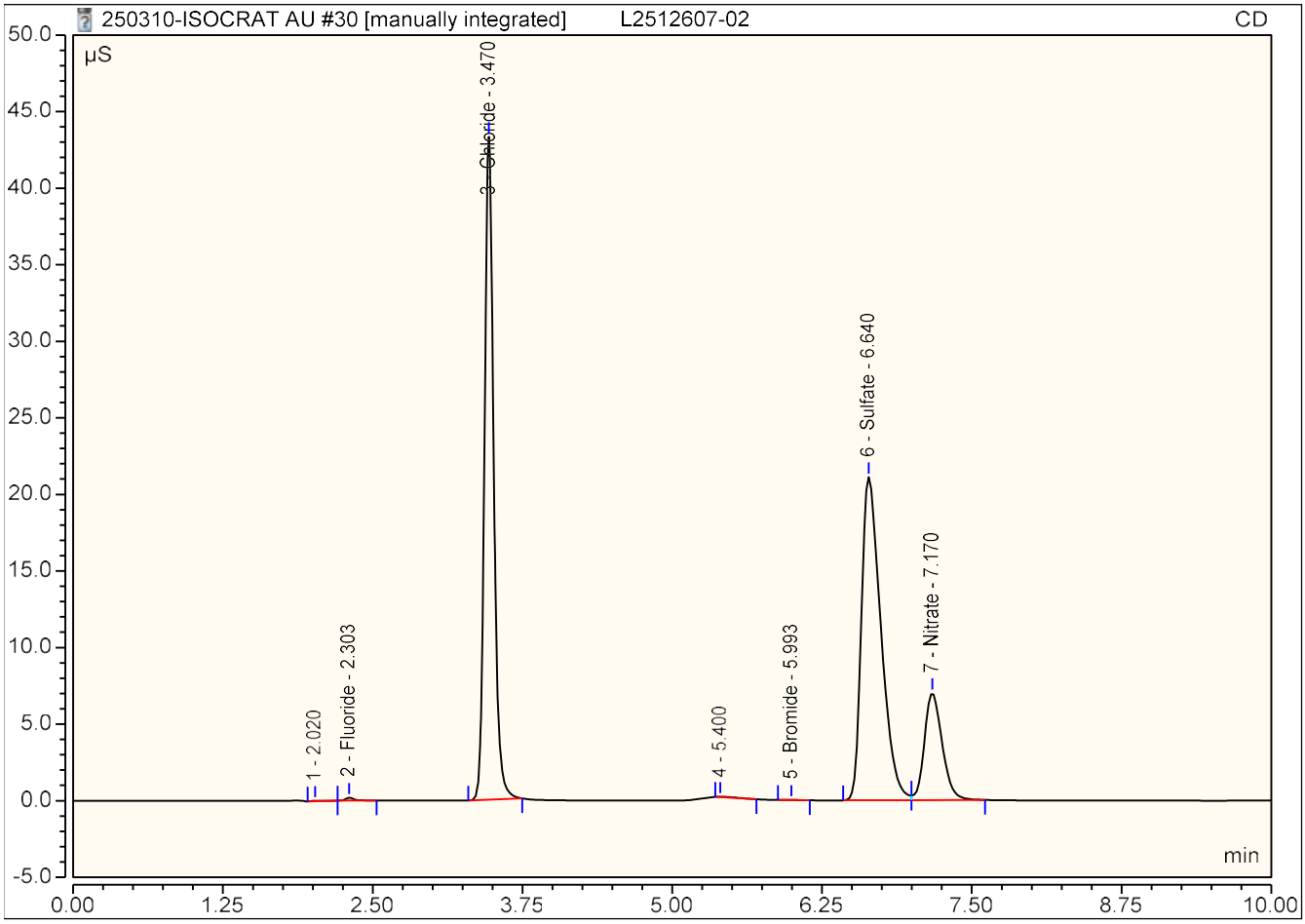
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.009 | 0.096 | 0.0411 |
| 3 | 3.45 | **Chloride** | BMB | 26.045 | 279.174 | 75.8218 |
| 5 | 5.98 | **Bromide** | BMB | 0.002 | 0.016 | 0.0501 |
| 6 | 6.65 | **Sulfate** | BM * | 2.827 | 16.315 | 11.2326 |
| 7 | 7.00 | **Nitrate** | MB*^ | 8.458 | 36.226 | 9.9109 |
| | | **TOTAL:** | | 37.34 | 331.83 | 97.06 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512607-02** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 19:48** | *Run Time:* | **10.00** |

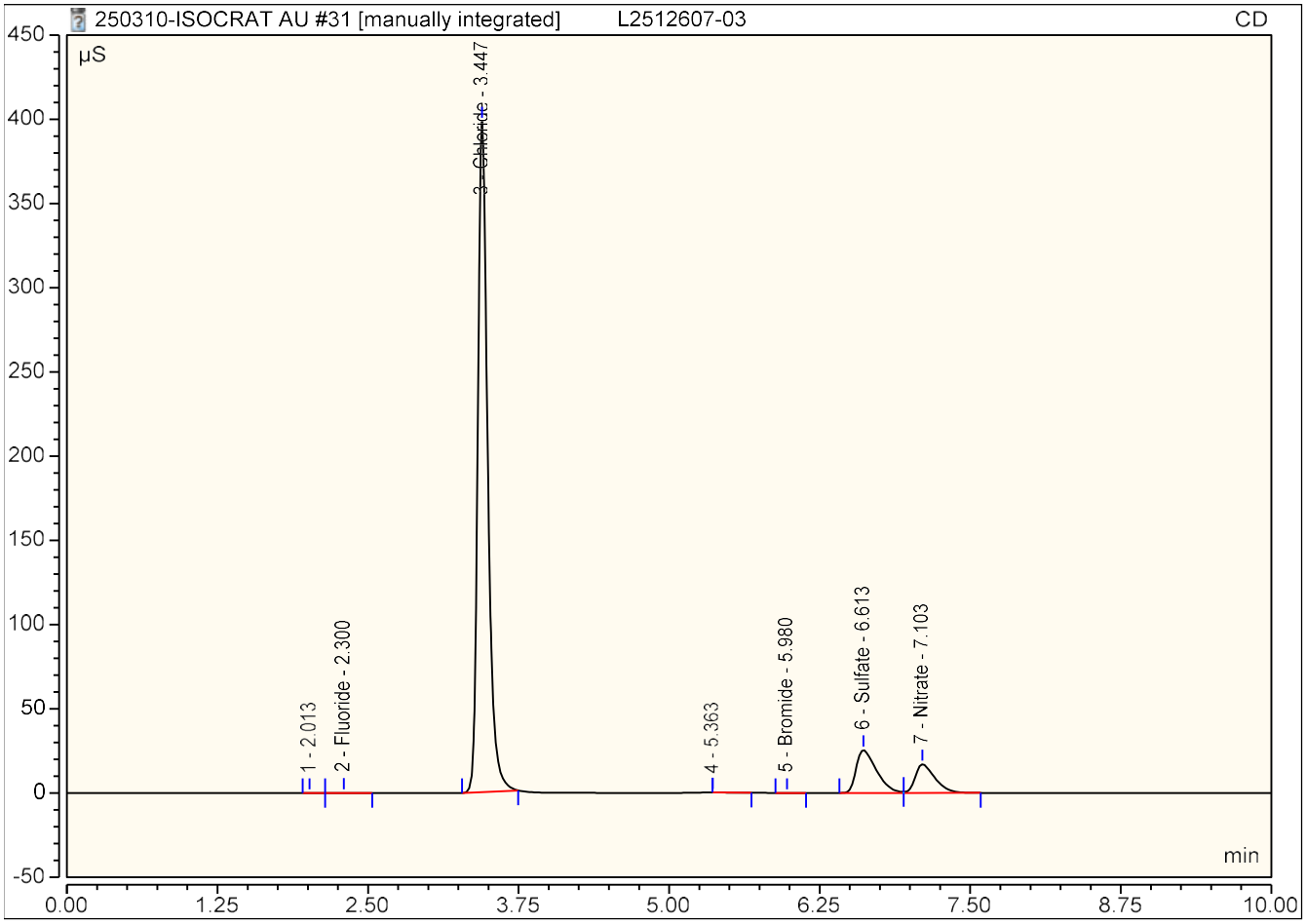
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.016 | 0.197 | 0.0552 |
| 3 | 3.47 | **Chloride** | BMB | 3.837 | 43.287 | 11.2464 |
| 5 | 5.99 | **Bromide** | BMB | 0.002 | 0.014 | 0.0481 |
| 6 | 6.64 | **Sulfate** | BM * | 3.976 | 21.097 | 15.7181 |
| 7 | 7.17 | **Nitrate** | MB* | 1.201 | 6.992 | 1.4331 |
| | | **TOTAL:** | | 9.03 | 71.59 | 28.50 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512607-03** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 20:00** | *Run Time:* | **10.00** |

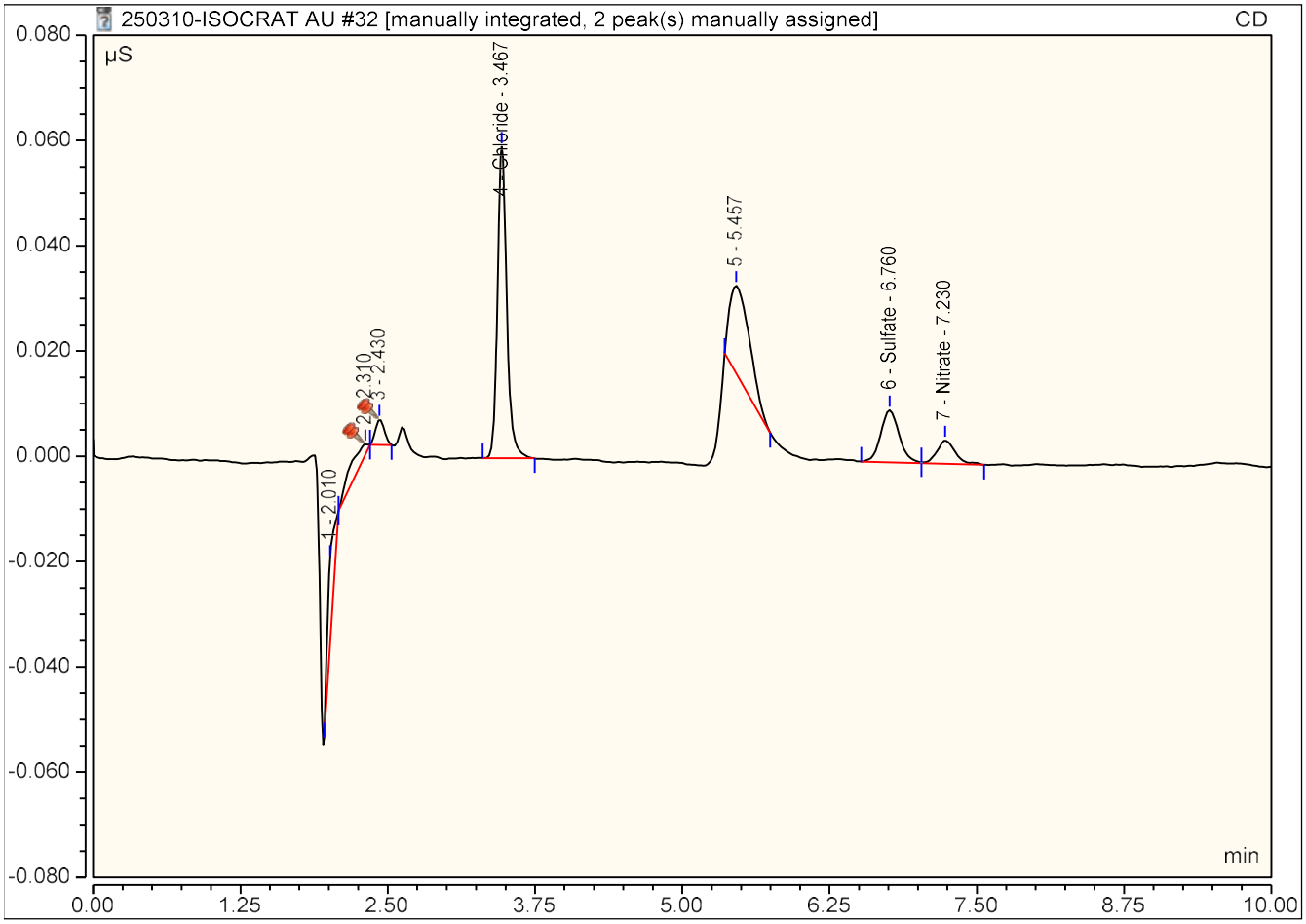
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.007 | 0.079 | 0.0383 |
| 3 | 3.45 | **Chloride** | BMB | 37.892 | 398.073 | 110.2698 |
| 5 | 5.98 | **Bromide** | BMB | 0.002 | 0.013 | 0.0472 |
| 6 | 6.61 | **Sulfate** | BM * | 4.947 | 25.409 | 19.5081 |
| 7 | 7.10 | **Nitrate** | MB* | 3.223 | 16.962 | 3.7949 |
| | | **TOTAL:** | | 46.07 | 440.54 | 133.66 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512607-06** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 20:12** | *Run Time:* | **10.00** |

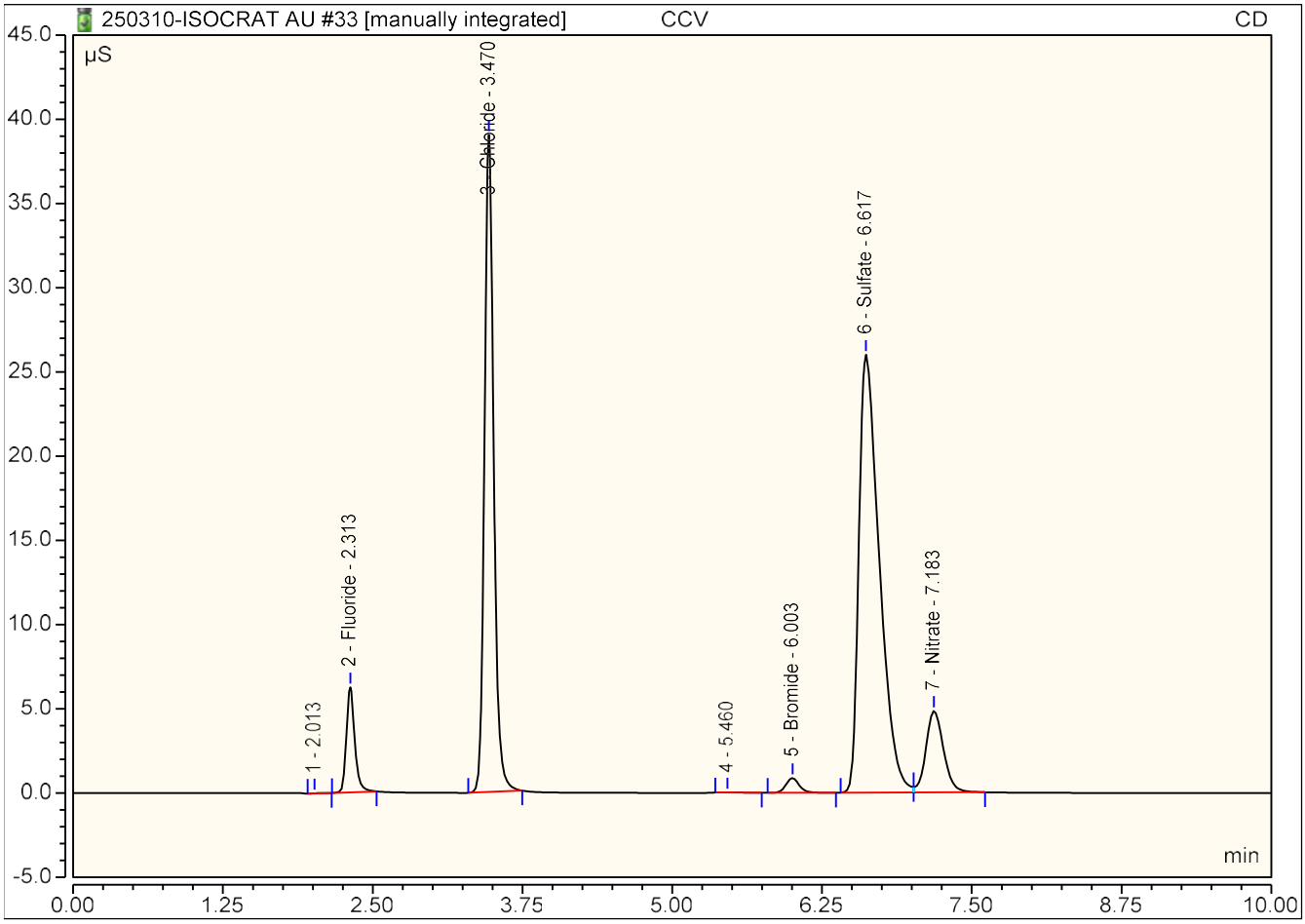
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 4 | 3.47 | **Chloride** | BMB | 0.005 | 0.059 | 0.1046 |
| 6 | 6.76 | **Sulfate** | BM * | 0.002 | 0.010 | 0.2092 |
| 7 | 7.23 | **Nitrate** | MB* | 0.001 | 0.004 | 0.0307 |
| **TOTAL:** | | | | 0.01 | 0.07 | 0.34 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 20:24** | *Run Time:* | **10.00** |

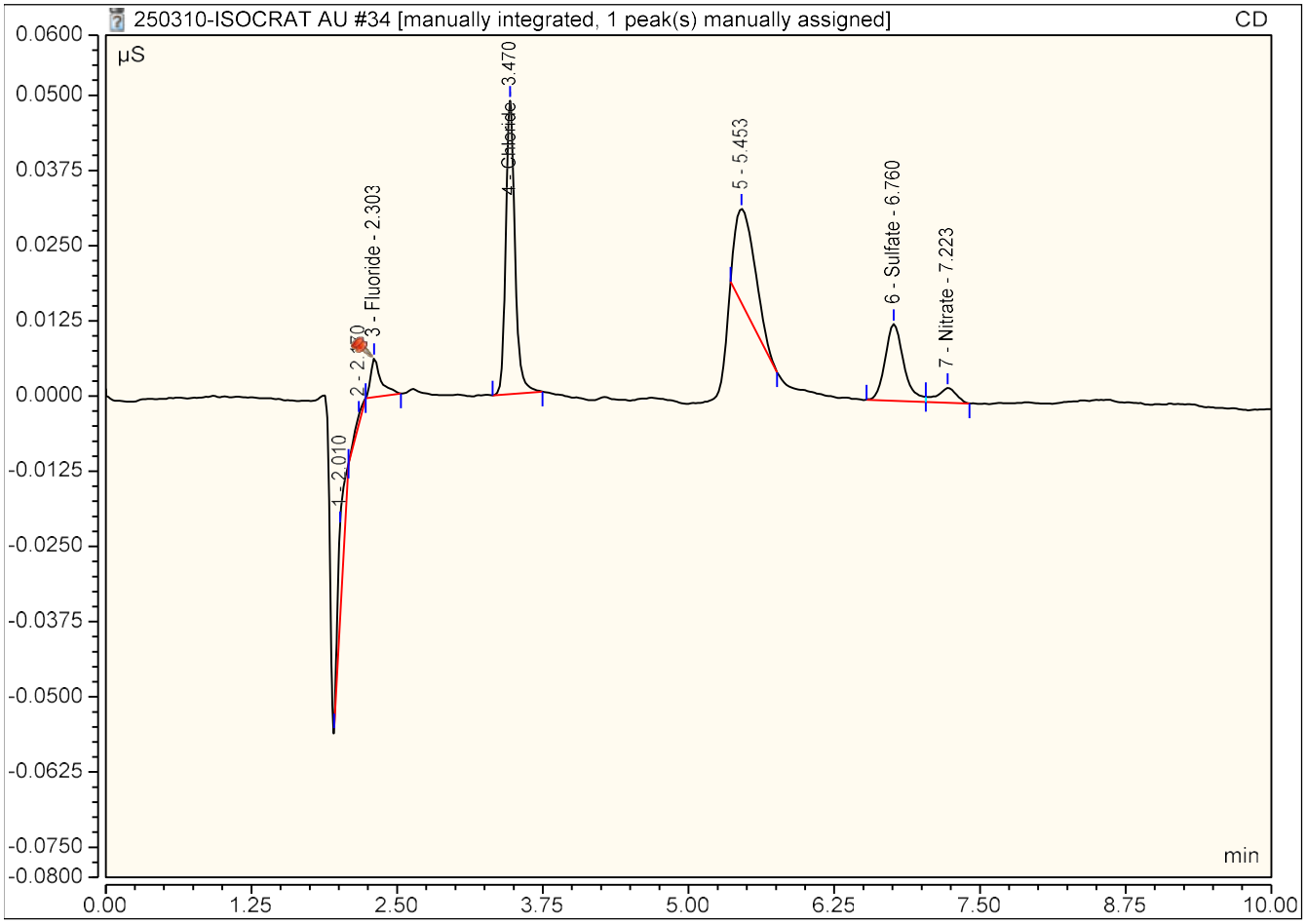
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.498 | 6.240 | 0.9799 |
| 3 | 3.47 | **Chloride** | BMB | 3.472 | 39.004 | 10.1855 |
| 5 | 6.00 | **Bromide** | BMB | 0.115 | 0.886 | 0.9520 |
| 6 | 6.62 | **Sulfate** | BM * | 5.149 | 25.997 | 20.2971 |
| 7 | 7.18 | **Nitrate** | MB* | 0.824 | 4.842 | 0.9920 |
| | | **TOTAL:** | | 10.06 | 76.97 | 33.41 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 20:36** | *Run Time:* | **10.00** |

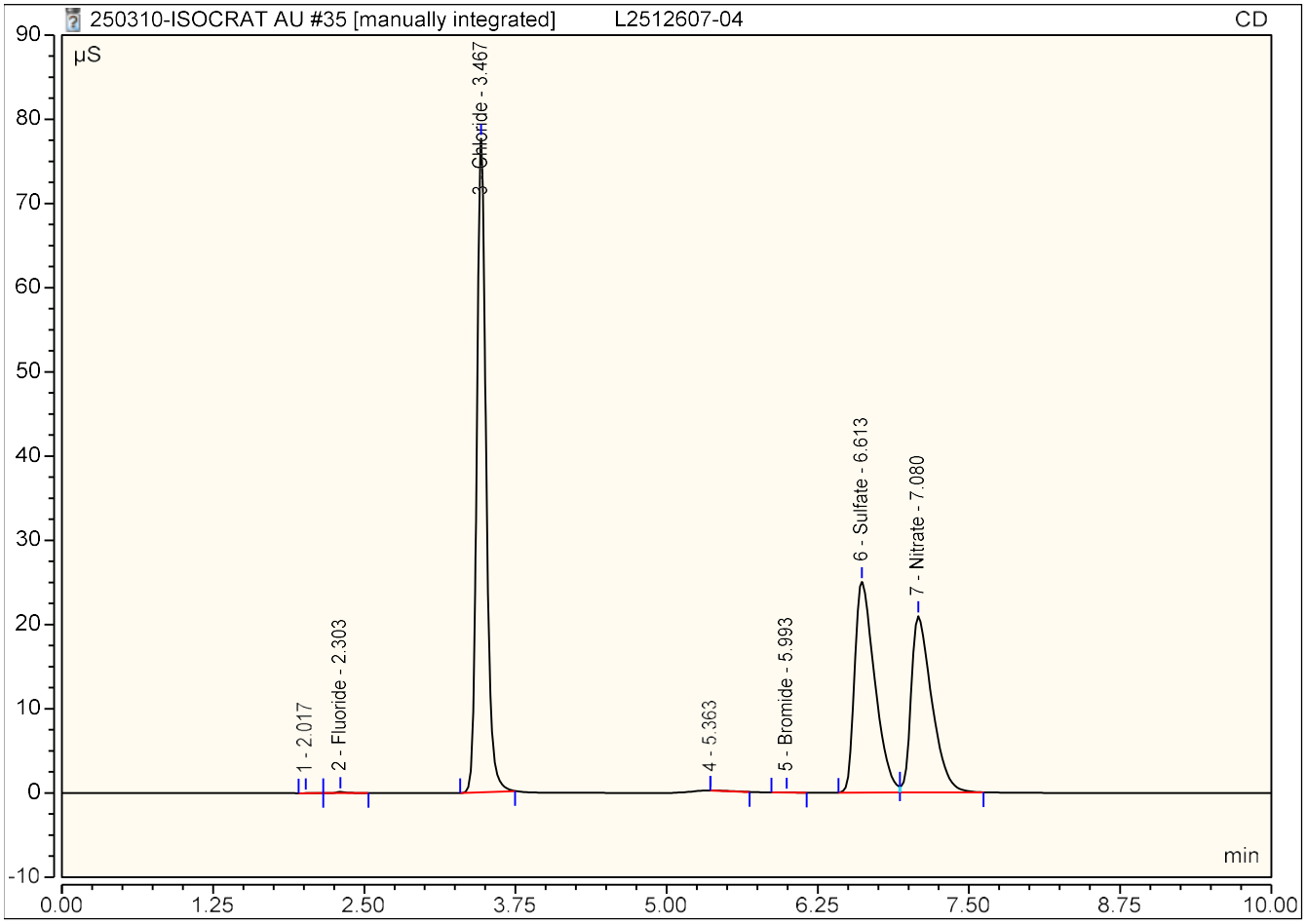
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB^ | 0.001 | 0.006 | 0.0259 |
| 4 | 3.47 | **Chloride** | BMB | 0.004 | 0.049 | 0.1018 |
| 6 | 6.76 | **Sulfate** | BM * | 0.002 | 0.013 | 0.2114 |
| 7 | 7.22 | **Nitrate** | MB* | 0.000 | 0.002 | 0.0303 |
| **TOTAL:** | | | | 0.01 | 0.07 | 0.37 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512607-04** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 20:48** | *Run Time:* | **10.00** |

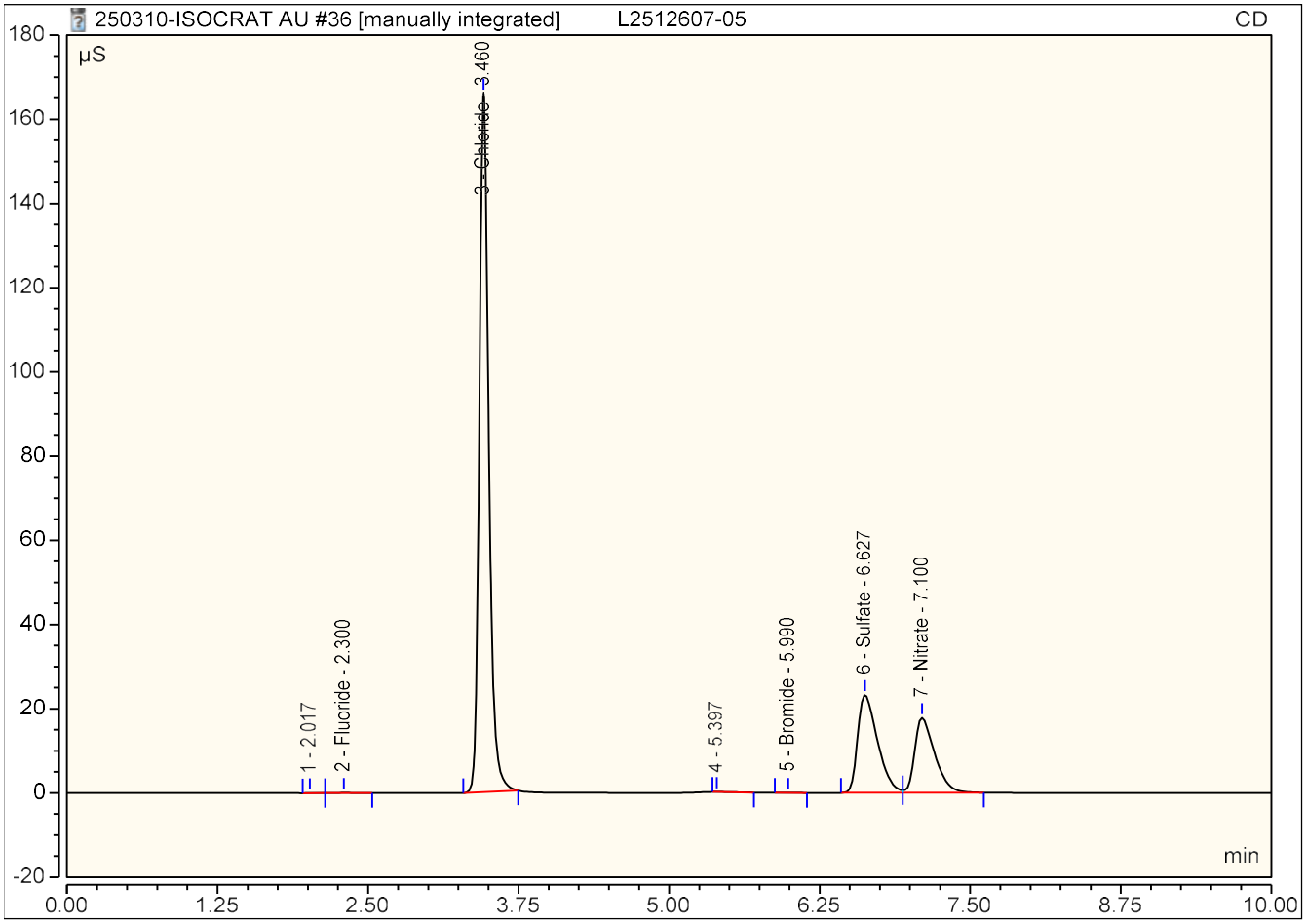
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.011 | 0.135 | 0.0466 |
| 3 | 3.47 | **Chloride** | BMB | 6.965 | 77.605 | 20.3421 |
| 5 | 5.99 | **Bromide** | BMB | 0.004 | 0.037 | 0.0703 |
| 6 | 6.61 | **Sulfate** | BM * | 4.840 | 25.028 | 19.0894 |
| 7 | 7.08 | **Nitrate** | MB* | 4.152 | 20.944 | 4.8808 |
| | | **TOTAL:** | | 15.97 | 123.75 | 44.43 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512607-05** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 21:00** | *Run Time:* | **10.00** |

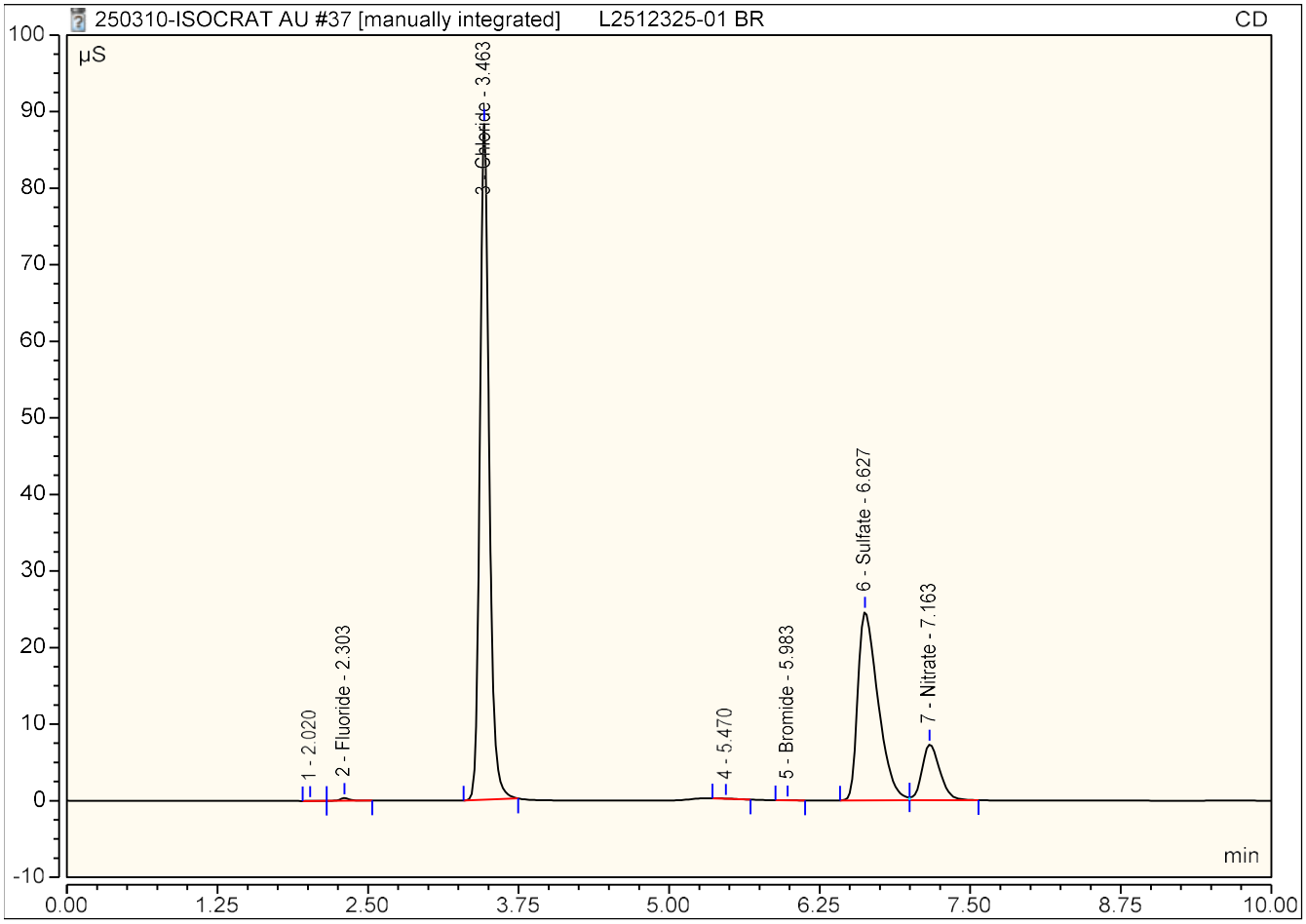
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.008 | 0.086 | 0.0398 |
| 3 | 3.46 | **Chloride** | BMB | 15.206 | 165.922 | 44.3040 |
| 5 | 5.99 | **Bromide** | BMB | 0.002 | 0.019 | 0.0521 |
| 6 | 6.63 | **Sulfate** | BM * | 4.434 | 23.312 | 17.5048 |
| 7 | 7.10 | **Nitrate** | MB* | 3.413 | 17.795 | 4.0164 |
| **TOTAL:** | | | | 23.06 | 207.13 | 65.92 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-01 BR** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 21:13** | *Run Time:* | **10.00** |

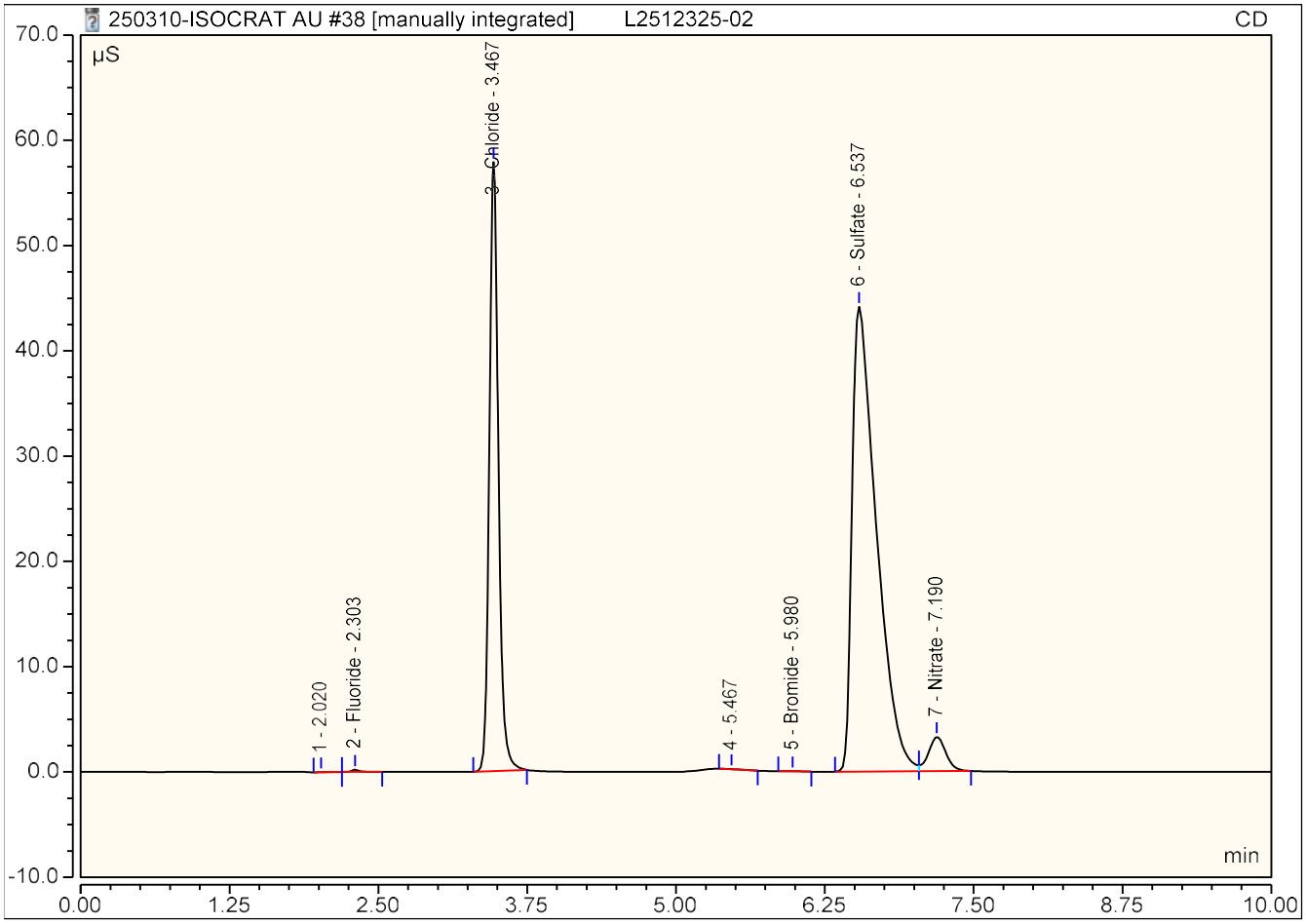
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.029 | 0.367 | 0.0803 |
| 3 | 3.46 | **Chloride** | BMB | 7.953 | 88.286 | 23.2144 |
| 5 | 5.98 | **Bromide** | BMB | 0.002 | 0.015 | 0.0489 |
| 6 | 6.63 | **Sulfate** | BM * | 4.815 | 24.674 | 18.9935 |
| 7 | 7.16 | **Nitrate** | MB* | 1.259 | 7.295 | 1.5007 |
| | | **TOTAL:** | | 14.06 | 120.64 | 43.84 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-02** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 21:25** | *Run Time:* | **10.00** |

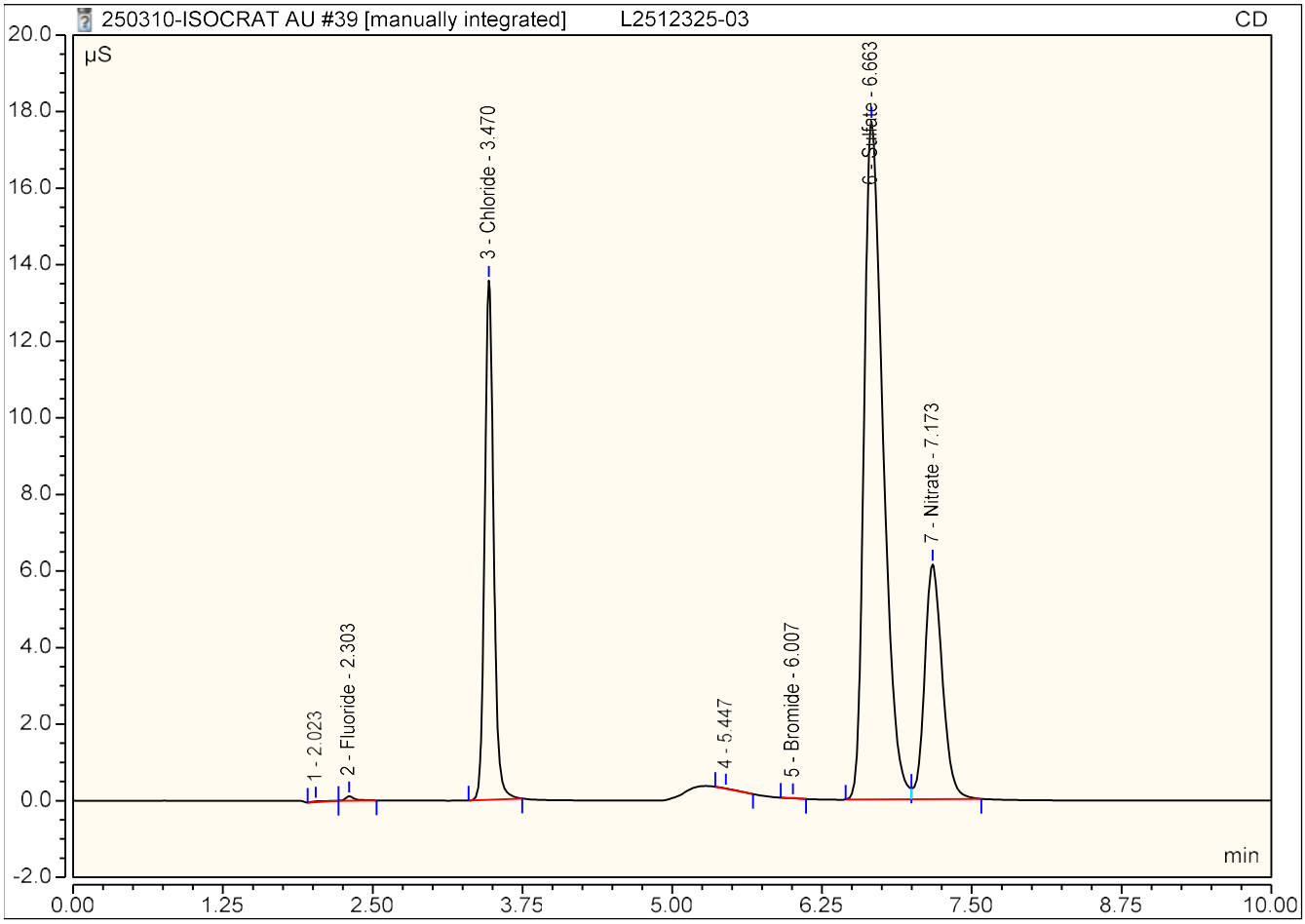
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.017 | 0.206 | 0.0568 |
| 3 | 3.47 | **Chloride** | BMB | 5.157 | 57.844 | 15.0830 |
| 5 | 5.98 | **Bromide** | BMB | 0.004 | 0.033 | 0.0659 |
| 6 | 6.54 | **Sulfate** | BM * | 10.437 | 44.139 | 40.9294 |
| 7 | 7.19 | **Nitrate** | MB* | 0.553 | 3.254 | 0.6757 |
| **TOTAL:** | | | | 16.17 | 105.48 | 56.81 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-03** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 21:37** | *Run Time:* | **10.00** |

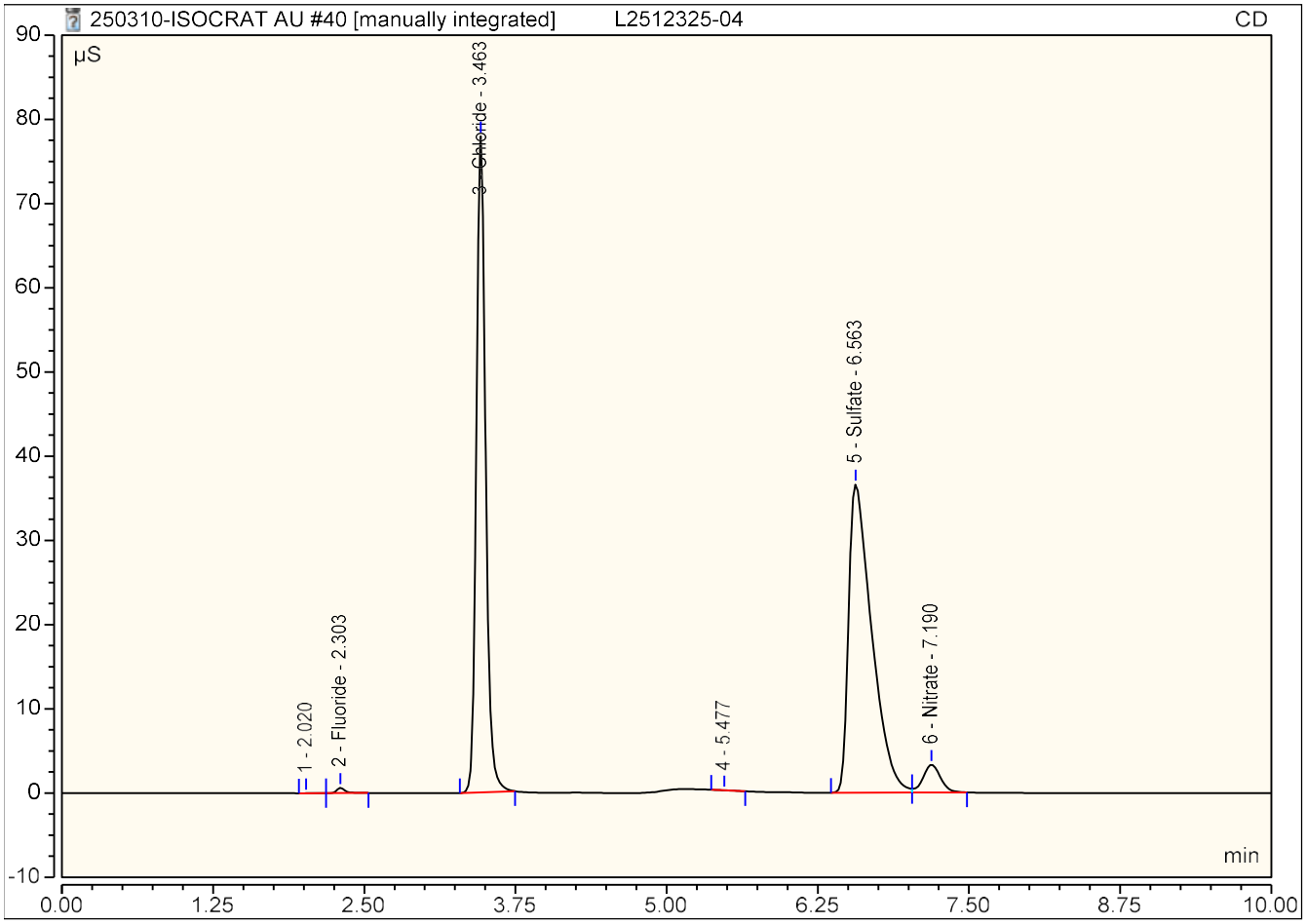
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.010 | 0.116 | 0.0439 |
| 3 | 3.47 | **Chloride** | BMB | 1.170 | 13.563 | 3.4901 |
| 5 | 6.01 | **Bromide** | BMB | 0.001 | 0.007 | 0.0402 |
| 6 | 6.66 | **Sulfate** | BM * | 3.259 | 17.706 | 12.9211 |
| 7 | 7.17 | **Nitrate** | MB* | 1.041 | 6.133 | 1.2462 |
| | | **TOTAL:** | | 5.48 | 37.53 | 17.74 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-04** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 21:49** | *Run Time:* | **10.00** |

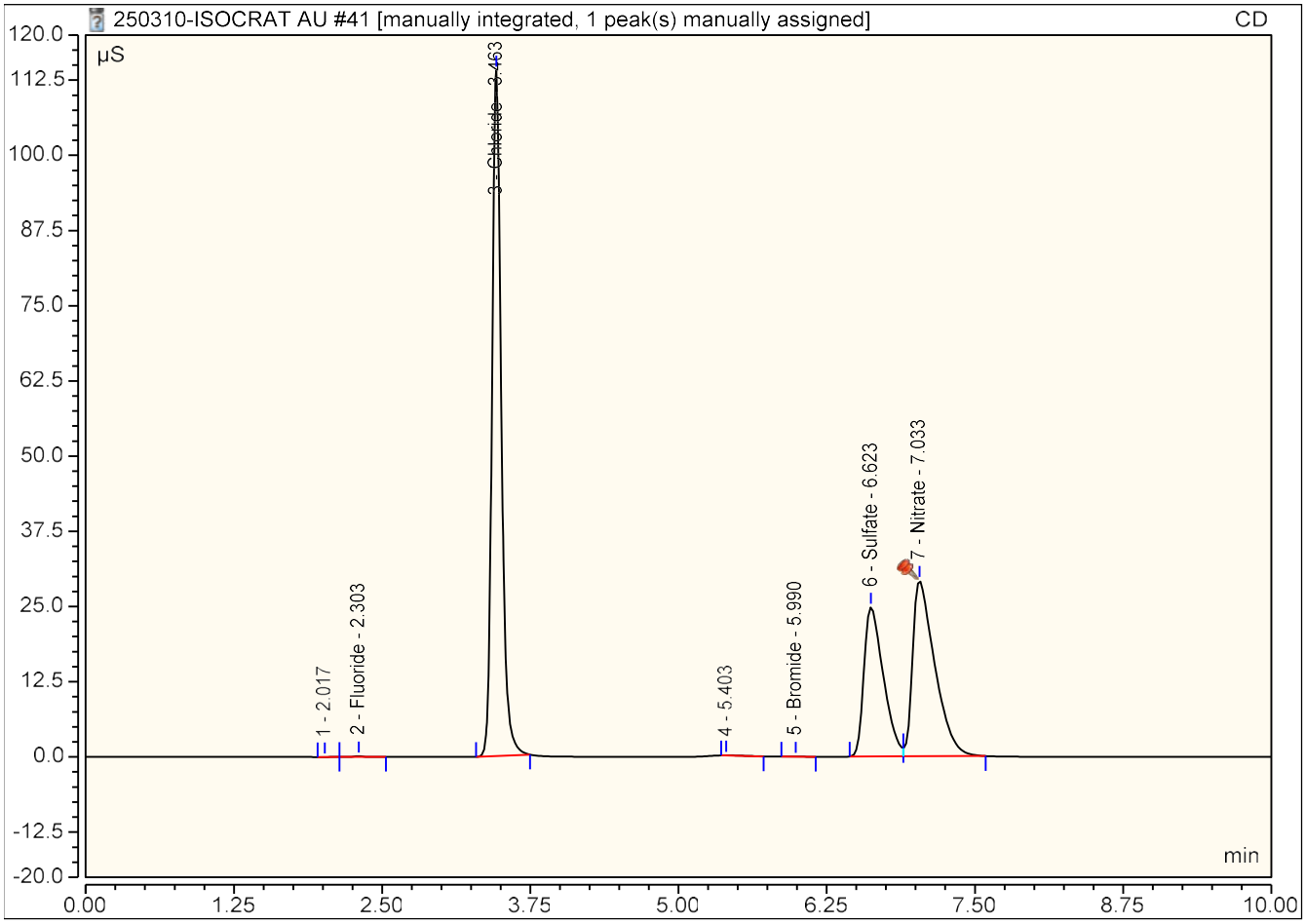
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.048 | 0.623 | 0.1171 |
| 3 | 3.46 | **Chloride** | BMB | 6.940 | 77.909 | 20.2694 |
| 5 | 6.56 | **Sulfate** | BM * | 8.112 | 36.620 | 31.8579 |
| 6 | 7.19 | **Nitrate** | MB* | 0.556 | 3.304 | 0.6794 |
| **TOTAL:** | | | | 15.66 | 118.46 | 52.92 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-05** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 22:01** | *Run Time:* | **10.00** |

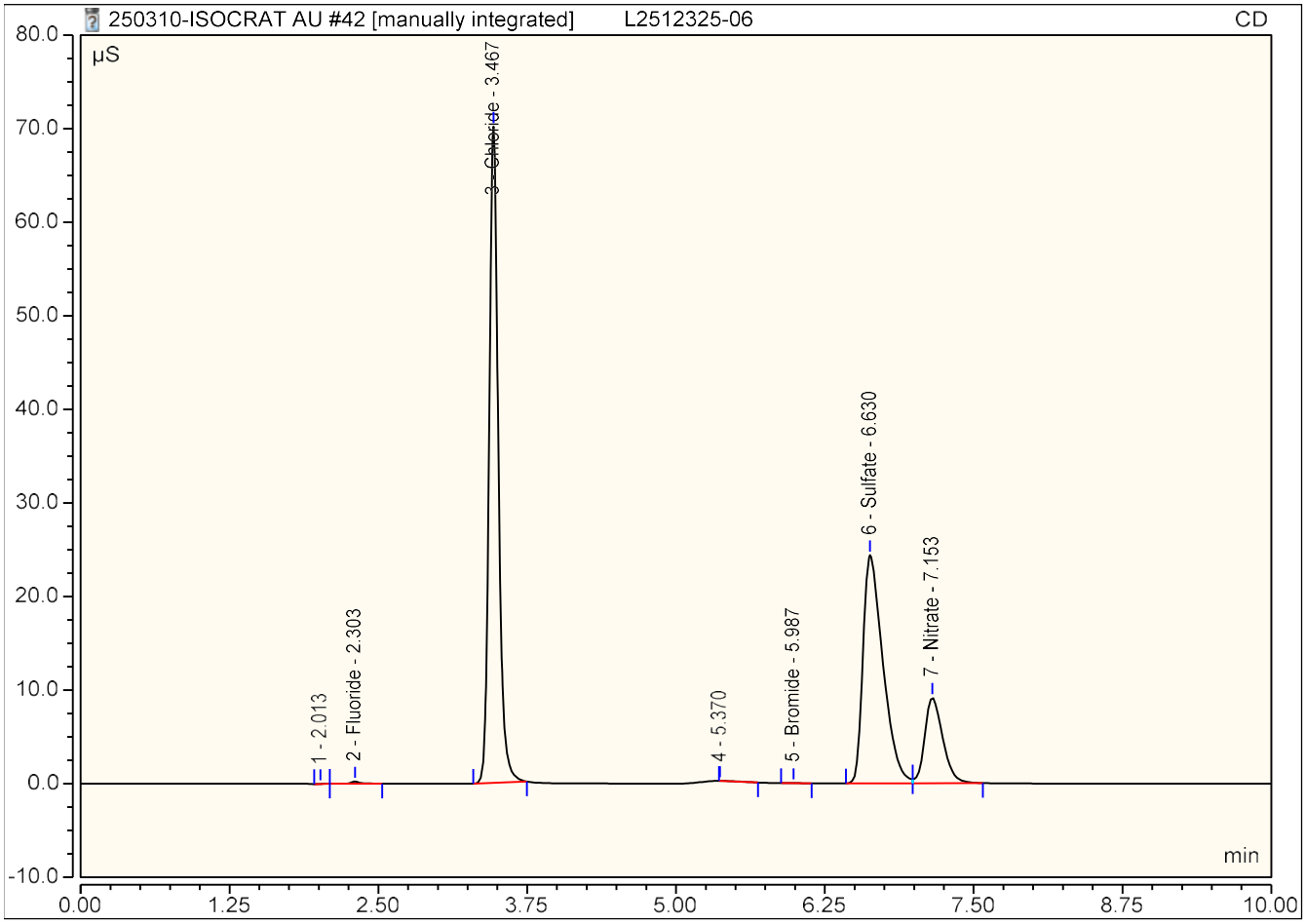
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.012 | 0.138 | 0.0481 |
| 3 | 3.46 | **Chloride** | BMB | 10.352 | 113.977 | 30.1901 |
| 5 | 5.99 | **Bromide** | BMB | 0.004 | 0.034 | 0.0673 |
| 6 | 6.62 | **Sulfate** | BM * | 4.710 | 24.775 | 18.5837 |
| 7 | 7.03 | **Nitrate** | MB*^ | 6.329 | 29.205 | 7.4230 |
| | | **TOTAL:** | | 21.41 | 168.13 | 56.31 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-06** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 22:13** | *Run Time:* | **10.00** |

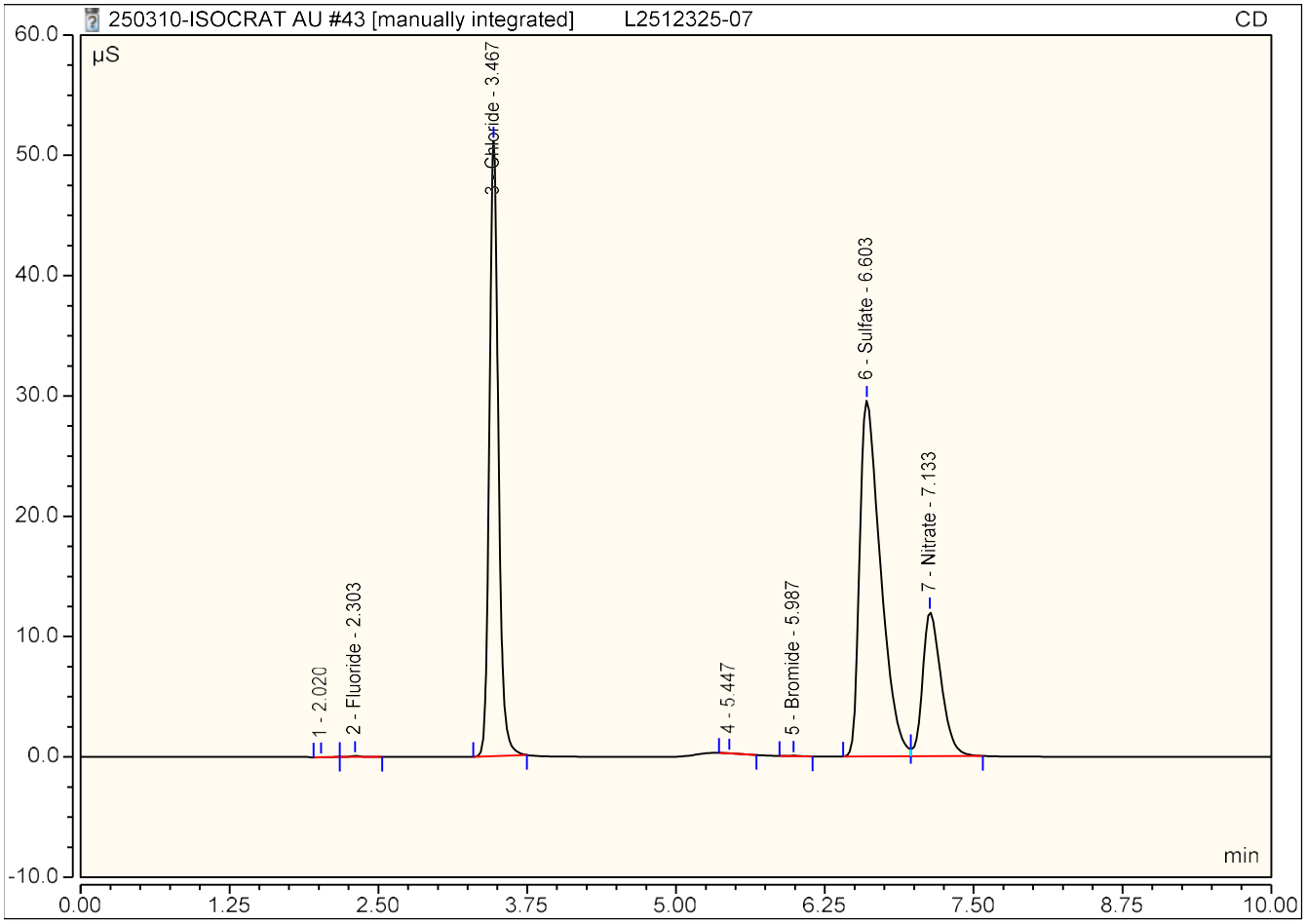
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.020 | 0.239 | 0.0631 |
| 3 | 3.47 | **Chloride** | BMB | 6.291 | 70.117 | 18.3804 |
| 5 | 5.99 | **Bromide** | BMB | 0.002 | 0.016 | 0.0496 |
| 6 | 6.63 | **Sulfate** | BM * | 4.745 | 24.381 | 18.7185 |
| 7 | 7.15 | **Nitrate** | MB* | 1.604 | 9.129 | 1.9041 |
| **TOTAL:** | | | | 12.66 | 103.88 | 39.12 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-07** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 22:25** | *Run Time:* | **10.00** |

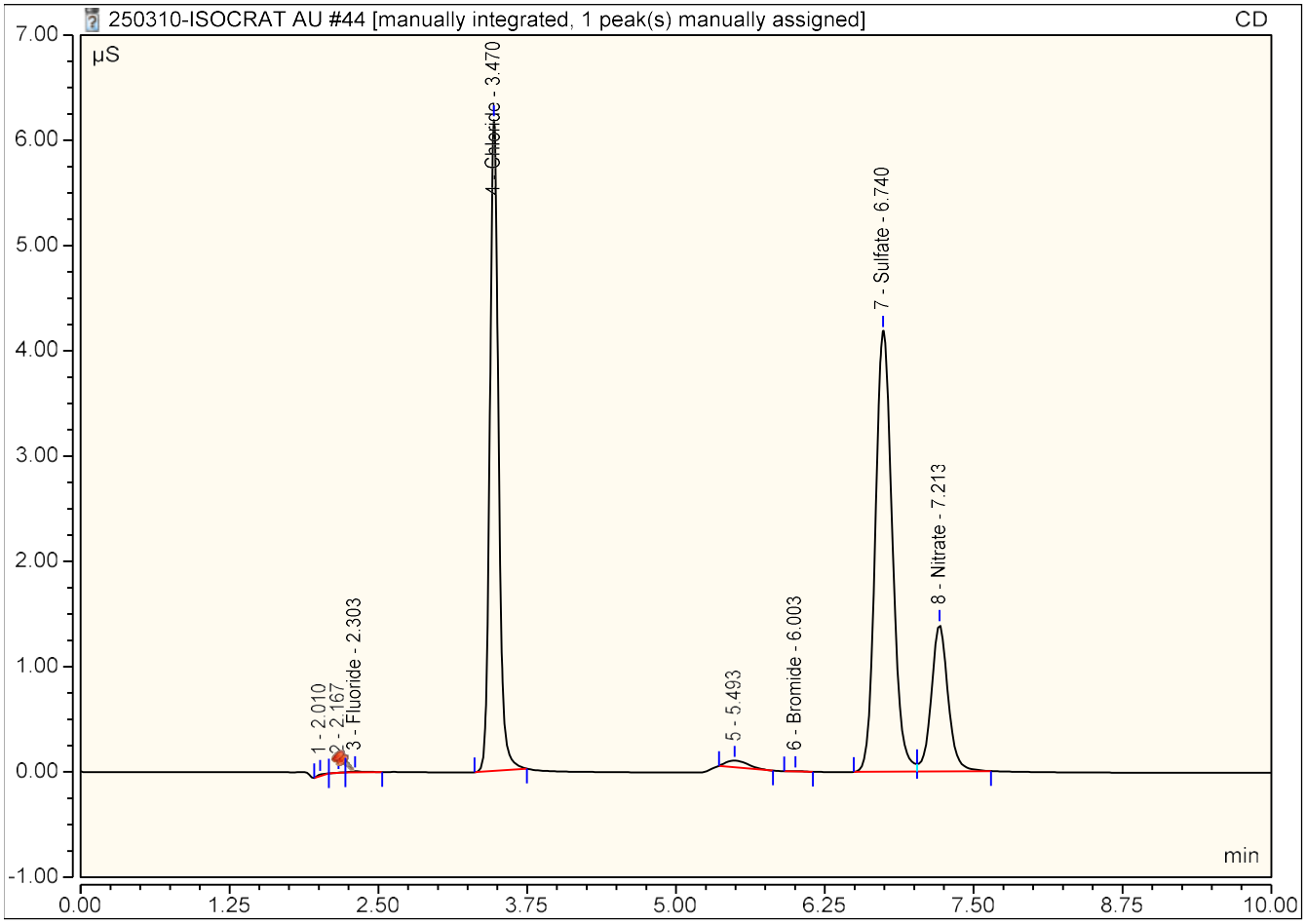
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.008 | 0.090 | 0.0398 |
| 3 | 3.47 | **Chloride** | BMB | 4.542 | 51.080 | 13.2952 |
| 5 | 5.99 | **Bromide** | BMB | 0.004 | 0.033 | 0.0663 |
| 6 | 6.60 | **Sulfate** | BM * | 6.036 | 29.555 | 23.7558 |
| 7 | 7.13 | **Nitrate** | MB* | 2.163 | 11.953 | 2.5570 |
| **TOTAL:** | | | | 12.75 | 92.71 | 39.71 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **XL2512325-07; 10X** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 22:37** | *Run Time:* | **10.00** |

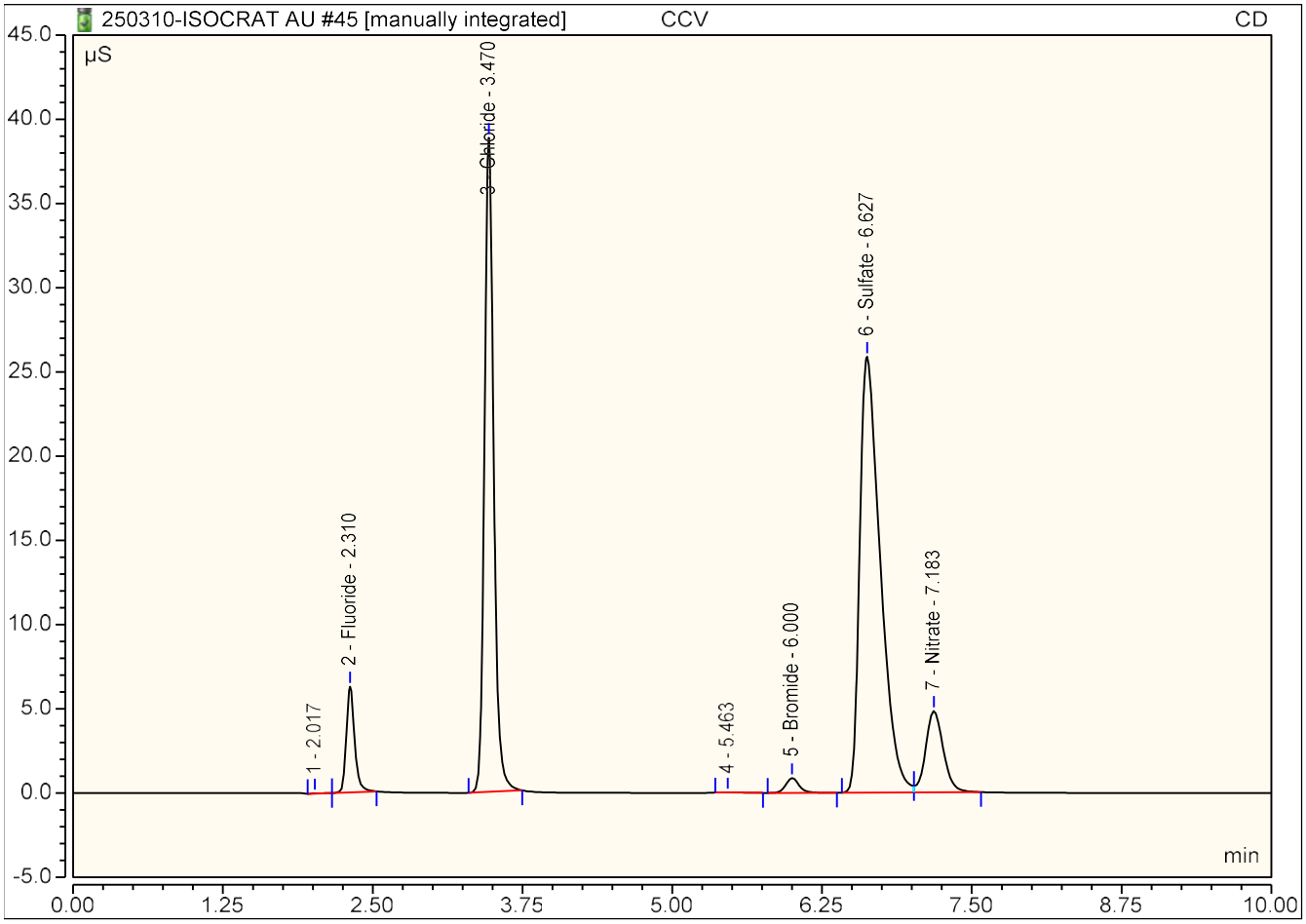
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB^ | 0.001 | 0.012 | 0.2687 |
| 4 | 3.47 | **Chloride** | BMB | 0.530 | 6.183 | 16.2940 |
| 6 | 6.00 | **Bromide** | BMB | 0.000 | 0.004 | 0.3801 |
| 7 | 6.74 | **Sulfate** | BM * | 0.690 | 4.190 | 28.9567 |
| 8 | 7.21 | **Nitrate** | MB* | 0.227 | 1.392 | 2.9525 |
| **TOTAL:** | | | | 1.45 | 11.78 | 48.85 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 22:49** | *Run Time:* | **10.00** |

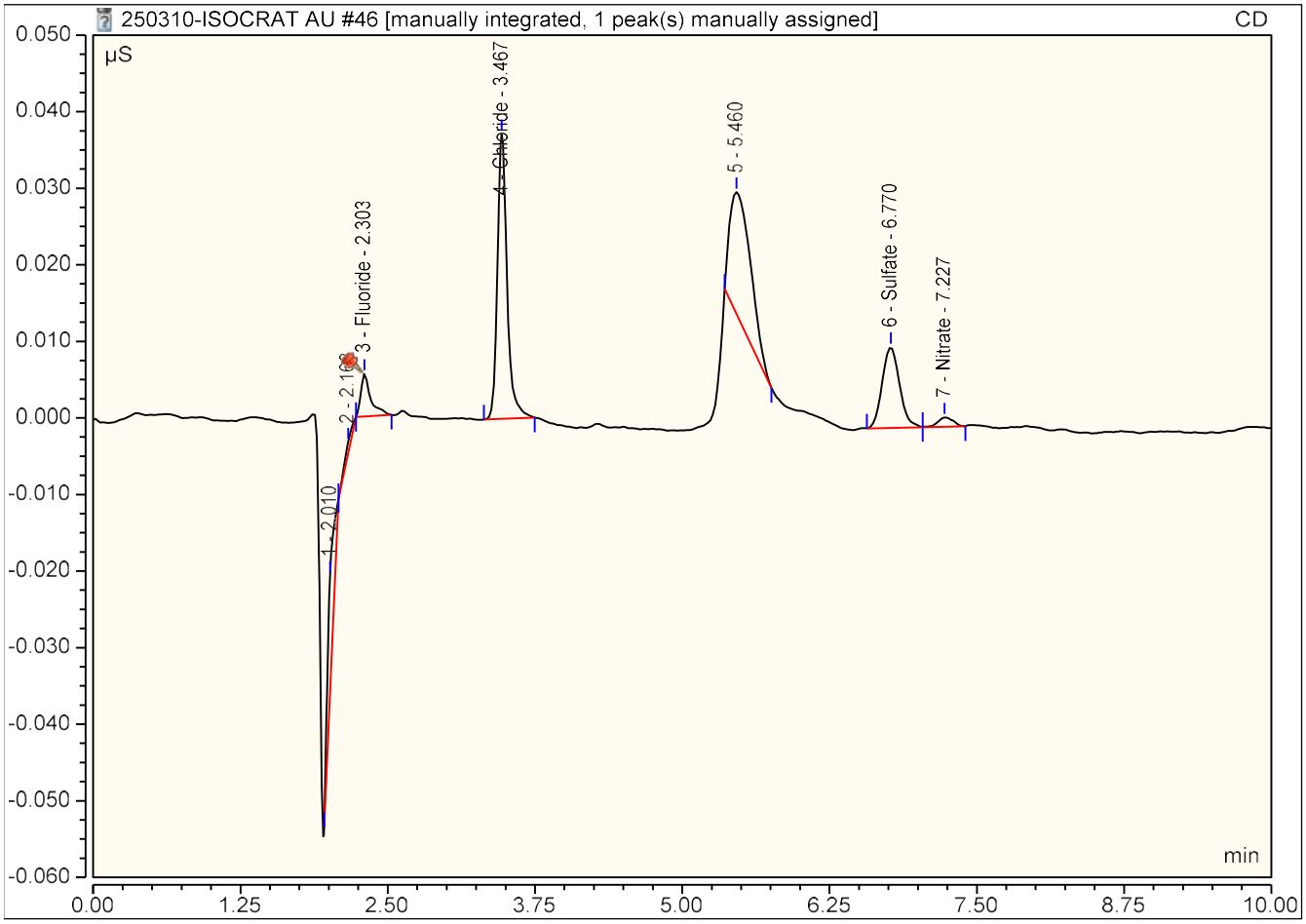
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.498 | 6.285 | 0.9800 |
| 3 | 3.47 | **Chloride** | BMB | 3.458 | 38.832 | 10.1440 |
| 5 | 6.00 | **Bromide** | BMB | 0.114 | 0.881 | 0.9482 |
| 6 | 6.63 | **Sulfate** | BM * | 5.142 | 25.872 | 20.2675 |
| 7 | 7.18 | **Nitrate** | MB* | 0.824 | 4.838 | 0.9920 |
| **TOTAL:** | | | | 10.04 | 76.71 | 33.33 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 23:01** | *Run Time:* | **10.00** |

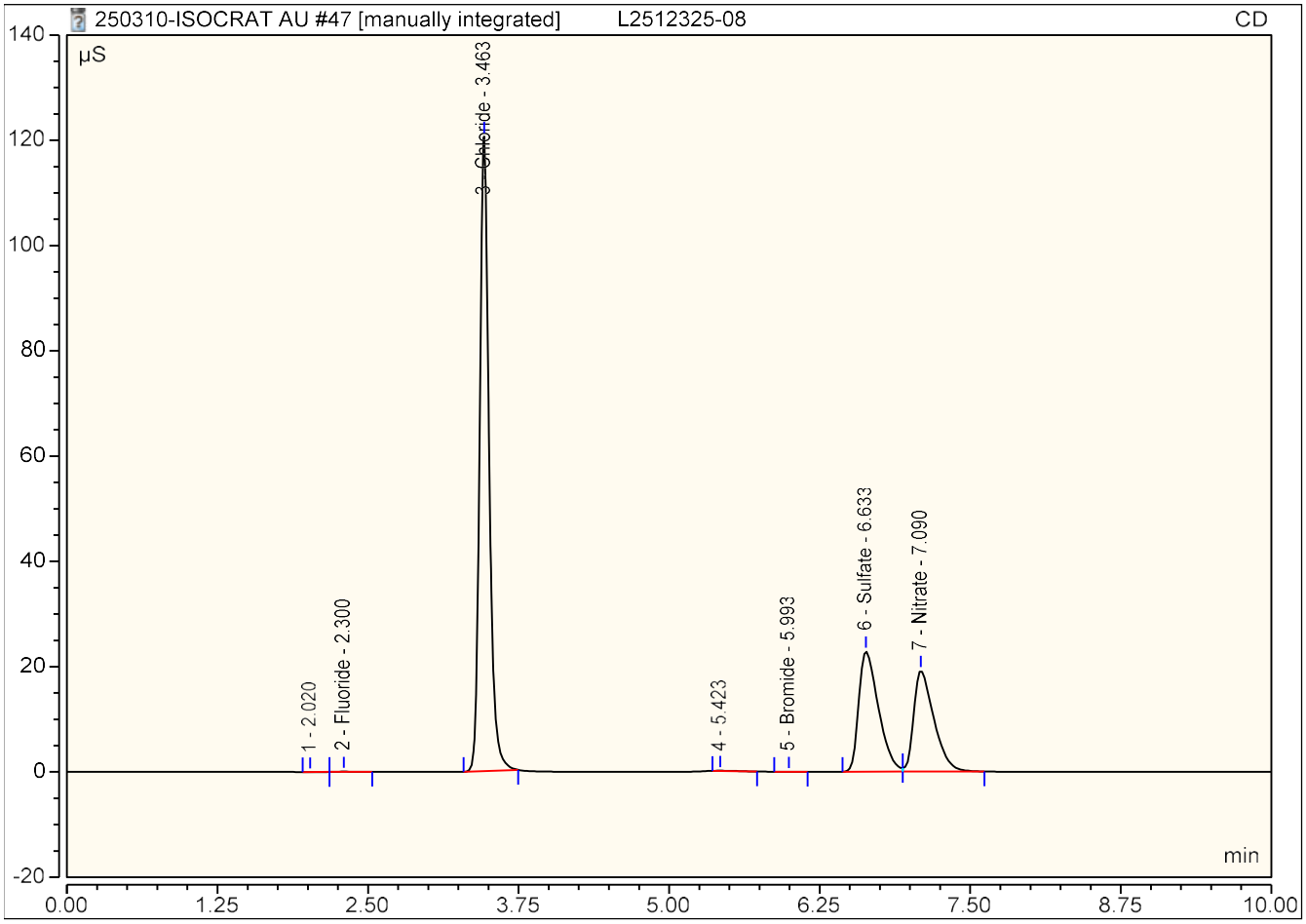
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB^ | 0.001 | 0.006 | 0.0257 |
| 4 | 3.47 | **Chloride** | BMB | 0.003 | 0.037 | 0.0990 |
| 6 | 6.77 | **Sulfate** | BM * | 0.002 | 0.011 | 0.2092 |
| 7 | 7.23 | **Nitrate** | MB* | 0.000 | 0.001 | 0.0300 |
| **TOTAL:** | | | | 0.01 | 0.05 | 0.36 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-08** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 23:13** | *Run Time:* | **10.00** |

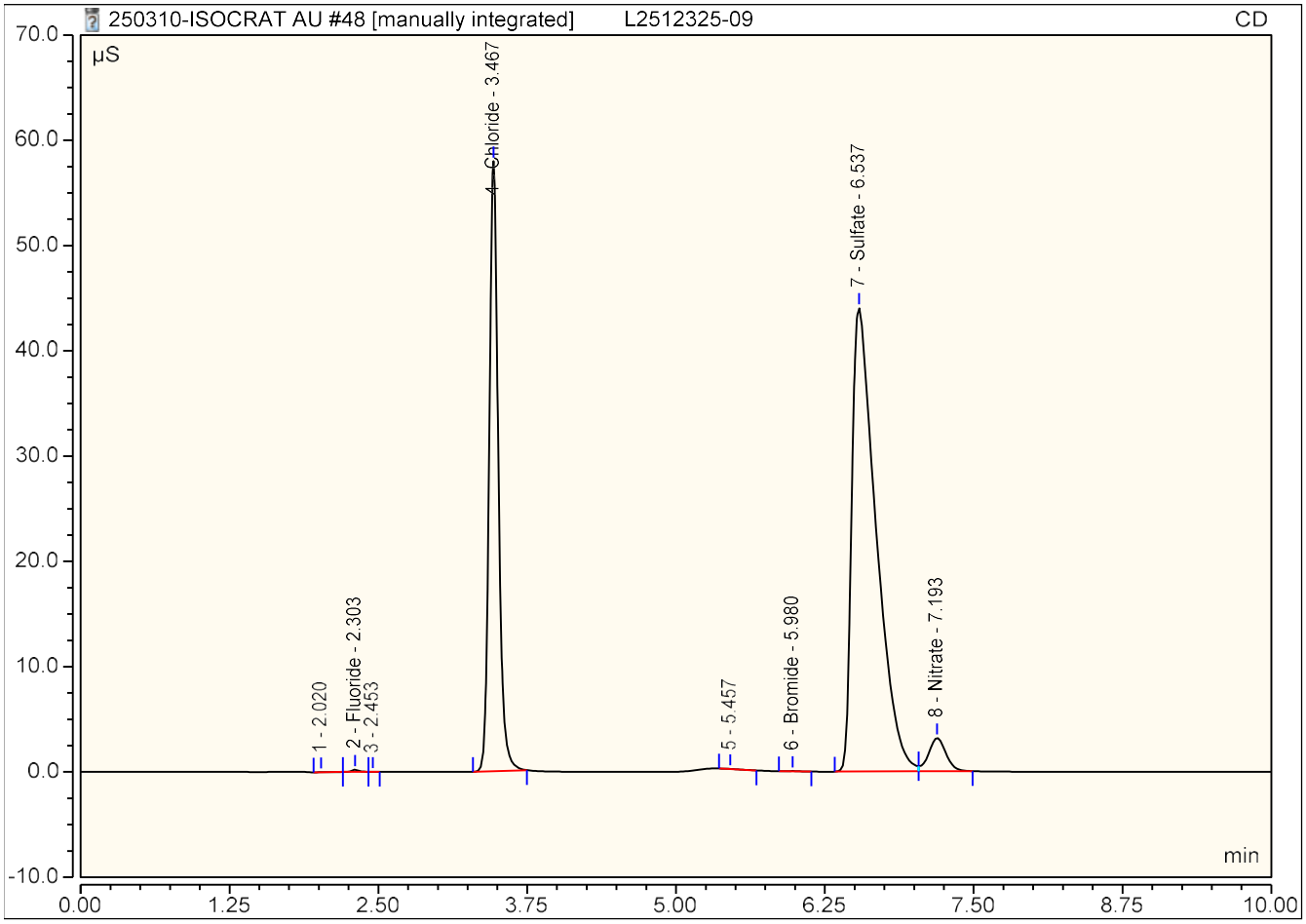
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.008 | 0.093 | 0.0406 |
| 3 | 3.46 | **Chloride** | BMB | 10.966 | 120.544 | 31.9748 |
| 5 | 5.99 | **Bromide** | BMB | 0.002 | 0.020 | 0.0536 |
| 6 | 6.63 | **Sulfate** | BM * | 4.334 | 22.894 | 17.1141 |
| 7 | 7.09 | **Nitrate** | MB* | 3.732 | 19.194 | 4.3901 |
| | | **TOTAL:** | | 19.04 | 162.75 | 53.57 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-09** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 23:26** | *Run Time:* | **10.00** |

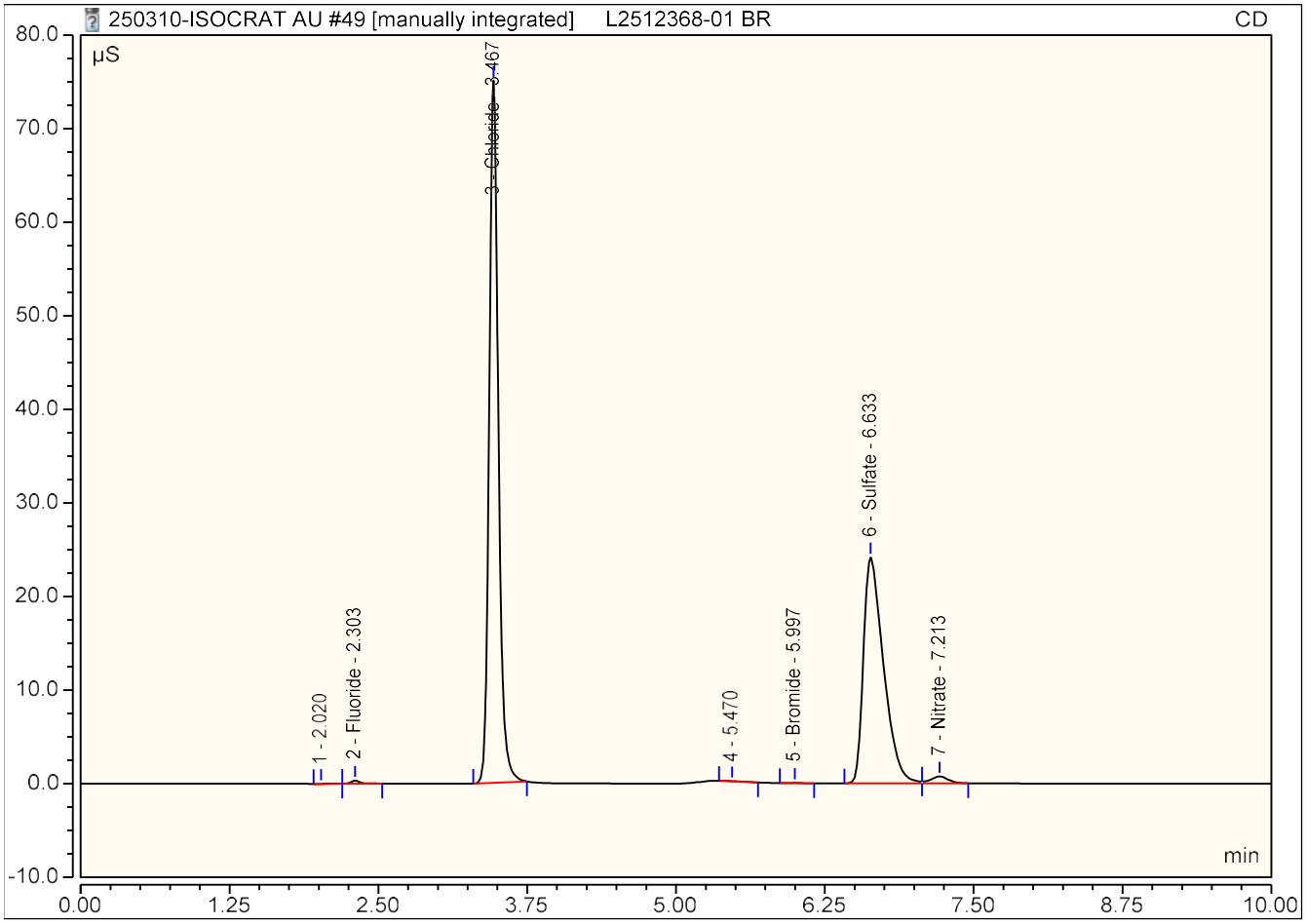
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.014 | 0.198 | 0.0512 |
| 4 | 3.47 | **Chloride** | BMB | 5.160 | 57.940 | 15.0919 |
| 6 | 5.98 | **Bromide** | BMB | 0.004 | 0.033 | 0.0657 |
| 7 | 6.54 | **Sulfate** | BM * | 10.384 | 44.050 | 40.7243 |
| 8 | 7.19 | **Nitrate** | MB* | 0.535 | 3.157 | 0.6552 |
| | | **TOTAL:** | | 16.10 | 105.38 | 56.59 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-01 BR** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 23:38** | *Run Time:* | **10.00** |

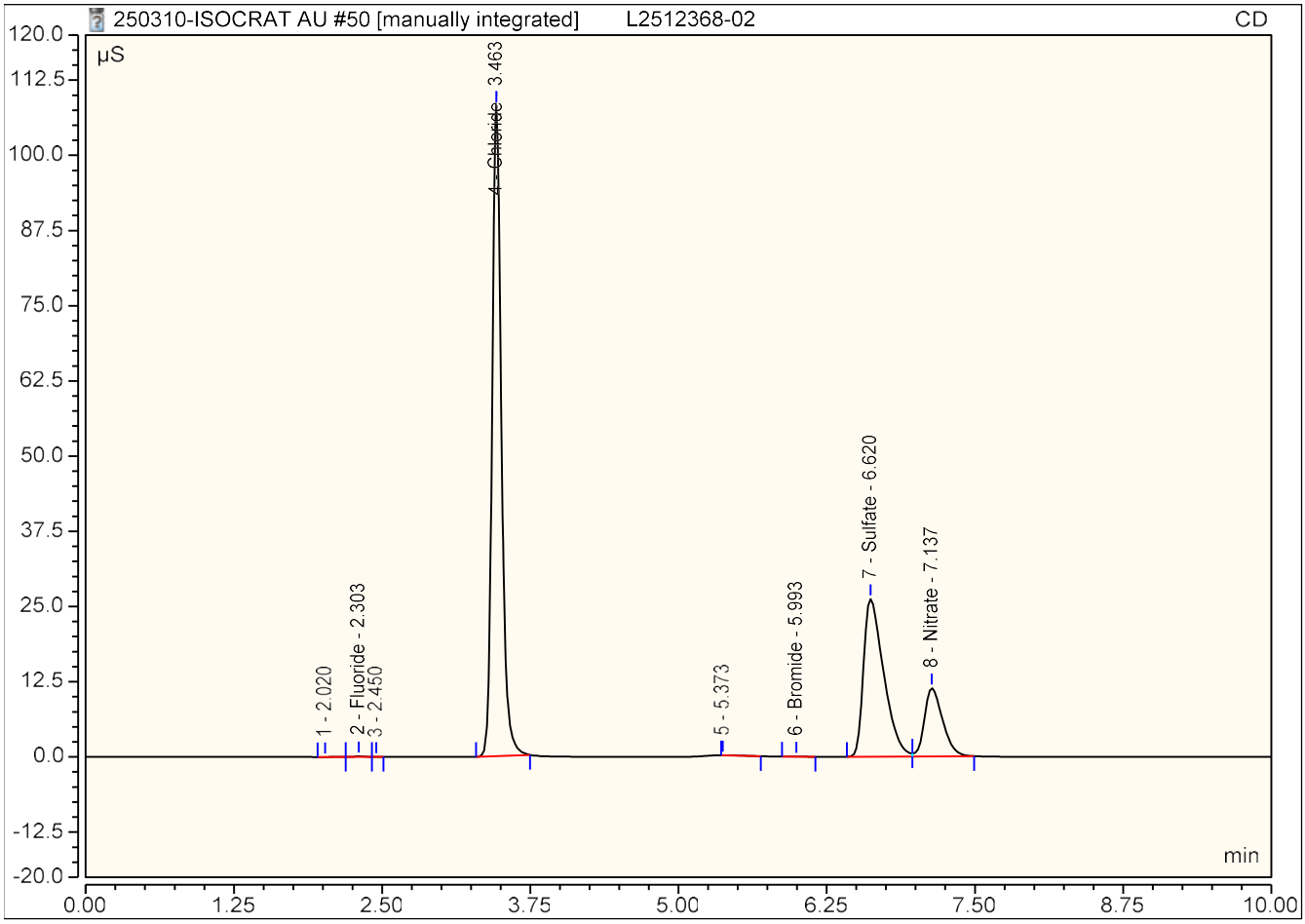
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.027 | 0.344 | 0.0765 |
| 3 | 3.47 | **Chloride** | BMB | 6.739 | 75.031 | 19.6842 |
| 5 | 6.00 | **Bromide** | BMB | 0.005 | 0.040 | 0.0728 |
| 6 | 6.63 | **Sulfate** | BM * | 4.726 | 24.154 | 18.6434 |
| 7 | 7.21 | **Nitrate** | MB* | 0.125 | 0.737 | 0.1756 |
| | | **TOTAL:** | | 11.62 | 100.30 | 38.65 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-02** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 23:50** | *Run Time:* | **10.00** |

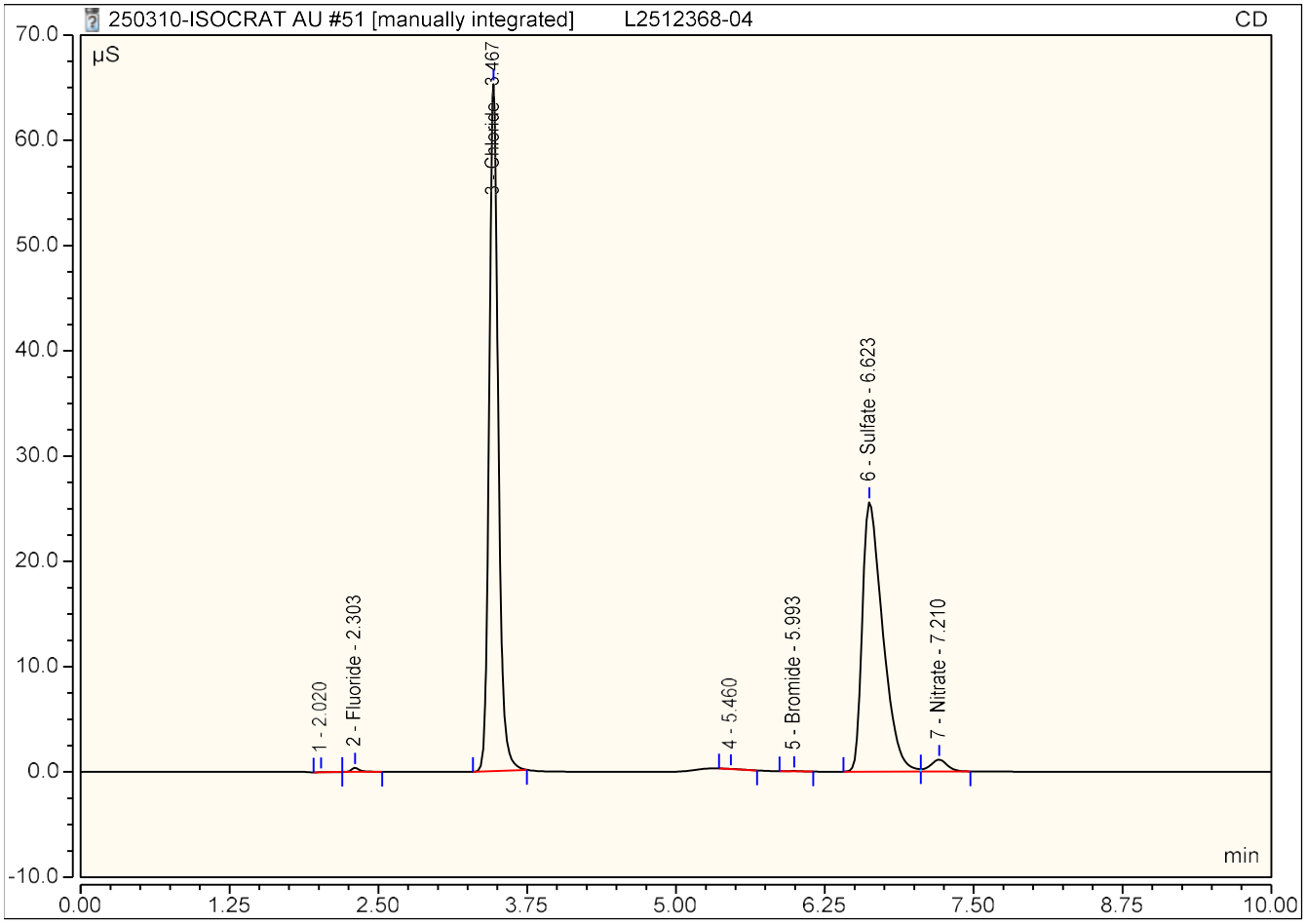
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.009 | 0.129 | 0.0424 |
| 4 | 3.46 | **Chloride** | BMB | 9.799 | 108.109 | 28.5818 |
| 6 | 5.99 | **Bromide** | BMB | 0.004 | 0.031 | 0.0636 |
| 7 | 6.62 | **Sulfate** | BM * | 5.175 | 26.209 | 20.3972 |
| 8 | 7.14 | **Nitrate** | MB* | 2.012 | 11.331 | 2.3804 |
| | | **TOTAL:** | | 17.00 | 145.81 | 51.47 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-04** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 00:02** | *Run Time:* | **10.00** |

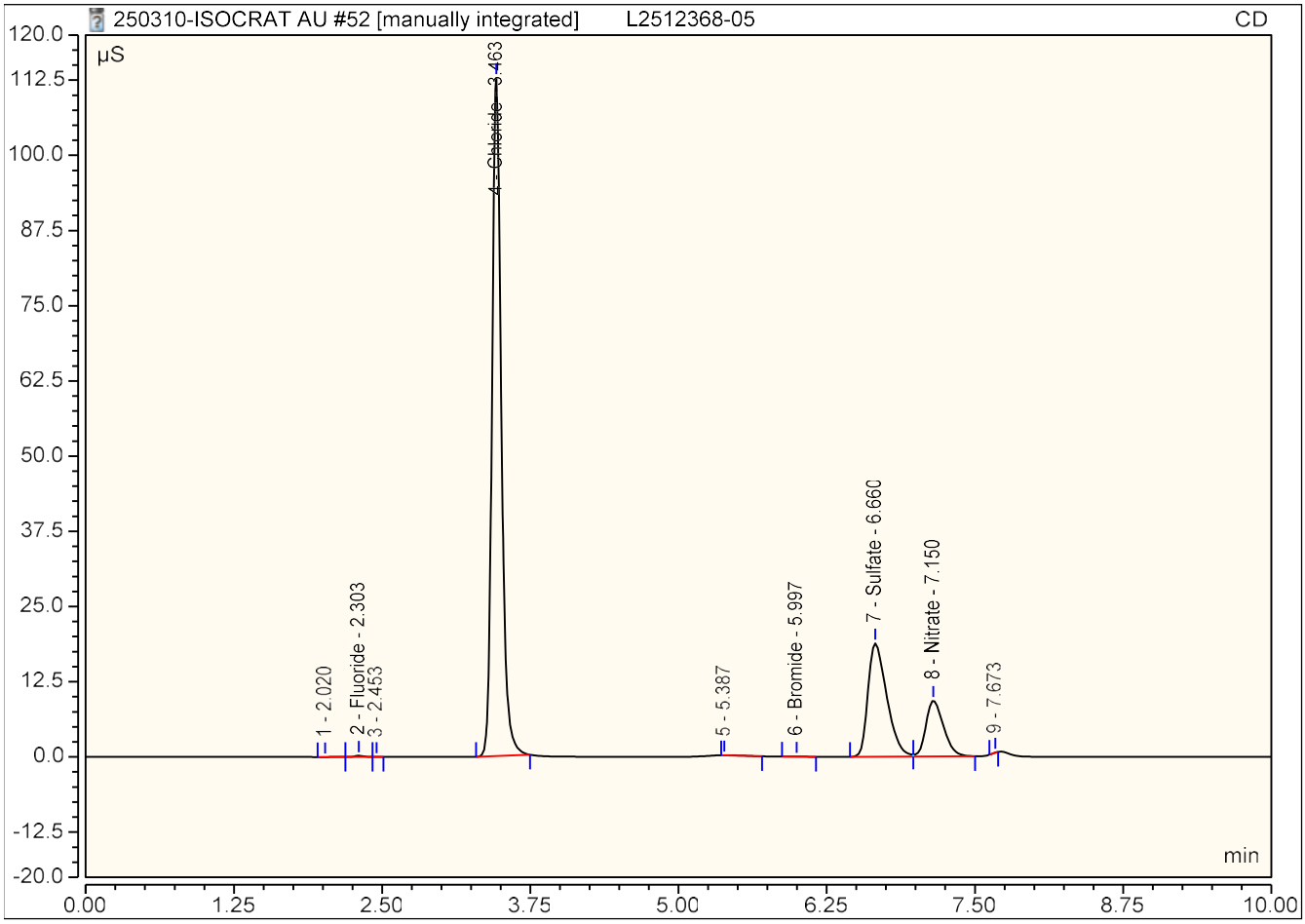
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.033 | 0.409 | 0.0876 |
| 3 | 3.47 | **Chloride** | BMB | 5.838 | 65.270 | 17.0634 |
| 5 | 5.99 | **Bromide** | BMB | 0.005 | 0.038 | 0.0704 |
| 6 | 6.62 | **Sulfate** | BM * | 5.099 | 25.622 | 20.1015 |
| 7 | 7.21 | **Nitrate** | MB* | 0.189 | 1.128 | 0.2502 |
| | | **TOTAL:** | | 11.16 | 92.47 | 37.57 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-05** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 00:14** | *Run Time:* | **10.00** |

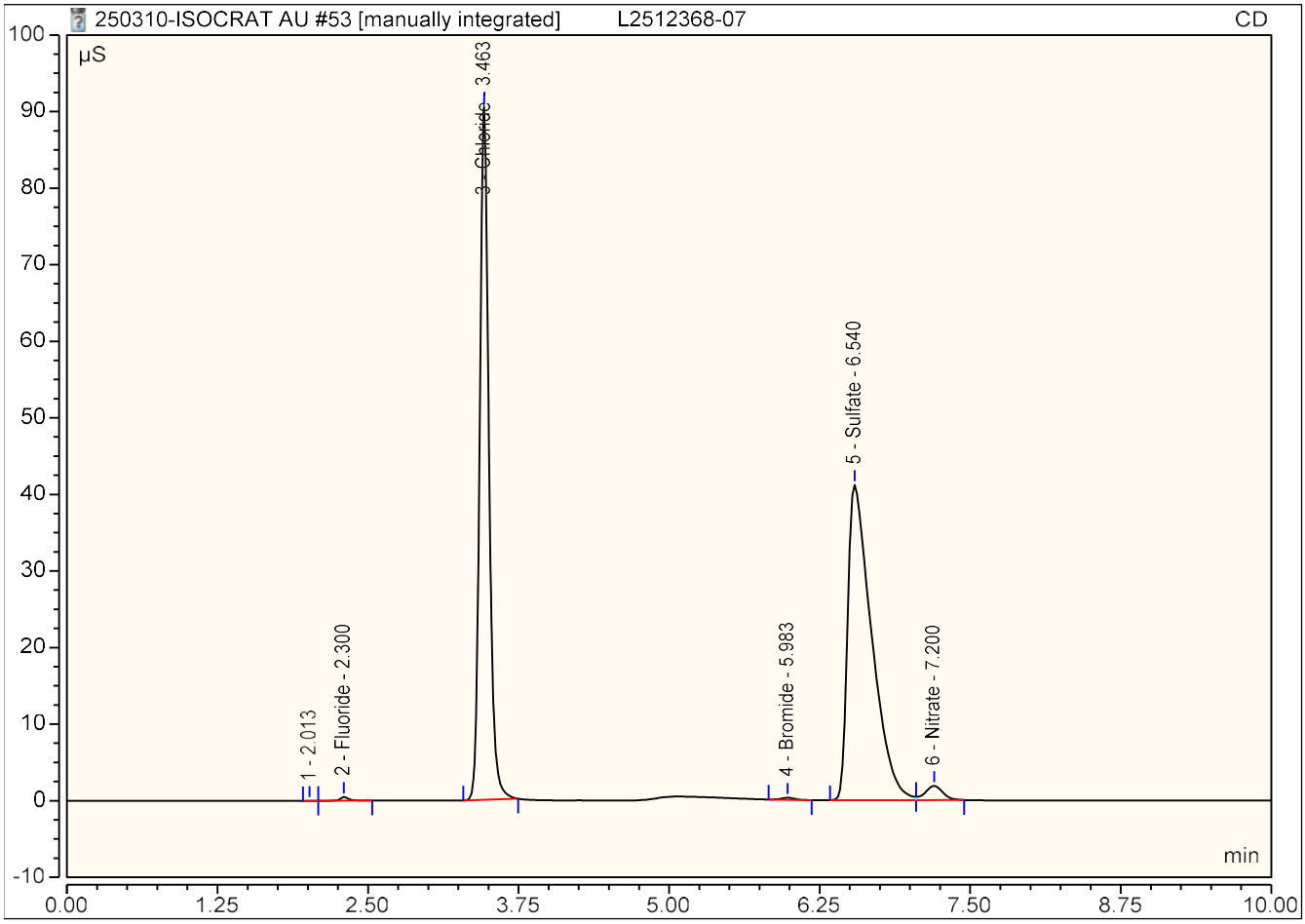
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.014 | 0.193 | 0.0509 |
| 4 | 3.46 | **Chloride** | BMB | 10.237 | 112.755 | 29.8547 |
| 6 | 6.00 | **Bromide** | BMB | 0.004 | 0.033 | 0.0661 |
| 7 | 6.66 | **Sulfate** | BM * | 3.463 | 18.839 | 13.7147 |
| 8 | 7.15 | **Nitrate** | MB* | 1.602 | 9.281 | 1.9007 |
| | | **TOTAL:** | | 15.32 | 141.10 | 45.59 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-07** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 00:26** | *Run Time:* | **10.00** |

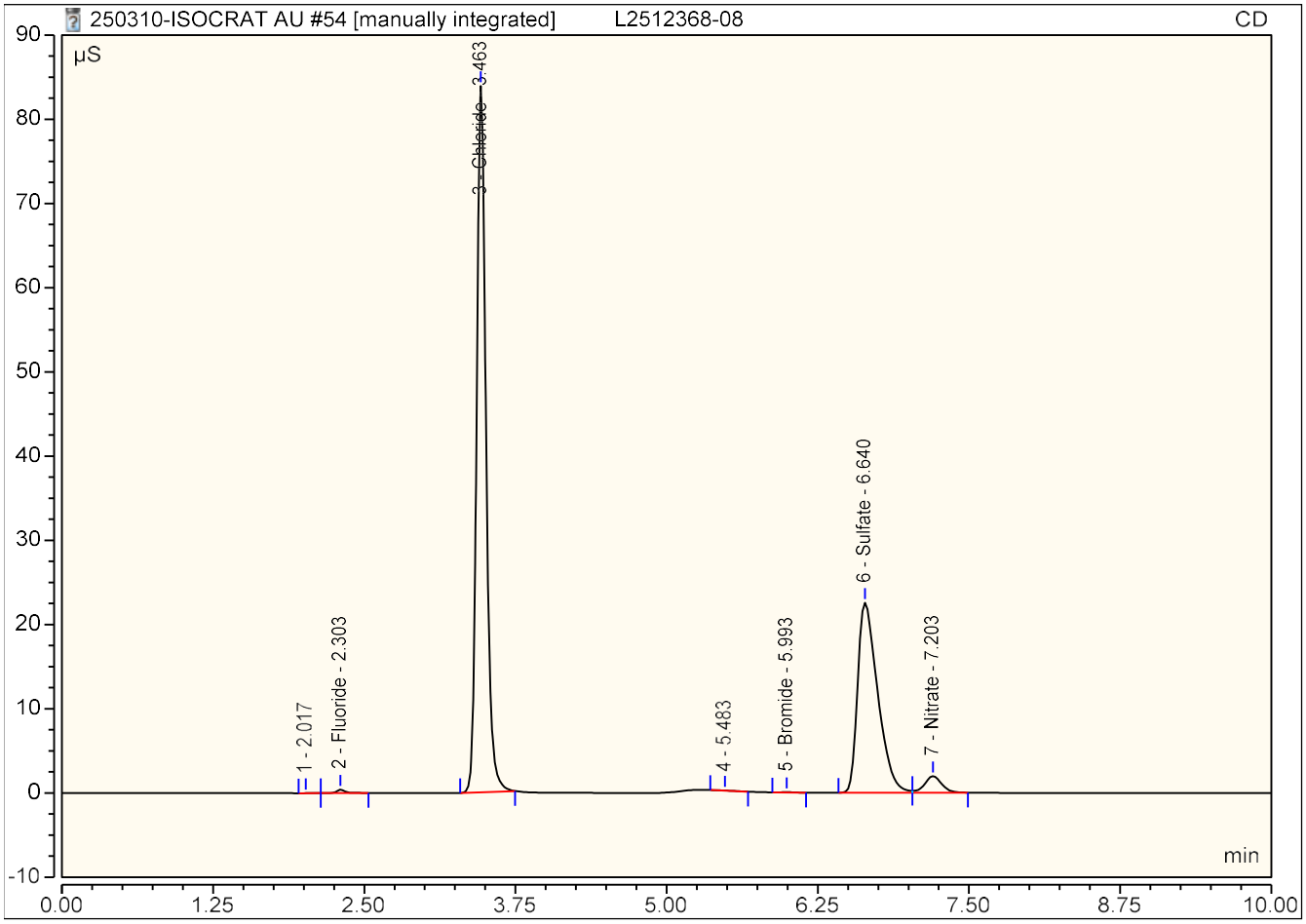
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.039 | 0.490 | 0.0989 |
| 3 | 3.46 | **Chloride** | BMB | 8.057 | 90.460 | 23.5176 |
| 4 | 5.98 | **Bromide** | BMB | 0.034 | 0.272 | 0.3073 |
| 5 | 6.54 | **Sulfate** | BM * | 9.507 | 41.187 | 37.3028 |
| 6 | 7.20 | **Nitrate** | MB* | 0.315 | 1.868 | 0.3978 |
| | | **TOTAL:** | | 17.95 | 134.28 | 61.62 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-08** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 00:38** | *Run Time:* | **10.00** |

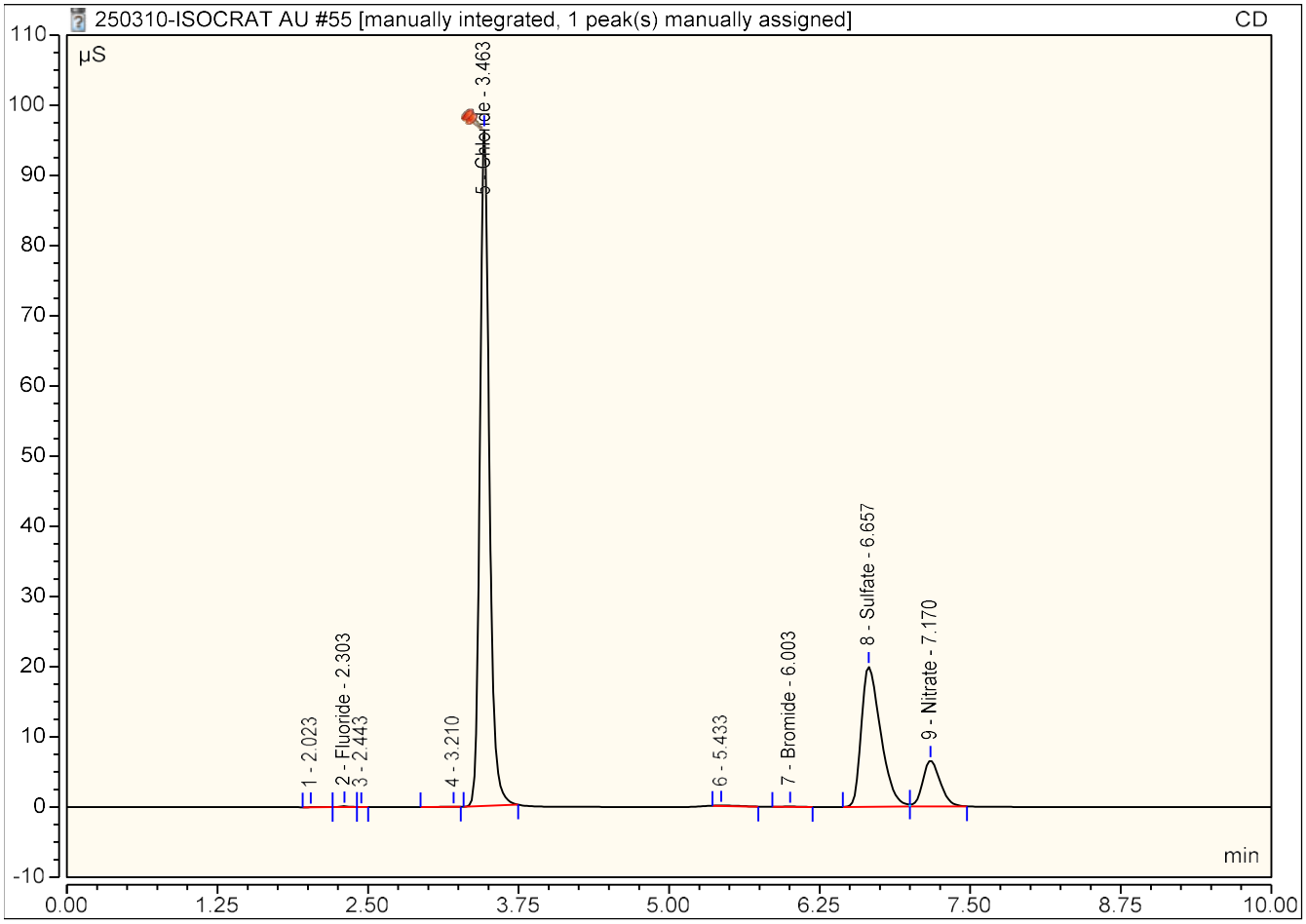
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.031 | 0.403 | 0.0850 |
| 3 | 3.46 | **Chloride** | BMB | 7.532 | 83.870 | 21.9893 |
| 5 | 5.99 | **Bromide** | BMB | 0.005 | 0.040 | 0.0729 |
| 6 | 6.64 | **Sulfate** | BM * | 4.345 | 22.561 | 17.1560 |
| 7 | 7.20 | **Nitrate** | MB* | 0.322 | 1.958 | 0.4058 |
| | | **TOTAL:** | | 12.23 | 108.83 | 39.71 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-10** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 00:50** | *Run Time:* | **10.00** |

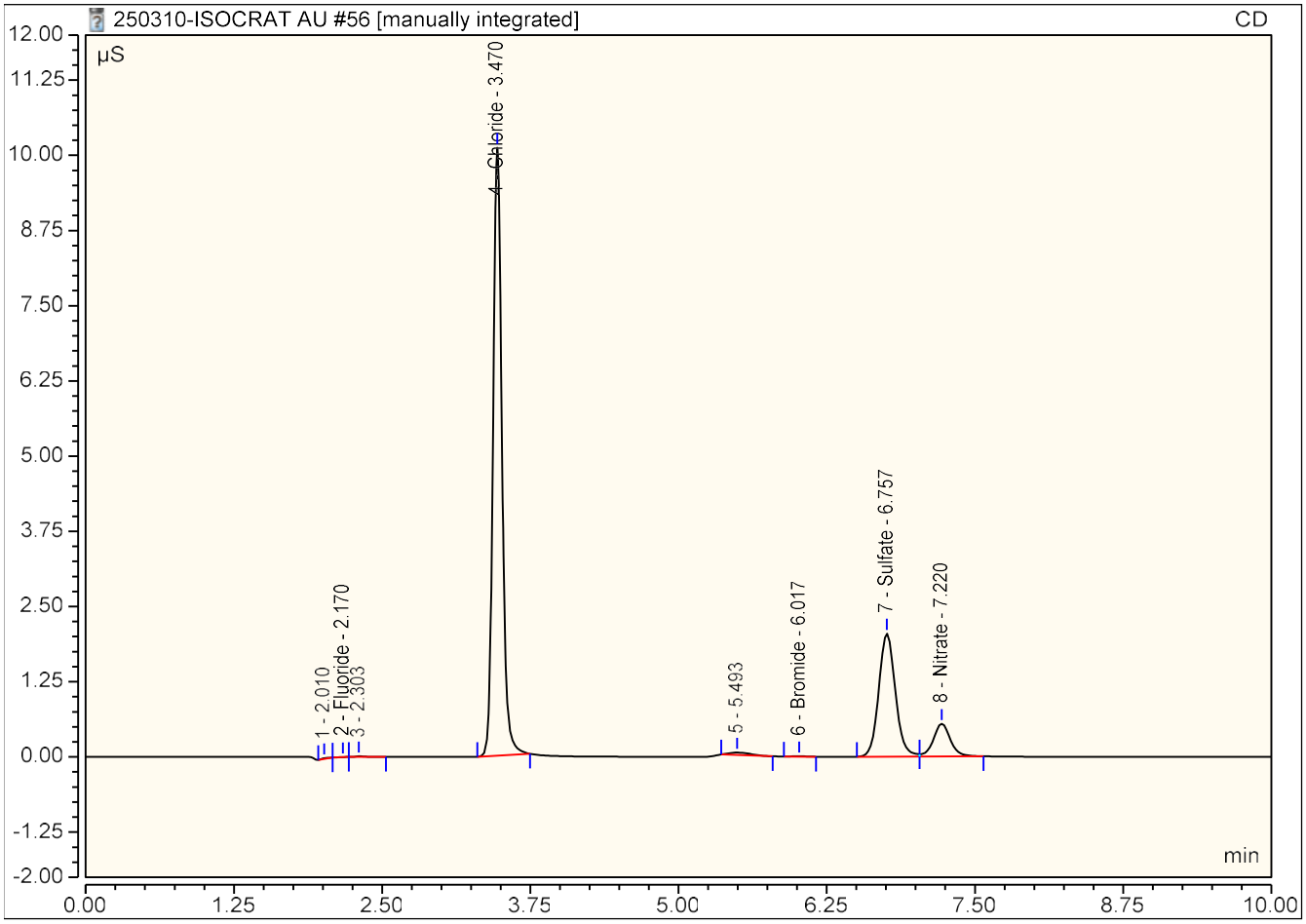
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.007 | 0.102 | 0.0384 |
| 5 | 3.46 | **Chloride** | BMB^ | 8.750 | 96.320 | 25.5319 |
| 7 | 6.00 | **Bromide** | BMB | 0.008 | 0.064 | 0.0983 |
| 8 | 6.66 | **Sulfate** | BM * | 3.724 | 19.948 | 14.7331 |
| 9 | 7.17 | **Nitrate** | MB* | 1.099 | 6.525 | 1.3133 |
| | | **TOTAL:** | | 13.59 | 122.96 | 41.72 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **XL2512368-10; 10X** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 01:02** | *Run Time:* | **10.00** |

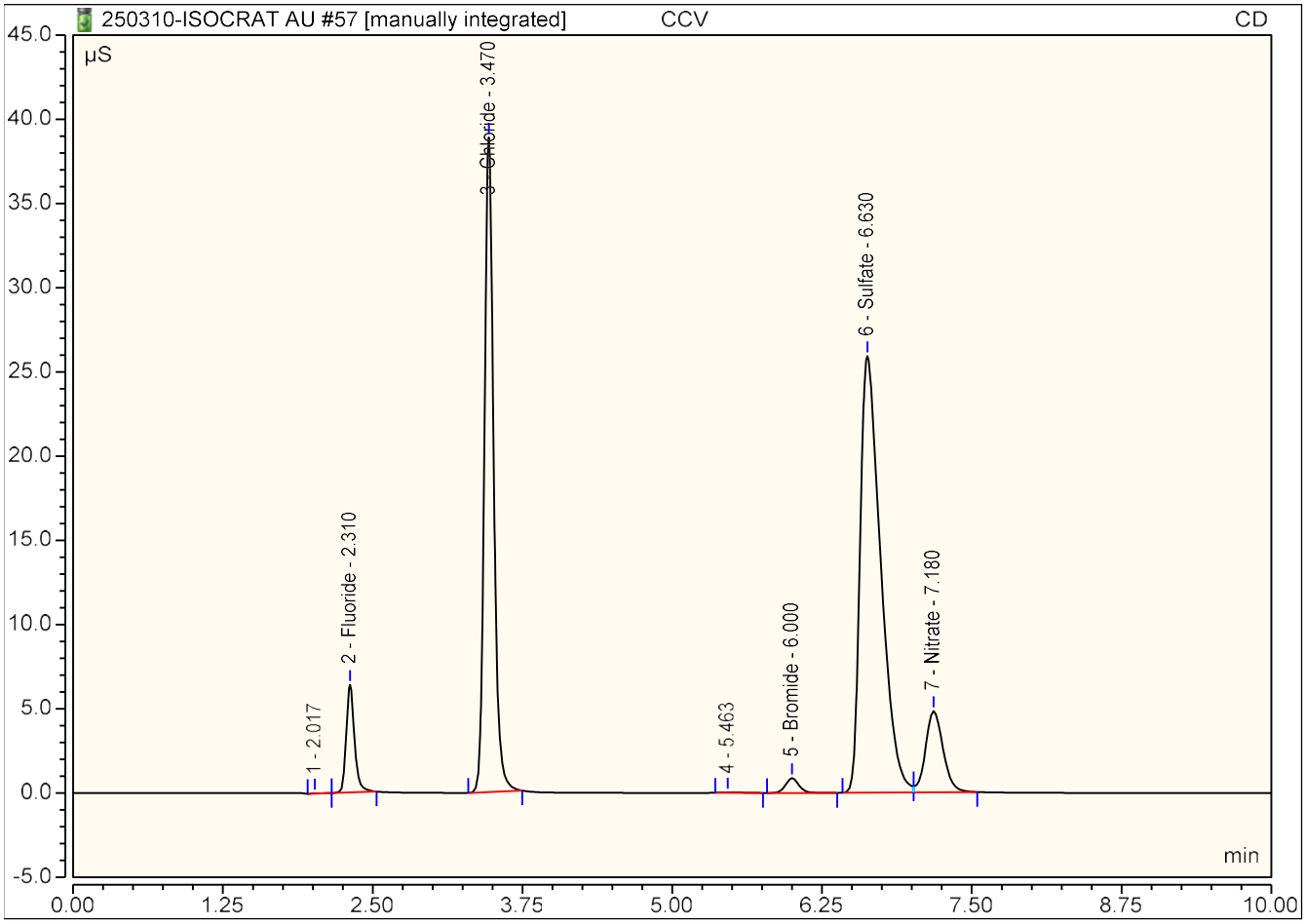
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.17 | **Fluoride** | BMB | 0.000 | 0.001 | 0.2482 |
| 4 | 3.47 | **Chloride** | BMB | 0.877 | 10.105 | 26.3838 |
| 6 | 6.02 | **Bromide** | BMB | 0.001 | 0.006 | 0.4044 |
| 7 | 6.76 | **Sulfate** | BM * | 0.333 | 2.047 | 15.0033 |
| 8 | 7.22 | **Nitrate** | MB* | 0.090 | 0.545 | 1.3520 |
| | | **TOTAL:** | | 1.30 | 12.70 | 43.39 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 01:14** | *Run Time:* | **10.00** |

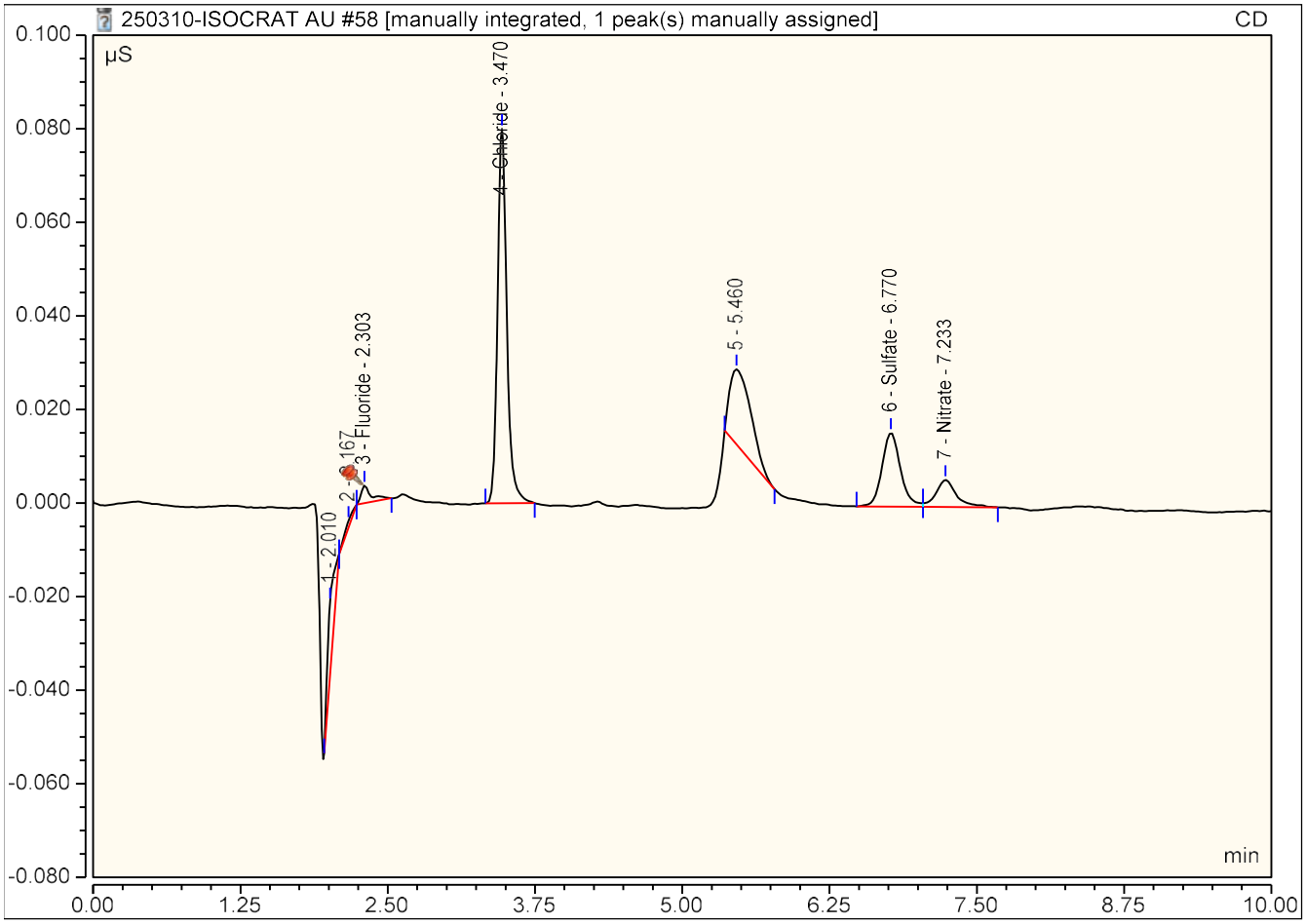
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.504 | 6.387 | 0.9917 |
| 3 | 3.47 | **Chloride** | BMB | 3.461 | 38.855 | 10.1540 |
| 5 | 6.00 | **Bromide** | BMB | 0.114 | 0.881 | 0.9456 |
| 6 | 6.63 | **Sulfate** | BM * | 5.144 | 25.911 | 20.2748 |
| 7 | 7.18 | **Nitrate** | MB* | 0.819 | 4.831 | 0.9864 |
| **TOTAL:** | | | | 10.04 | 76.86 | 33.35 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 01:26** | *Run Time:* | **10.00** |

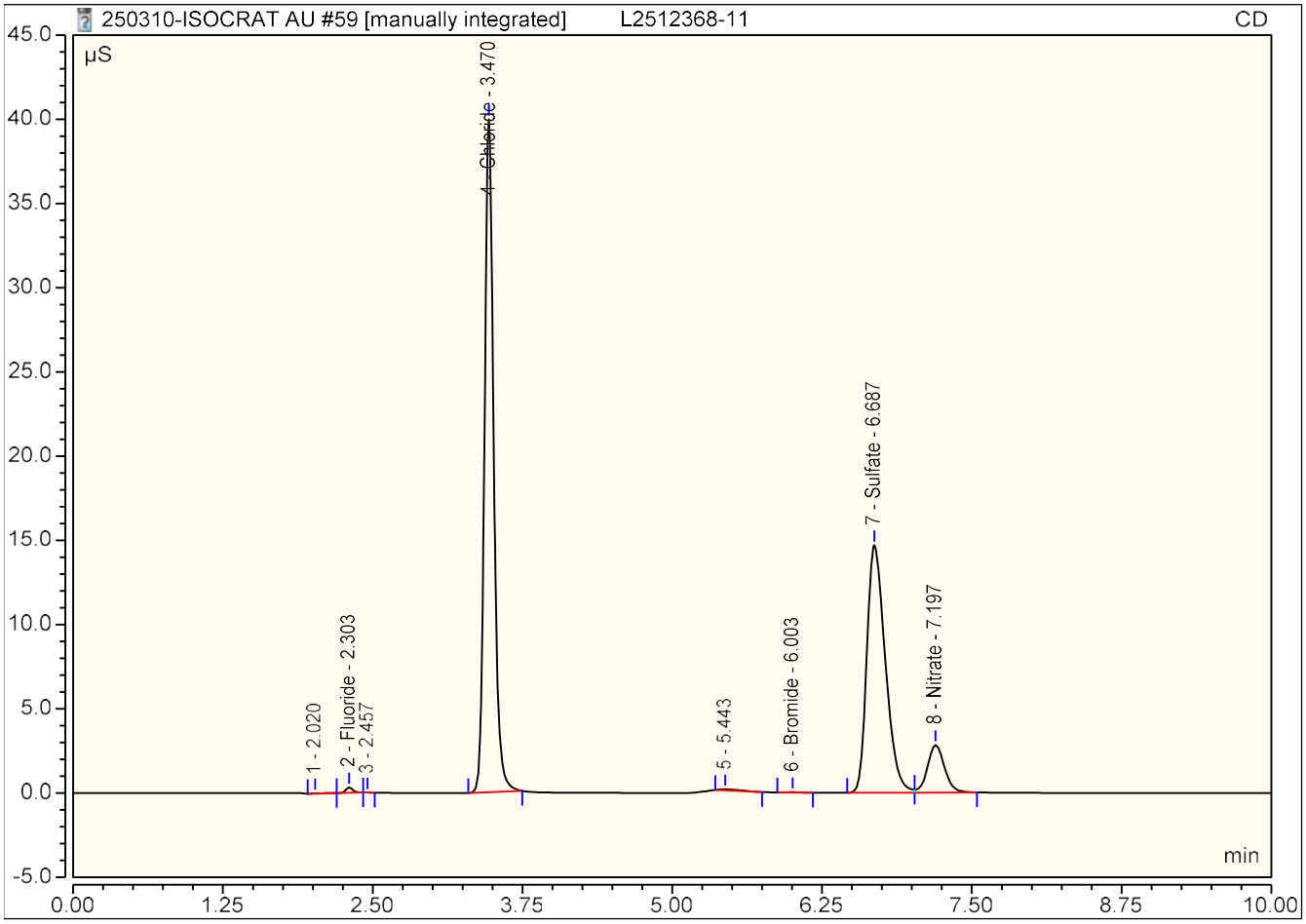
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB^ | 0.000 | 0.004 | 0.0254 |
| 4 | 3.47 | **Chloride** | BMB | 0.007 | 0.080 | 0.1101 |
| 6 | 6.77 | **Sulfate** | BM * | 0.003 | 0.016 | 0.2134 |
| 7 | 7.23 | **Nitrate** | MB* | 0.001 | 0.006 | 0.0311 |
| **TOTAL:** | | | | 0.01 | 0.11 | 0.38 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-11** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 01:38** | *Run Time:* | **10.00** |

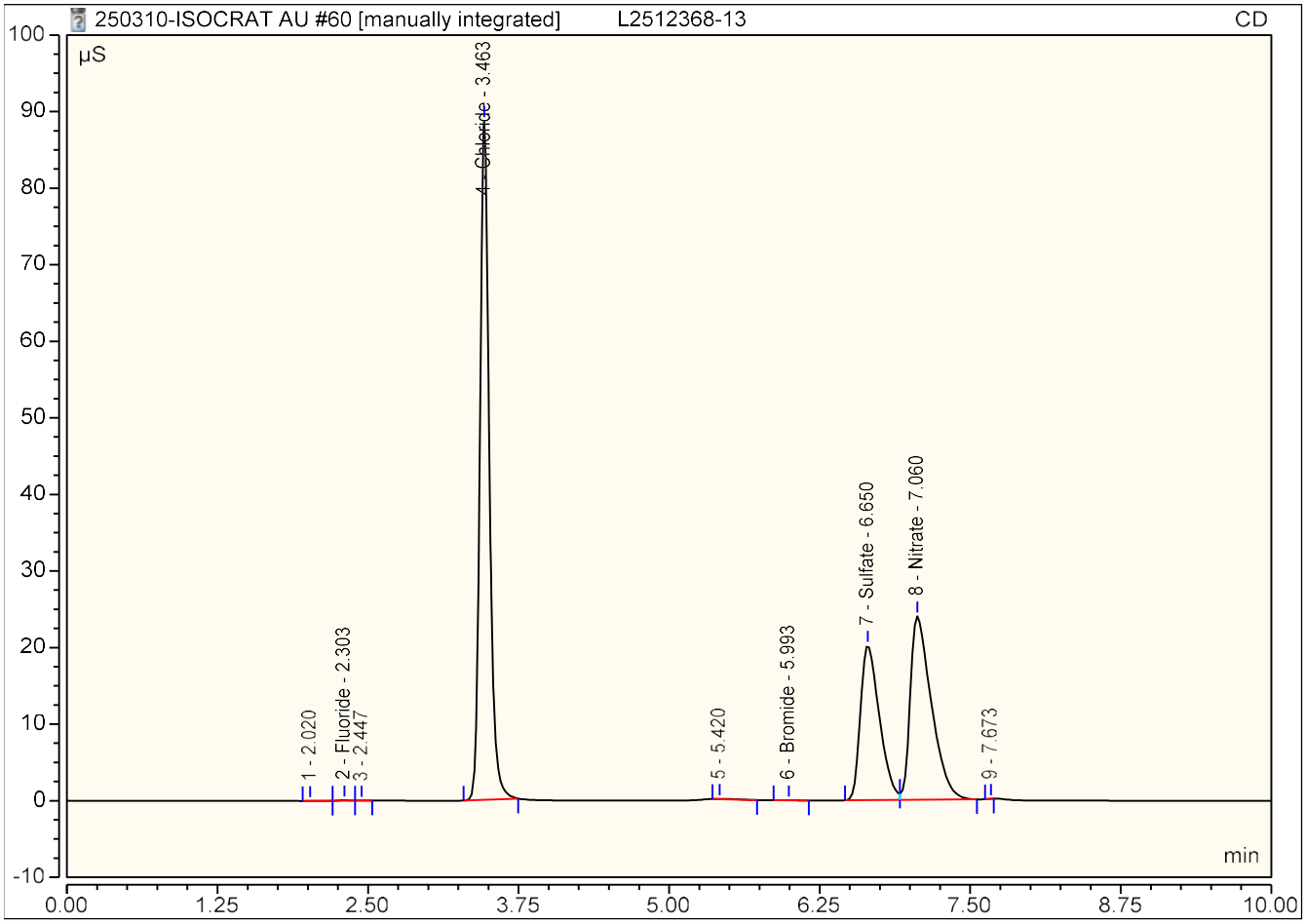
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.022 | 0.315 | 0.0665 |
| 4 | 3.47 | **Chloride** | BMB | 3.551 | 39.946 | 10.4134 |
| 6 | 6.00 | **Bromide** | BMB | 0.003 | 0.024 | 0.0573 |
| 7 | 6.69 | **Sulfate** | BM * | 2.620 | 14.694 | 10.4254 |
| 8 | 7.20 | **Nitrate** | MB* | 0.462 | 2.821 | 0.5693 |
| | | **TOTAL:** | | 6.66 | 57.80 | 21.53 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-13** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 01:50** | *Run Time:* | **10.00** |

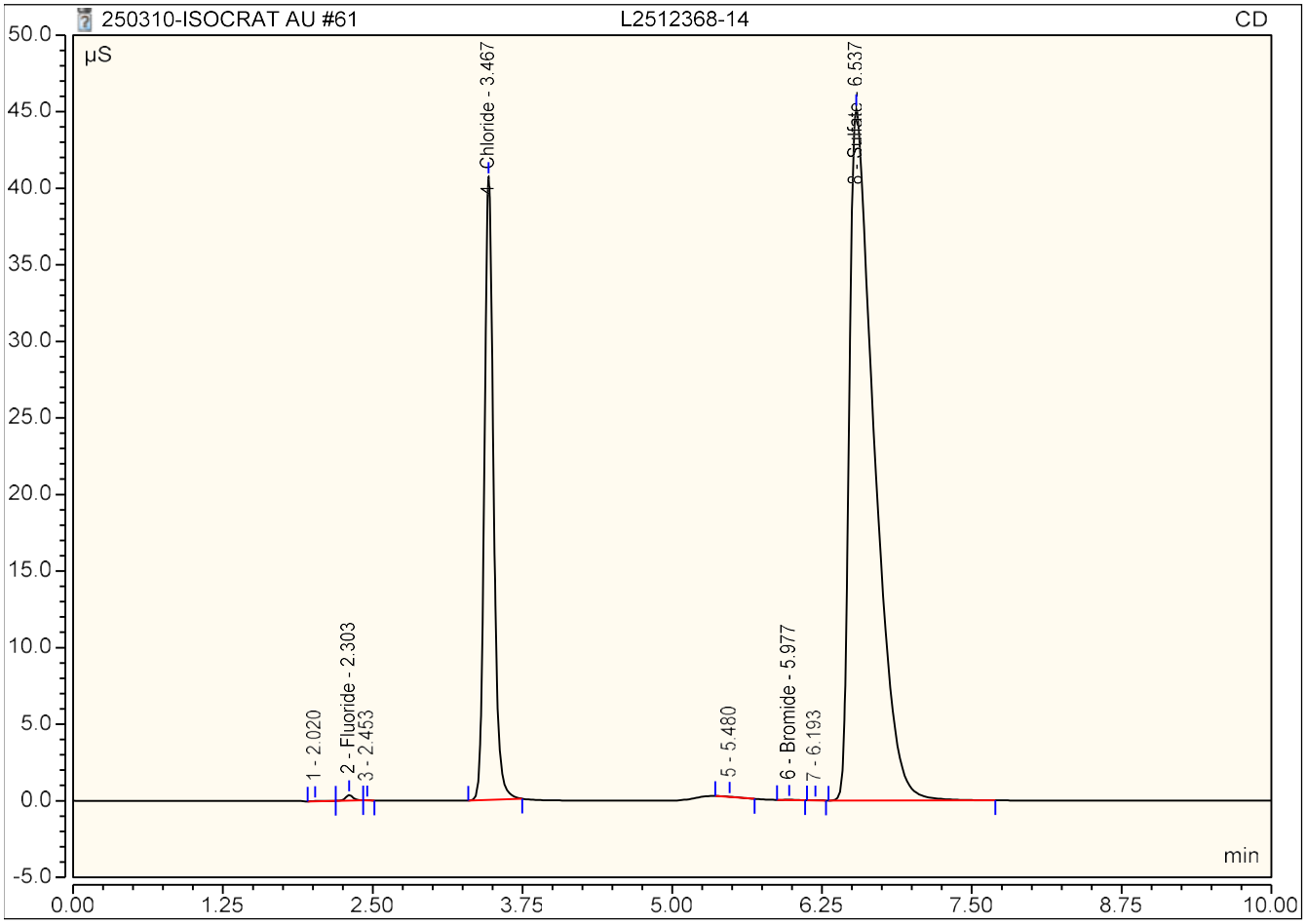
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.004 | 0.057 | 0.0322 |
| 4 | 3.46 | **Chloride** | BMB | 8.023 | 88.676 | 23.4188 |
| 6 | 5.99 | **Bromide** | BMB | 0.004 | 0.037 | 0.0695 |
| 7 | 6.65 | **Sulfate** | BM * | 3.691 | 20.187 | 14.6040 |
| 8 | 7.06 | **Nitrate** | MB* | 4.879 | 23.984 | 5.7294 |
| | | **TOTAL:** | | 16.60 | 132.94 | 43.85 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-14** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 02:03** | *Run Time:* | **10.00** |

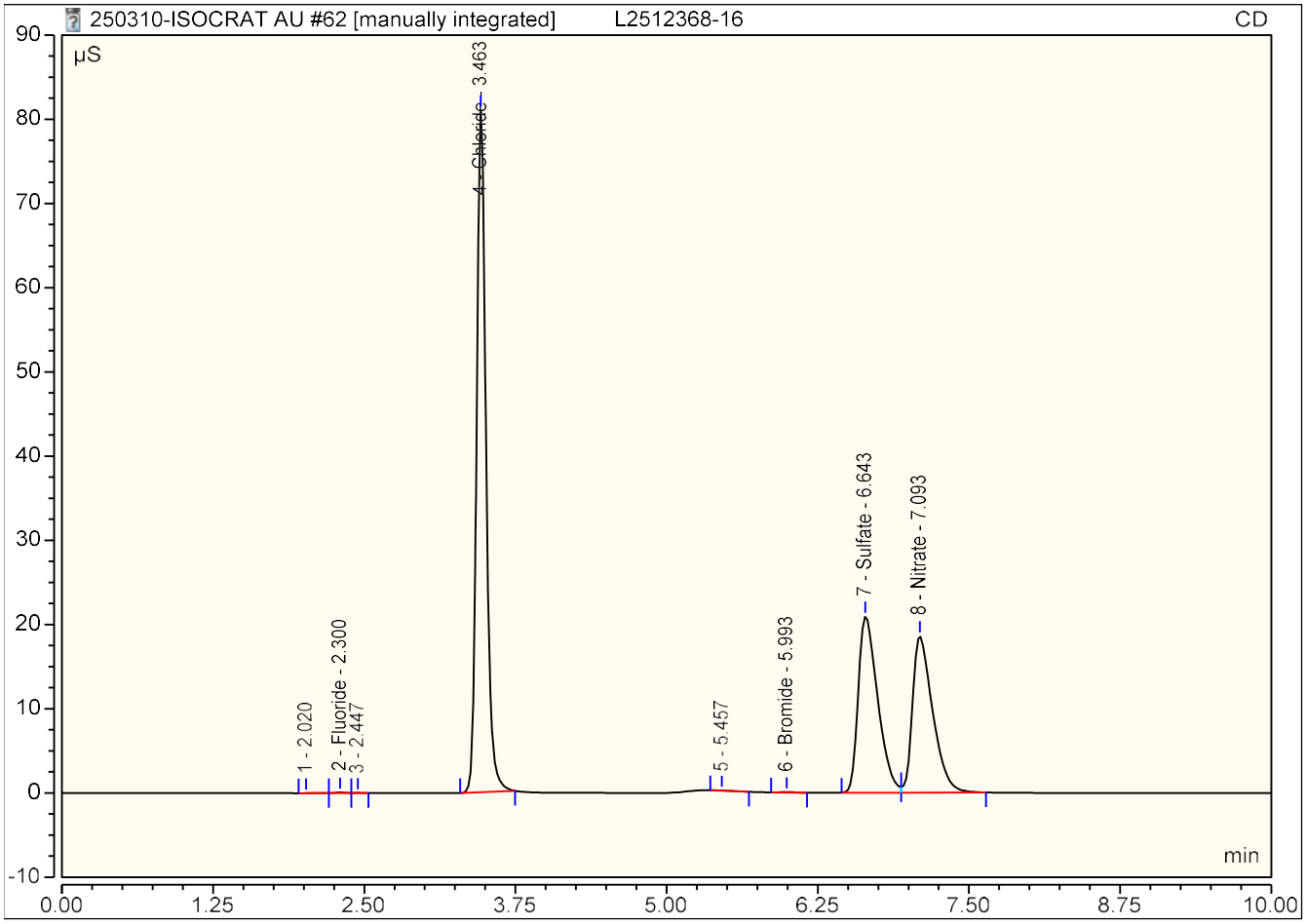
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.025 | 0.361 | 0.0725 |
| 4 | 3.47 | **Chloride** | BMB | 3.608 | 40.682 | 10.5797 |
| 6 | 5.98 | **Bromide** | BMB | 0.002 | 0.021 | 0.0531 |
| 8 | 6.54 | **Sulfate** | BMB | 10.856 | 45.136 | 42.5641 |
| **TOTAL:** | | | | 14.49 | 86.20 | 53.27 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-16** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 02:15** | *Run Time:* | **10.00** |

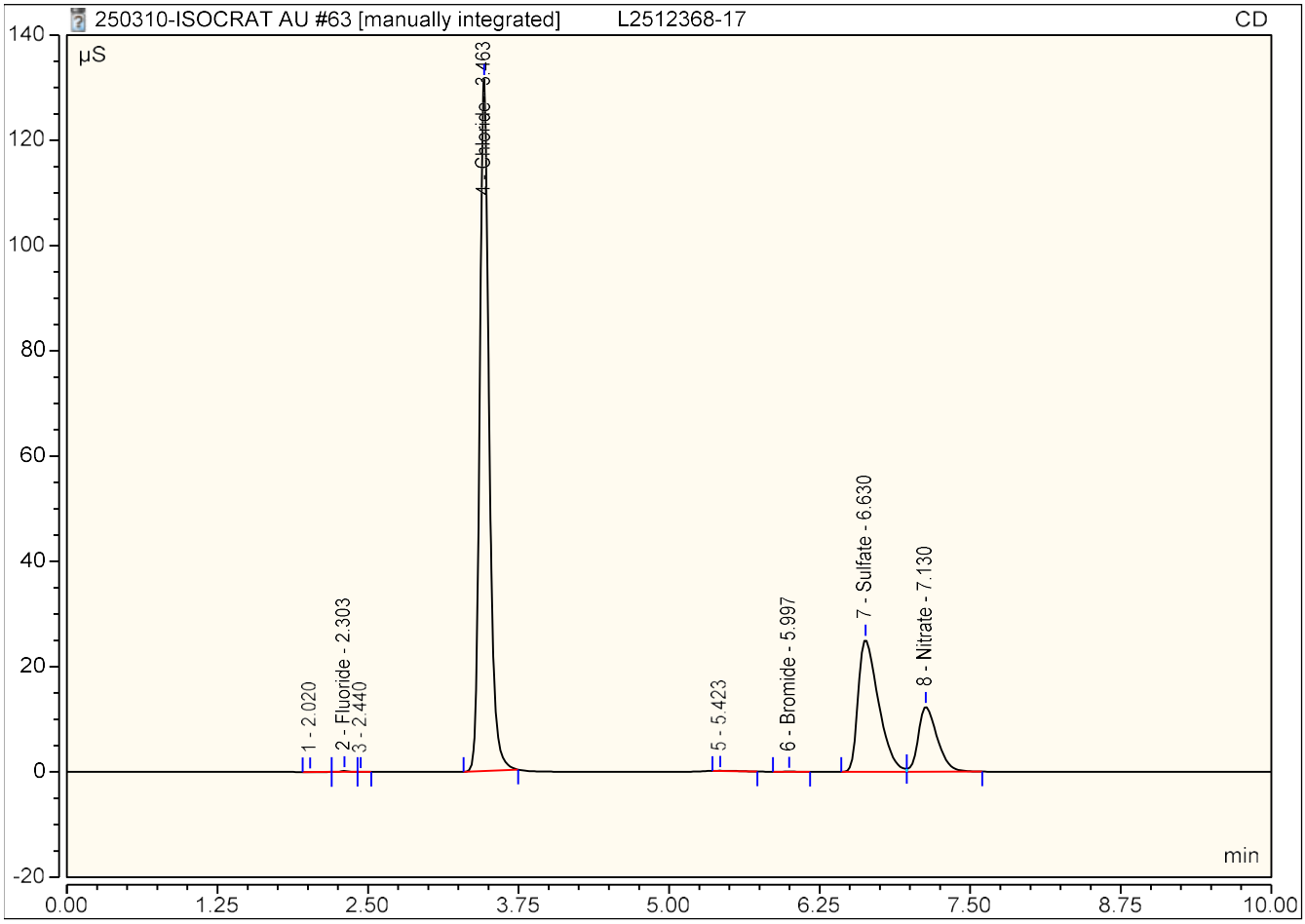
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.005 | 0.073 | 0.0342 |
| 4 | 3.46 | **Chloride** | BMB | 7.290 | 81.008 | 21.2861 |
| 6 | 5.99 | **Bromide** | BMB | 0.007 | 0.055 | 0.0876 |
| 7 | 6.64 | **Sulfate** | BM * | 3.904 | 20.932 | 15.4382 |
| 8 | 7.09 | **Nitrate** | MB* | 3.592 | 18.593 | 4.2260 |
| | | **TOTAL:** | | 14.80 | 120.66 | 41.07 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-17** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 02:27** | *Run Time:* | **10.00** |

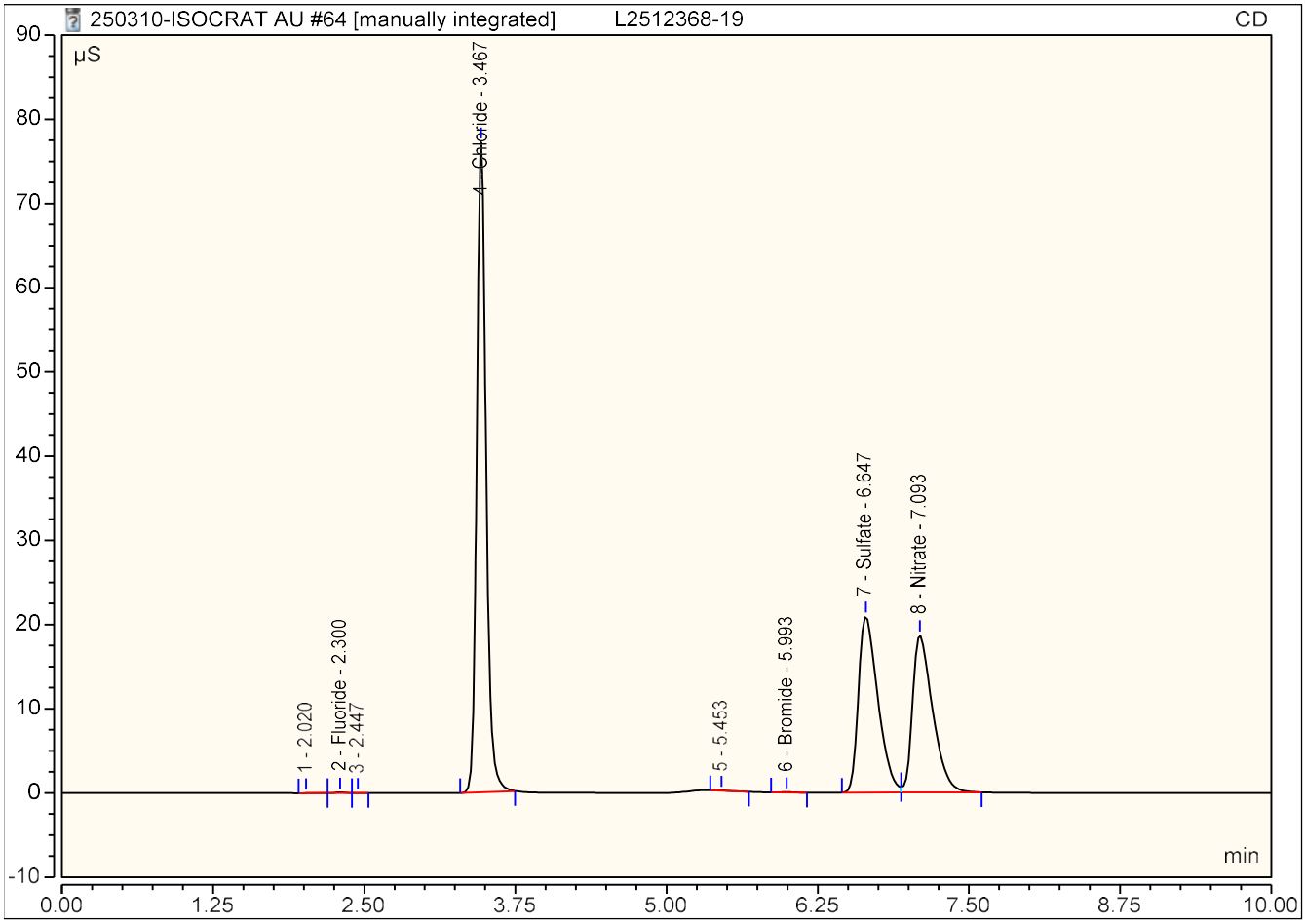
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.012 | 0.180 | 0.0485 |
| 4 | 3.46 | **Chloride** | BMB | 12.006 | 131.516 | 34.9995 |
| 6 | 6.00 | **Bromide** | BMB | 0.005 | 0.041 | 0.0748 |
| 7 | 6.63 | **Sulfate** | BM * | 4.905 | 25.144 | 19.3449 |
| 8 | 7.13 | **Nitrate** | MB* | 2.240 | 12.354 | 2.6463 |
| **TOTAL:** | | | | 19.17 | 169.24 | 57.11 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-19** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 02:39** | *Run Time:* | **10.00** |

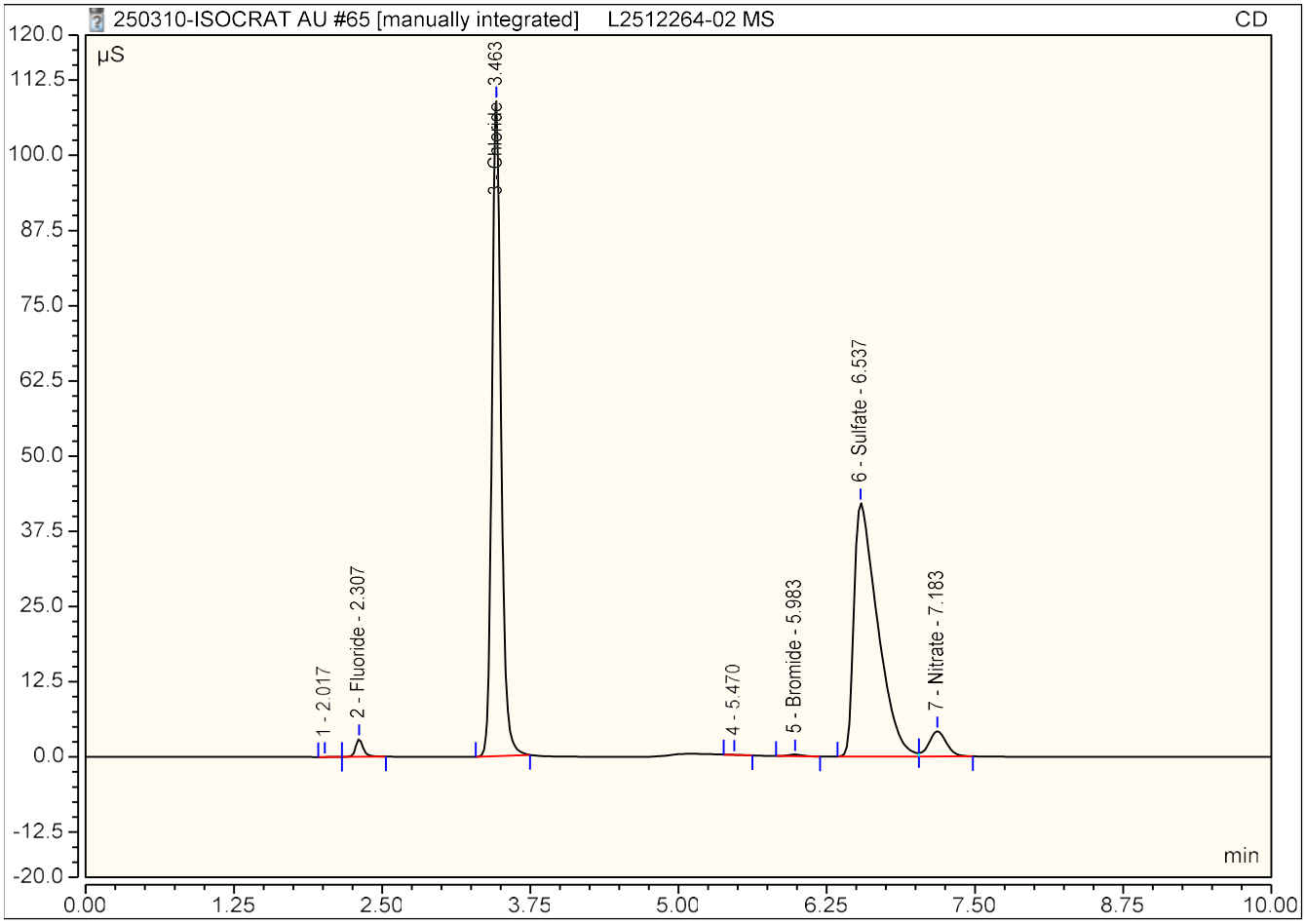
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.005 | 0.074 | 0.0344 |
| 4 | 3.47 | **Chloride** | BMB | 6.927 | 77.196 | 20.2318 |
| 6 | 5.99 | **Bromide** | BMB | 0.006 | 0.051 | 0.0840 |
| 7 | 6.65 | **Sulfate** | BM * | 3.899 | 20.942 | 15.4191 |
| 8 | 7.09 | **Nitrate** | MB* | 3.608 | 18.691 | 4.2450 |
| | | **TOTAL:** | | 14.45 | 116.95 | 40.01 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512264-02 MS** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 02:51** | *Run Time:* | **10.00** |

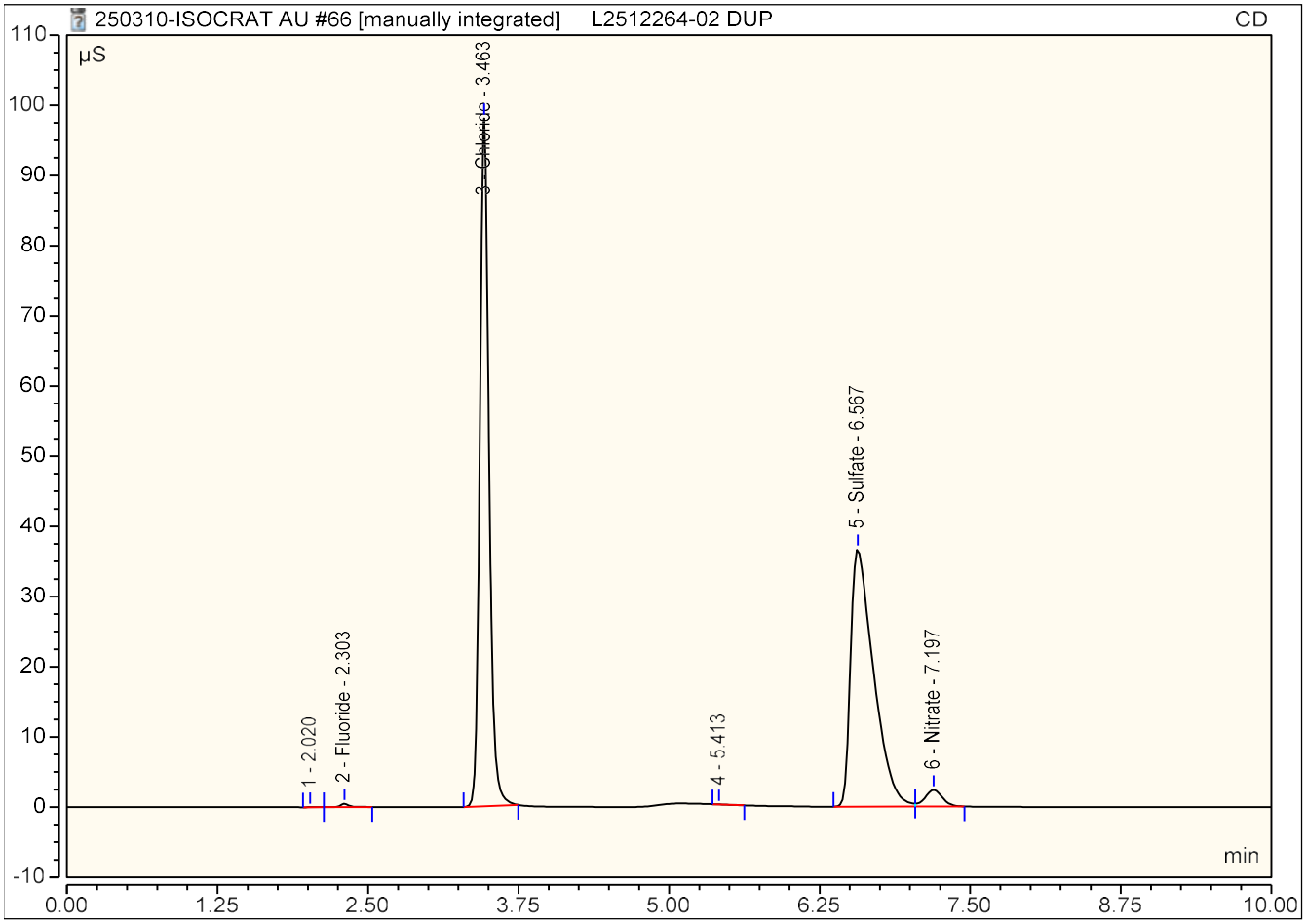
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.223 | 2.968 | 0.4528 |
| 3 | 3.46 | **Chloride** | BMB | 9.726 | 108.847 | 28.3707 |
| 5 | 5.98 | **Bromide** | BMB | 0.037 | 0.290 | 0.3261 |
| 6 | 6.54 | **Sulfate** | BM * | 9.770 | 42.110 | 38.3286 |
| 7 | 7.18 | **Nitrate** | MB* | 0.712 | 4.189 | 0.8612 |
| | | **TOTAL:** | | 20.47 | 158.40 | 68.34 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512264-02 DUP** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 03:03** | *Run Time:* | **10.00** |

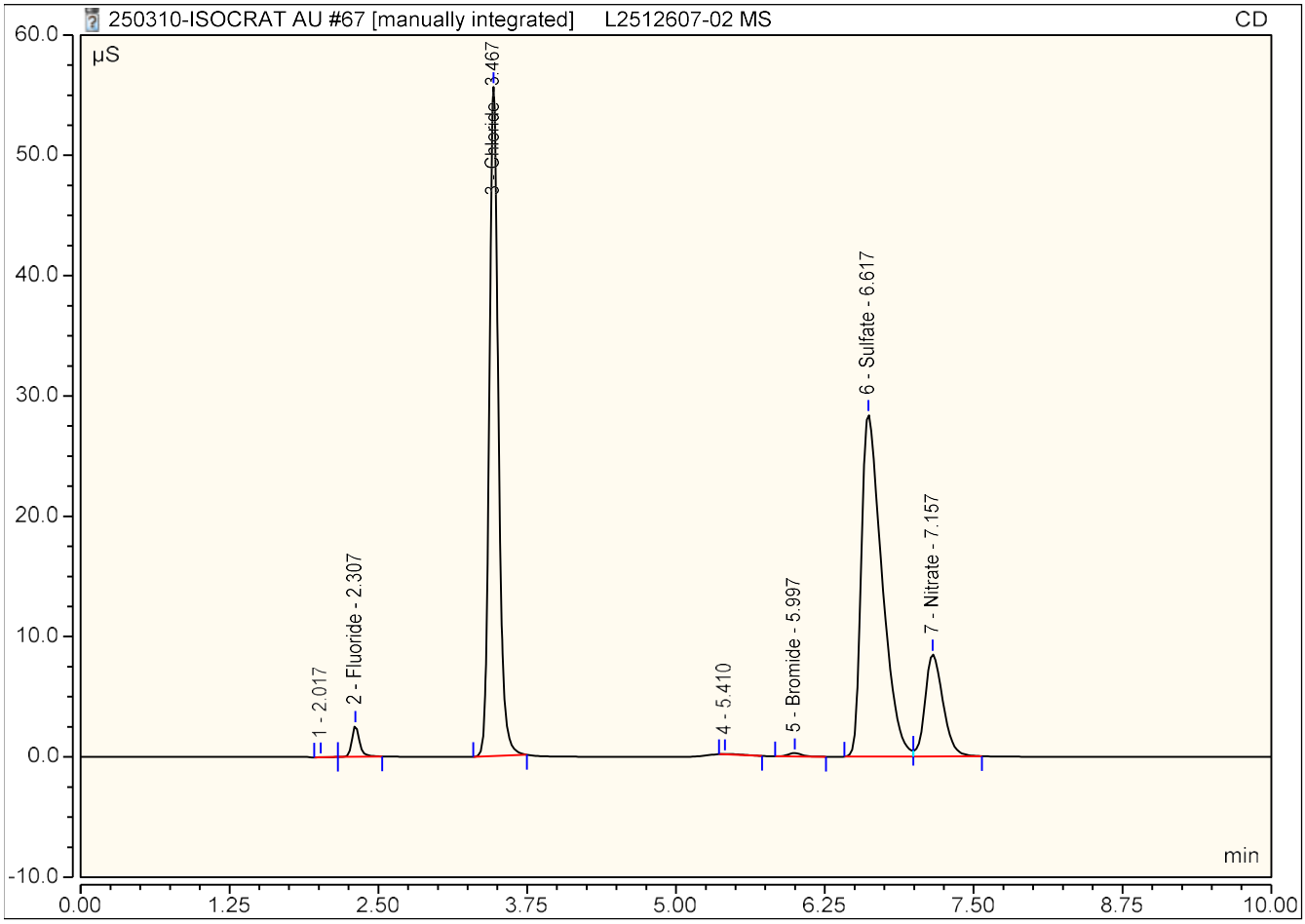
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.038 | 0.491 | 0.0976 |
| 3 | 3.46 | **Chloride** | BMB | 8.735 | 98.016 | 25.4880 |
| 5 | 6.57 | **Sulfate** | BM * | 8.104 | 36.705 | 31.8261 |
| 6 | 7.20 | **Nitrate** | MB* | 0.397 | 2.373 | 0.4937 |
| **TOTAL:** | | | | 17.27 | 137.58 | 57.91 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512607-02 MS** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 03:15** | *Run Time:* | **10.00** |

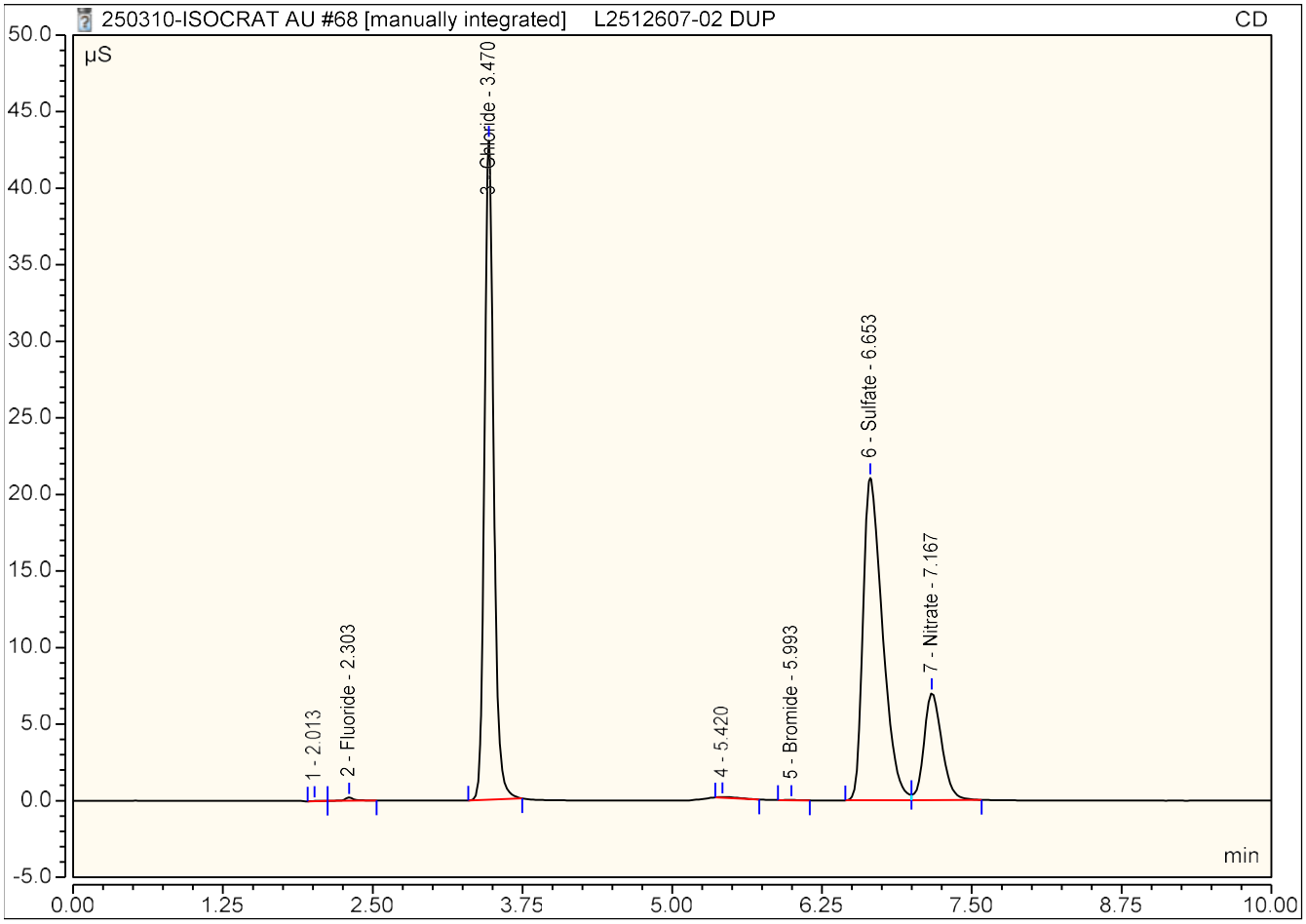
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.192 | 2.576 | 0.3929 |
| 3 | 3.47 | **Chloride** | BMB | 4.978 | 55.621 | 14.5625 |
| 5 | 6.00 | **Bromide** | BMB | 0.037 | 0.289 | 0.3302 |
| 6 | 6.62 | **Sulfate** | BM * | 5.746 | 28.418 | 22.6242 |
| 7 | 7.16 | **Nitrate** | MB* | 1.482 | 8.478 | 1.7606 |
| **TOTAL:** | | | | 12.43 | 95.38 | 39.67 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512607-02 DUP** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 03:27** | *Run Time:* | **10.00** |

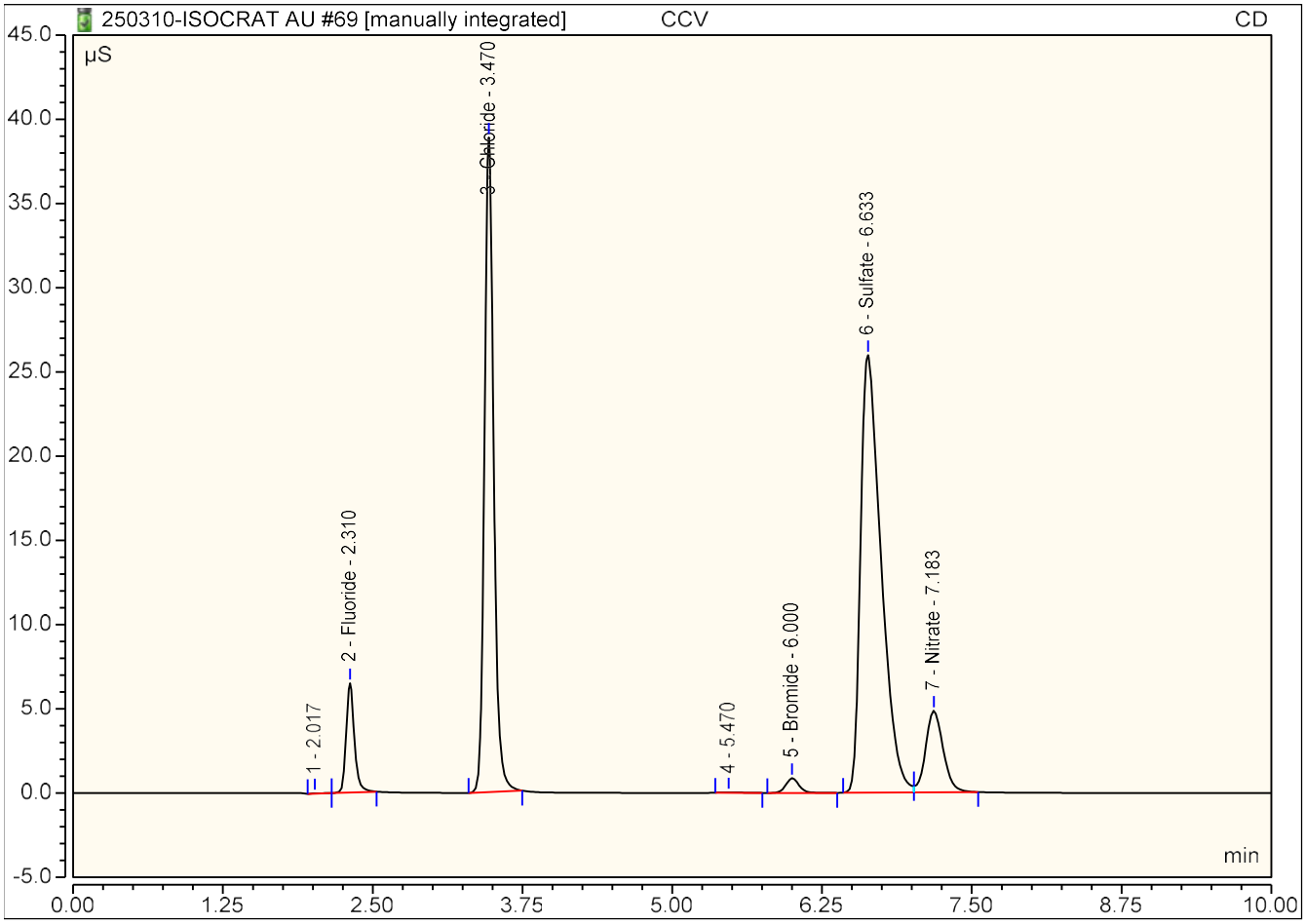
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.017 | 0.207 | 0.0581 |
| 3 | 3.47 | **Chloride** | BMB | 3.836 | 43.046 | 11.2425 |
| 5 | 5.99 | **Bromide** | BMB | 0.002 | 0.015 | 0.0482 |
| 6 | 6.65 | **Sulfate** | BM * | 3.969 | 21.048 | 15.6899 |
| 7 | 7.17 | **Nitrate** | MB* | 1.201 | 6.989 | 1.4325 |
| | | **TOTAL:** | | 9.02 | 71.30 | 28.47 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 03:39** | *Run Time:* | **10.00** |

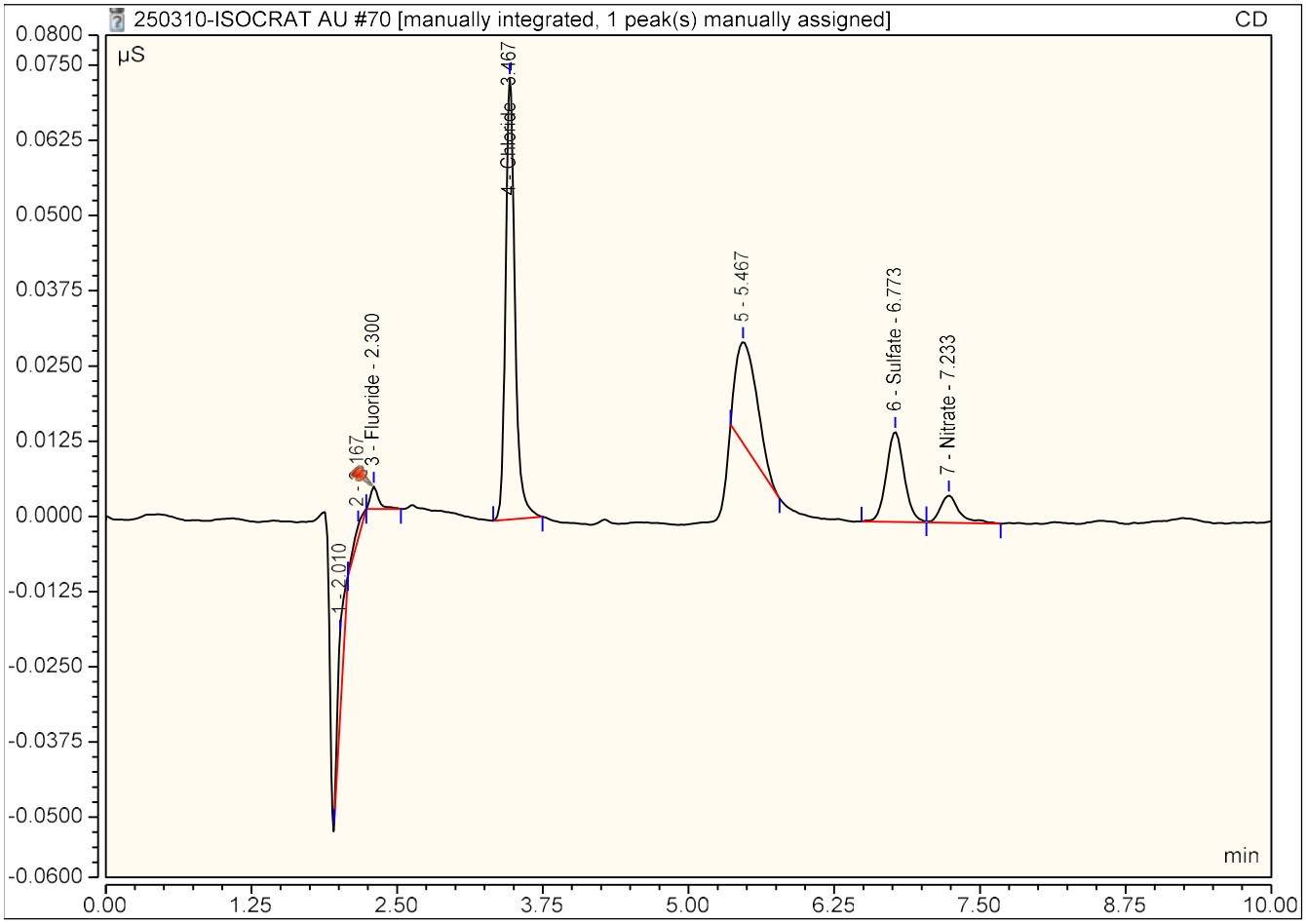
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.507 | 6.488 | 0.9985 |
| 3 | 3.47 | **Chloride** | BMB | 3.462 | 38.855 | 10.1565 |
| 5 | 6.00 | **Bromide** | BMB | 0.113 | 0.874 | 0.9401 |
| 6 | 6.63 | **Sulfate** | BM * | 5.144 | 25.965 | 20.2755 |
| 7 | 7.18 | **Nitrate** | MB* | 0.820 | 4.837 | 0.9874 |
| | | **TOTAL:** | | 10.05 | 77.02 | 33.36 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 03:51** | *Run Time:* | **10.00** |

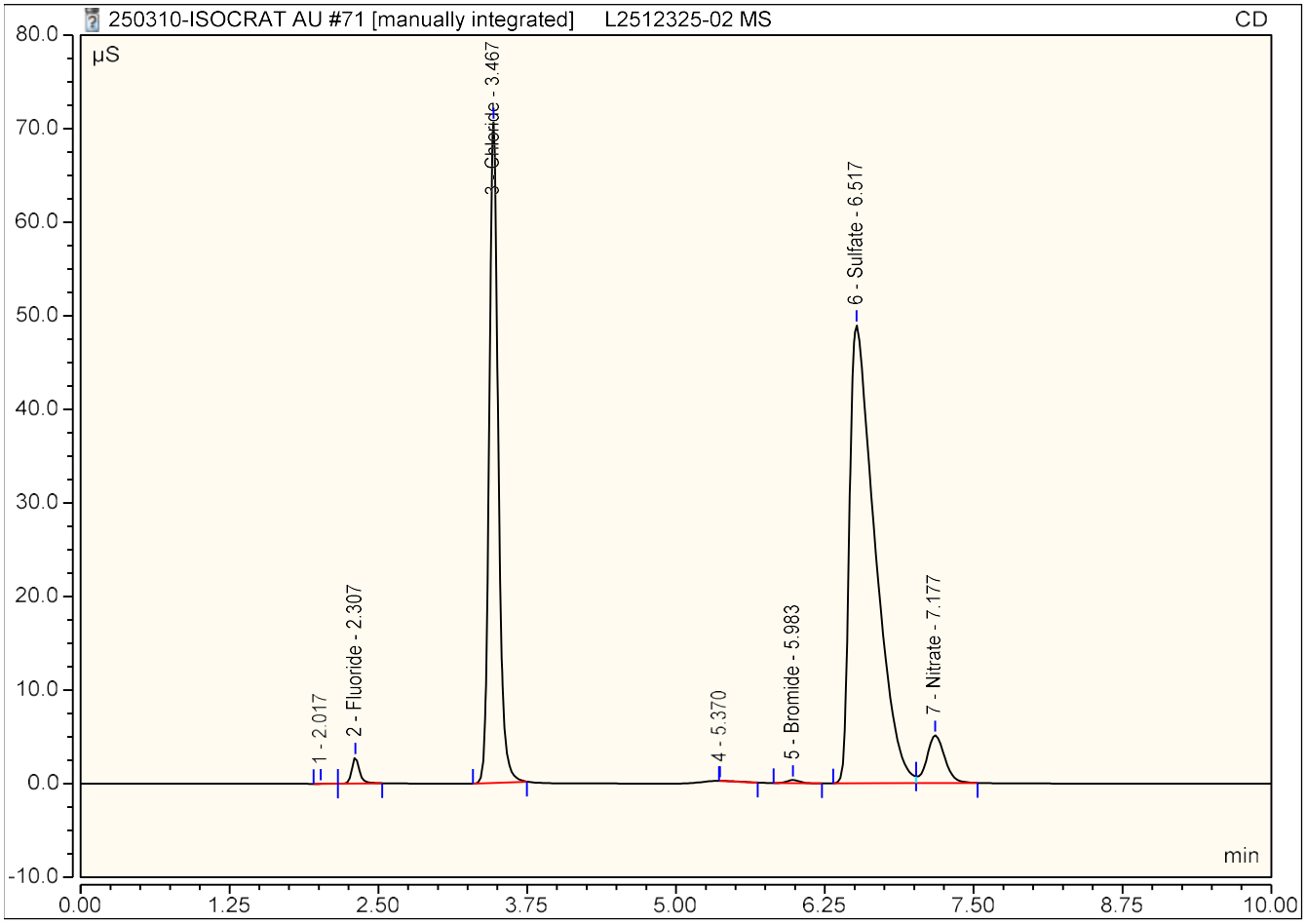
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB^ | 0.000 | 0.004 | 0.0252 |
| 4 | 3.47 | **Chloride** | BMB | 0.007 | 0.073 | 0.1086 |
| 6 | 6.77 | **Sulfate** | BM * | 0.003 | 0.015 | 0.2126 |
| 7 | 7.23 | **Nitrate** | MB* | 0.001 | 0.005 | 0.0308 |
| **TOTAL:** | | | | 0.01 | 0.10 | 0.38 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-02 MS** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 04:03** | *Run Time:* | **10.00** |

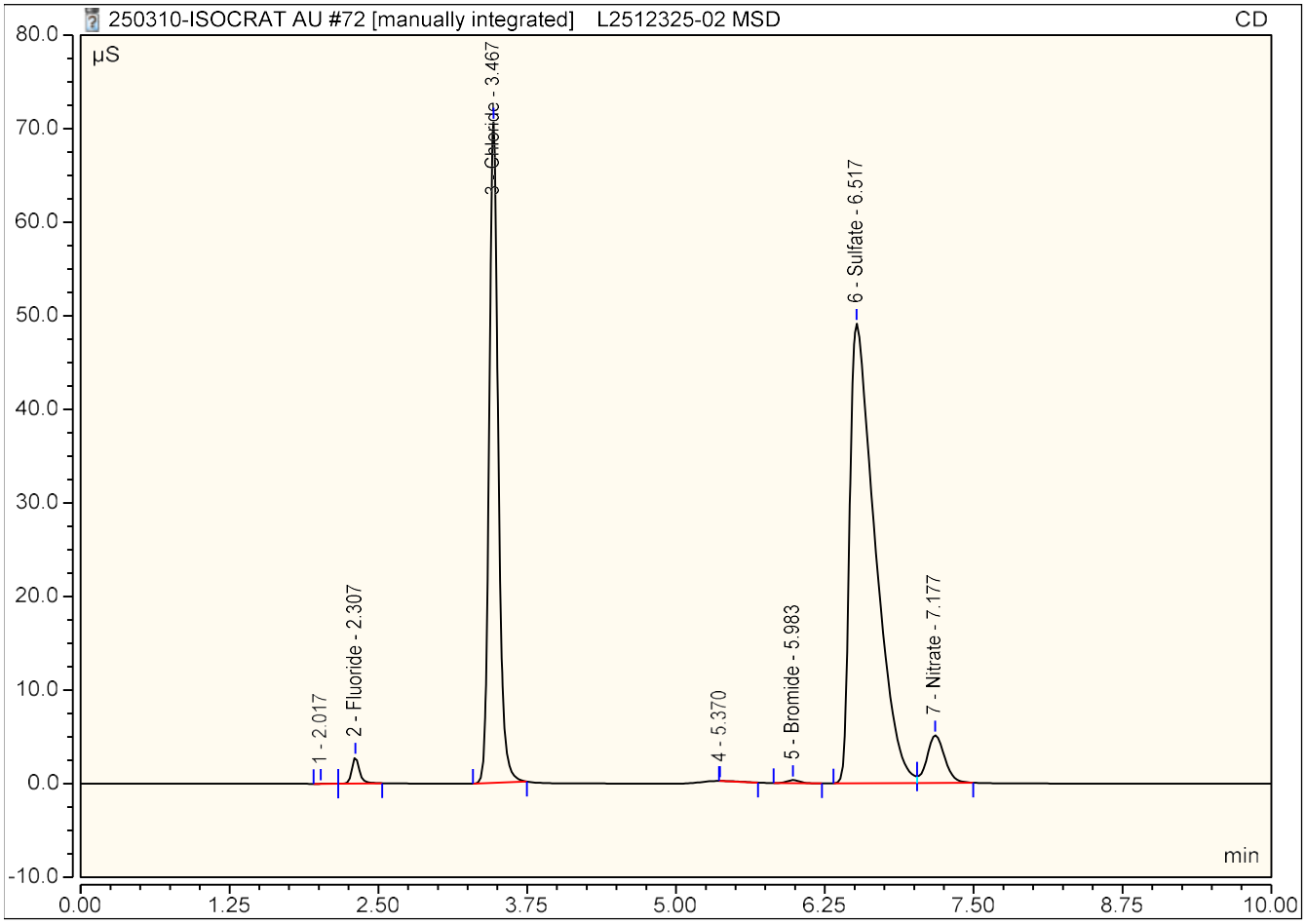
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.208 | 2.772 | 0.4243 |
| 3 | 3.47 | **Chloride** | BMB | 6.327 | 70.568 | 18.4867 |
| 5 | 5.98 | **Bromide** | BMB | 0.042 | 0.336 | 0.3728 |
| 6 | 6.52 | **Sulfate** | BM * | 12.078 | 48.975 | 47.3356 |
| 7 | 7.18 | **Nitrate** | MB* | 0.890 | 5.101 | 1.0695 |
| | | **TOTAL:** | | 19.55 | 127.75 | 67.69 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-02 MSD** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 04:15** | *Run Time:* | **10.00** |

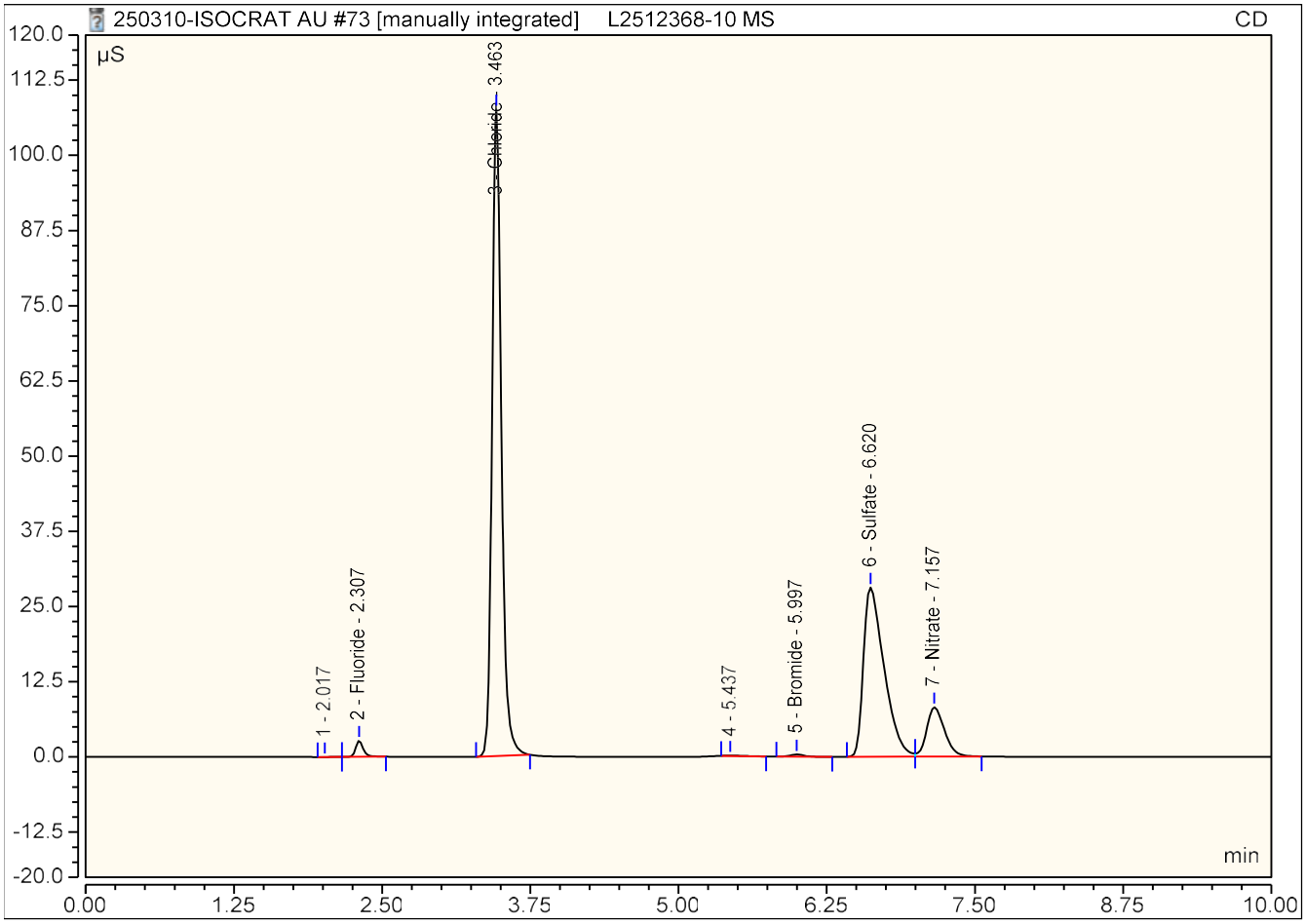
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.209 | 2.791 | 0.4252 |
| 3 | 3.47 | **Chloride** | BMB | 6.326 | 70.582 | 18.4842 |
| 5 | 5.98 | **Bromide** | BMB | 0.042 | 0.335 | 0.3723 |
| 6 | 6.52 | **Sulfate** | BM * | 12.081 | 49.115 | 47.3467 |
| 7 | 7.18 | **Nitrate** | MB* | 0.880 | 5.093 | 1.0576 |
| | | **TOTAL:** | | 19.54 | 127.92 | 67.69 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-10 MS** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 04:28** | *Run Time:* | **10.00** |

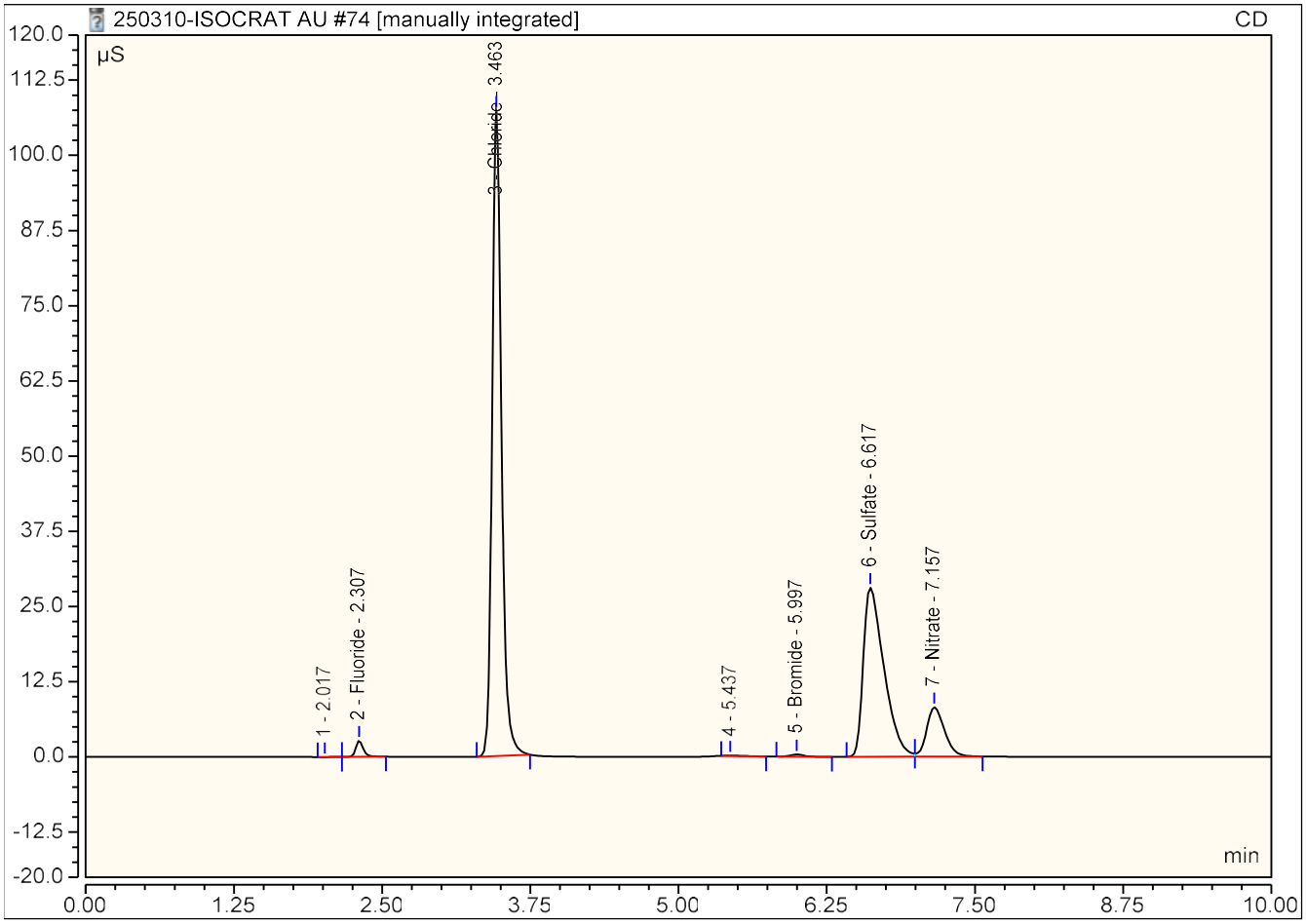
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.201 | 2.698 | 0.4110 |
| 3 | 3.46 | **Chloride** | BMB | 9.772 | 107.495 | 28.5048 |
| 5 | 6.00 | **Bromide** | BMB | 0.049 | 0.378 | 0.4216 |
| 6 | 6.62 | **Sulfate** | BM * | 5.671 | 28.112 | 22.3341 |
| 7 | 7.16 | **Nitrate** | MB* | 1.433 | 8.208 | 1.7034 |
| | | **TOTAL:** | | 17.13 | 146.89 | 53.37 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-10 MSD** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 04:40** | *Run Time:* | **10.00** |

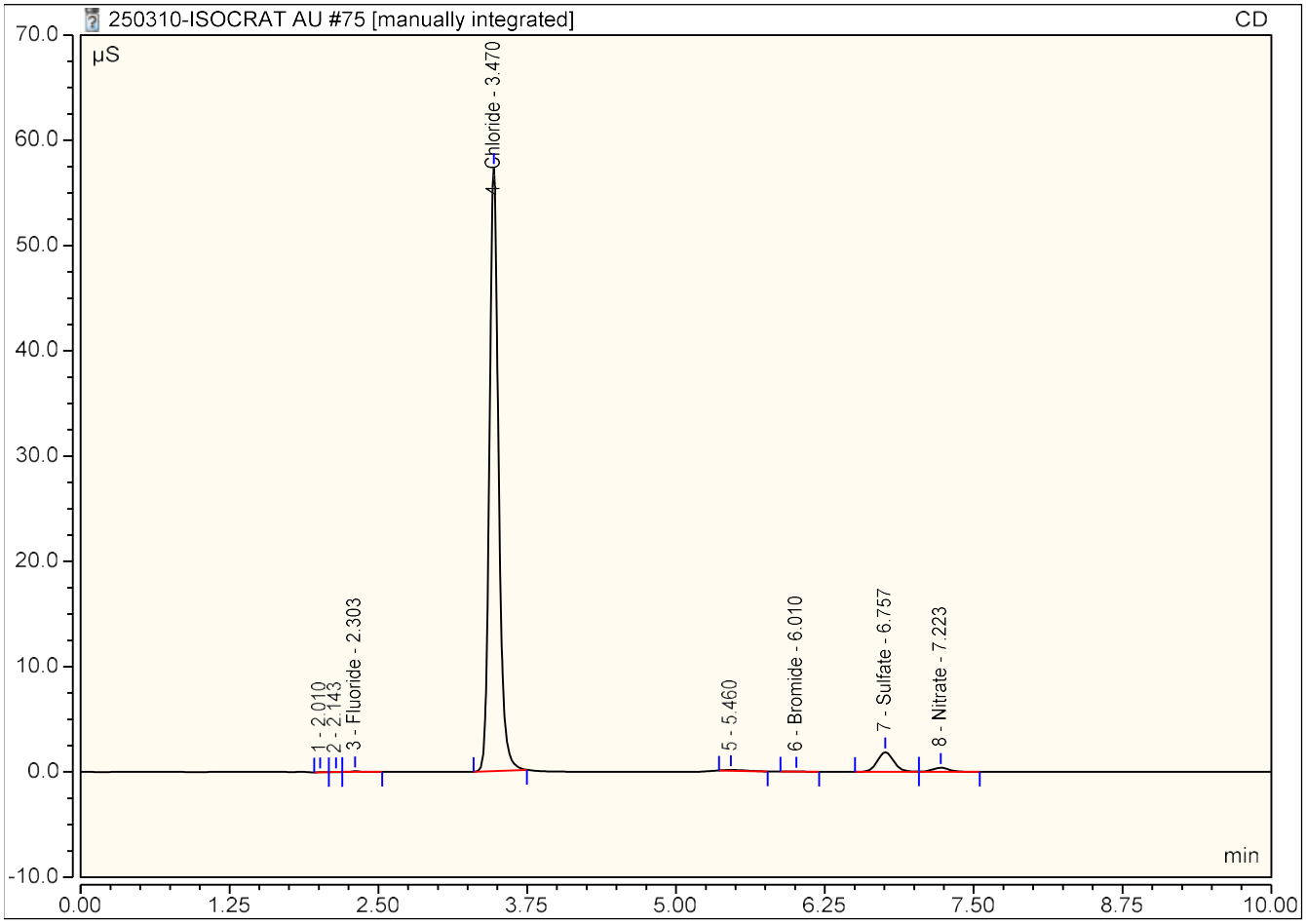
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.201 | 2.694 | 0.4101 |
| 3 | 3.46 | **Chloride** | BMB | 9.775 | 107.264 | 28.5126 |
| 5 | 6.00 | **Bromide** | BMB | 0.048 | 0.378 | 0.4212 |
| 6 | 6.62 | **Sulfate** | BM * | 5.669 | 28.093 | 22.3226 |
| 7 | 7.16 | **Nitrate** | MB* | 1.436 | 8.211 | 1.7075 |
| | | **TOTAL:** | | 17.13 | 146.64 | 53.37 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511911-07; 10X CL** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 04:52** | *Run Time:* | **10.00** |

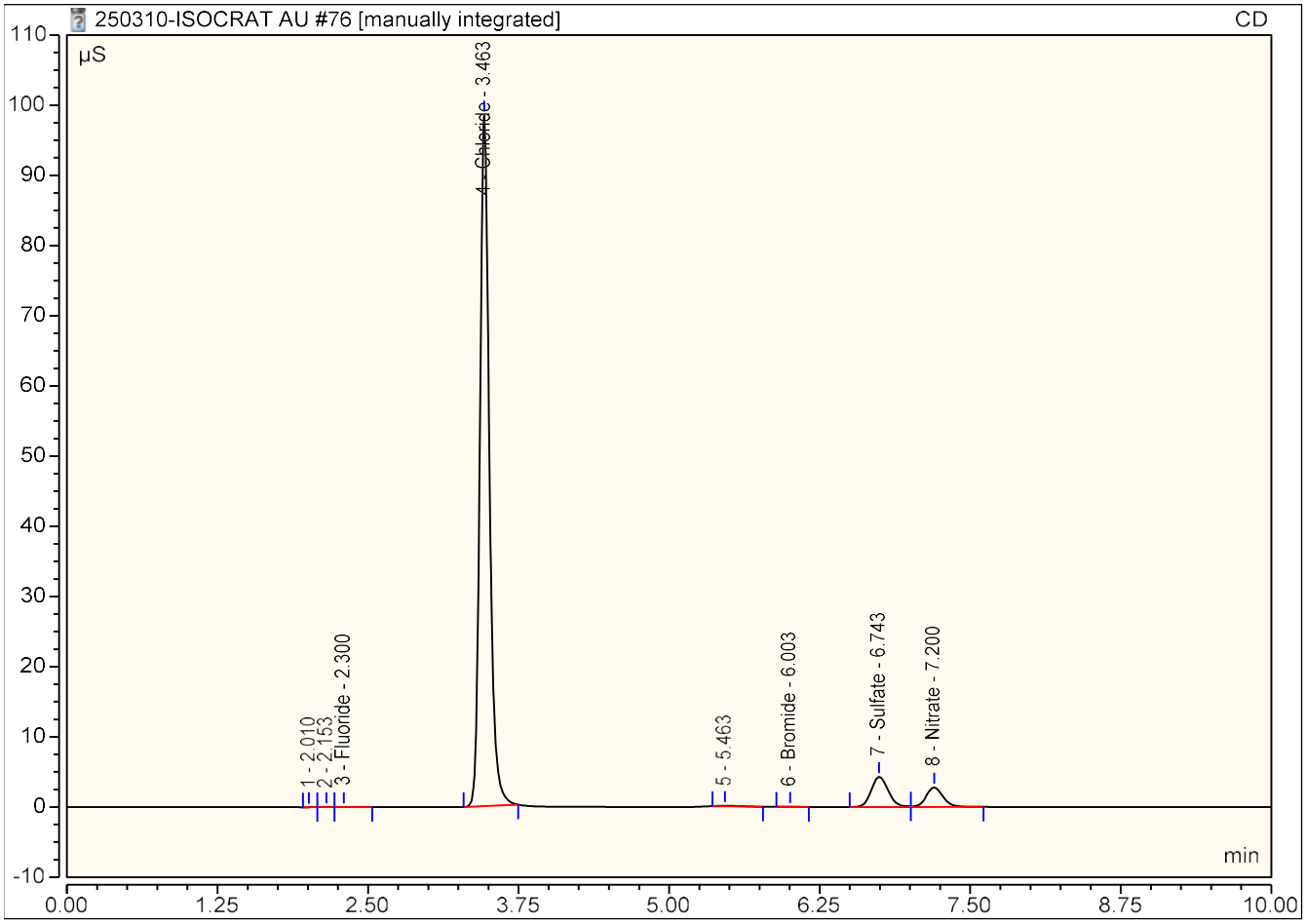
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB | 0.006 | 0.071 | 0.3632 |
| 4 | 3.47 | **Chloride** | BMB | 5.155 | 57.315 | 150.7808 |
| 6 | 6.01 | **Bromide** | BMB | 0.003 | 0.028 | 0.6213 |
| 7 | 6.76 | **Sulfate** | BM * | 0.303 | 1.871 | 13.8426 |
| 8 | 7.22 | **Nitrate** | MB* | 0.066 | 0.396 | 1.0708 |
| | | **TOTAL:** | | 5.53 | 59.68 | 166.68 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511911-08; 10X CL** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 05:04** | *Run Time:* | **10.00** |

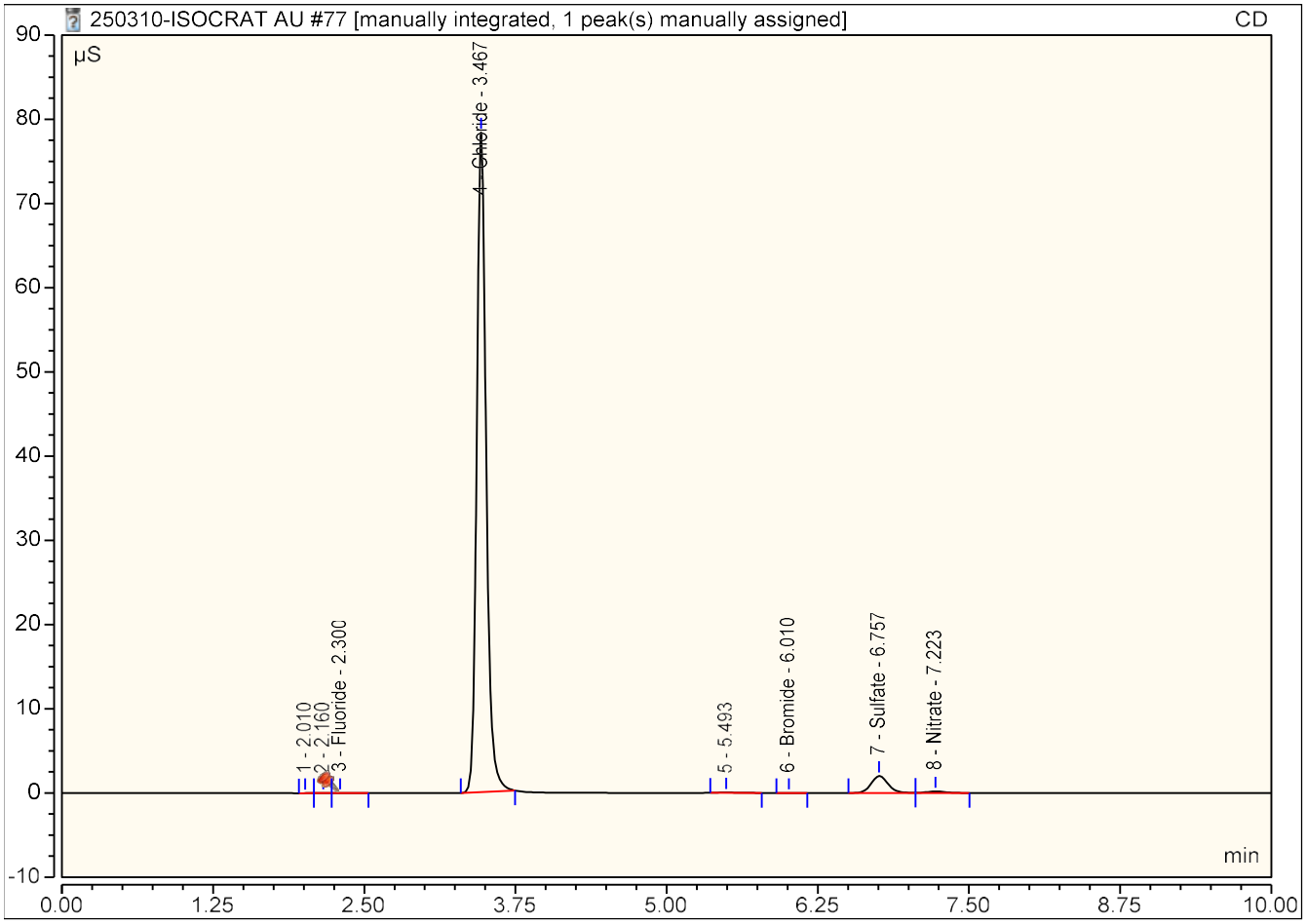
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB | 0.002 | 0.017 | 0.2756 |
| 4 | 3.46 | **Chloride** | BMB | 8.960 | 98.430 | 261.4338 |
| 6 | 6.00 | **Bromide** | BMB | 0.001 | 0.011 | 0.4525 |
| 7 | 6.74 | **Sulfate** | BM * | 0.704 | 4.291 | 29.4956 |
| 8 | 7.20 | **Nitrate** | MB* | 0.453 | 2.792 | 5.5874 |
| | | **TOTAL:** | | 10.12 | 105.54 | 297.24 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512264-05; 10X CL** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 05:16** | *Run Time:* | **10.00** |

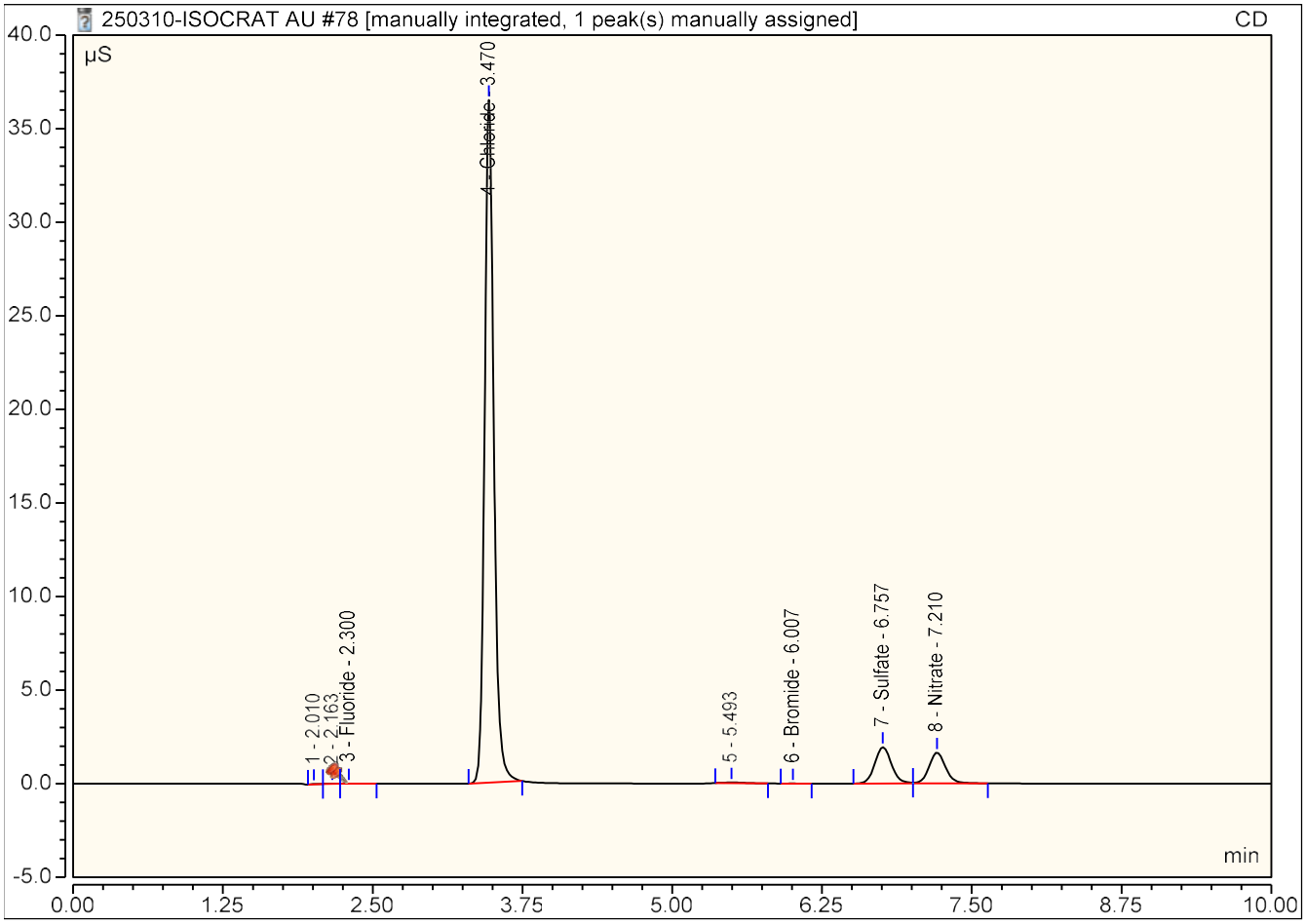
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB^ | 0.001 | 0.007 | 0.2590 |
| 4 | 3.47 | **Chloride** | BMB | 7.093 | 78.311 | 207.1341 |
| 6 | 6.01 | **Bromide** | BMB | 0.000 | 0.002 | 0.3674 |
| 7 | 6.76 | **Sulfate** | BM * | 0.328 | 2.017 | 14.8207 |
| 8 | 7.22 | **Nitrate** | MB* | 0.033 | 0.189 | 0.6817 |
| **TOTAL:** | | | | 7.45 | 80.53 | 223.26 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512264-06; 10X CL** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 05:28** | *Run Time:* | **10.00** |

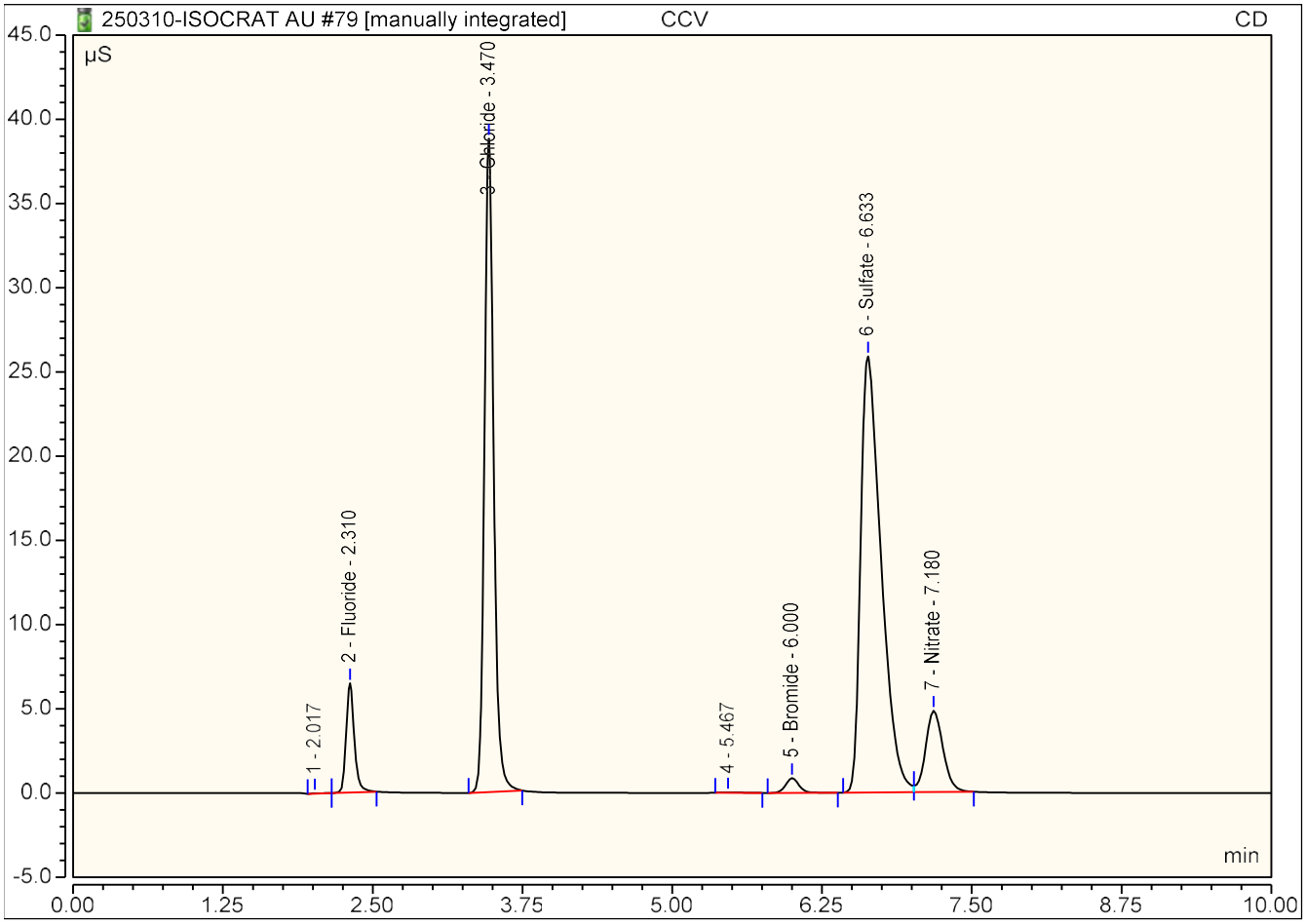
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB^ | 0.001 | 0.007 | 0.2590 |
| 4 | 3.47 | **Chloride** | BMB | 3.247 | 36.469 | 95.2921 |
| 6 | 6.01 | **Bromide** | BMB | 0.000 | 0.002 | 0.3611 |
| 7 | 6.76 | **Sulfate** | BM * | 0.315 | 1.950 | 14.2961 |
| 8 | 7.21 | **Nitrate** | MB* | 0.265 | 1.647 | 3.3876 |
| | | **TOTAL:** | | 3.83 | 40.07 | 113.60 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 05:40** | *Run Time:* | **10.00** |

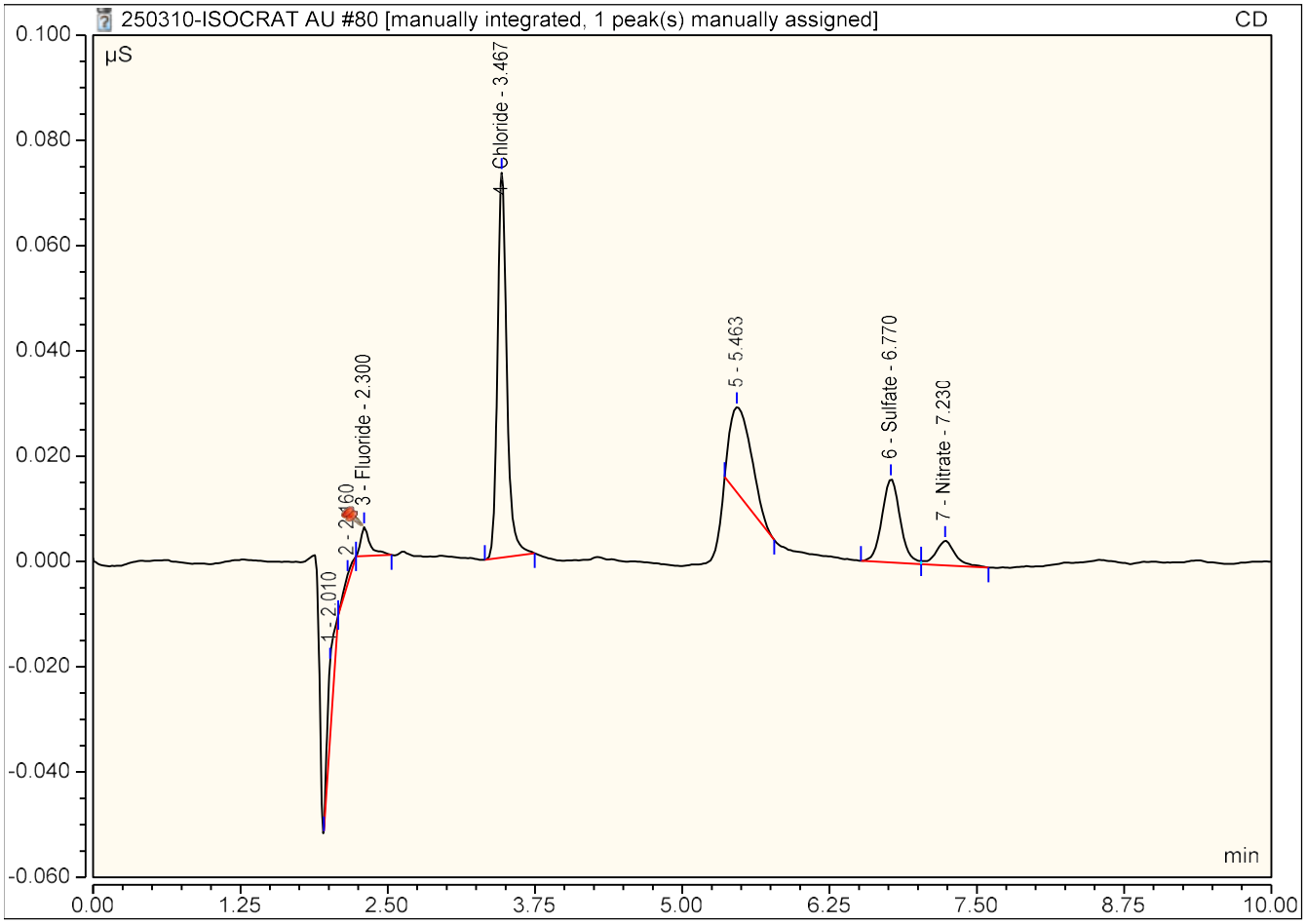
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.504 | 6.480 | 0.9922 |
| 3 | 3.47 | **Chloride** | BMB | 3.455 | 38.786 | 10.1340 |
| 5 | 6.00 | **Bromide** | BMB | 0.113 | 0.872 | 0.9389 |
| 6 | 6.63 | **Sulfate** | BM * | 5.127 | 25.888 | 20.2101 |
| 7 | 7.18 | **Nitrate** | MB* | 0.816 | 4.828 | 0.9826 |
| | | **TOTAL:** | | 10.01 | 76.85 | 33.26 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 05:52** | *Run Time:* | **10.00** |

| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB^ | 0.001 | 0.006 | 0.0257 |
| 4 | 3.47 | **Chloride** | BMB | 0.007 | 0.073 | 0.1084 |
| 6 | 6.77 | **Sulfate** | BM * | 0.003 | 0.016 | 0.2133 |
| 7 | 7.23 | **Nitrate** | MB* | 0.001 | 0.005 | 0.0308 |
| **TOTAL:** | | | | 0.01 | 0.10 | 0.38 |



Anion Summary Report

| No. | Name | Dilution | Amount CD Fluoride | Amount CD Chloride | Amount CD Nitrate | Amount CD Sulfate | Amount CD Bromide |
|---|---|---|---|---|---|---|---|
| 1 | BLANK | 1.0 | 0.0293 | 0.0946 | n.a. | 0.2070 | n.a. |
| 2 | STD 0.5 | 1.0 | 0.0395 | 0.2684 | 0.0463 | 0.5313 | 0.0514 |
| 3 | STD 1.0 | 1.0 | 0.0573 | 0.4952 | 0.0651 | 0.9629 | 0.0721 |
| 4 | STD 2.0 | 1.0 | 0.1825 | 1.9581 | 0.1855 | 3.8903 | 0.1900 |
| 5 | STD 3.0 | 1.0 | 0.4771 | 4.9752 | 0.4697 | 9.9595 | 0.4486 |
| 6 | STD 4.0 | 1.0 | 2.0262 | 20.0817 | 2.0084 | 40.2455 | 2.0130 |
| 7 | STD 5.0 | 1.0 | 4.9924 | 49.9715 | 5.2029 | 99.9104 | 5.3987 |
| 8 | RINSE | 1.0 | 0.0731 | 0.0956 | n.a. | 0.2064 | n.a. |
| 9 | CCV | 1.0 | 1.0020 | 10.1605 | 0.9973 | 20.3383 | 0.9823 |
| 10 | CCB | 1.0 | 0.0260 | 0.1007 | 0.0306 | 0.2137 | n.a. |
| 11 | ICV | 1.0 | 0.8225 | 8.5868 | 0.8080 | 8.4191 | 0.7676 |
| 12 | ICB | 1.0 | 0.0262 | 0.1016 | 0.0306 | 0.2112 | n.a. |
| 13 | BLK | 1.0 | 0.0251 | 0.0945 | n.a. | 0.2058 | n.a. |
| 14 | LCS | 1.0 | 0.8170 | 8.5887 | 0.7914 | 8.3873 | 0.7598 |
| 15 | BLK-2 | 1.0 | 0.0258 | 0.0948 | n.a. | 0.2077 | n.a. |
| 16 | LCS-2 | 1.0 | 0.8169 | 8.5869 | 0.7895 | 8.3844 | 0.7576 |
| 17 | L2511911-07 CL SO4 BR | 1.0 | 0.1671 | 155.6392 | 1.1038 | 14.9309 | 0.3950 |
| 18 | L2511911-08 | 1.0 | 0.0524 | 269.2638 | 6.3922 | 31.9544 | 0.1842 |
| 19 | L2513130-01; 10X CL | 10.0 | 0.3687 | 147.7753 | 1.4072 | 10.2355 | n.a. |
| 20 | L2513130-02; 10X | 10.0 | n.a. | 135.9644 | 0.5573 | 7.9633 | 0.3552 |
| 21 | CCV | 1.0 | 0.9881 | 10.1627 | 0.9812 | 20.3230 | 0.9476 |
| 22 | CCB | 1.0 | 0.0254 | 0.1027 | 0.0307 | 0.2103 | n.a. |
| 23 | L2512264-01 CL SO4 BR | 1.0 | 0.0550 | 29.6021 | 5.4421 | 91.1746 | 0.0528 |
| 24 | L2512264-02 | 1.0 | 0.0972 | 25.5874 | 0.4903 | 31.9534 | n.a. |
| 25 | L2512264-03 | 1.0 | 0.0888 | 6.4640 | 1.3078 | 17.9626 | 0.0360 |
| 26 | L2512264-04 | 1.0 | 0.0865 | 18.7790 | 1.6671 | 16.0785 | 0.0451 |
| 27 | L2512264-05 | 1.0 | 0.0367 | 212.1711 | 0.5493 | 16.4988 | 0.0657 |
| 28 | L2512264-06 | 1.0 | 0.0365 | 99.0999 | 3.9300 | 15.7808 | 0.0566 |
| 29 | L2512607-01 BR | 1.0 | 0.0411 | 75.8218 | 9.9109 | 11.2326 | 0.0501 |
| 30 | L2512607-02 | 1.0 | 0.0552 | 11.2464 | 1.4331 | 15.7181 | 0.0481 |
| 31 | L2512607-03 | 1.0 | 0.0383 | 110.2698 | 3.7949 | 19.5081 | 0.0472 |
| 32 | L2512607-06 | 1.0 | n.a. | 0.1046 | 0.0307 | 0.2092 | n.a. |
| 33 | CCV | 1.0 | 0.9799 | 10.1855 | 0.9920 | 20.2971 | 0.9520 |
| 34 | CCB | 1.0 | 0.0259 | 0.1018 | 0.0303 | 0.2114 | n.a. |
| 35 | L2512607-04 | 1.0 | 0.0466 | 20.3421 | 4.8808 | 19.0894 | 0.0703 |
| 36 | L2512607-05 | 1.0 | 0.0398 | 44.3040 | 4.0164 | 17.5048 | 0.0521 |
| 37 | L2512325-01 BR | 1.0 | 0.0803 | 23.2144 | 1.5007 | 18.9935 | 0.0489 |
| 38 | L2512325-02 | 1.0 | 0.0568 | 15.0830 | 0.6757 | 40.9294 | 0.0659 |
| 39 | L2512325-03 | 1.0 | 0.0439 | 3.4901 | 1.2462 | 12.9211 | 0.0402 |
| 40 | L2512325-04 | 1.0 | 0.1171 | 20.2694 | 0.6794 | 31.8579 | n.a. |
| 41 | L2512325-05 | 1.0 | 0.0481 | 30.1901 | 7.4230 | 18.5837 | 0.0673 |
| 42 | L2512325-06 | 1.0 | 0.0631 | 18.3804 | 1.9041 | 18.7185 | 0.0496 |
| 43 | L2512325-07 | 1.0 | 0.0398 | 13.2952 | 2.5570 | 23.7558 | 0.0663 |
| 44 | XL2512325-07; 10X | 10.0 | 0.2687 | 16.2940 | 2.9525 | 28.9567 | 0.3801 |
| 45 | CCV | 1.0 | 0.9800 | 10.1440 | 0.9920 | 20.2675 | 0.9482 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 46 | CCB | 1.0 | 0.0257 | 0.0990 | 0.0300 | 0.2092 | n.a. |
| 47 | L2512325-08 | 1.0 | 0.0406 | 31.9748 | 4.3901 | 17.1141 | 0.0536 |
| 48 | L2512325-09 | 1.0 | 0.0512 | 15.0919 | 0.6552 | 40.7243 | 0.0657 |
| 49 | L2512368-01 BR | 1.0 | 0.0765 | 19.6842 | 0.1756 | 18.6434 | 0.0728 |
| 50 | L2512368-02 | 1.0 | 0.0424 | 28.5818 | 2.3804 | 20.3972 | 0.0636 |
| 51 | L2512368-04 | 1.0 | 0.0876 | 17.0634 | 0.2502 | 20.1015 | 0.0704 |
| 52 | L2512368-05 | 1.0 | 0.0509 | 29.8547 | 1.9007 | 13.7147 | 0.0661 |
| 53 | L2512368-07 | 1.0 | 0.0989 | 23.5176 | 0.3978 | 37.3028 | 0.3073 |
| 54 | L2512368-08 | 1.0 | 0.0850 | 21.9893 | 0.4058 | 17.1560 | 0.0729 |
| 55 | L2512368-10 | 1.0 | 0.0384 | 25.5319 | 1.3133 | 14.7331 | 0.0983 |
| 56 | XL2512368-10; 10X | 10.0 | 0.2482 | 26.3838 | 1.3520 | 15.0033 | 0.4044 |
| 57 | CCV | 1.0 | 0.9917 | 10.1540 | 0.9864 | 20.2748 | 0.9456 |
| 58 | CCB | 1.0 | 0.0254 | 0.1101 | 0.0311 | 0.2134 | n.a. |
| 59 | L2512368-11 | 1.0 | 0.0665 | 10.4134 | 0.5693 | 10.4254 | 0.0573 |
| 60 | L2512368-13 | 1.0 | 0.0322 | 23.4188 | 5.7294 | 14.6040 | 0.0695 |
| 61 | L2512368-14 | 1.0 | 0.0725 | 10.5797 | n.a. | 42.5641 | 0.0531 |
| 62 | L2512368-16 | 1.0 | 0.0342 | 21.2861 | 4.2260 | 15.4382 | 0.0876 |
| 63 | L2512368-17 | 1.0 | 0.0485 | 34.9995 | 2.6463 | 19.3449 | 0.0748 |
| 64 | L2512368-19 | 1.0 | 0.0344 | 20.2318 | 4.2450 | 15.4191 | 0.0840 |
| 65 | L2512264-02 MS | 1.0 | 0.4528 | 28.3707 | 0.8612 | 38.3286 | 0.3261 |
| 66 | L2512264-02 DUP | 1.0 | 0.0976 | 25.4880 | 0.4937 | 31.8261 | n.a. |
| 67 | L2512607-02 MS | 1.0 | 0.3929 | 14.5625 | 1.7606 | 22.6242 | 0.3302 |
| 68 | L2512607-02 DUP | 1.0 | 0.0581 | 11.2425 | 1.4325 | 15.6899 | 0.0482 |
| 69 | CCV | 1.0 | 0.9985 | 10.1565 | 0.9874 | 20.2755 | 0.9401 |
| 70 | CCB | 1.0 | 0.0252 | 0.1086 | 0.0308 | 0.2126 | n.a. |
| 71 | L2512325-02 MS | 1.0 | 0.4243 | 18.4867 | 1.0695 | 47.3356 | 0.3728 |
| 72 | L2512325-02 MSD | 1.0 | 0.4252 | 18.4842 | 1.0576 | 47.3467 | 0.3723 |
| 73 | L2512368-10 MS | 1.0 | 0.4110 | 28.5048 | 1.7034 | 22.3341 | 0.4216 |
| 74 | L2512368-10 MSD | 1.0 | 0.4101 | 28.5126 | 1.7075 | 22.3226 | 0.4212 |
| 75 | L2511911-07; 10X CL | 10.0 | 0.3632 | 150.7808 | 1.0708 | 13.8426 | 0.6213 |
| 76 | L2511911-08; 10X CL | 10.0 | 0.2756 | 261.4338 | 5.5874 | 29.4956 | 0.4525 |
| 77 | L2512264-05; 10X CL | 10.0 | 0.2590 | 207.1341 | 0.6817 | 14.8207 | 0.3674 |
| 78 | L2512264-06; 10X CL | 10.0 | 0.2590 | 95.2921 | 3.3876 | 14.2961 | 0.3611 |
| 79 | CCV | 1.0 | 0.9922 | 10.1340 | 0.9826 | 20.2101 | 0.9389 |
| 80 | CCB | 1.0 | 0.0257 | 0.1084 | 0.0308 | 0.2133 | n.a. |
| | Sum: | 152.000 | 24.3872 | | 134.8332 | 1510.6599 | 25.0864 |
| | Average: | 1.900 | 0.3127 | | 1.7978 | 18.8832 | 0.3982 |
| | Rel.Std.Dev: | 143.002 % | 2.0748 | | 1.1069 | 0.9133 | 1.8616 |

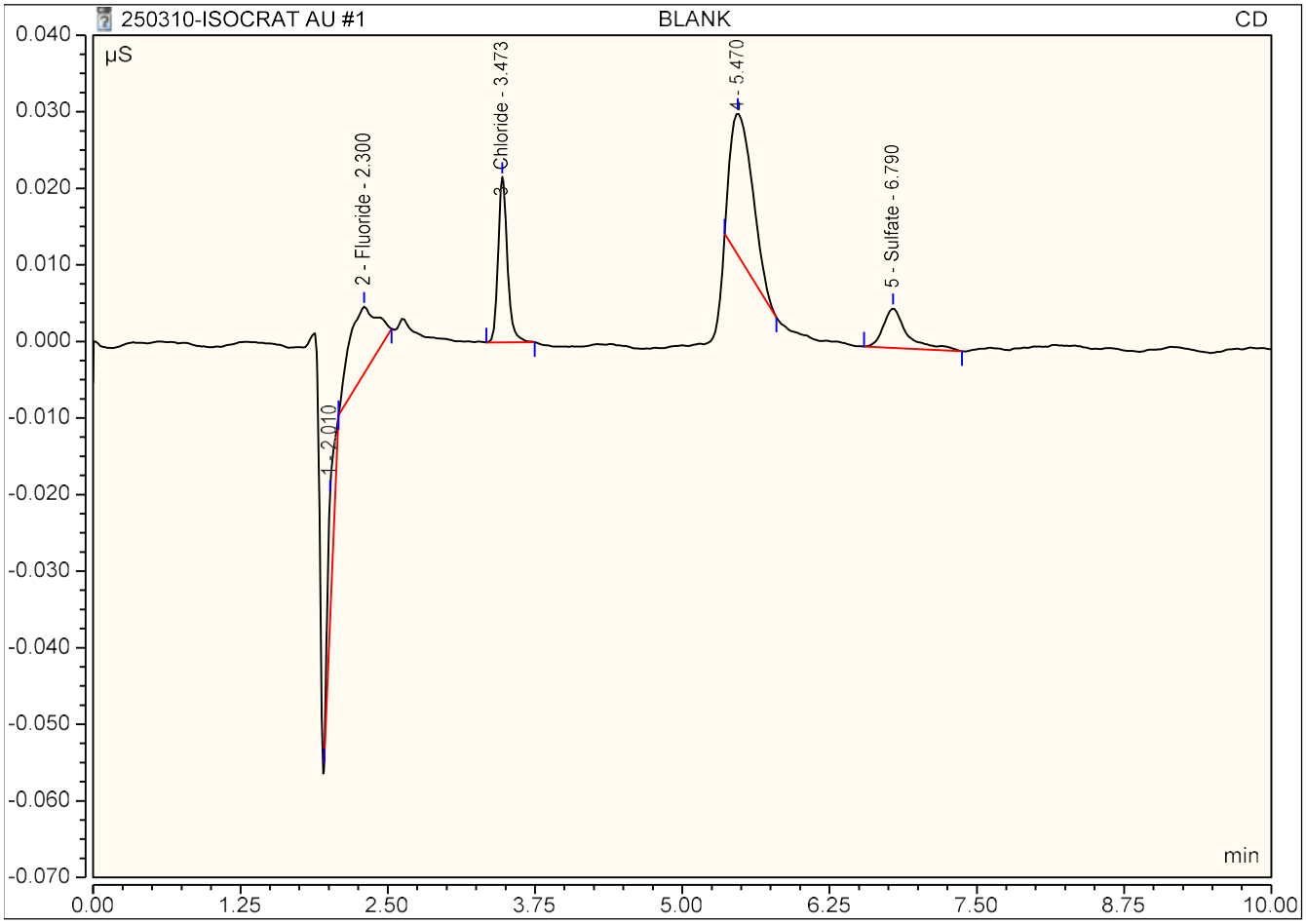
| Inject Time | Comment |
|---|---|
| 06/Mar/2025 18:55 | AU |
| 06/Mar/2025 19:07 | LOT#250306-0.5 |
| 06/Mar/2025 19:19 | LOT#250306-1.0 |
| 06/Mar/2025 19:31 | LOT#250306-2.0 |
| 06/Mar/2025 19:43 | LOT#250306-3.0 |
| 06/Mar/2025 19:55 | LOT#250306-4.0 |
| 06/Mar/2025 20:08 | LOT#250306-5.0 |
| 10/Mar/2025 15:22 | VG2038790-91-92-93 |
| 10/Mar/2025 15:34 | LOT#250306-C |
| 10/Mar/2025 15:46 | AU |
| 10/Mar/2025 15:58 | LOT#250306-I |
| 10/Mar/2025 16:10 | AU |
| 10/Mar/2025 16:22 | AU |
| 10/Mar/2025 16:34 | LOT#250306-I |
| 10/Mar/2025 16:46 | AU |
| 10/Mar/2025 16:59 | LOT#250306-I |
| 10/Mar/2025 17:11 | AU |
| 10/Mar/2025 17:23 | AU |
| 10/Mar/2025 17:35 | AU |
| 10/Mar/2025 17:47 | AU |
| 10/Mar/2025 17:59 | LOT#250306-C |
| 10/Mar/2025 18:11 | AU |
| 10/Mar/2025 18:23 | AU |
| 10/Mar/2025 18:35 | AU |
| 10/Mar/2025 18:47 | AU |
| 10/Mar/2025 19:00 | AU |
| 10/Mar/2025 19:12 | AU |
| 10/Mar/2025 19:24 | AU |
| 10/Mar/2025 19:36 | AU |
| 10/Mar/2025 19:48 | AU |
| 10/Mar/2025 20:00 | AU |
| 10/Mar/2025 20:12 | AU |
| 10/Mar/2025 20:24 | LOT#250306-C |
| 10/Mar/2025 20:36 | AU |
| 10/Mar/2025 20:48 | AU |
| 10/Mar/2025 21:00 | AU |
| 10/Mar/2025 21:13 | AU |
| 10/Mar/2025 21:25 | AU |
| 10/Mar/2025 21:37 | AU |
| 10/Mar/2025 21:49 | AU |
| 10/Mar/2025 22:01 | AU |
| 10/Mar/2025 22:13 | AU |
| 10/Mar/2025 22:25 | AU |
| 10/Mar/2025 22:37 | AU |
| 10/Mar/2025 22:49 | LOT#250306-C |

| | |
|---|---|
| 10/Mar/2025 23:01 | AU |
| 10/Mar/2025 23:13 | AU |
| 10/Mar/2025 23:26 | AU |
| 10/Mar/2025 23:38 | AU |
| 10/Mar/2025 23:50 | AU |
| 11/Mar/2025 00:02 | AU |
| 11/Mar/2025 00:14 | AU |
| 11/Mar/2025 00:26 | AU |
| 11/Mar/2025 00:38 | AU |
| 11/Mar/2025 00:50 | AU |
| 11/Mar/2025 01:02 | AU |
| 11/Mar/2025 01:14 | LOT#250306-C |
| 11/Mar/2025 01:26 | AU |
| 11/Mar/2025 01:38 | AU |
| 11/Mar/2025 01:50 | AU |
| 11/Mar/2025 02:03 | AU |
| 11/Mar/2025 02:15 | AU |
| 11/Mar/2025 02:27 | AU |
| 11/Mar/2025 02:39 | AU |
| 11/Mar/2025 02:51 | AU |
| 11/Mar/2025 03:03 | AU |
| 11/Mar/2025 03:15 | AU |
| 11/Mar/2025 03:27 | AU |
| 11/Mar/2025 03:39 | LOT#250306-C |
| 11/Mar/2025 03:51 | AU |
| 11/Mar/2025 04:03 | AU |
| 11/Mar/2025 04:15 | AU |
| 11/Mar/2025 04:28 | AU |
| 11/Mar/2025 04:40 | AU |
| 11/Mar/2025 04:52 | AU |
| 11/Mar/2025 05:04 | AU |
| 11/Mar/2025 05:16 | AU |
| 11/Mar/2025 05:28 | AU |
| 11/Mar/2025 05:40 | LOT#250306-C |
| 11/Mar/2025 05:52 | AU |
| | 0.000 |
| | #DIV/0! |
| | #DIV/0! |

## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **BLANK** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **06-Mar-2025 / 18:55** | *Run Time:* | **10.00** |

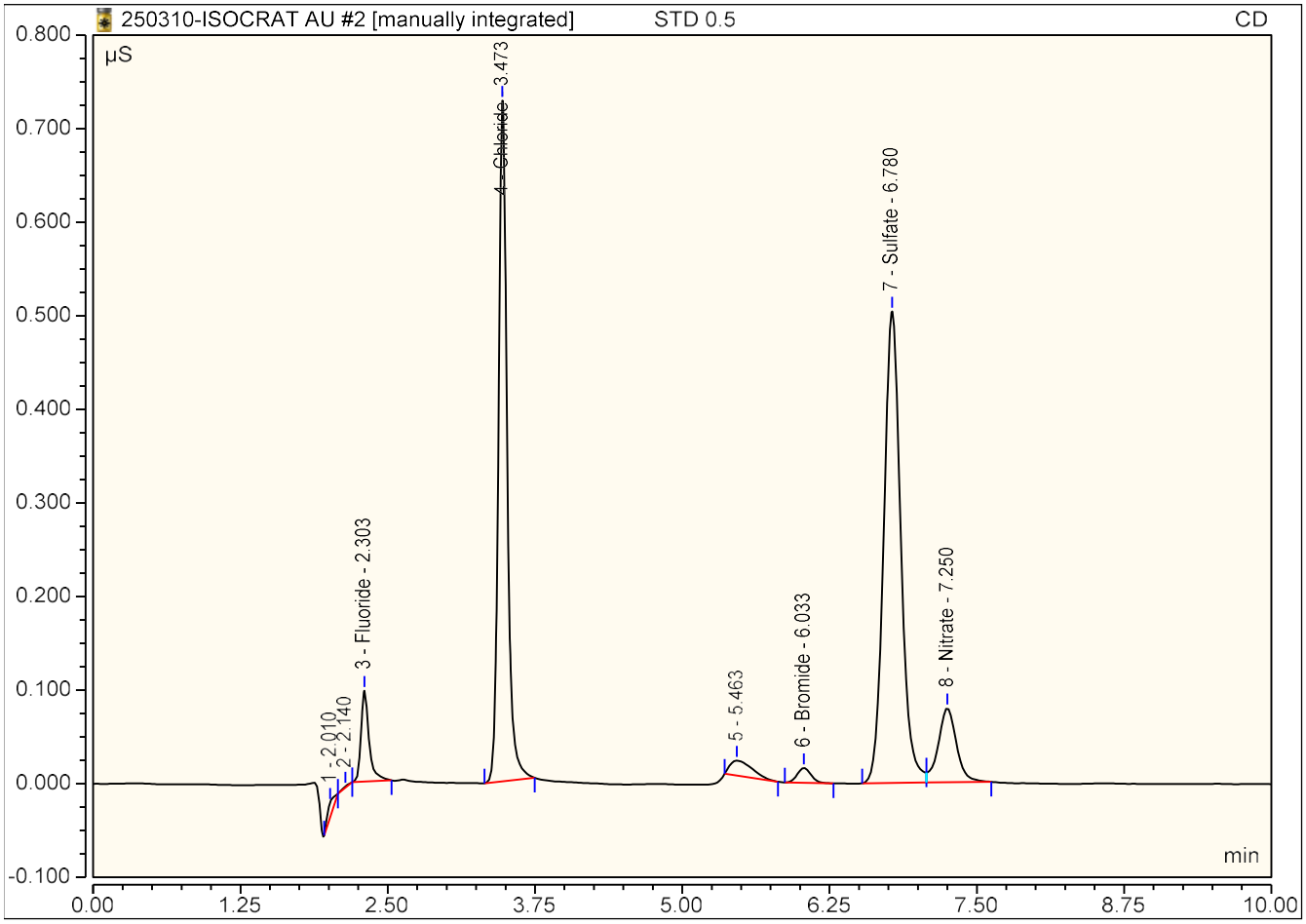
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.002 | 0.009 | 0.0293 |
| 3 | 3.47 | **Chloride** | BMB | 0.002 | 0.022 | 0.0946 |
| 5 | 6.79 | **Sulfate** | BMB | 0.001 | 0.005 | 0.2070 |
| | | **TOTAL:** | | 0.01 | 0.04 | 0.33 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 0.5** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **06-Mar-2025 / 19:07** | *Run Time:* | **10.00** |

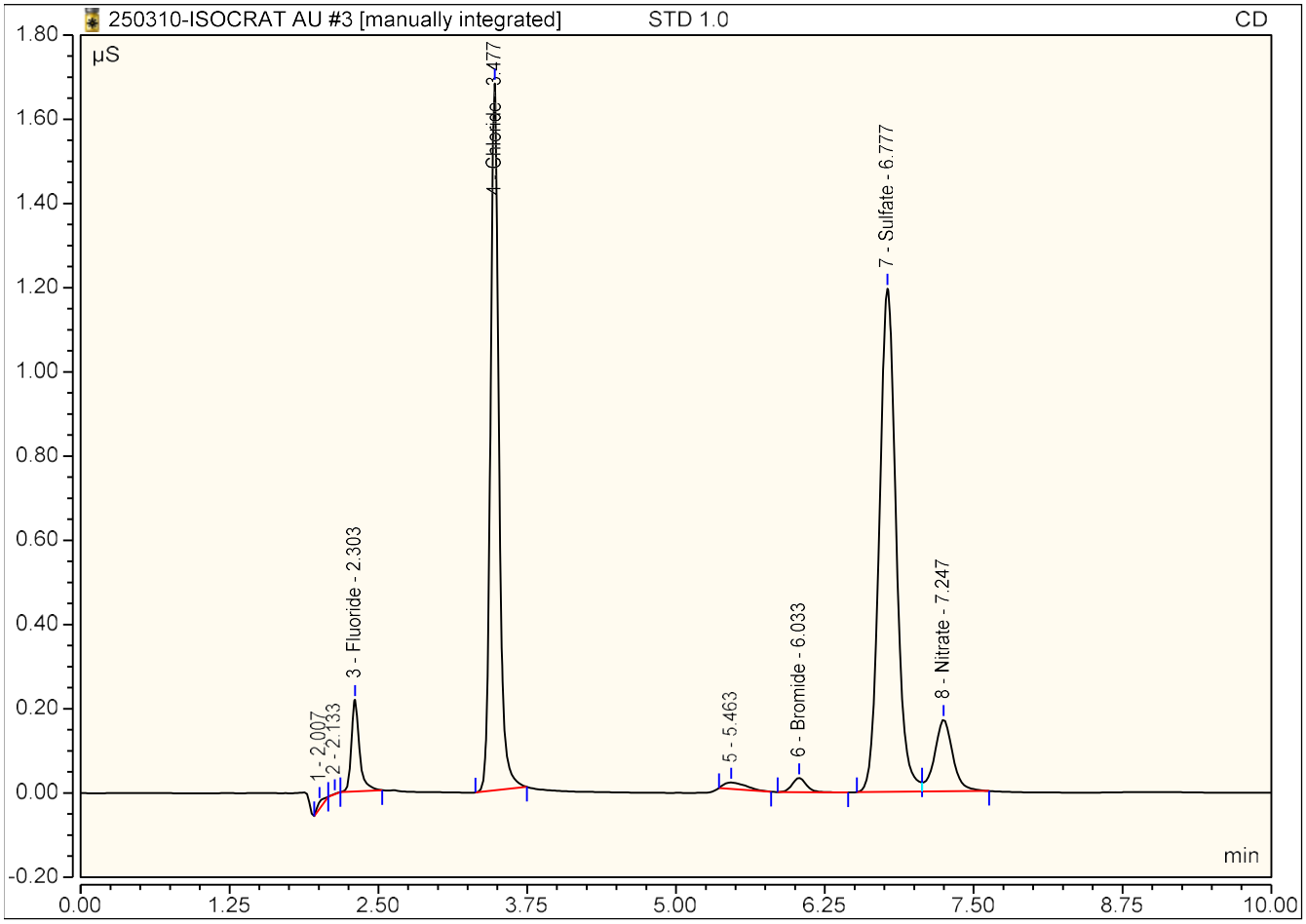
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB | 0.008 | 0.097 | 0.0395 |
| 4 | 3.47 | **Chloride** | BMB | 0.062 | 0.727 | 0.2684 |
| 6 | 6.03 | **Bromide** | BMB | 0.002 | 0.016 | 0.0514 |
| 7 | 6.78 | **Sulfate** | BM * | 0.084 | 0.504 | 0.5313 |
| 8 | 7.25 | **Nitrate** | MB* | 0.014 | 0.079 | 0.0463 |
| **TOTAL:** | | | | 0.17 | 1.42 | 0.94 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 1.0** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **06-Mar-2025 / 19:19** | *Run Time:* | **10.00** |

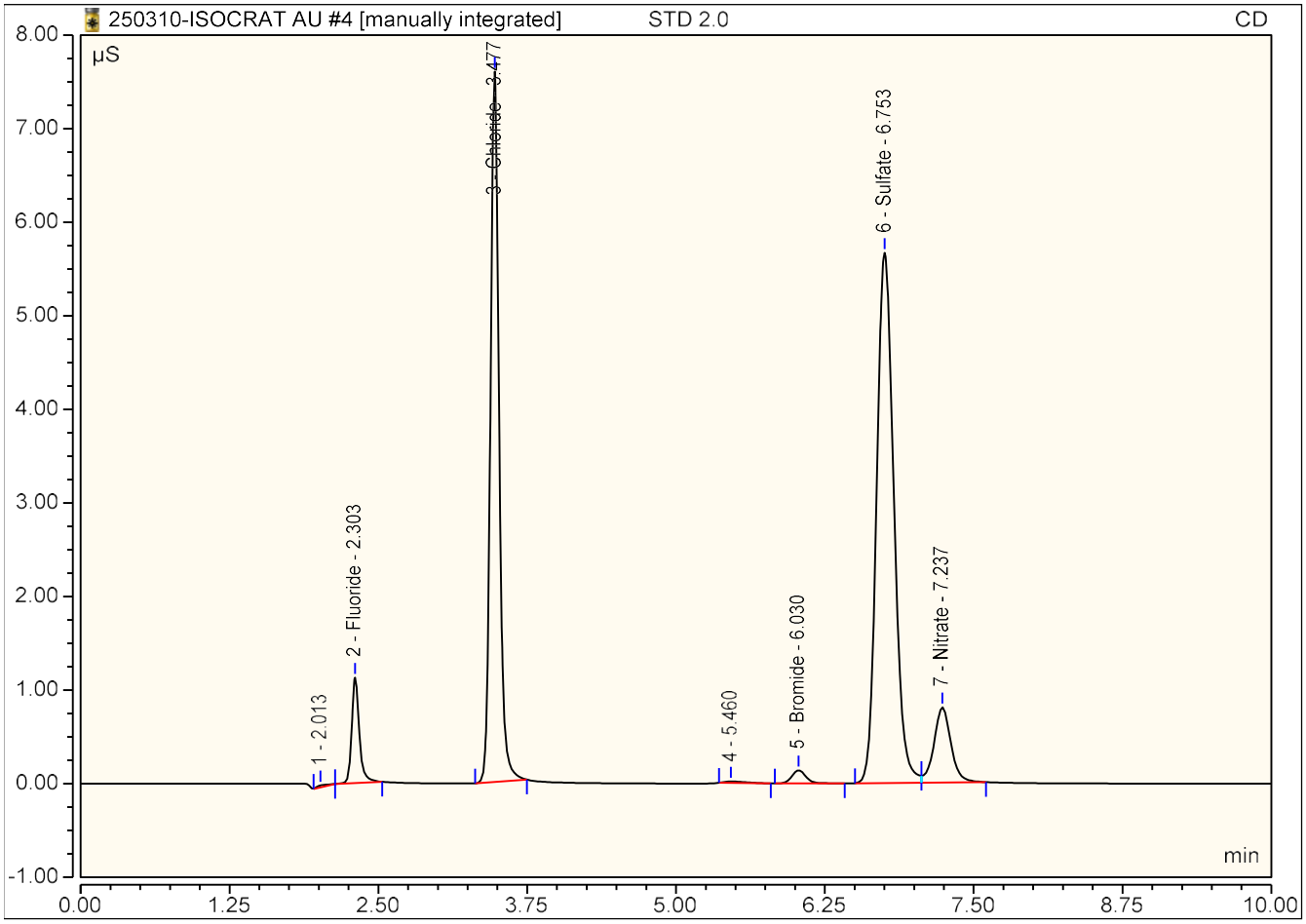
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB | 0.017 | 0.218 | 0.0573 |
| 4 | 3.48 | **Chloride** | BMB | 0.140 | 1.679 | 0.4952 |
| 6 | 6.03 | **Bromide** | BMB | 0.005 | 0.034 | 0.0721 |
| 7 | 6.78 | **Sulfate** | BM * | 0.195 | 1.195 | 0.9629 |
| 8 | 7.25 | **Nitrate** | MB* | 0.030 | 0.170 | 0.0651 |
| | | **TOTAL:** | | 0.39 | 3.30 | 1.65 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 2.0** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **06-Mar-2025 / 19:31** | *Run Time:* | **10.00** |

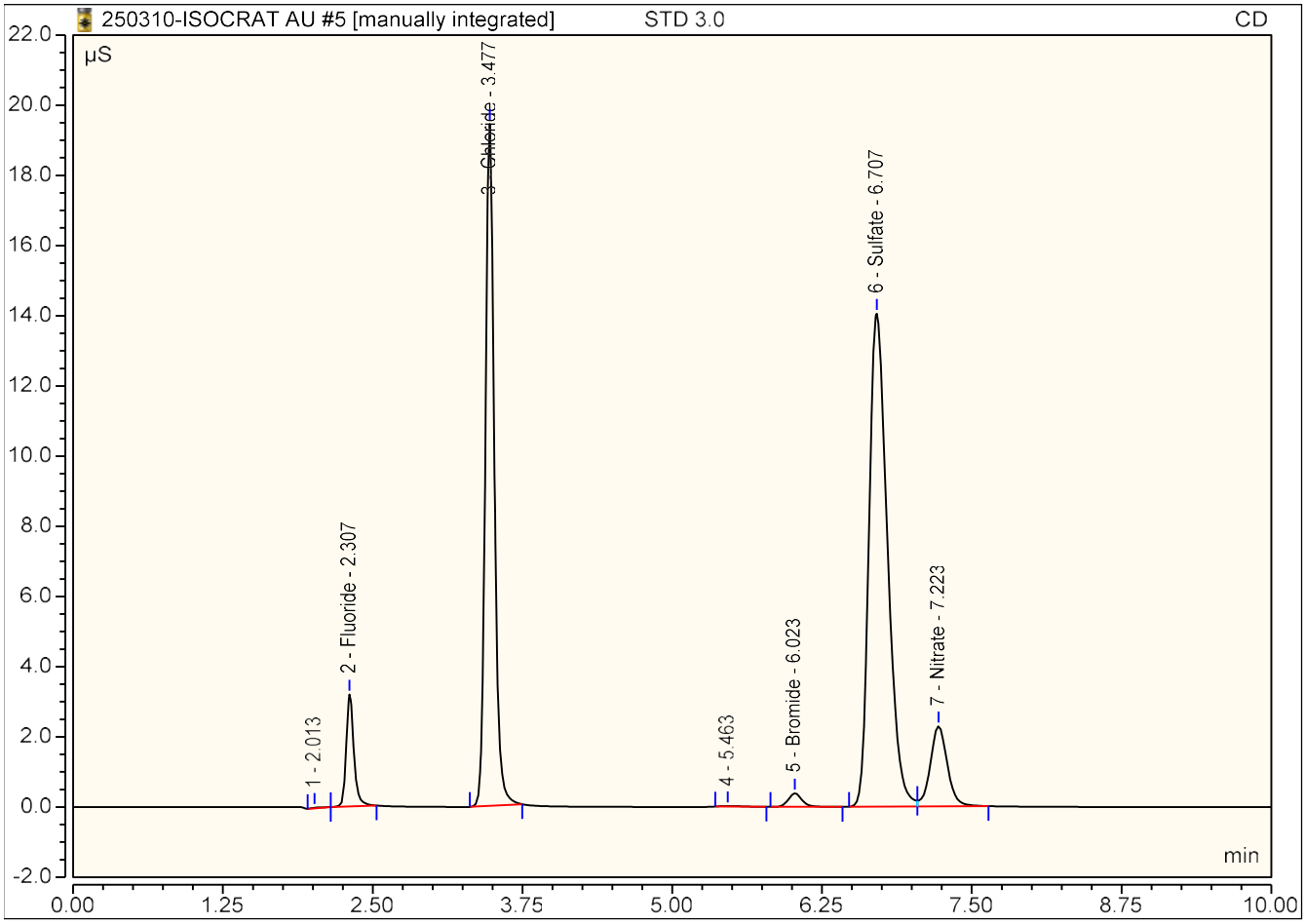
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.082 | 1.127 | 0.1825 |
| 3 | 3.48 | **Chloride** | BMB | 0.643 | 7.591 | 1.9581 |
| 5 | 6.03 | **Bromide** | BMB | 0.019 | 0.141 | 0.1900 |
| 6 | 6.75 | **Sulfate** | BM * | 0.945 | 5.665 | 3.8903 |
| 7 | 7.24 | **Nitrate** | MB* | 0.133 | 0.804 | 0.1855 |
| | | **TOTAL:** | | 1.82 | 15.33 | 6.41 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 3.0** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **06-Mar-2025 / 19:43** | *Run Time:* | **10.00** |

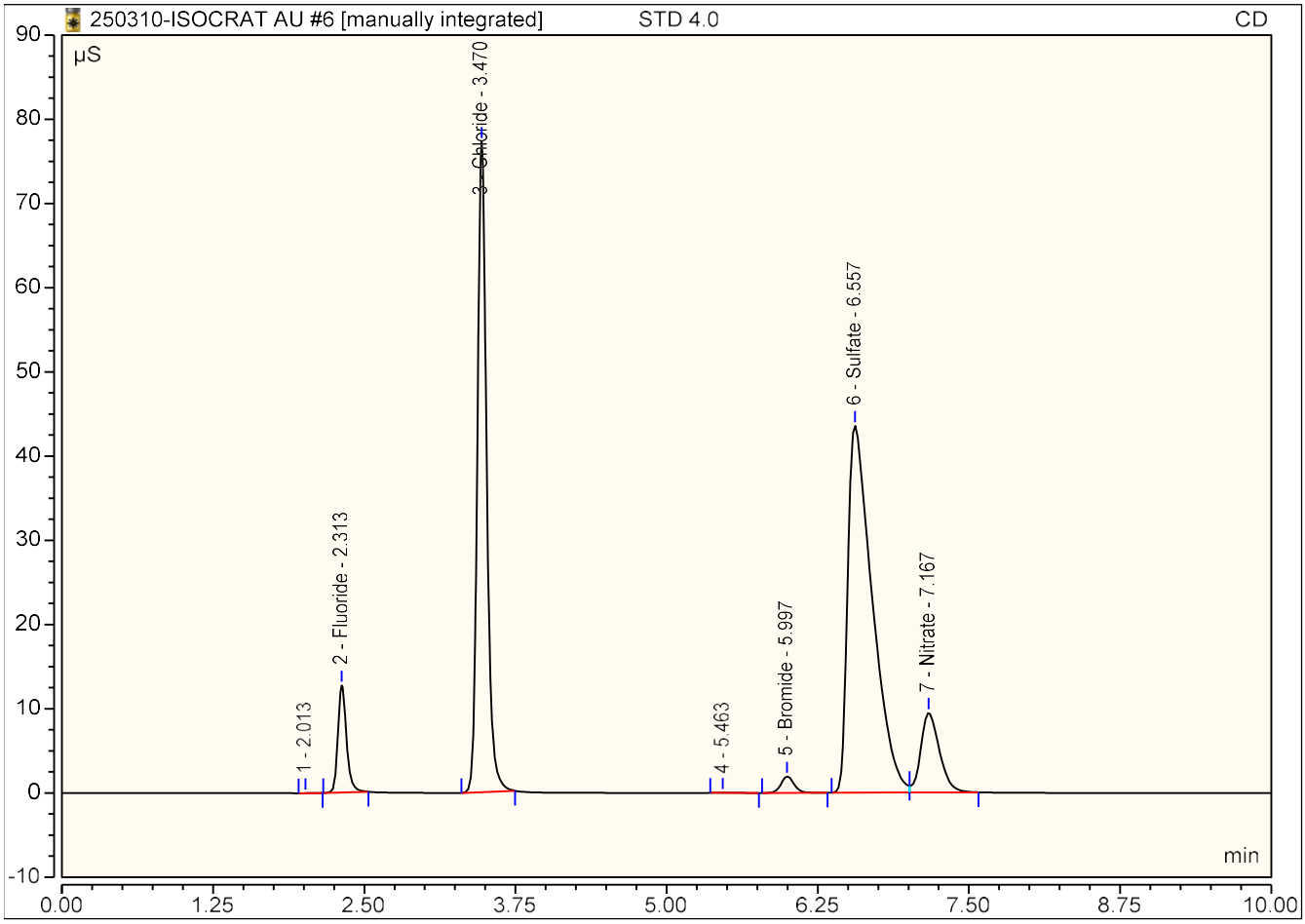
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.236 | 3.190 | 0.4771 |
| 3 | 3.48 | **Chloride** | BMB | 1.680 | 19.436 | 4.9752 |
| 5 | 6.02 | **Bromide** | BMB | 0.052 | 0.388 | 0.4486 |
| 6 | 6.71 | **Sulfate** | BM * | 2.500 | 14.051 | 9.9595 |
| 7 | 7.22 | **Nitrate** | MB* | 0.377 | 2.284 | 0.4697 |
| | | **TOTAL:** | | 4.85 | 39.35 | 16.33 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 4.0** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **06-Mar-2025 / 19:55** | *Run Time:* | **10.00** |

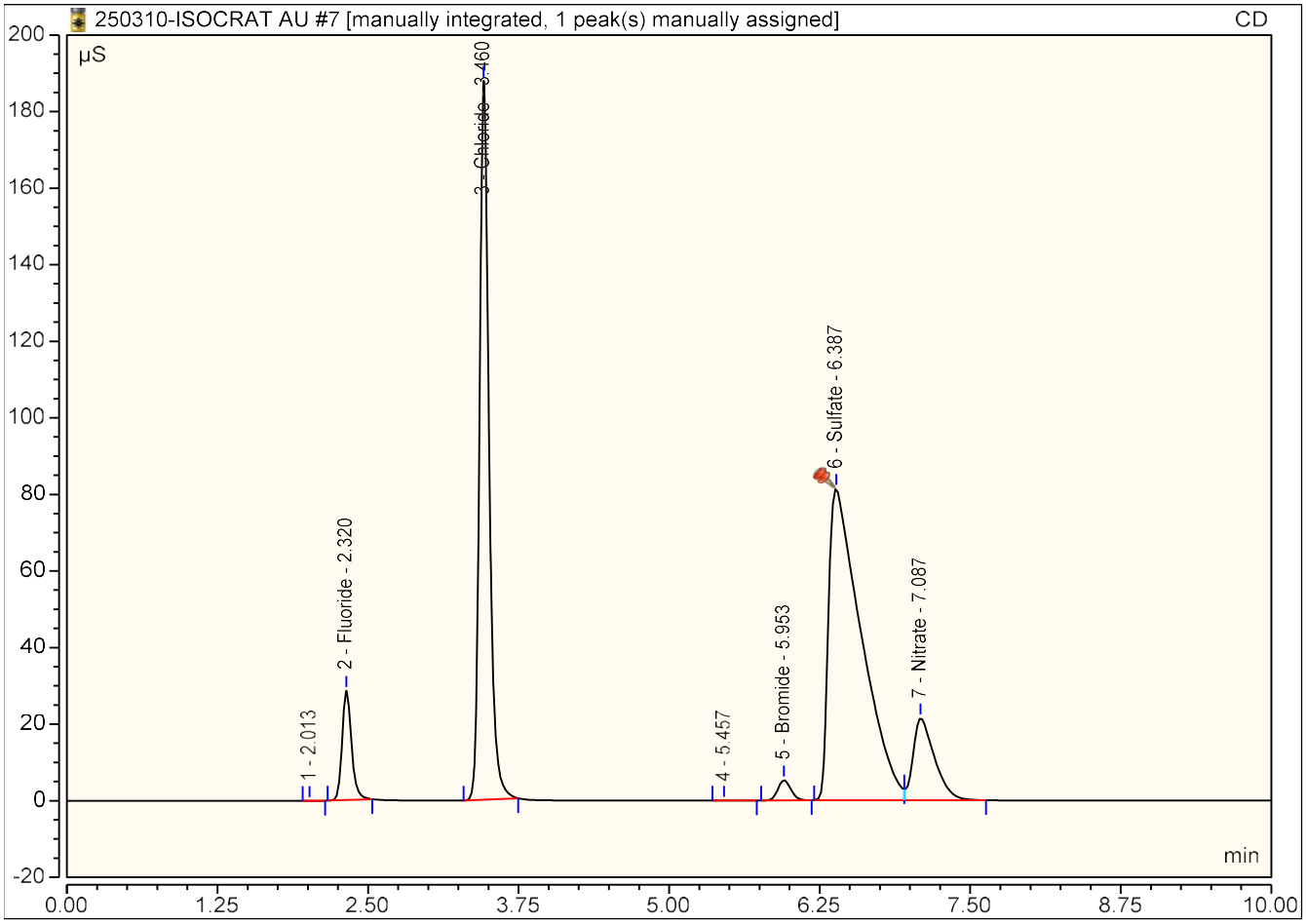
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 1.043 | 12.703 | 2.0262 |
| 3 | 3.47 | **Chloride** | BMB | 6.876 | 77.211 | 20.0817 |
| 5 | 6.00 | **Bromide** | BMB | 0.248 | 1.949 | 2.0130 |
| 6 | 6.56 | **Sulfate** | BM * | 10.261 | 43.563 | 40.2455 |
| 7 | 7.17 | **Nitrate** | MB* | 1.694 | 9.469 | 2.0084 |
| **TOTAL:** | | | | 20.12 | 144.90 | 66.37 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **STD 5.0** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Calibration Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **06-Mar-2025 / 20:08** | *Run Time:* | **10.00** |

| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.32 | **Fluoride** | BMB | 2.589 | 28.581 | 4.9924 |
| 3 | 3.46 | **Chloride** | BMB | 17.155 | 187.803 | 49.9715 |
| 5 | 5.95 | **Bromide** | BMB | 0.672 | 5.286 | 5.3987 |
| 6 | 6.39 | **Sulfate** | BM *^ | 25.551 | 81.356 | 99.9104 |
| 7 | 7.09 | **Nitrate** | MB* | 4.428 | 21.412 | 5.2029 |
| | | **TOTAL:** | | 50.39 | 324.44 | 165.48 |



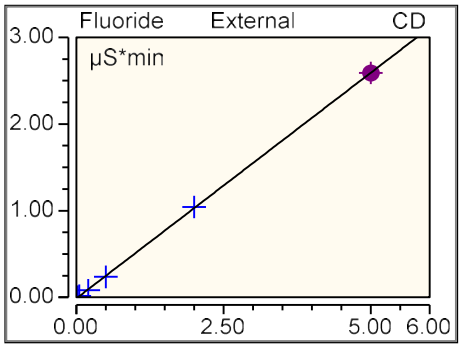
## Calibration Batch Report

| | | | |
|---|---|---|---|
| *Sequence:* | **250310-ISOCRAT AU** | *Injection Volume:* | **25.00** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **06-Mar-2025 / 20:08** | *Run Time:* | **10** |

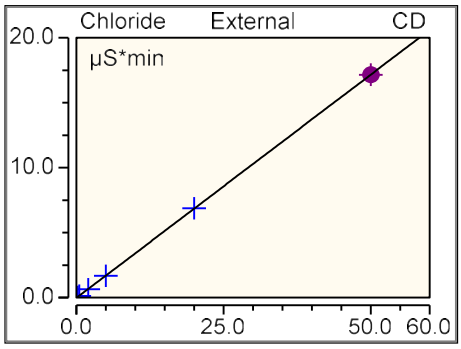
**Calibration Summary**

| Peak Name | Eval.Type | Cal.Type | Points | Offset (C0) | Slope (C1) | Curve (C2) | Coeff.Det. % |
|---|---|---|---|---|---|---|---|
| Fluoride | Area | in, WithOffse | 6.000 | -0.013 | 0.521 | 0.000 | 99.9904 |
| Chloride | Area | in, WithOffse | 6.000 | -0.031 | 0.344 | 0.000 | 99.9995 |
| Bromide | Area | in, WithOffse | 5.000 | -0.004 | 0.125 | 0.000 | 99.8514 |
| Sulfate | Area | in, WithOffse | 6.000 | -0.052 | 0.256 | 0.000 | 99.9989 |
| Nitrate | Area | in, WithOffse | 5.000 | -0.025 | 0.856 | 0.000 | 99.9317 |
| | | **AVERAGE:** | | -0.0250 | 0.4205 | 0.0000 | 99.9544 |

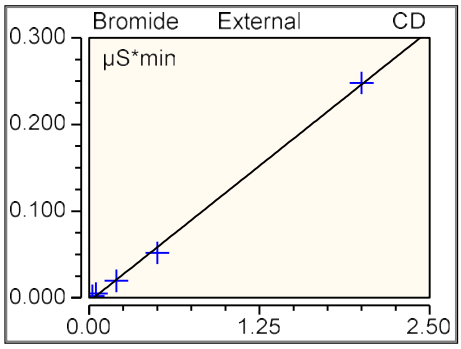
| Injection Name | Ret.Time min CD | Area µS*min CD | Height µS CD | Amount CD |
|---|---|---|---|---|
| | Fluoride | Fluoride | Fluoride | Fluoride |
| STD 0.5 | 2.303 | 0.0077 | 0.097 | 0.040 |
| STD 1.0 | 2.303 | 0.0170 | 0.218 | 0.057 |
| STD 2.0 | 2.303 | 0.0823 | 1.127 | 0.183 |
| STD 3.0 | 2.307 | 0.2358 | 3.190 | 0.477 |
| STD 4.0 | 2.313 | 1.0431 | 12.703 | 2.026 |
| STD 5.0 | 2.320 | 2.5888 | 28.581 | 4.992 |
| **Average** | 2.308 | | | |
| **Rel. Std. Dev.** | 0.299 % | | | |



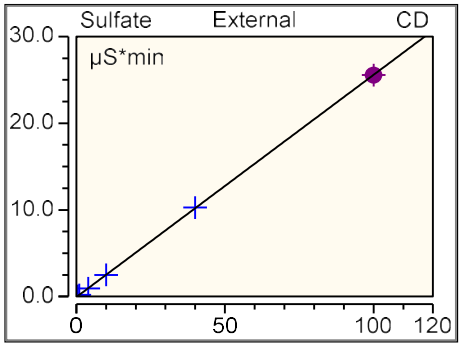

| Injection Name | Ret.Time min CD | Area µS*min CD | Height µS CD | Amount CD |
|---|---|---|---|---|
| | Chloride | Chloride | Chloride | Chloride |
| STD 0.5 | 3.473 | 0.0617 | 0.727 | 0.268 |
| STD 1.0 | 3.477 | 0.1397 | 1.679 | 0.495 |
| STD 2.0 | 3.477 | 0.6428 | 7.591 | 1.958 |
| STD 3.0 | 3.477 | 1.6804 | 19.436 | 4.975 |
| STD 4.0 | 3.470 | 6.8756 | 77.211 | 20.082 |
| STD 5.0 | 3.460 | 17.1549 | 187.803 | 49.971 |
| **Average** | 3.472 | | | |
| **Rel. Std. Dev.** | 0.189 % | | | |



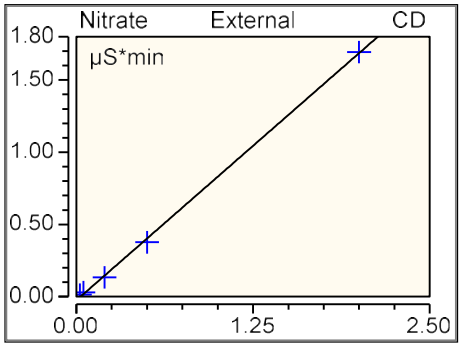

| Injection Name | Ret.Time min CD | Area µS*min CD | Height µS CD | Amount CD |
|---|---|---|---|---|
| | Bromide | Bromide | Bromide | Bromide |
| STD 0.5 | 6.033 | 0.0021 | 0.016 | 0.051 |
| STD 1.0 | 6.033 | 0.0047 | 0.034 | 0.072 |
| STD 2.0 | 6.030 | 0.0195 | 0.141 | 0.190 |
| STD 3.0 | 6.023 | 0.0519 | 0.388 | 0.449 |
| STD 4.0 | 5.997 | 0.2478 | 1.949 | 2.013 |
| STD 5.0 | 5.953 | 0.6720 | 5.286 | 5.399 |
| **Average** | 6.012 | | | |
| **Rel. Std. Dev.** | 0.528 % | | | |



| Injection Name | Ret.Time min CD | Area µS*min CD | Height µS CD | Amount CD |
|---|---|---|---|---|
| | Sulfate | Sulfate | Sulfate | Sulfate |
| STD 0.5 | 6.780 | 0.0843 | 0.504 | 0.531 |
| STD 1.0 | 6.777 | 0.1949 | 1.195 | 0.963 |
| STD 2.0 | 6.753 | 0.9451 | 5.665 | 3.890 |
| STD 3.0 | 6.707 | 2.5004 | 14.051 | 9.959 |
| STD 4.0 | 6.557 | 10.2614 | 43.563 | 40.246 |
| STD 5.0 | 6.387 | 25.5509 | 81.356 | 99.910 |
| **Average** | 6.660 | | | |
| **Rel. Std. Dev.** | 2.367 % | | | |



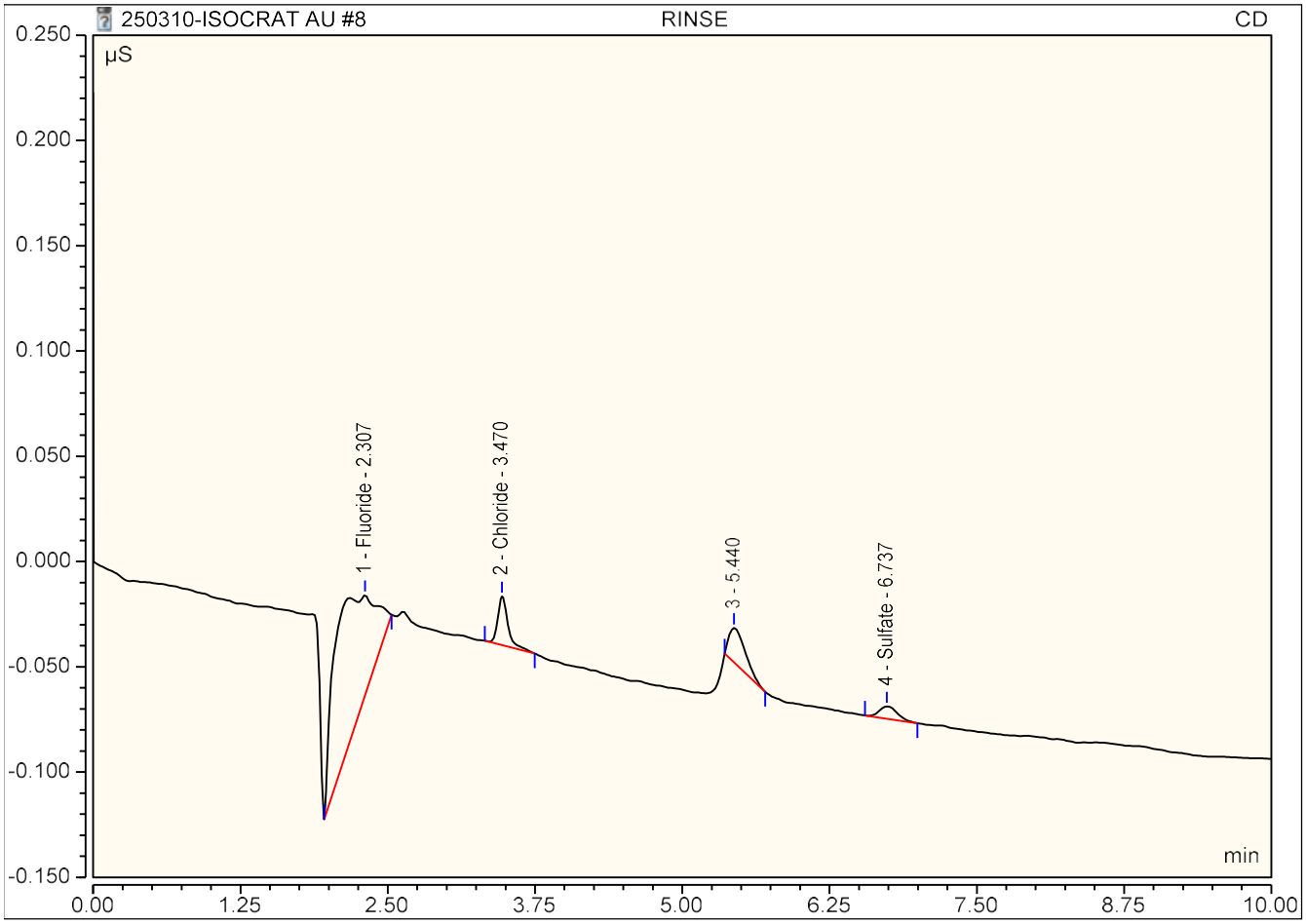

| Injection Name | Ret.Time min CD | Area µS*min CD | Height µS CD | Amount CD |
|---|---|---|---|---|
| | Nitrate | Nitrate | Nitrate | Nitrate |
| STD 0.5 | 7.250 | 0.0142 | 0.079 | 0.046 |
| STD 1.0 | 7.247 | 0.0302 | 0.170 | 0.065 |
| STD 2.0 | 7.237 | 0.1333 | 0.804 | 0.186 |
| STD 3.0 | 7.223 | 0.3766 | 2.284 | 0.470 |
| STD 4.0 | 7.167 | 1.6937 | 9.469 | 2.008 |
| STD 5.0 | 7.087 | 4.4282 | 21.412 | 5.203 |
| **Average** | 7.202 | | | |
| **Rel. Std. Dev.** | 0.889 % | | | |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **RINSE** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 15:22** | *Run Time:* | **10.00** |

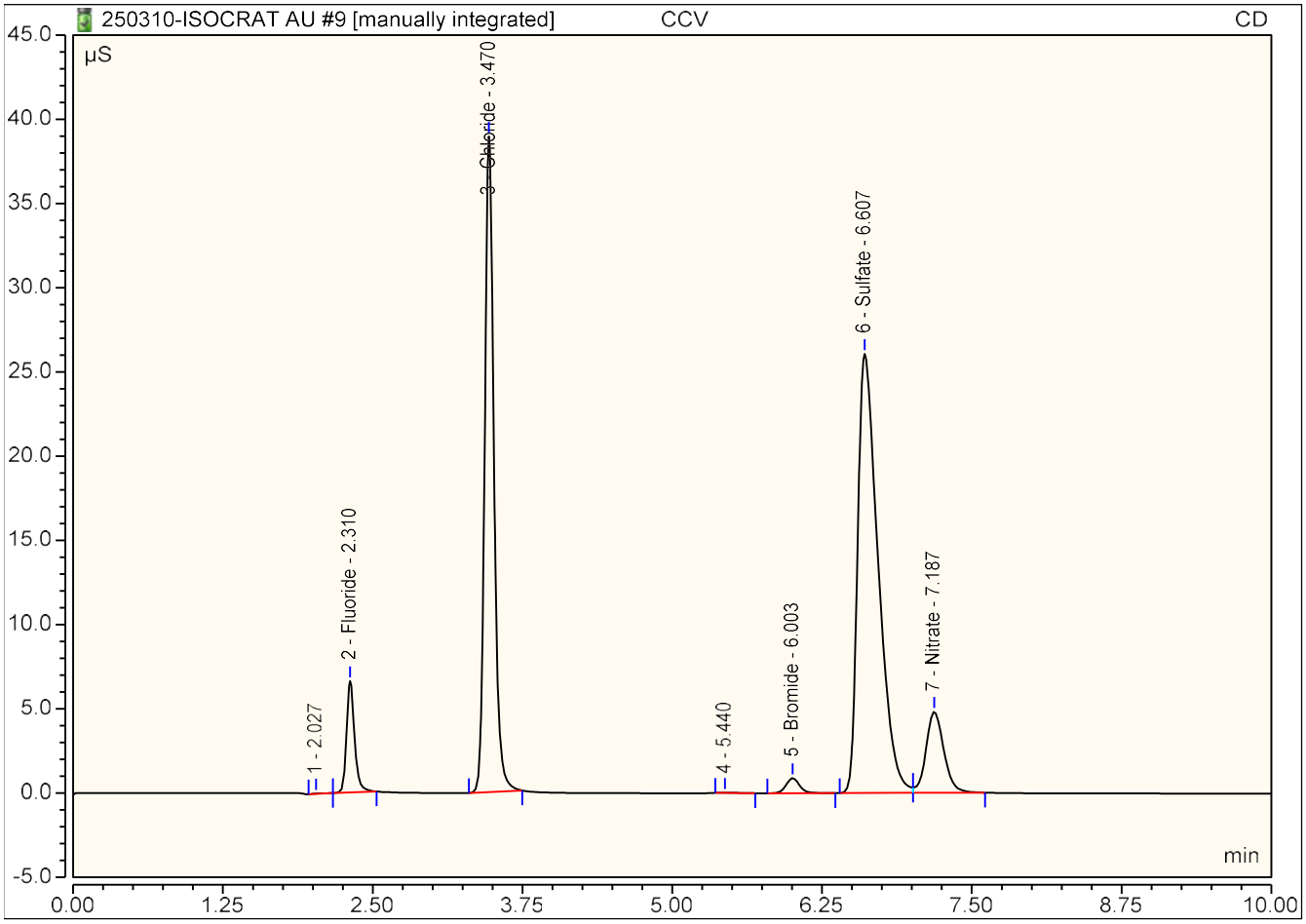
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 1 | 2.31 | **Fluoride** | BMB | 0.025 | 0.048 | 0.0731 |
| 2 | 3.47 | **Chloride** | BMB | 0.002 | 0.023 | 0.0956 |
| 4 | 6.74 | **Sulfate** | BMB | 0.001 | 0.006 | 0.2064 |
| | | **TOTAL:** | | 0.03 | 0.08 | 0.38 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 15:34** | *Run Time:* | **10.00** |

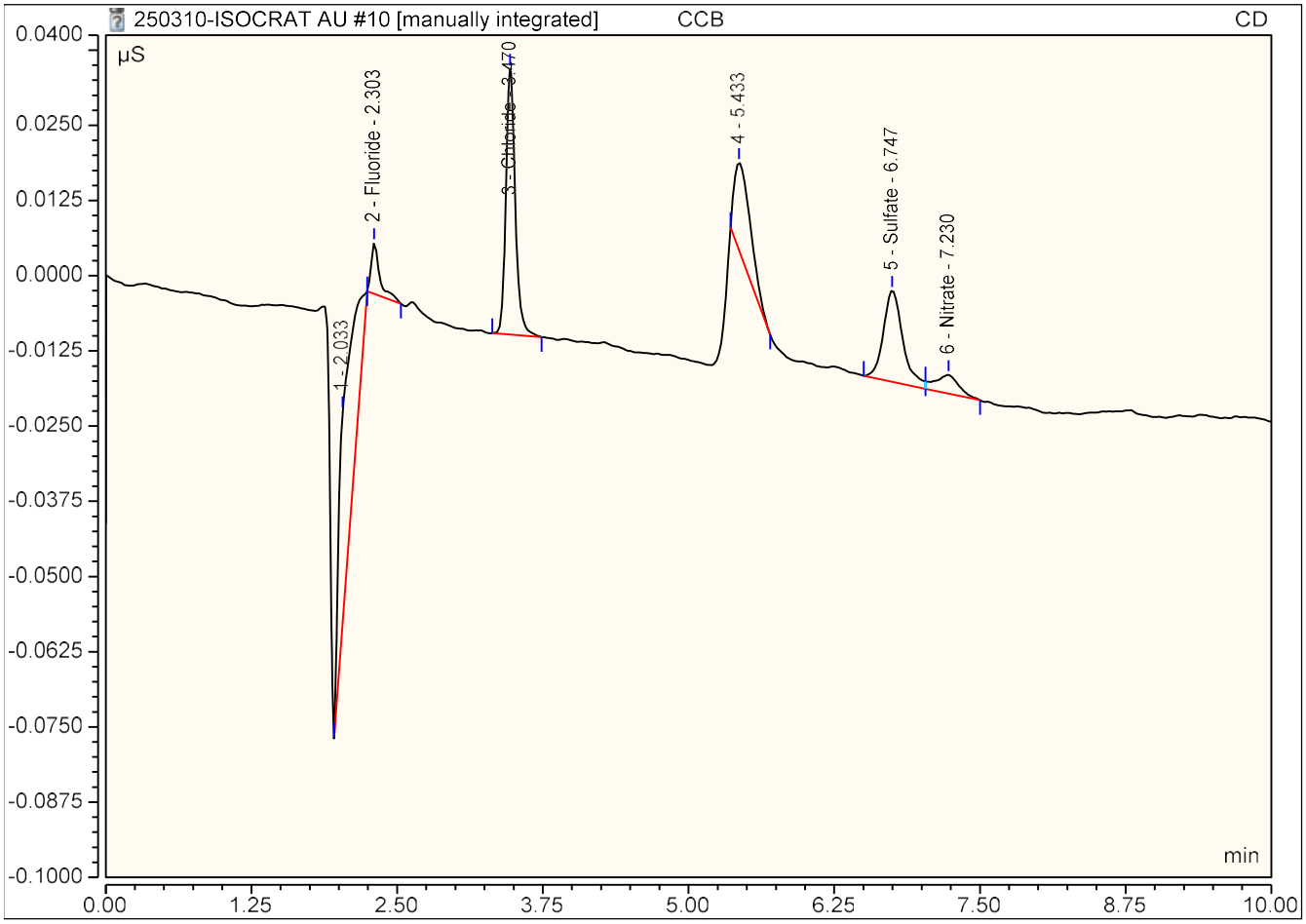
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.509 | 6.610 | 1.0020 |
| 3 | 3.47 | **Chloride** | BMB | 3.464 | 38.918 | 10.1605 |
| 5 | 6.00 | **Bromide** | BMB | 0.119 | 0.899 | 0.9823 |
| 6 | 6.61 | **Sulfate** | BM * | 5.160 | 26.066 | 20.3383 |
| 7 | 7.19 | **Nitrate** | MB* | 0.828 | 4.818 | 0.9973 |
| **TOTAL:** | | | | 10.08 | 77.31 | 33.48 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 15:46** | *Run Time:* | **10.00** |

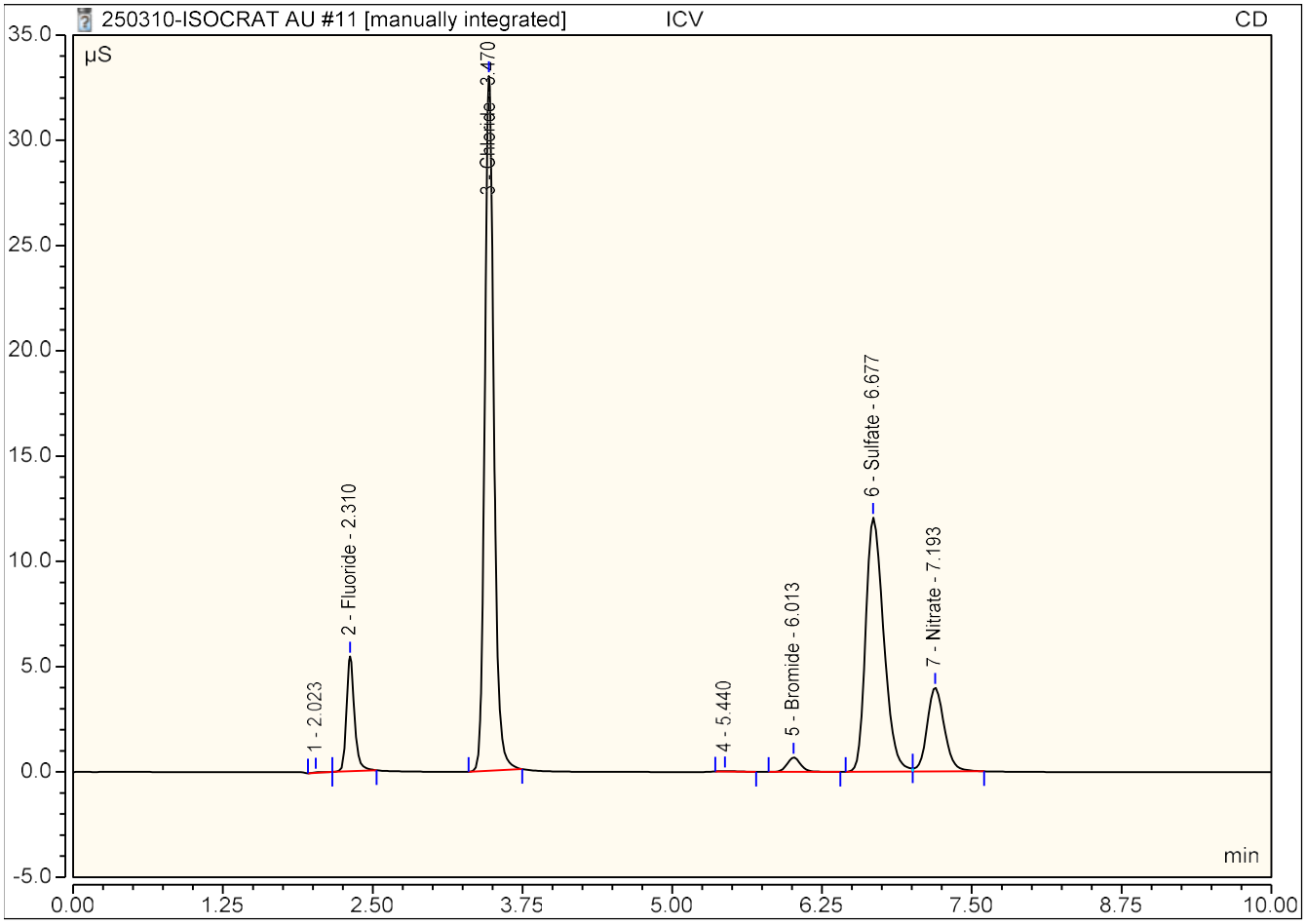
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.001 | 0.008 | 0.0260 |
| 3 | 3.47 | **Chloride** | BMB | 0.004 | 0.044 | 0.1007 |
| 5 | 6.75 | **Sulfate** | BM * | 0.003 | 0.015 | 0.2137 |
| 6 | 7.23 | **Nitrate** | MB* | 0.001 | 0.003 | 0.0306 |
| **TOTAL:** | | | | 0.01 | 0.07 | 0.37 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **ICV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 15:58** | *Run Time:* | **10.00** |

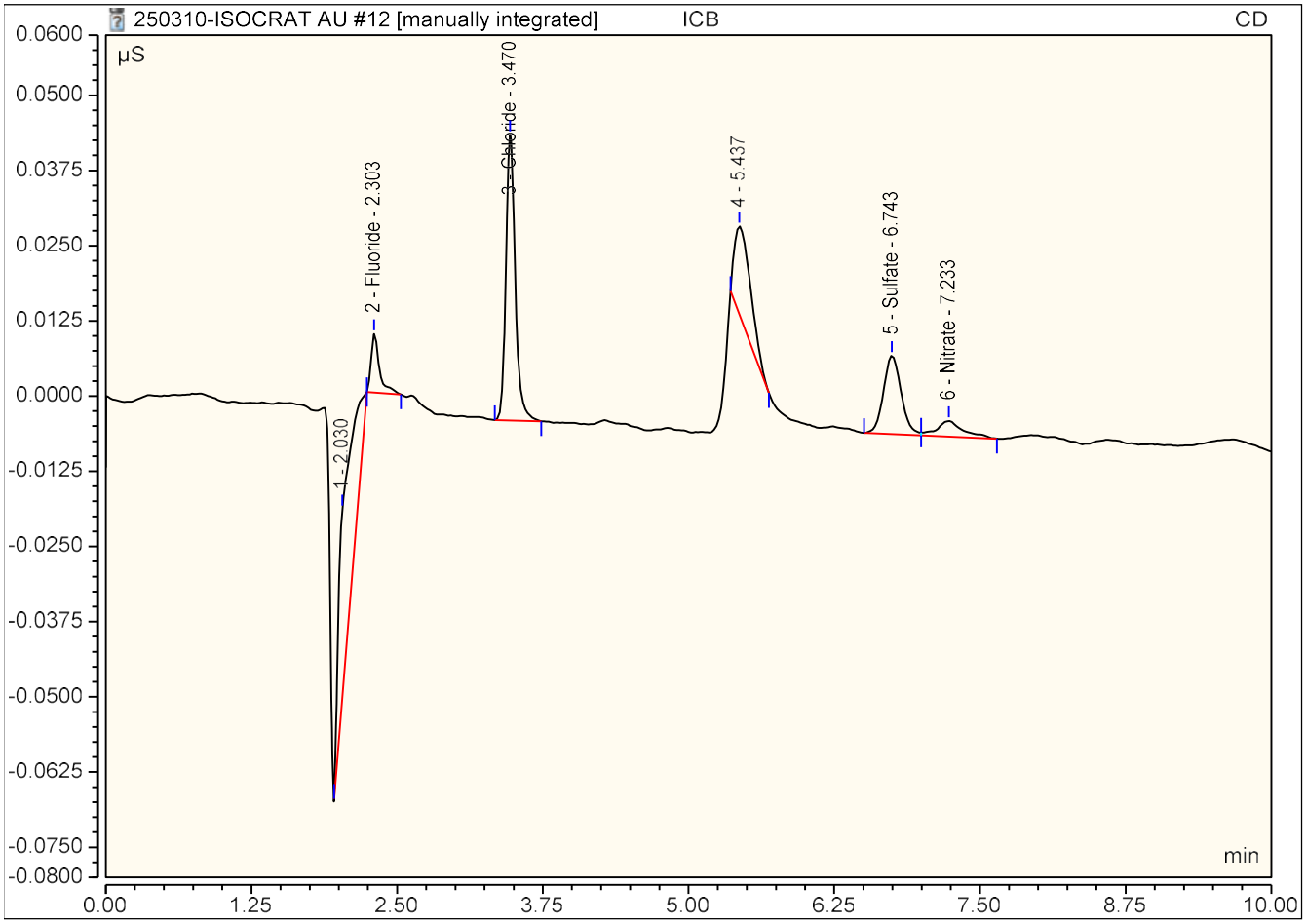
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.416 | 5.456 | 0.8225 |
| 3 | 3.47 | **Chloride** | BMB | 2.922 | 33.002 | 8.5868 |
| 5 | 6.01 | **Bromide** | BMB | 0.092 | 0.687 | 0.7676 |
| 6 | 6.68 | **Sulfate** | BM * | 2.106 | 12.067 | 8.4191 |
| 7 | 7.19 | **Nitrate** | MB* | 0.666 | 3.987 | 0.8080 |
| | | **TOTAL:** | | 6.20 | 55.20 | 19.40 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **ICB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 16:10** | *Run Time:* | **10.00** |

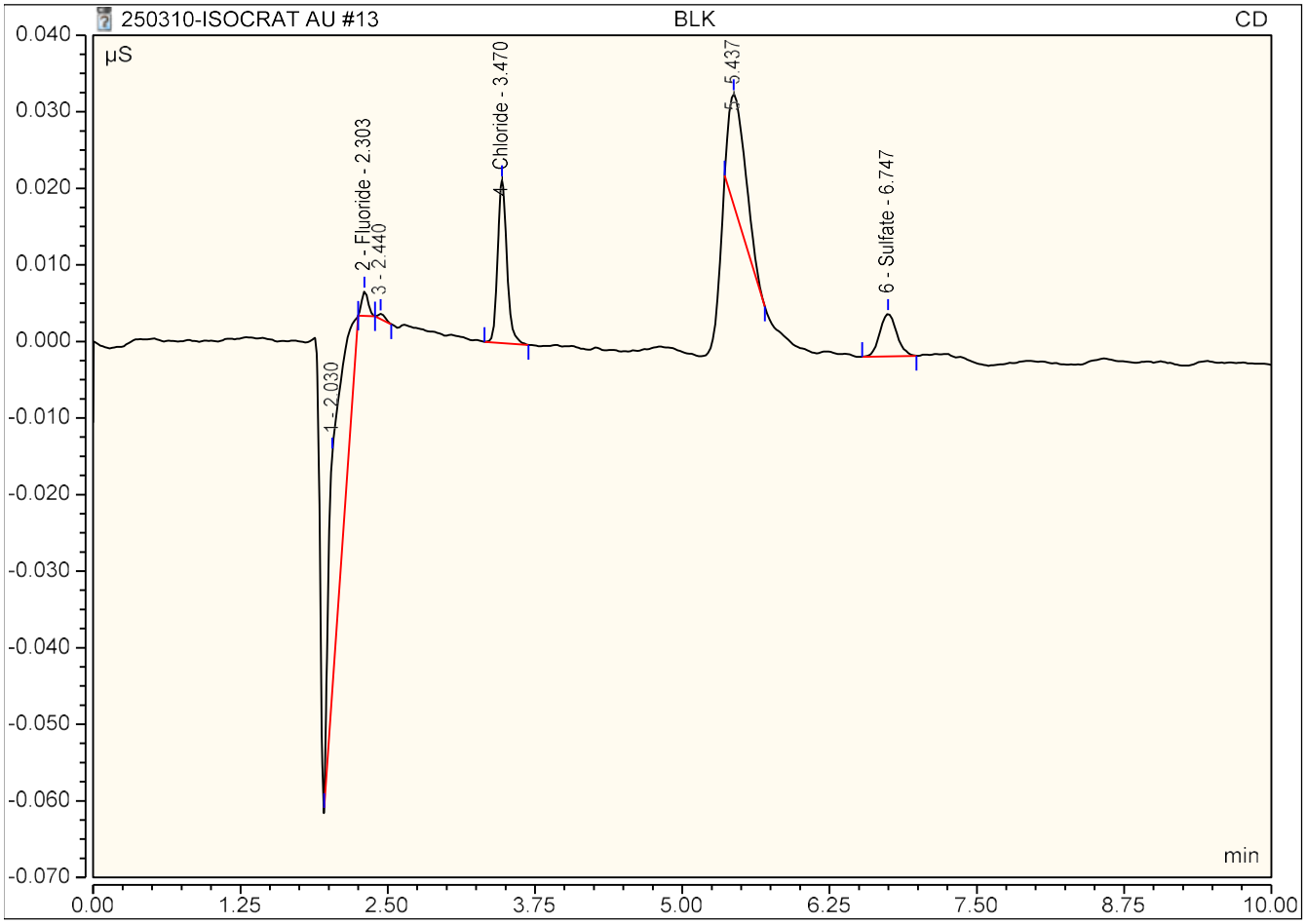
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.001 | 0.010 | 0.0262 |
| 3 | 3.47 | **Chloride** | BMB | 0.004 | 0.047 | 0.1016 |
| 5 | 6.74 | **Sulfate** | BM * | 0.002 | 0.013 | 0.2112 |
| 6 | 7.23 | **Nitrate** | MB* | 0.001 | 0.003 | 0.0306 |
| **TOTAL:** | | | | 0.01 | 0.07 | 0.37 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **BLK** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 16:22** | *Run Time:* | **10.00** |

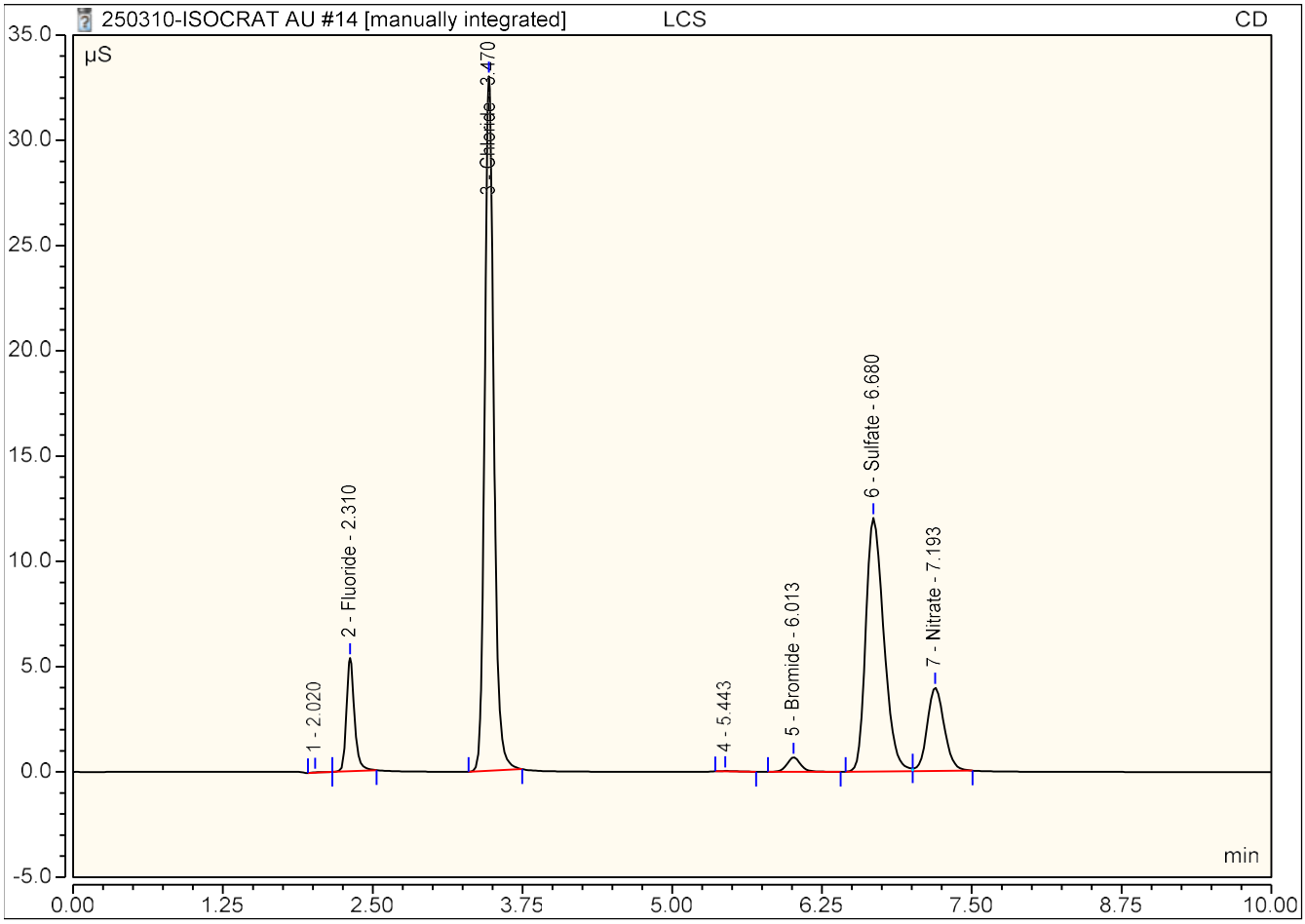
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.000 | 0.003 | 0.0251 |
| 4 | 3.47 | **Chloride** | BMB | 0.002 | 0.021 | 0.0945 |
| 6 | 6.75 | **Sulfate** | BMB | 0.001 | 0.006 | 0.2058 |
| | | **TOTAL:** | | 0.00 | 0.03 | 0.33 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **LCS** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 16:34** | *Run Time:* | **10.00** |

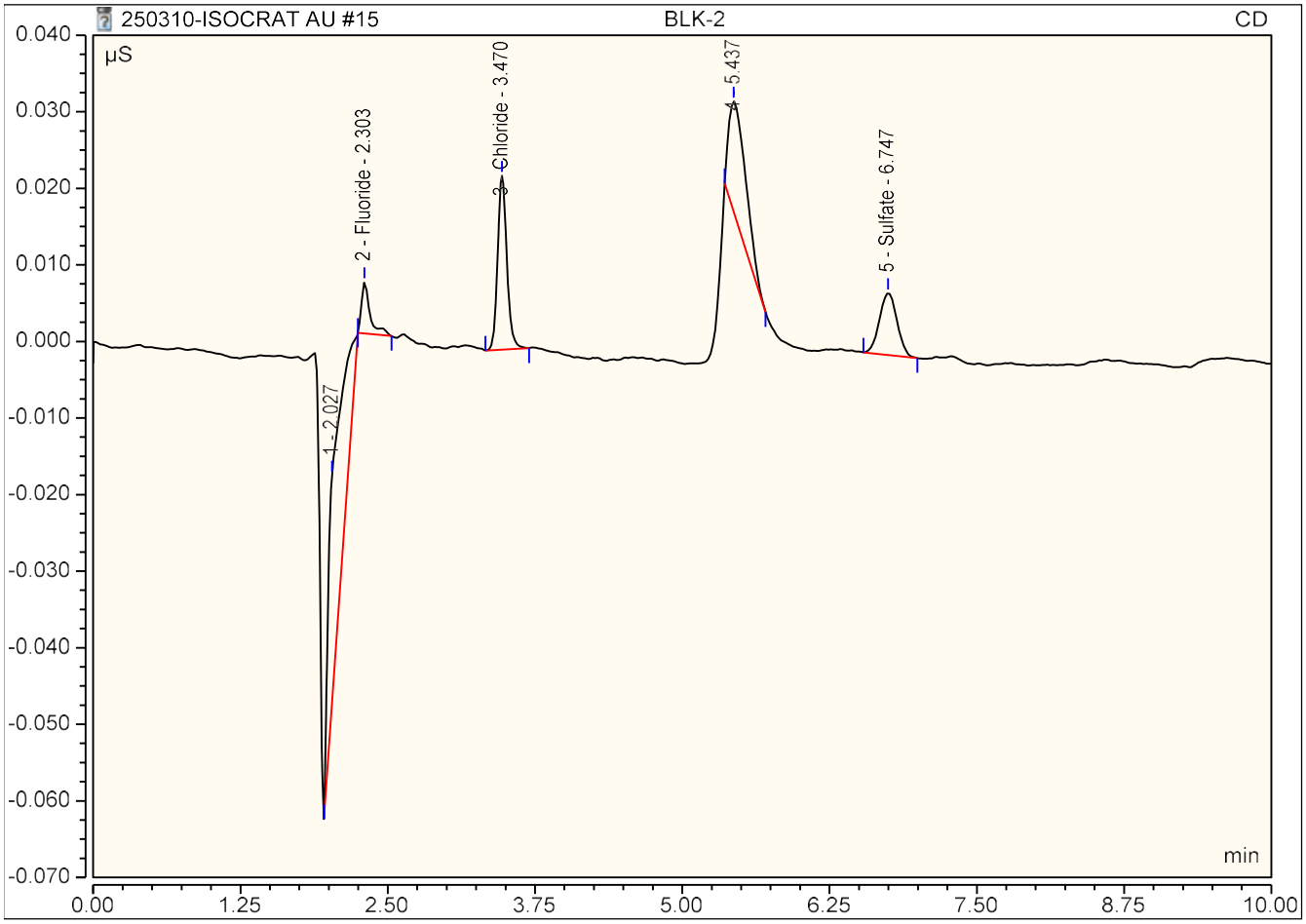
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.413 | 5.378 | 0.8170 |
| 3 | 3.47 | **Chloride** | BMB | 2.923 | 32.988 | 8.5887 |
| 5 | 6.01 | **Bromide** | BMB | 0.091 | 0.683 | 0.7598 |
| 6 | 6.68 | **Sulfate** | BM * | 2.097 | 12.039 | 8.3873 |
| 7 | 7.19 | **Nitrate** | MB* | 0.652 | 3.966 | 0.7914 |
| | | **TOTAL:** | | 6.18 | 55.05 | 19.34 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **BLK-2** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 16:46** | *Run Time:* | **10.00** |

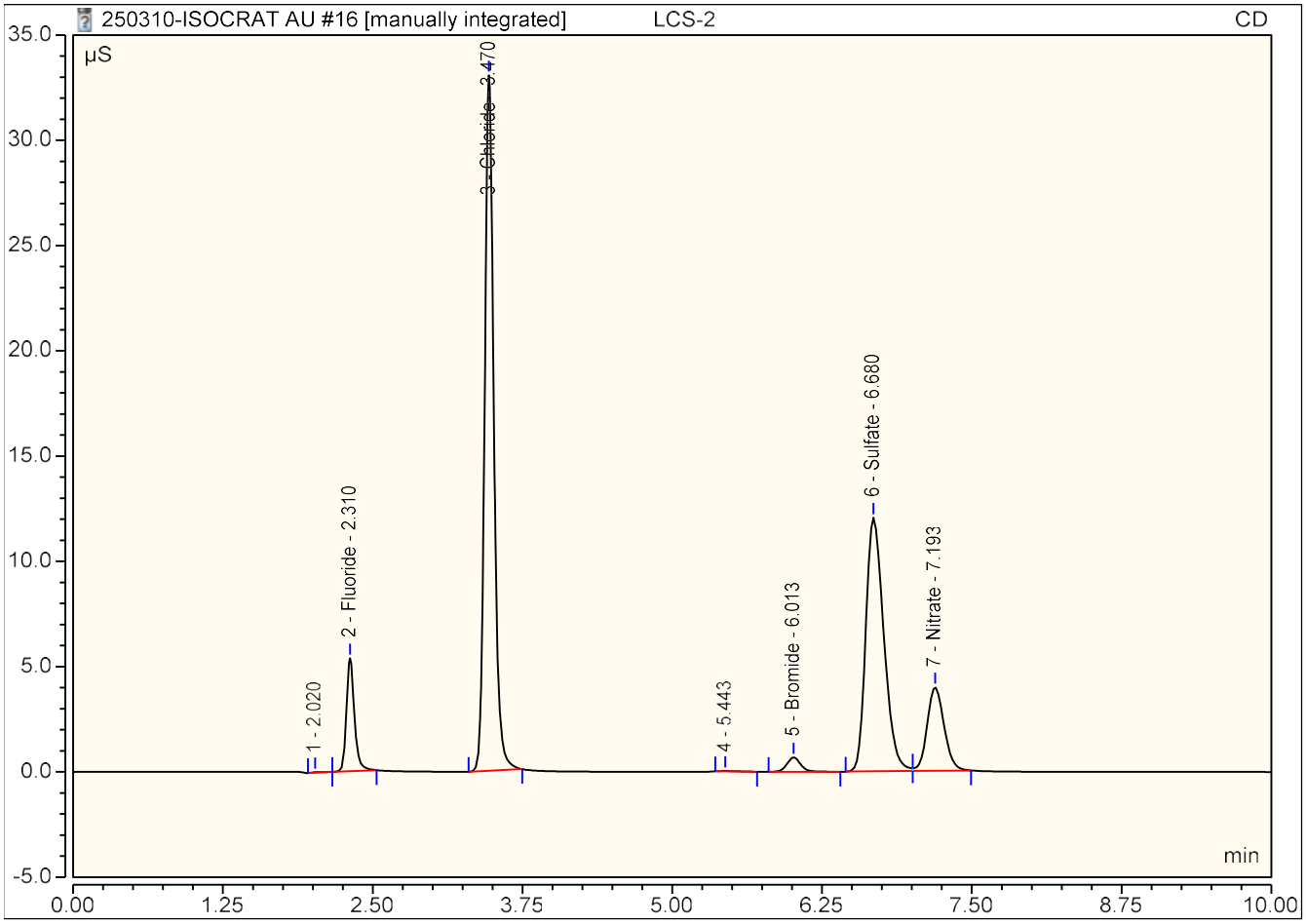
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.001 | 0.007 | 0.0258 |
| 3 | 3.47 | **Chloride** | BMB | 0.002 | 0.023 | 0.0948 |
| 5 | 6.75 | **Sulfate** | BMB | 0.001 | 0.008 | 0.2077 |
| **TOTAL:** | | | | 0.00 | 0.04 | 0.33 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **LCS-2** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 16:59** | *Run Time:* | **10.00** |

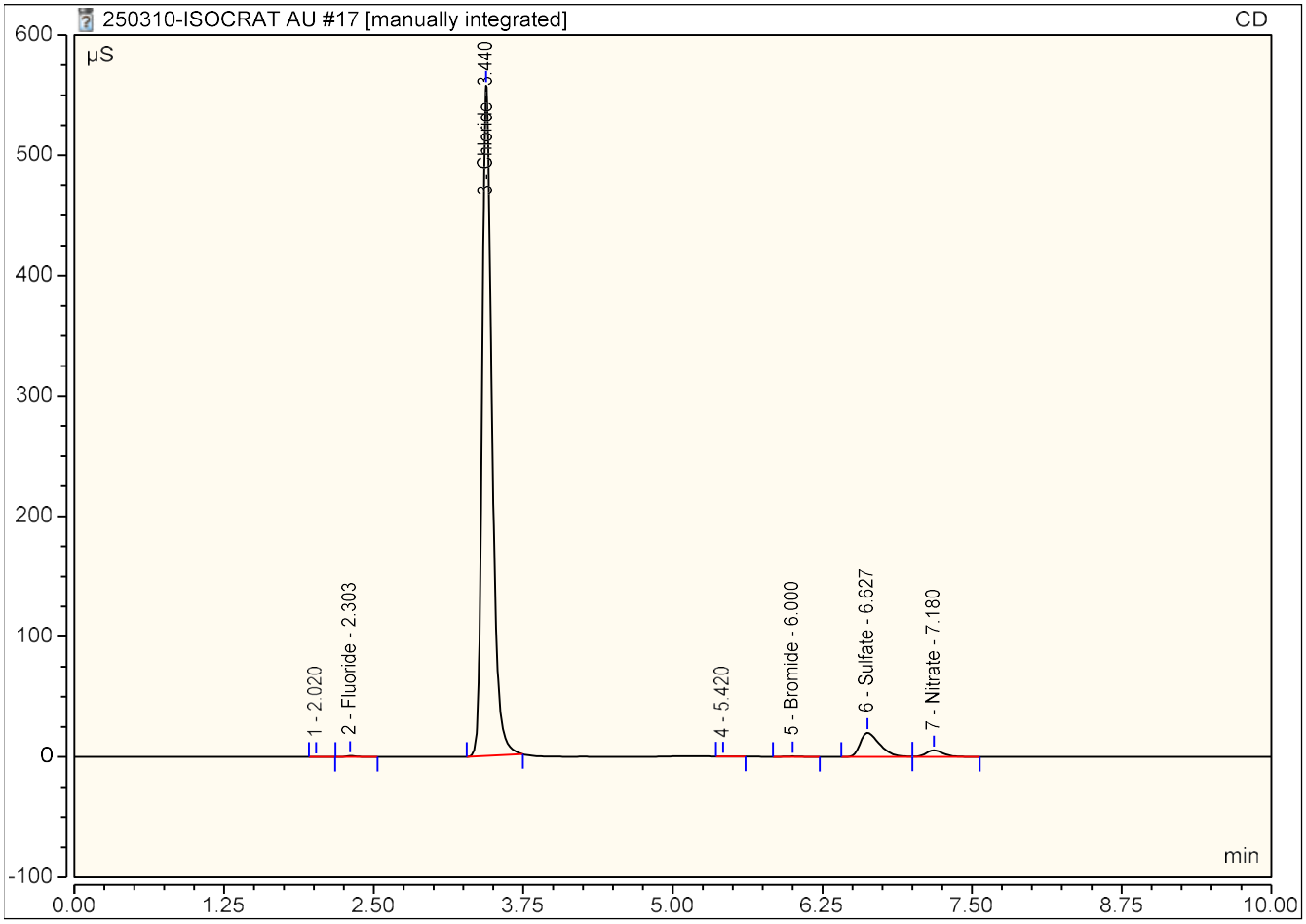
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.413 | 5.364 | 0.8169 |
| 3 | 3.47 | **Chloride** | BMB | 2.923 | 33.031 | 8.5869 |
| 5 | 6.01 | **Bromide** | BMB | 0.091 | 0.684 | 0.7576 |
| 6 | 6.68 | **Sulfate** | BM * | 2.097 | 12.048 | 8.3844 |
| 7 | 7.19 | **Nitrate** | MB* | 0.650 | 3.972 | 0.7895 |
| | | **TOTAL:** | | 6.17 | 55.10 | 19.34 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511911-07 CL SO4 BR** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 17:11** | *Run Time:* | **10.00** |

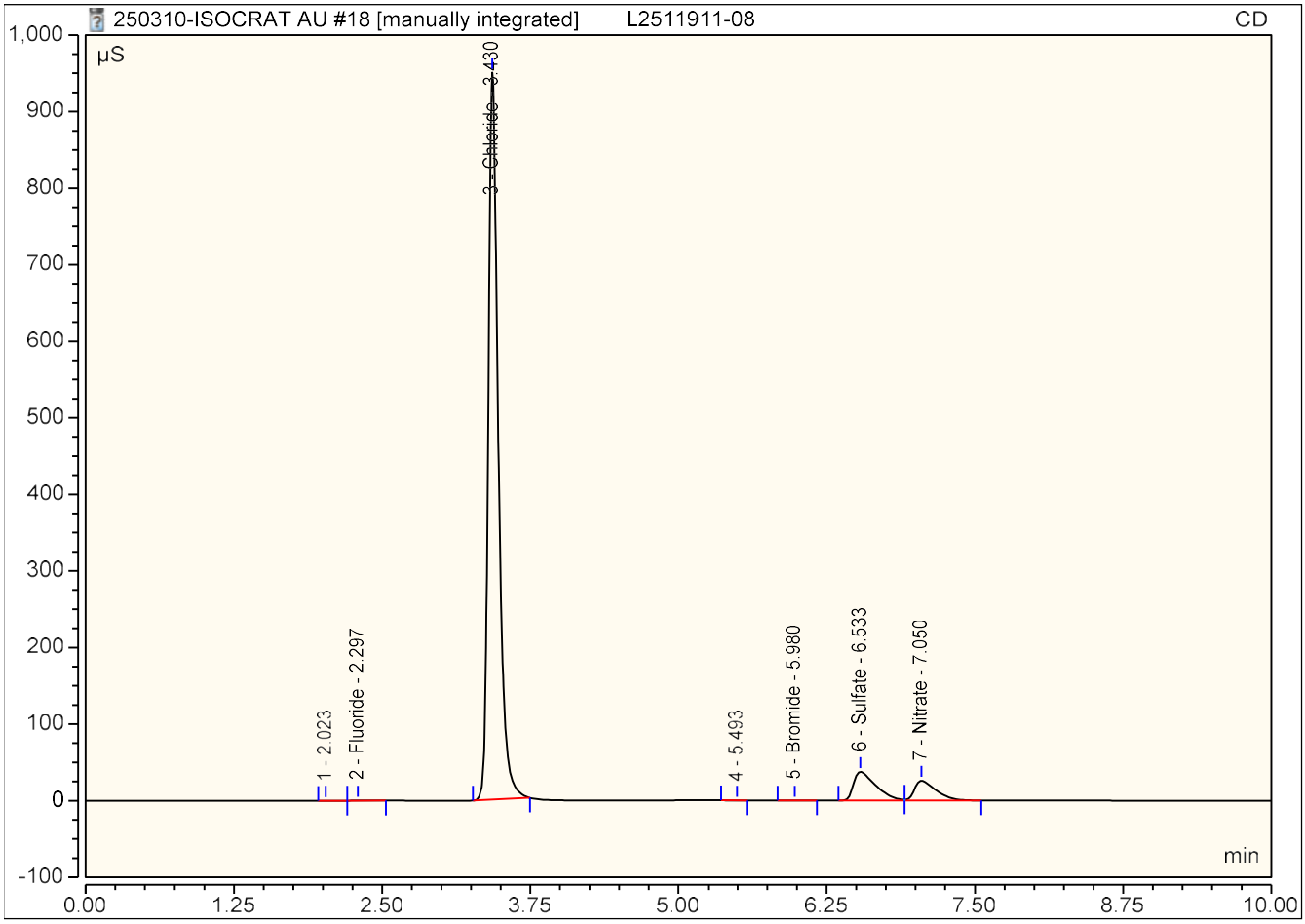
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.074 | 0.893 | 0.1671 |
| 3 | 3.44 | **Chloride** | BMB | 53.495 | 557.002 | 155.6392 |
| 5 | 6.00 | **Bromide** | BMB | 0.045 | 0.352 | 0.3950 |
| 6 | 6.63 | **Sulfate** | BM * | 3.774 | 20.041 | 14.9309 |
| 7 | 7.18 | **Nitrate** | MB* | 0.919 | 5.444 | 1.1038 |
| | | **TOTAL:** | | 58.31 | 583.73 | 172.24 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511911-08** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 17:23** | *Run Time:* | **10.00** |

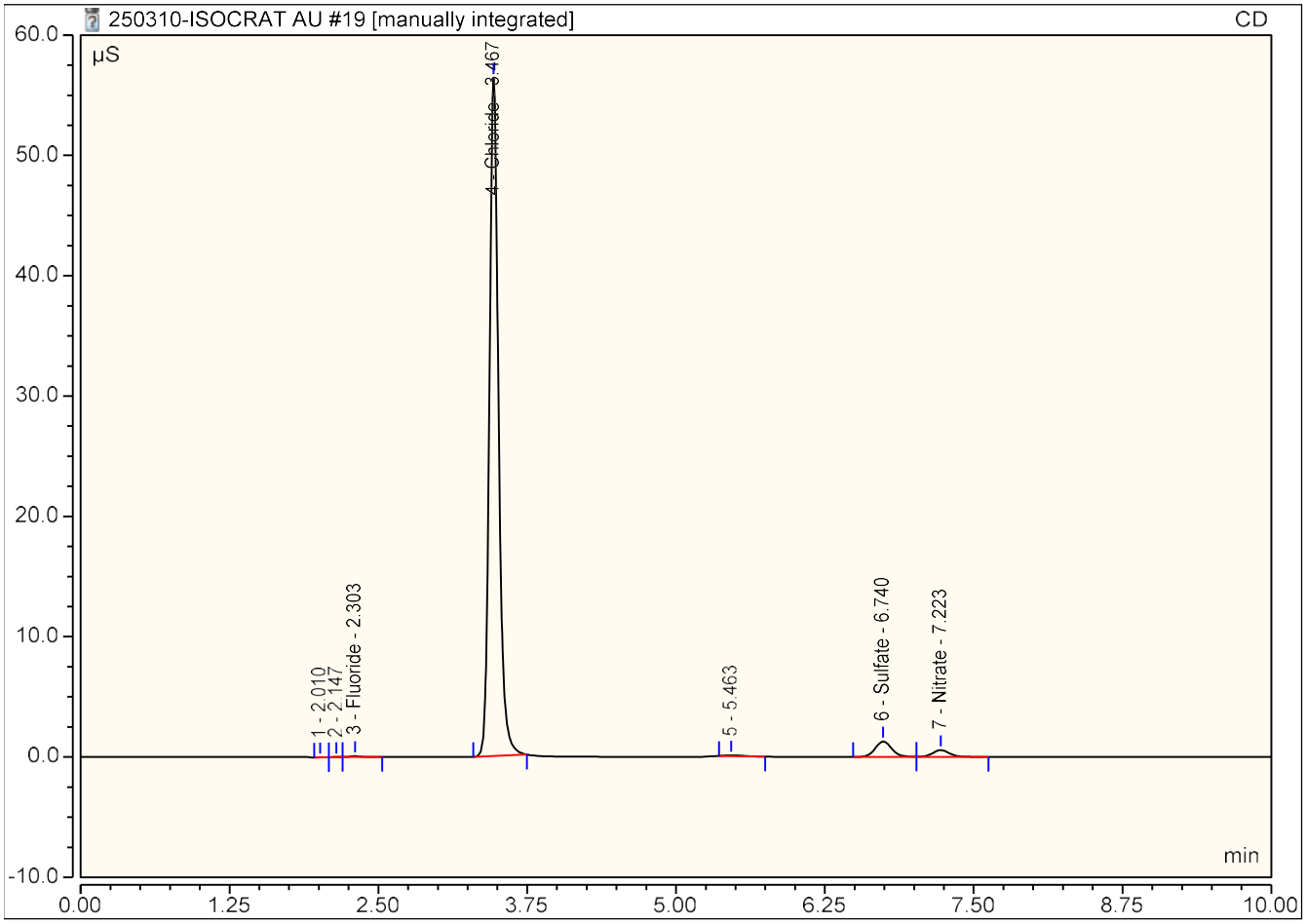
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.014 | 0.172 | 0.0524 |
| 3 | 3.43 | **Chloride** | BMB | 92.571 | 949.692 | 269.2638 |
| 5 | 5.98 | **Bromide** | BMB | 0.019 | 0.151 | 0.1842 |
| 6 | 6.53 | **Sulfate** | BM * | 8.137 | 37.511 | 31.9544 |
| 7 | 7.05 | **Nitrate** | MB* | 5.446 | 26.045 | 6.3922 |
| **TOTAL:** | | | | 106.19 | 1013.57 | 307.85 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2513130-01; 10X CL** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 17:35** | *Run Time:* | **10.00** |

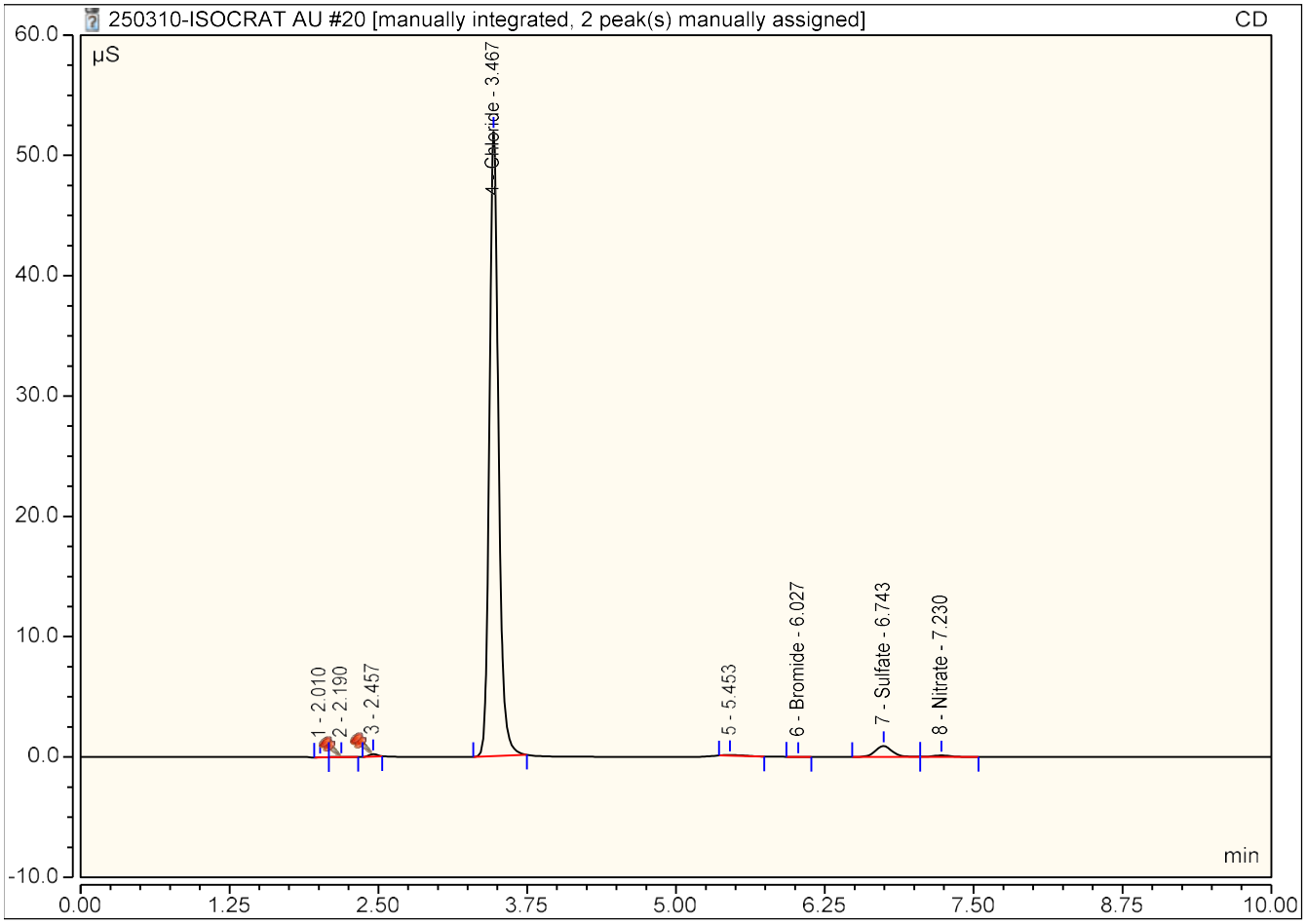
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB | 0.006 | 0.079 | 0.3687 |
| 4 | 3.47 | **Chloride** | BMB | 5.052 | 56.371 | 147.7753 |
| 6 | 6.74 | **Sulfate** | BM * | 0.210 | 1.293 | 10.2355 |
| 7 | 7.22 | **Nitrate** | MB* | 0.095 | 0.575 | 1.4072 |
| **TOTAL:** | | | | 5.36 | 58.32 | 159.79 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2513130-02; 10X** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 17:47** | *Run Time:* | **10.00** |

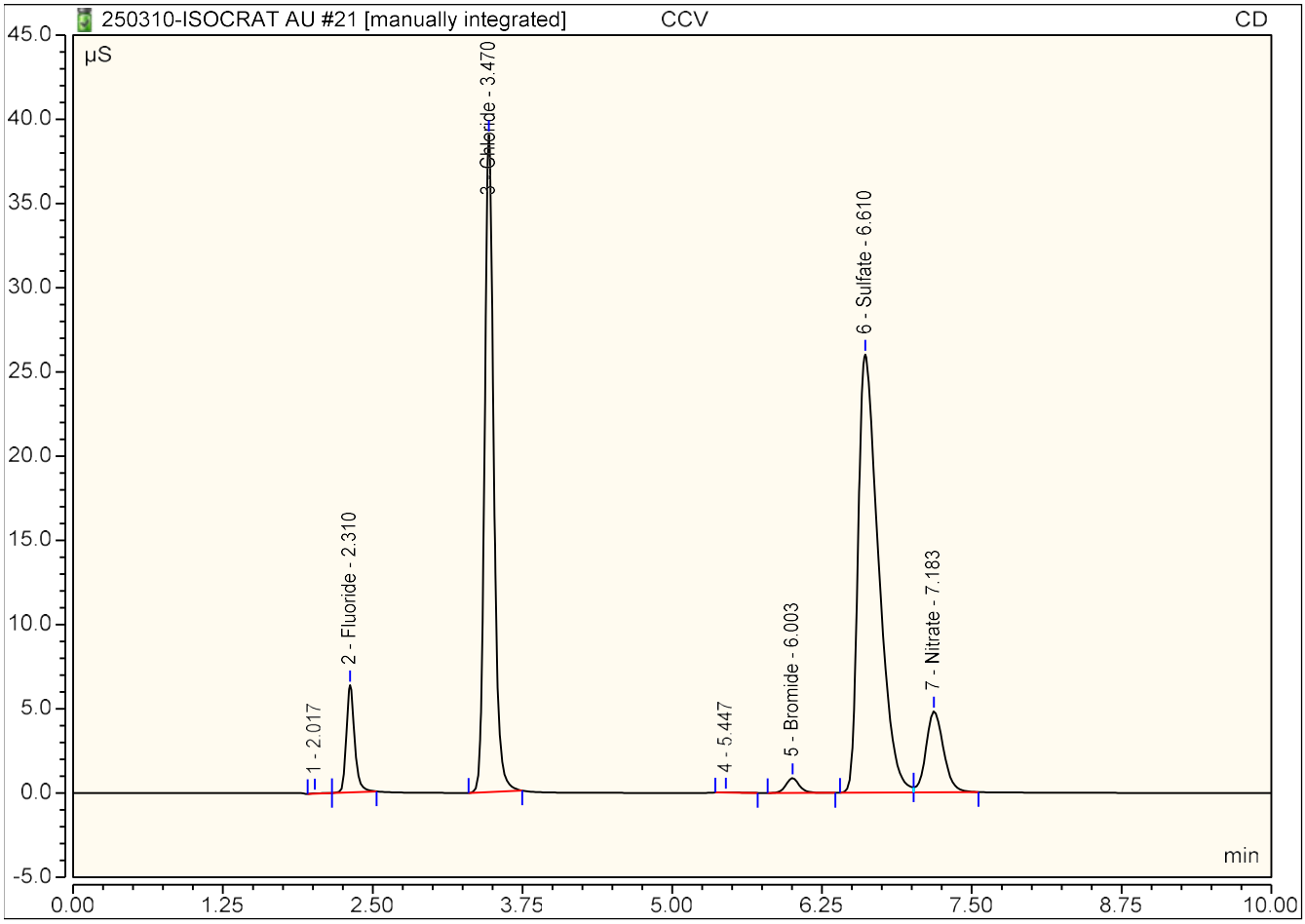
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 4 | 3.47 | **Chloride** | BMB | 4.645 | 51.914 | 135.9644 |
| 6 | 6.03 | **Bromide** | BMB | 0.000 | 0.001 | 0.3552 |
| 7 | 6.74 | **Sulfate** | BM * | 0.152 | 0.920 | 7.9633 |
| 8 | 7.23 | **Nitrate** | MB* | 0.022 | 0.127 | 0.5573 |
| **TOTAL:** | | | | 4.82 | 52.96 | 144.84 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 17:59** | *Run Time:* | **10.00** |

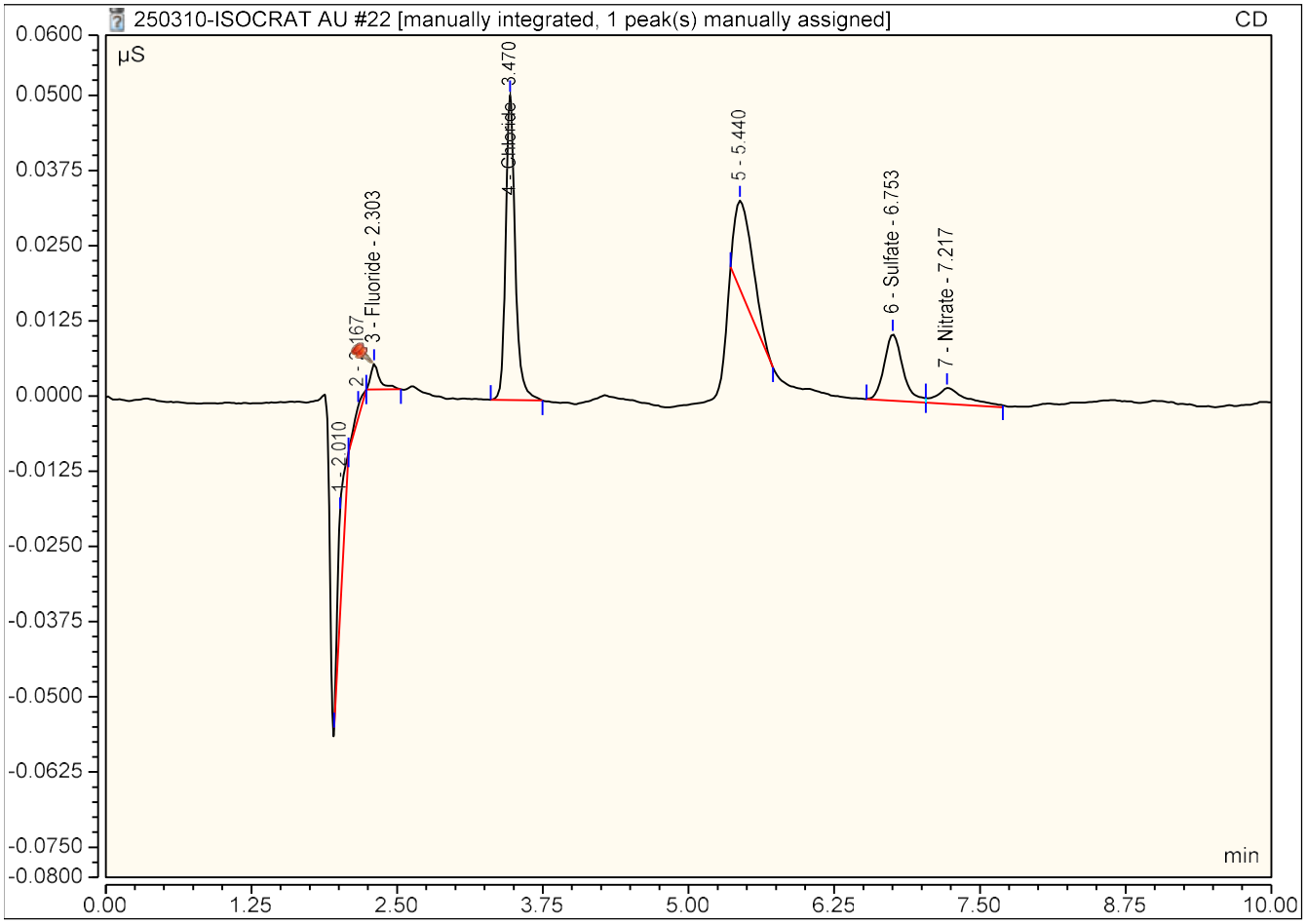
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.502 | 6.364 | 0.9881 |
| 3 | 3.47 | **Chloride** | BMB | 3.464 | 39.003 | 10.1627 |
| 5 | 6.00 | **Bromide** | BMB | 0.114 | 0.879 | 0.9476 |
| 6 | 6.61 | **Sulfate** | BM * | 5.156 | 26.014 | 20.3230 |
| 7 | 7.18 | **Nitrate** | MB* | 0.814 | 4.810 | 0.9812 |
| | | **TOTAL:** | | 10.05 | 77.07 | 33.40 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 18:11** | *Run Time:* | **10.00** |

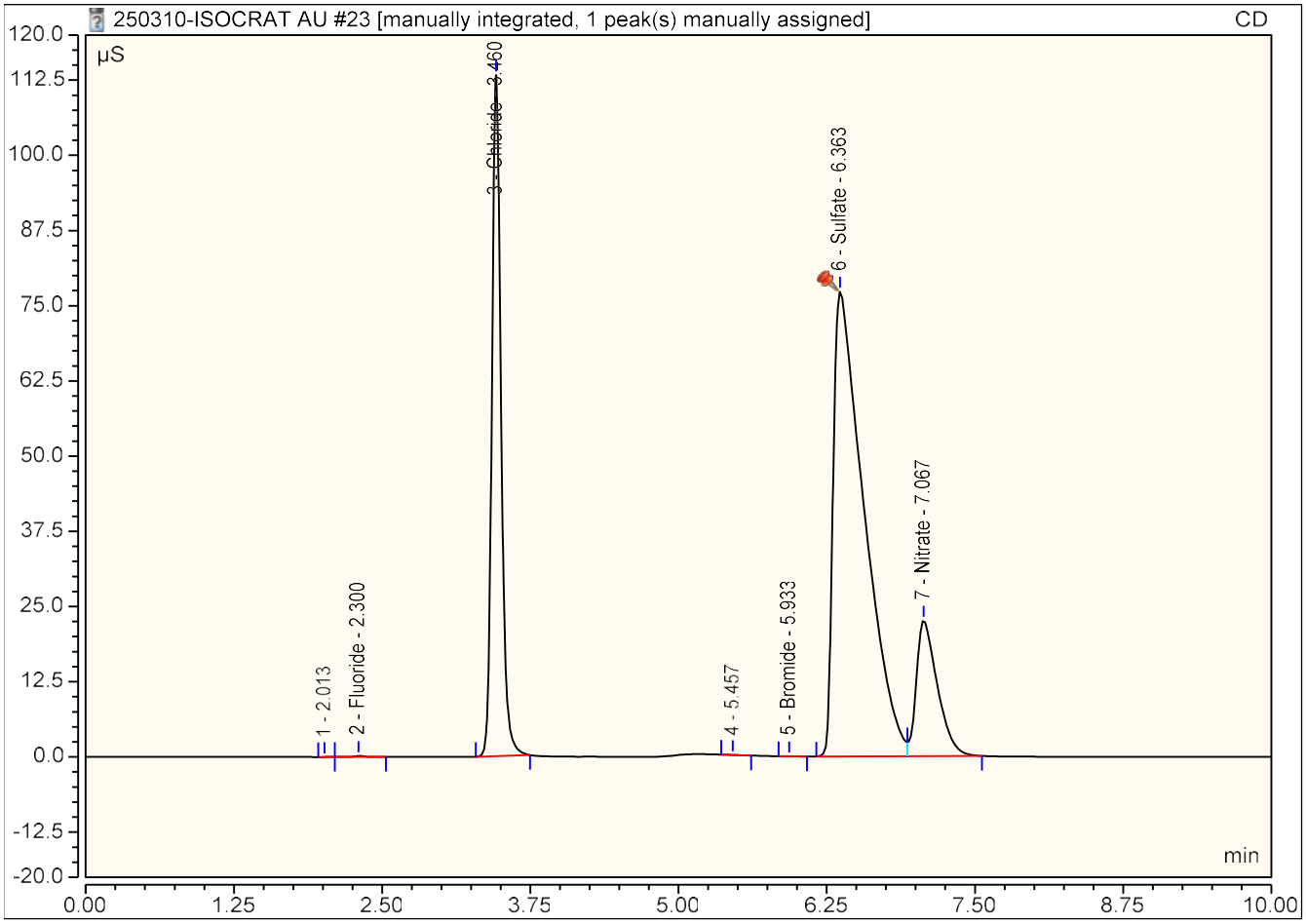
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB^ | 0.000 | 0.004 | 0.0254 |
| 4 | 3.47 | **Chloride** | BMB | 0.005 | 0.051 | 0.1027 |
| 6 | 6.75 | **Sulfate** | BM * | 0.002 | 0.011 | 0.2103 |
| 7 | 7.22 | **Nitrate** | M * | 0.001 | 0.003 | 0.0307 |
| **TOTAL:** | | | | 0.01 | 0.07 | 0.37 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512264-01 CL SO4 BR** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 18:23** | *Run Time:* | **10.00** |

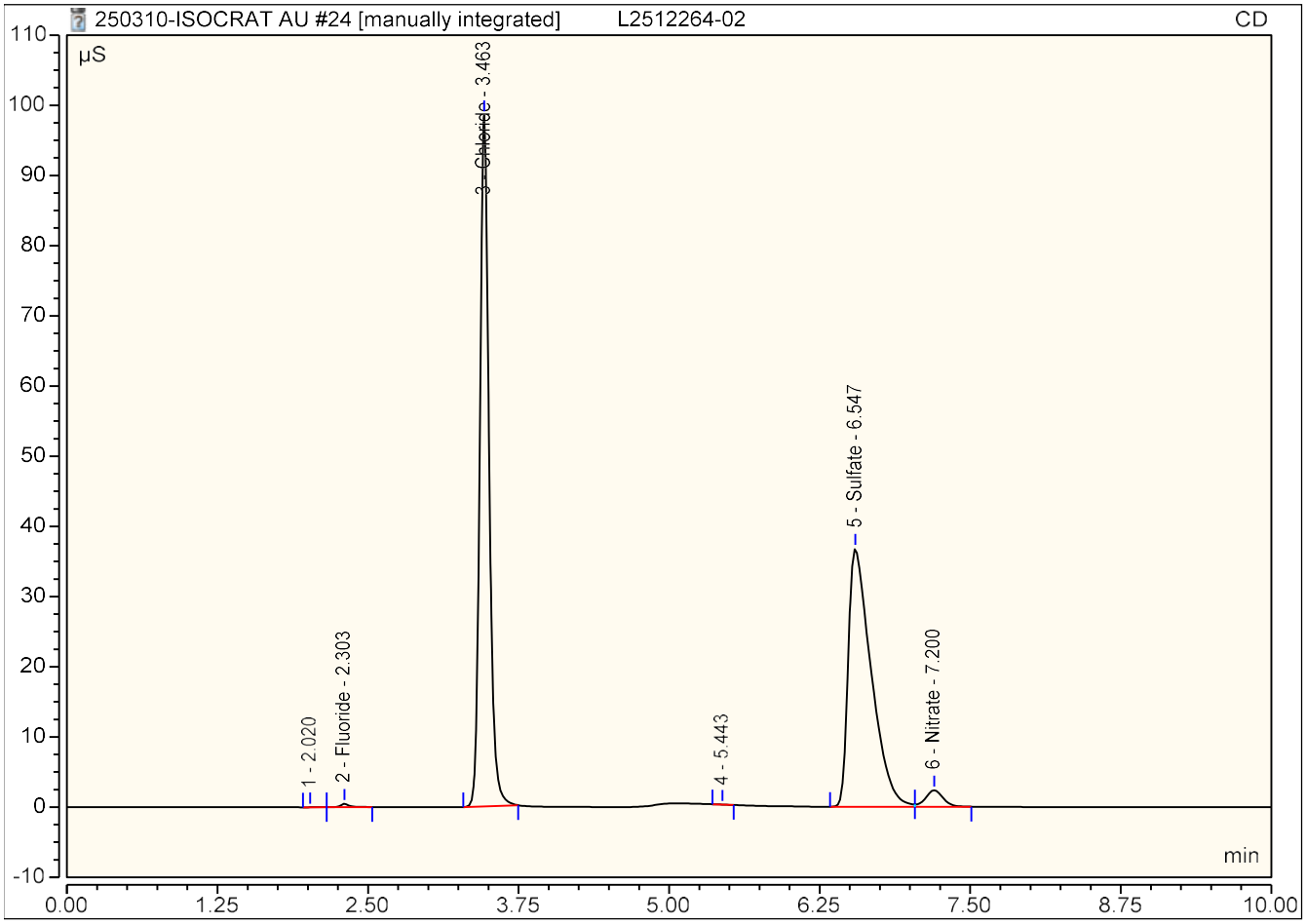
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.016 | 0.188 | 0.0550 |
| 3 | 3.46 | **Chloride** | BMB | 10.150 | 113.243 | 29.6021 |
| 5 | 5.93 | **Bromide** | BMB | 0.002 | 0.019 | 0.0528 |
| 6 | 6.36 | **Sulfate** | BM *^ | 23.312 | 77.288 | 91.1746 |
| 7 | 7.07 | **Nitrate** | MB* | 4.633 | 22.554 | 5.4421 |
| | | **TOTAL:** | | 38.11 | 213.29 | 126.33 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512264-02** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 18:35** | *Run Time:* | **10.00** |

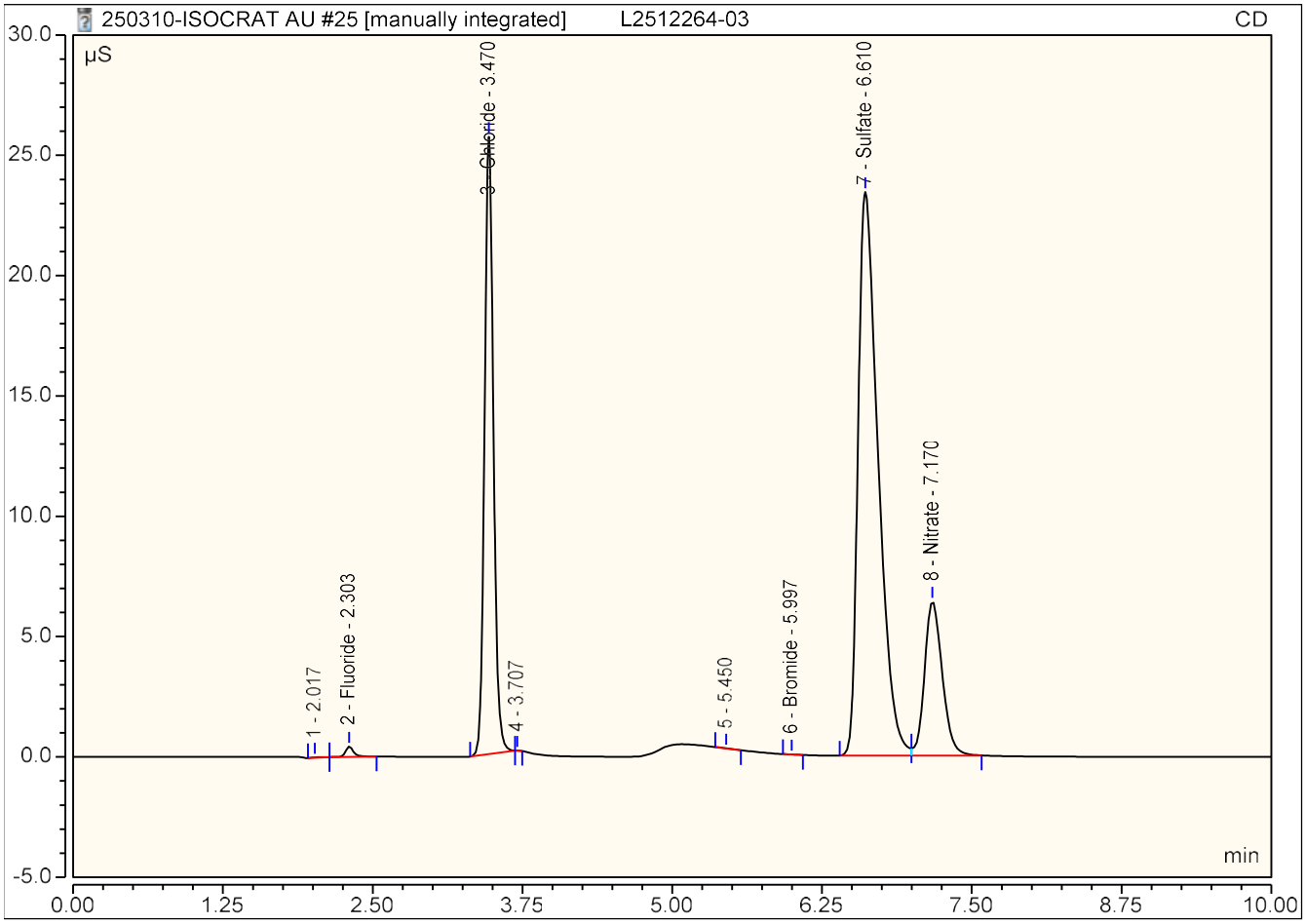
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.038 | 0.485 | 0.0972 |
| 3 | 3.46 | **Chloride** | BMB | 8.769 | 98.502 | 25.5874 |
| 5 | 6.55 | **Sulfate** | BM * | 8.136 | 36.794 | 31.9534 |
| 6 | 7.20 | **Nitrate** | MB* | 0.394 | 2.344 | 0.4903 |
| **TOTAL:** | | | | 17.34 | 138.13 | 58.13 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512264-03** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 18:47** | *Run Time:* | **10.00** |

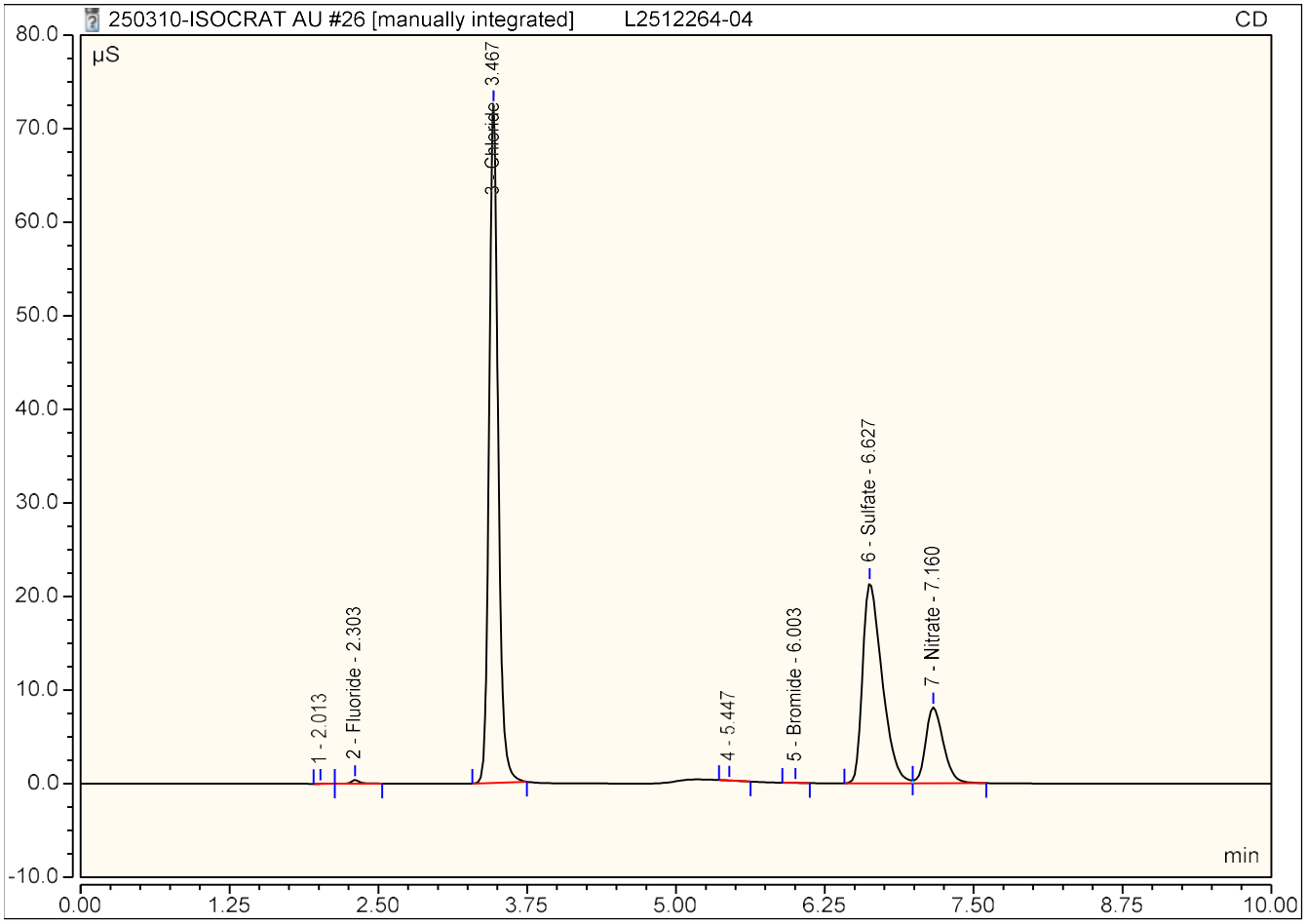
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.033 | 0.433 | 0.0888 |
| 3 | 3.47 | **Chloride** | BMB | 2.192 | 25.656 | 6.4640 |
| 6 | 6.00 | **Bromide** | BMB | 0.000 | 0.002 | 0.0360 |
| 7 | 6.61 | **Sulfate** | BM * | 4.551 | 23.420 | 17.9626 |
| 8 | 7.17 | **Nitrate** | MB* | 1.094 | 6.402 | 1.3078 |
| | | **TOTAL:** | | 7.87 | 55.91 | 25.86 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512264-04** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 19:00** | *Run Time:* | **10.00** |

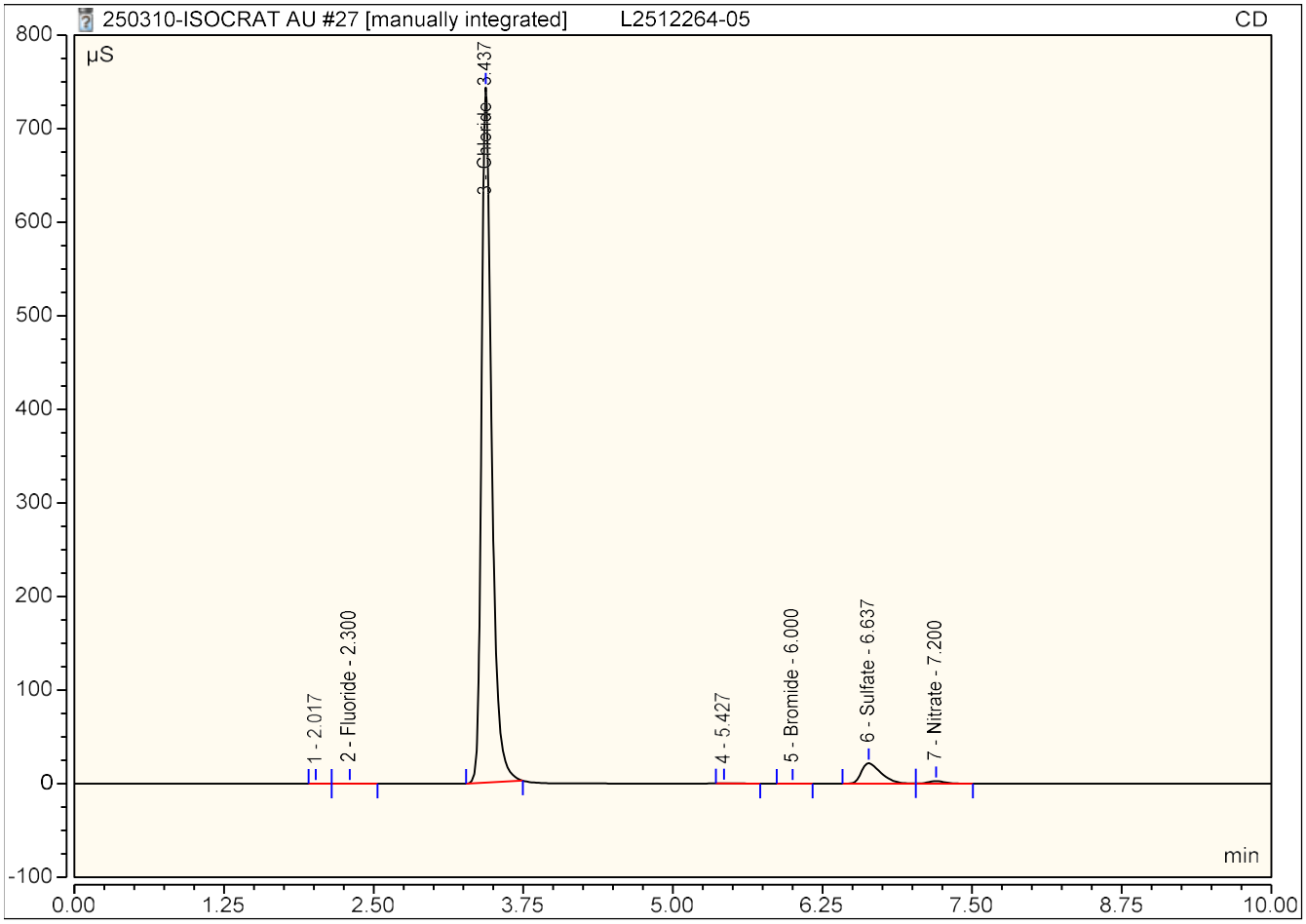
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.032 | 0.409 | 0.0865 |
| 3 | 3.47 | **Chloride** | BMB | 6.428 | 72.447 | 18.7790 |
| 5 | 6.00 | **Bromide** | BMB | 0.001 | 0.013 | 0.0451 |
| 6 | 6.63 | **Sulfate** | BM * | 4.068 | 21.414 | 16.0785 |
| 7 | 7.16 | **Nitrate** | MB* | 1.402 | 8.100 | 1.6671 |
| | | **TOTAL:** | | 11.93 | 102.38 | 36.66 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512264-05** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 19:12** | *Run Time:* | **10.00** |

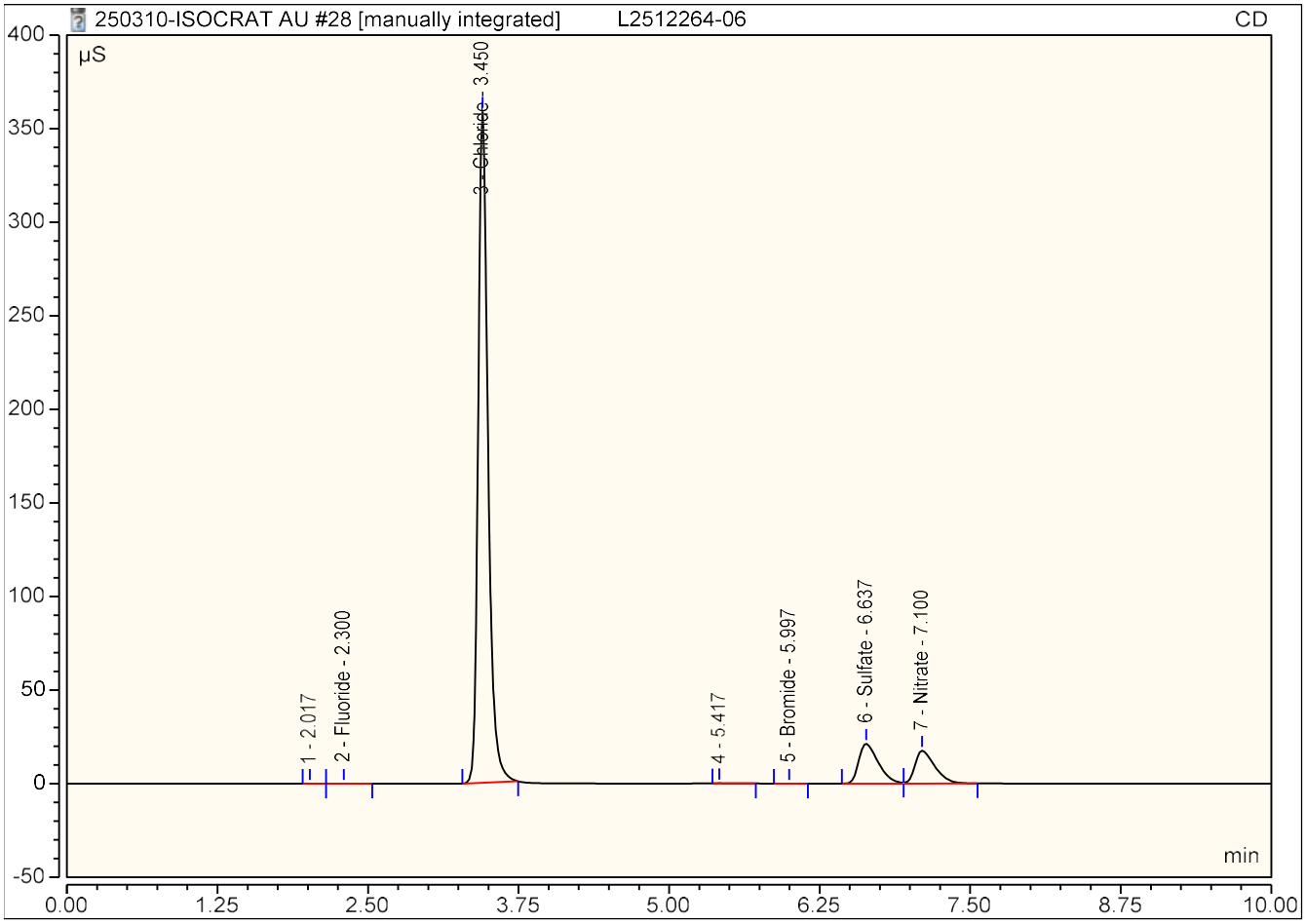
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.006 | 0.069 | 0.0367 |
| 3 | 3.44 | **Chloride** | BMB | 72.936 | 742.607 | 212.1711 |
| 5 | 6.00 | **Bromide** | BMB | 0.004 | 0.032 | 0.0657 |
| 6 | 6.64 | **Sulfate** | BM * | 4.176 | 21.856 | 16.4988 |
| 7 | 7.20 | **Nitrate** | MB* | 0.445 | 2.692 | 0.5493 |
| | | **TOTAL:** | | 77.57 | 767.26 | 229.32 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512264-06** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 19:24** | *Run Time:* | **10.00** |

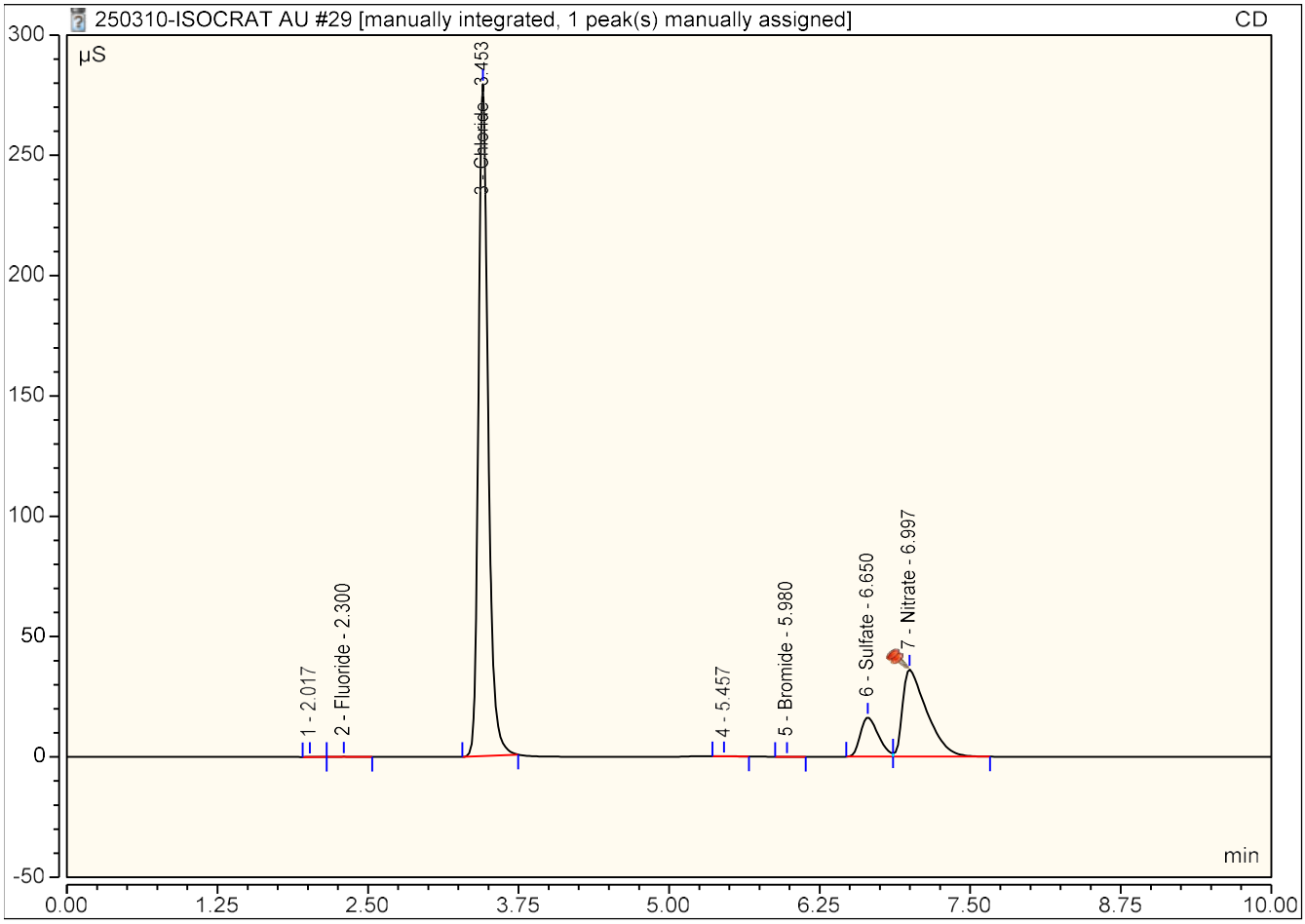
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.006 | 0.069 | 0.0365 |
| 3 | 3.45 | **Chloride** | BMB | 34.050 | 358.634 | 99.0999 |
| 5 | 6.00 | **Bromide** | BMB | 0.003 | 0.023 | 0.0566 |
| 6 | 6.64 | **Sulfate** | BM * | 3.992 | 21.323 | 15.7808 |
| 7 | 7.10 | **Nitrate** | MB* | 3.339 | 17.545 | 3.9300 |
| | | **TOTAL:** | | 41.39 | 397.59 | 118.90 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512607-01 BR** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 19:36** | *Run Time:* | **10.00** |

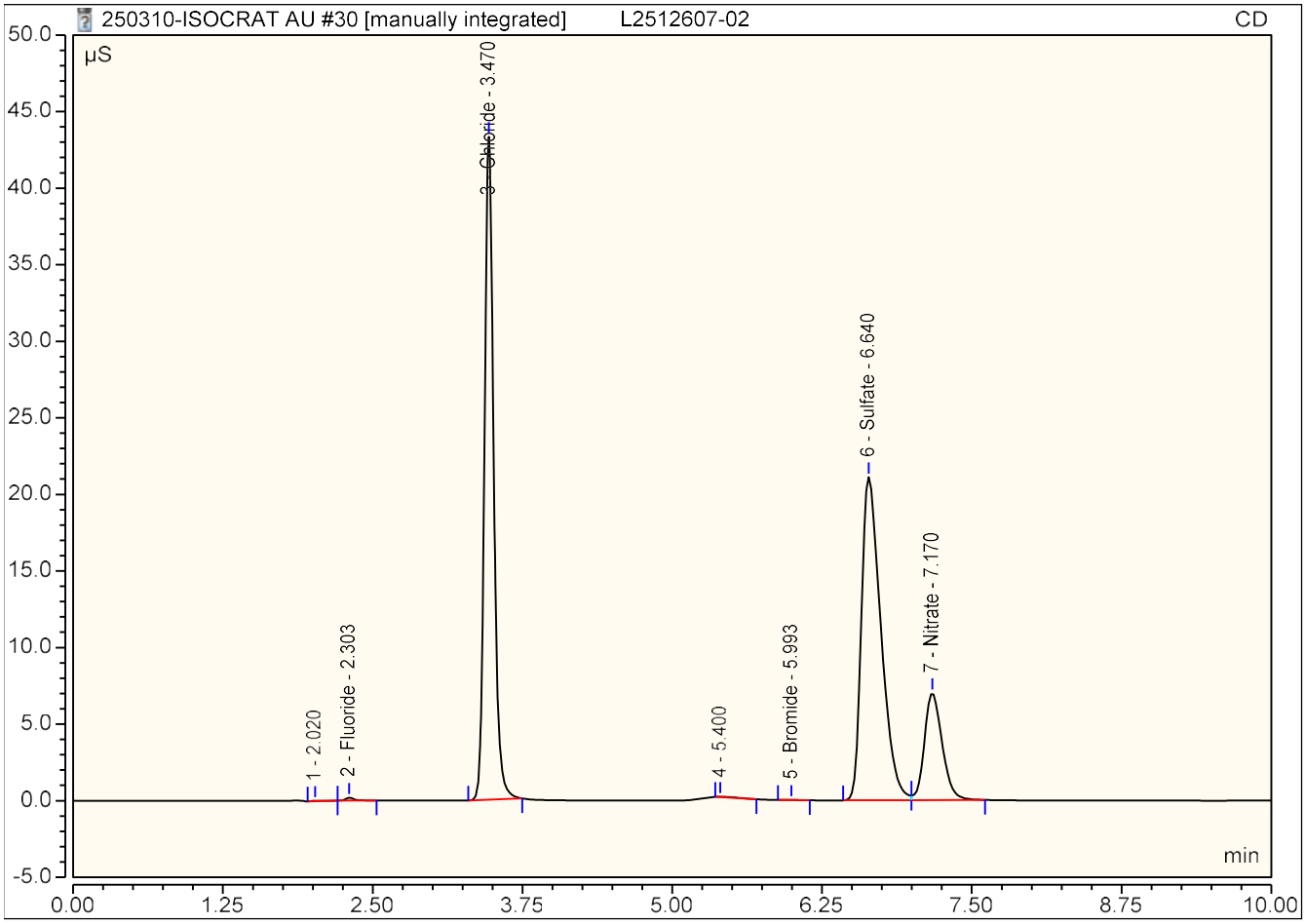
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.009 | 0.096 | 0.0411 |
| 3 | 3.45 | **Chloride** | BMB | 26.045 | 279.174 | 75.8218 |
| 5 | 5.98 | **Bromide** | BMB | 0.002 | 0.016 | 0.0501 |
| 6 | 6.65 | **Sulfate** | BM * | 2.827 | 16.315 | 11.2326 |
| 7 | 7.00 | **Nitrate** | MB*^ | 8.458 | 36.226 | 9.9109 |
| | | **TOTAL:** | | 37.34 | 331.83 | 97.06 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512607-02** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 19:48** | *Run Time:* | **10.00** |

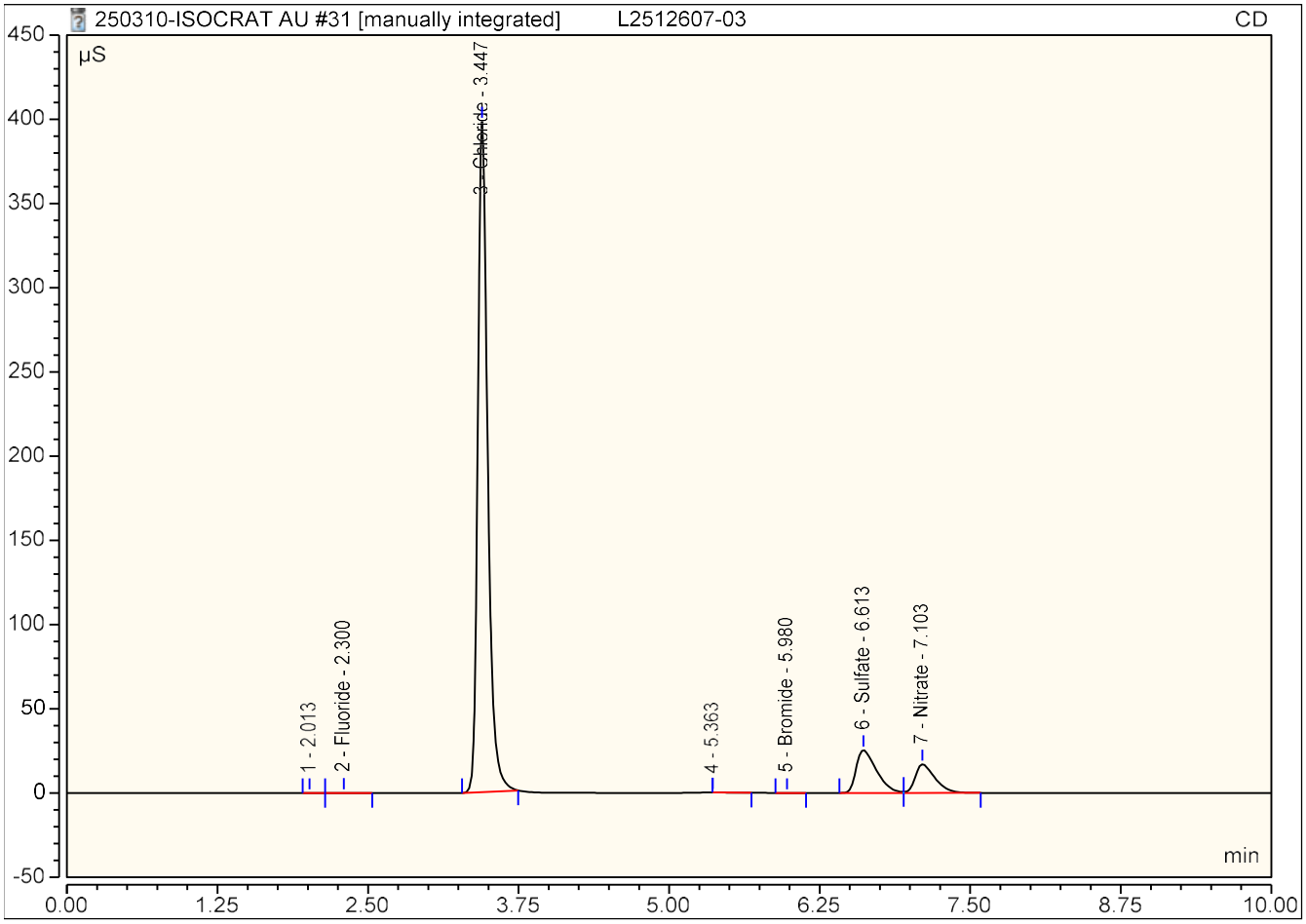
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.016 | 0.197 | 0.0552 |
| 3 | 3.47 | **Chloride** | BMB | 3.837 | 43.287 | 11.2464 |
| 5 | 5.99 | **Bromide** | BMB | 0.002 | 0.014 | 0.0481 |
| 6 | 6.64 | **Sulfate** | BM * | 3.976 | 21.097 | 15.7181 |
| 7 | 7.17 | **Nitrate** | MB* | 1.201 | 6.992 | 1.4331 |
| | | **TOTAL:** | | 9.03 | 71.59 | 28.50 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512607-03** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 20:00** | *Run Time:* | **10.00** |

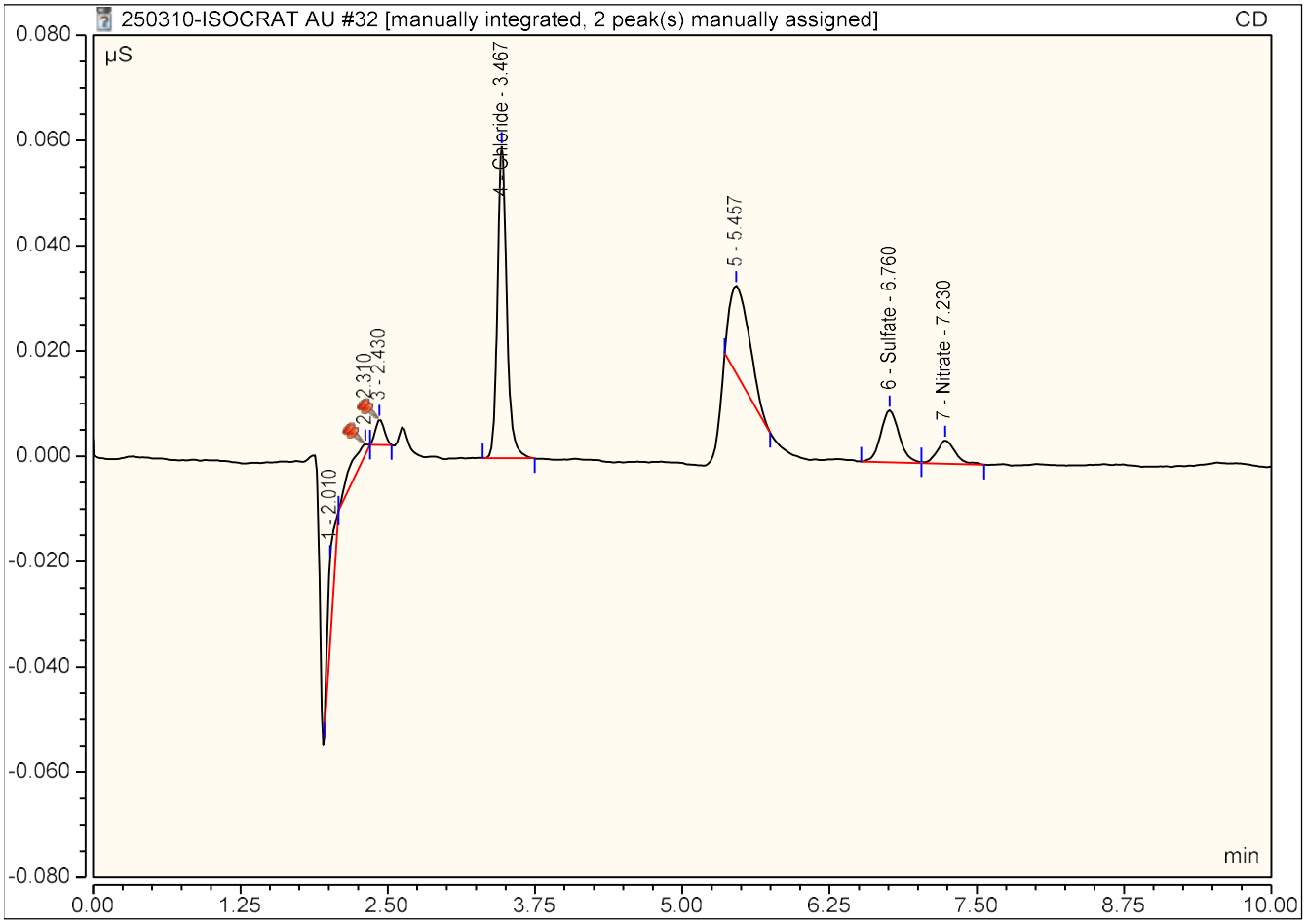
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.007 | 0.079 | 0.0383 |
| 3 | 3.45 | **Chloride** | BMB | 37.892 | 398.073 | 110.2698 |
| 5 | 5.98 | **Bromide** | BMB | 0.002 | 0.013 | 0.0472 |
| 6 | 6.61 | **Sulfate** | BM * | 4.947 | 25.409 | 19.5081 |
| 7 | 7.10 | **Nitrate** | MB* | 3.223 | 16.962 | 3.7949 |
| | | **TOTAL:** | | 46.07 | 440.54 | 133.66 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512607-06** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 20:12** | *Run Time:* | **10.00** |

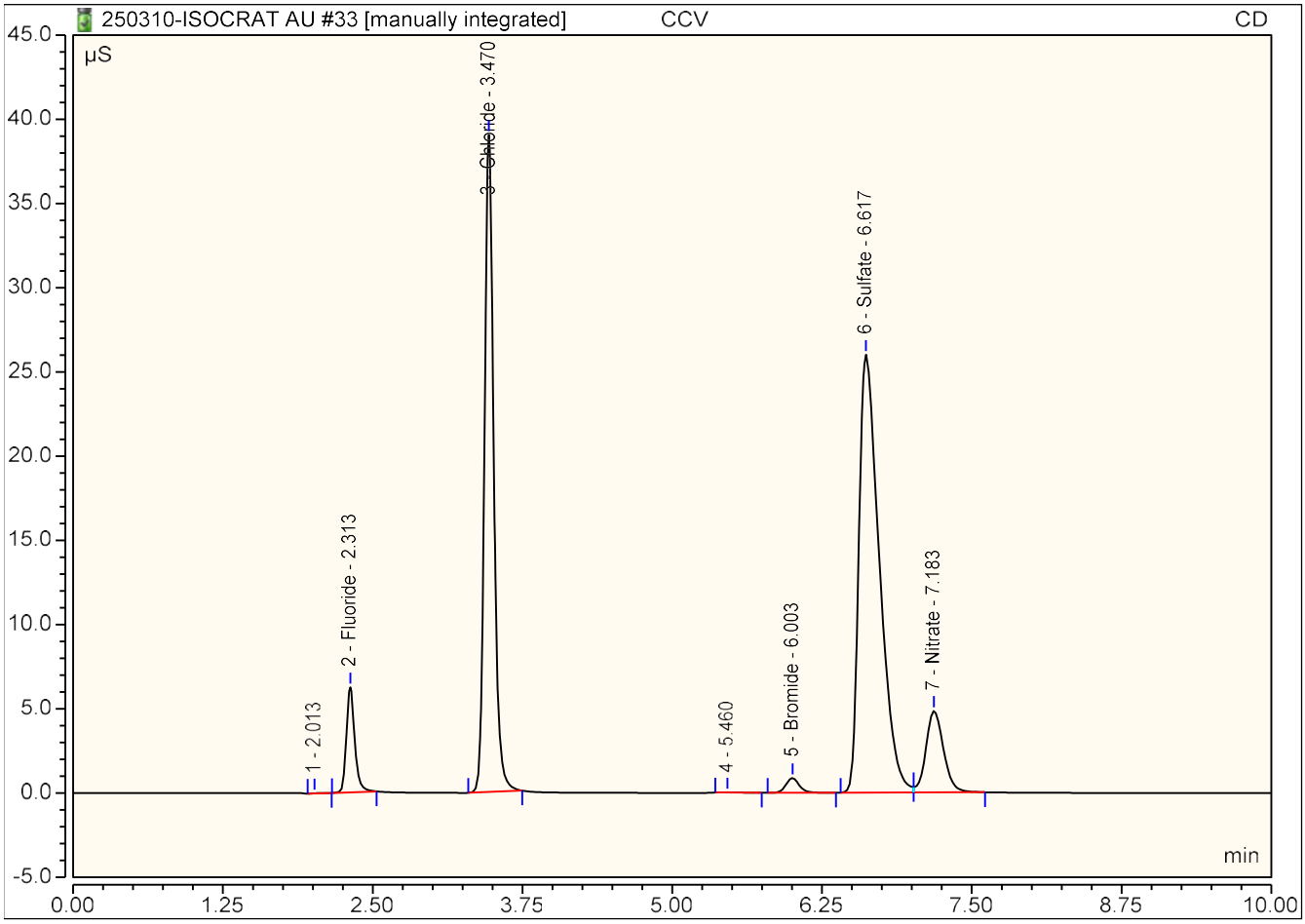
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 4 | 3.47 | **Chloride** | BMB | 0.005 | 0.059 | 0.1046 |
| 6 | 6.76 | **Sulfate** | BM * | 0.002 | 0.010 | 0.2092 |
| 7 | 7.23 | **Nitrate** | MB* | 0.001 | 0.004 | 0.0307 |
| **TOTAL:** | | | | 0.01 | 0.07 | 0.34 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 20:24** | *Run Time:* | **10.00** |

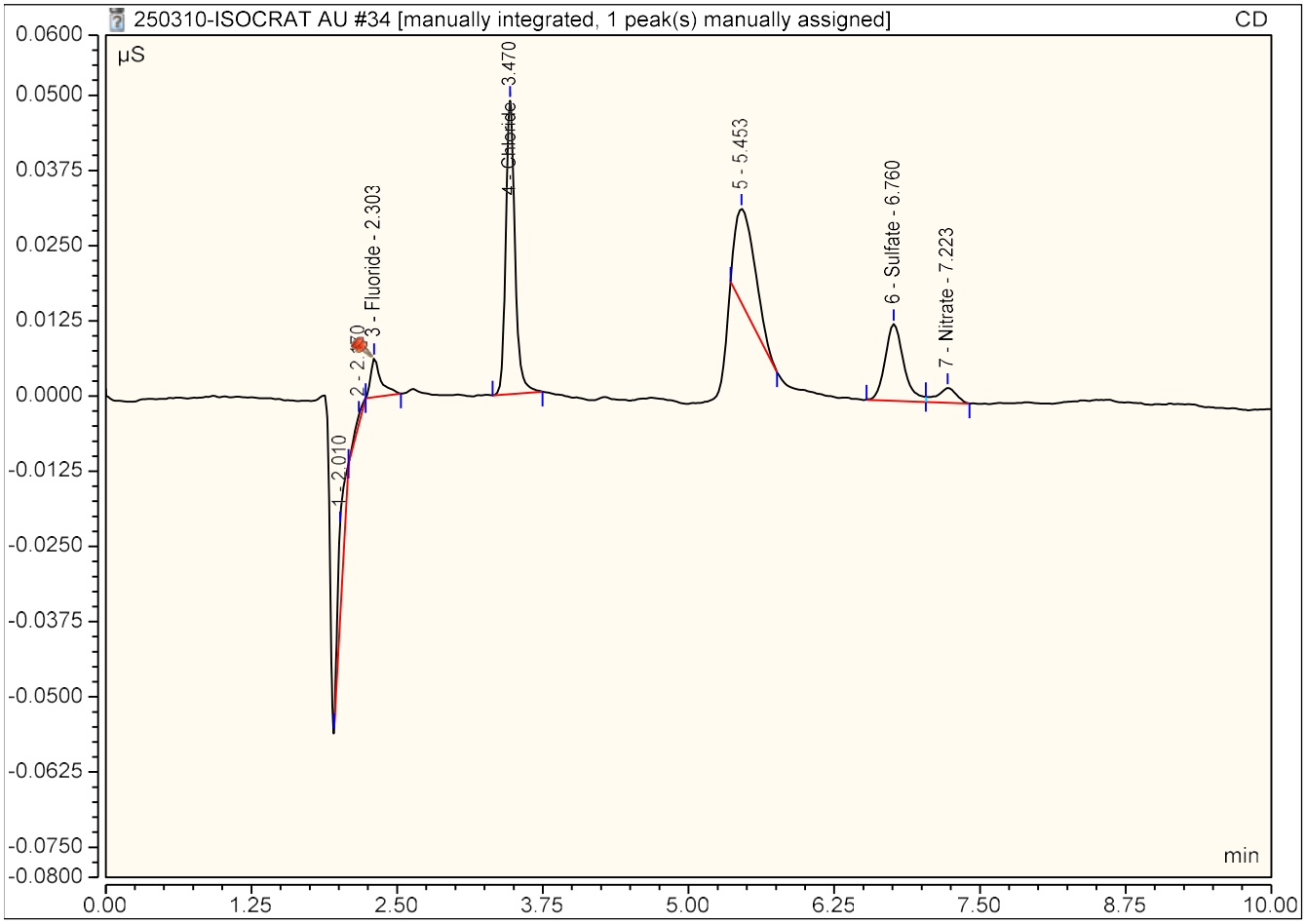
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.498 | 6.240 | 0.9799 |
| 3 | 3.47 | **Chloride** | BMB | 3.472 | 39.004 | 10.1855 |
| 5 | 6.00 | **Bromide** | BMB | 0.115 | 0.886 | 0.9520 |
| 6 | 6.62 | **Sulfate** | BM * | 5.149 | 25.997 | 20.2971 |
| 7 | 7.18 | **Nitrate** | MB* | 0.824 | 4.842 | 0.9920 |
| | | **TOTAL:** | | 10.06 | 76.97 | 33.41 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 20:36** | *Run Time:* | **10.00** |

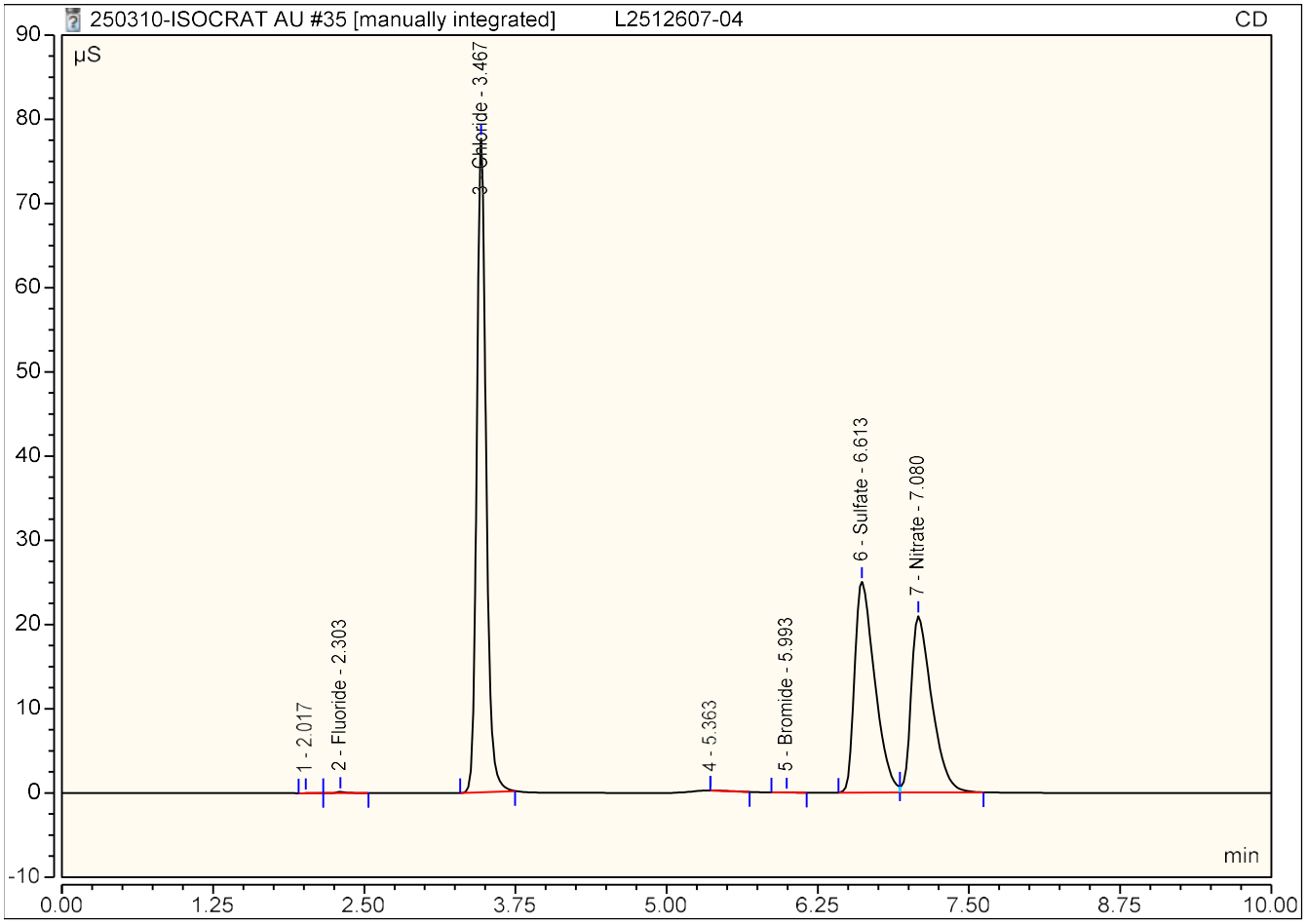
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB^ | 0.001 | 0.006 | 0.0259 |
| 4 | 3.47 | **Chloride** | BMB | 0.004 | 0.049 | 0.1018 |
| 6 | 6.76 | **Sulfate** | BM * | 0.002 | 0.013 | 0.2114 |
| 7 | 7.22 | **Nitrate** | MB* | 0.000 | 0.002 | 0.0303 |
| **TOTAL:** | | | | 0.01 | 0.07 | 0.37 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512607-04** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 20:48** | *Run Time:* | **10.00** |

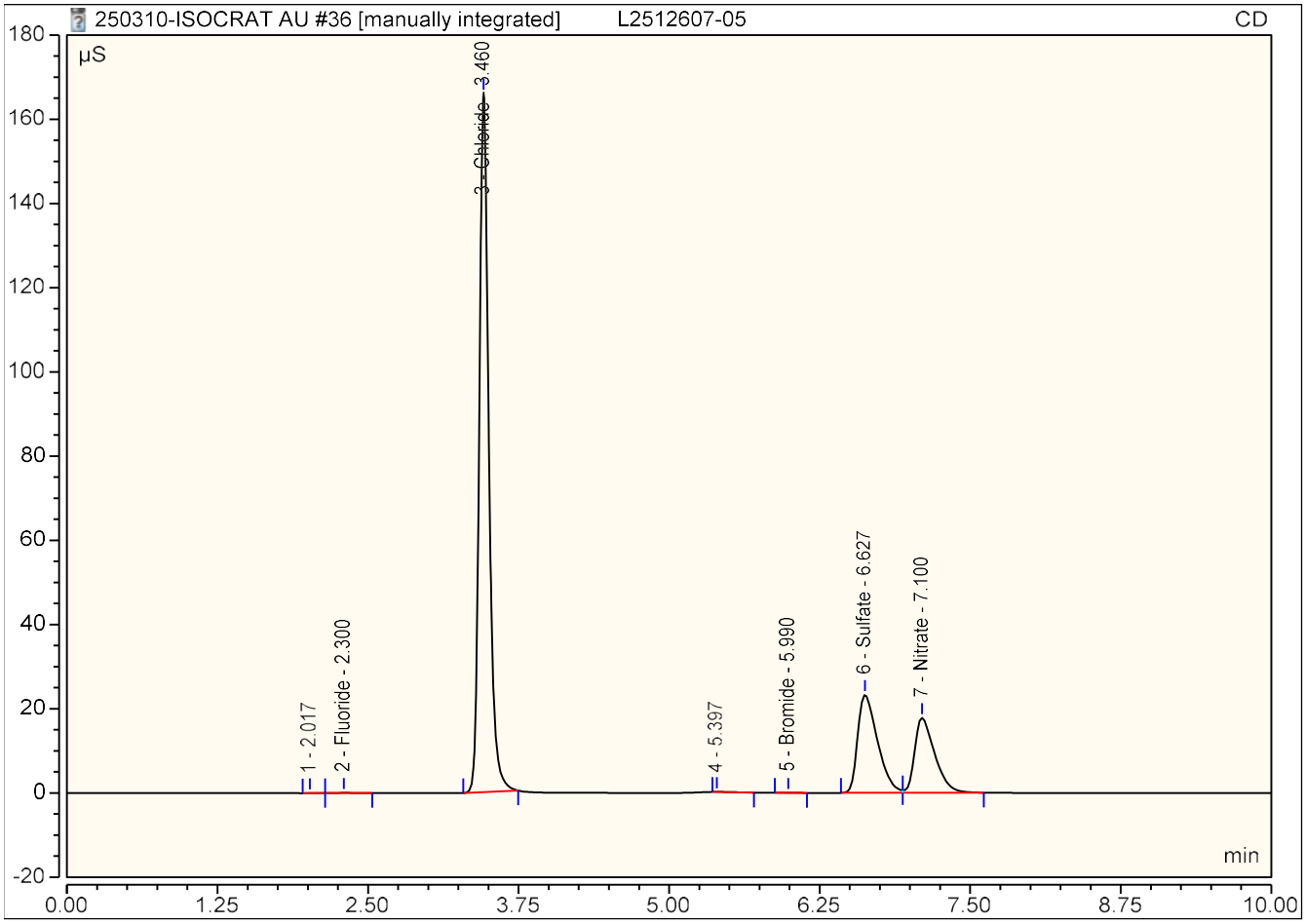
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.011 | 0.135 | 0.0466 |
| 3 | 3.47 | **Chloride** | BMB | 6.965 | 77.605 | 20.3421 |
| 5 | 5.99 | **Bromide** | BMB | 0.004 | 0.037 | 0.0703 |
| 6 | 6.61 | **Sulfate** | BM * | 4.840 | 25.028 | 19.0894 |
| 7 | 7.08 | **Nitrate** | MB* | 4.152 | 20.944 | 4.8808 |
| | | **TOTAL:** | | 15.97 | 123.75 | 44.43 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512607-05** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 21:00** | *Run Time:* | **10.00** |

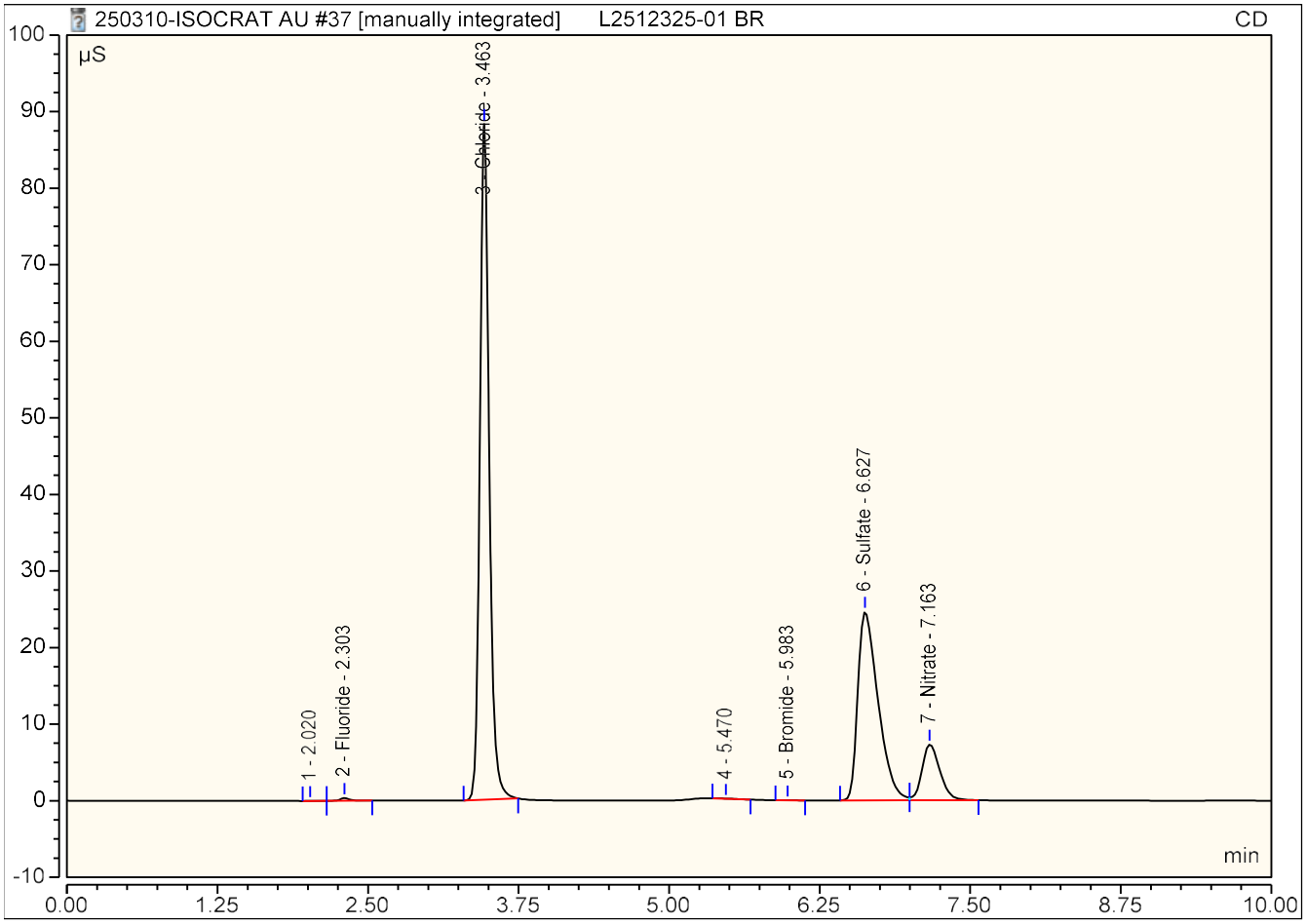
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.008 | 0.086 | 0.0398 |
| 3 | 3.46 | **Chloride** | BMB | 15.206 | 165.922 | 44.3040 |
| 5 | 5.99 | **Bromide** | BMB | 0.002 | 0.019 | 0.0521 |
| 6 | 6.63 | **Sulfate** | BM * | 4.434 | 23.312 | 17.5048 |
| 7 | 7.10 | **Nitrate** | MB* | 3.413 | 17.795 | 4.0164 |
| **TOTAL:** | | | | 23.06 | 207.13 | 65.92 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-01 BR** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 21:13** | *Run Time:* | **10.00** |

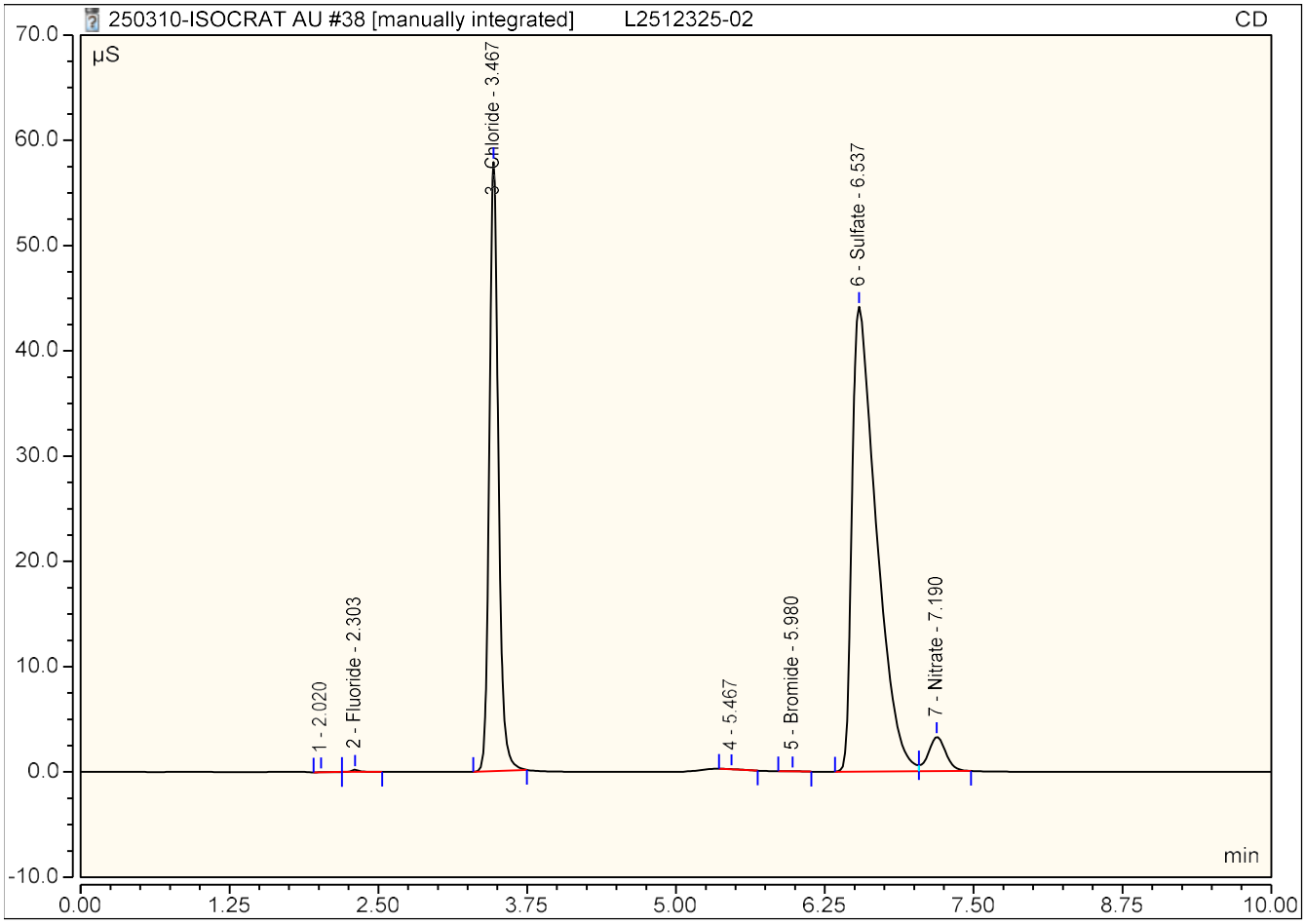
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.029 | 0.367 | 0.0803 |
| 3 | 3.46 | **Chloride** | BMB | 7.953 | 88.286 | 23.2144 |
| 5 | 5.98 | **Bromide** | BMB | 0.002 | 0.015 | 0.0489 |
| 6 | 6.63 | **Sulfate** | BM * | 4.815 | 24.674 | 18.9935 |
| 7 | 7.16 | **Nitrate** | MB* | 1.259 | 7.295 | 1.5007 |
| | | **TOTAL:** | | 14.06 | 120.64 | 43.84 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-02** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 21:25** | *Run Time:* | **10.00** |

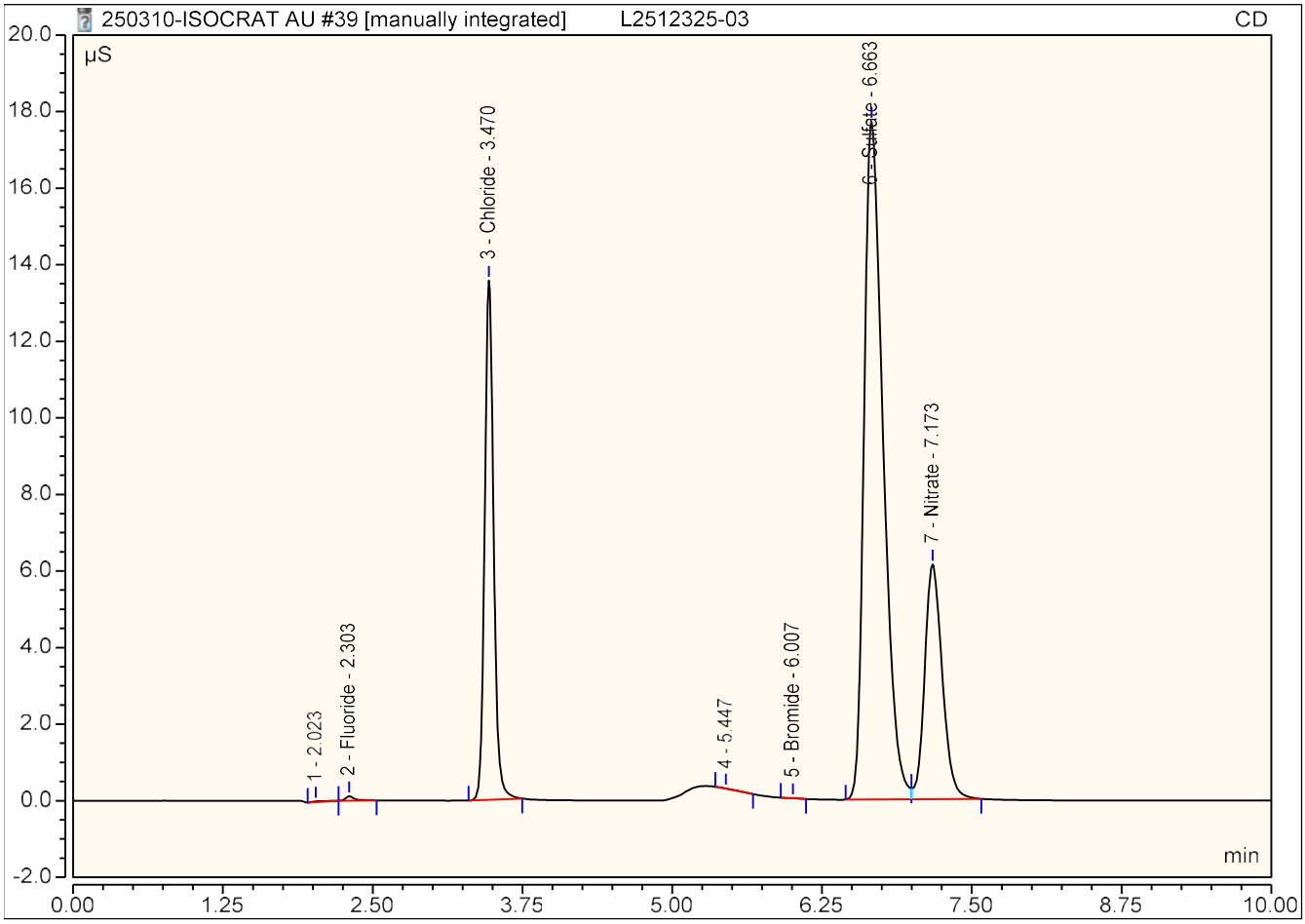
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.017 | 0.206 | 0.0568 |
| 3 | 3.47 | **Chloride** | BMB | 5.157 | 57.844 | 15.0830 |
| 5 | 5.98 | **Bromide** | BMB | 0.004 | 0.033 | 0.0659 |
| 6 | 6.54 | **Sulfate** | BM * | 10.437 | 44.139 | 40.9294 |
| 7 | 7.19 | **Nitrate** | MB* | 0.553 | 3.254 | 0.6757 |
| **TOTAL:** | | | | 16.17 | 105.48 | 56.81 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-03** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 21:37** | *Run Time:* | **10.00** |

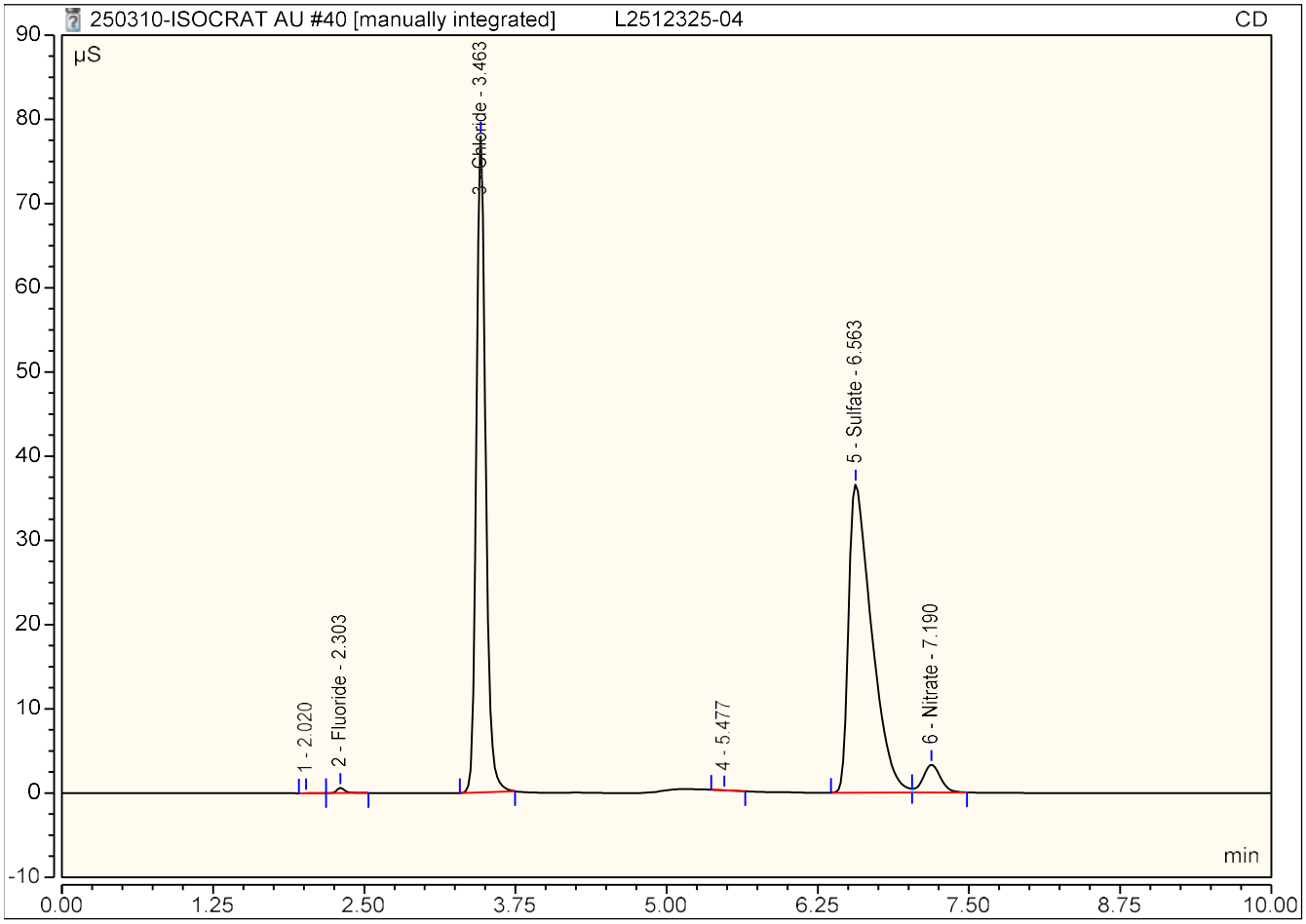
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.010 | 0.116 | 0.0439 |
| 3 | 3.47 | **Chloride** | BMB | 1.170 | 13.563 | 3.4901 |
| 5 | 6.01 | **Bromide** | BMB | 0.001 | 0.007 | 0.0402 |
| 6 | 6.66 | **Sulfate** | BM * | 3.259 | 17.706 | 12.9211 |
| 7 | 7.17 | **Nitrate** | MB* | 1.041 | 6.133 | 1.2462 |
| | | **TOTAL:** | | 5.48 | 37.53 | 17.74 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-04** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 21:49** | *Run Time:* | **10.00** |

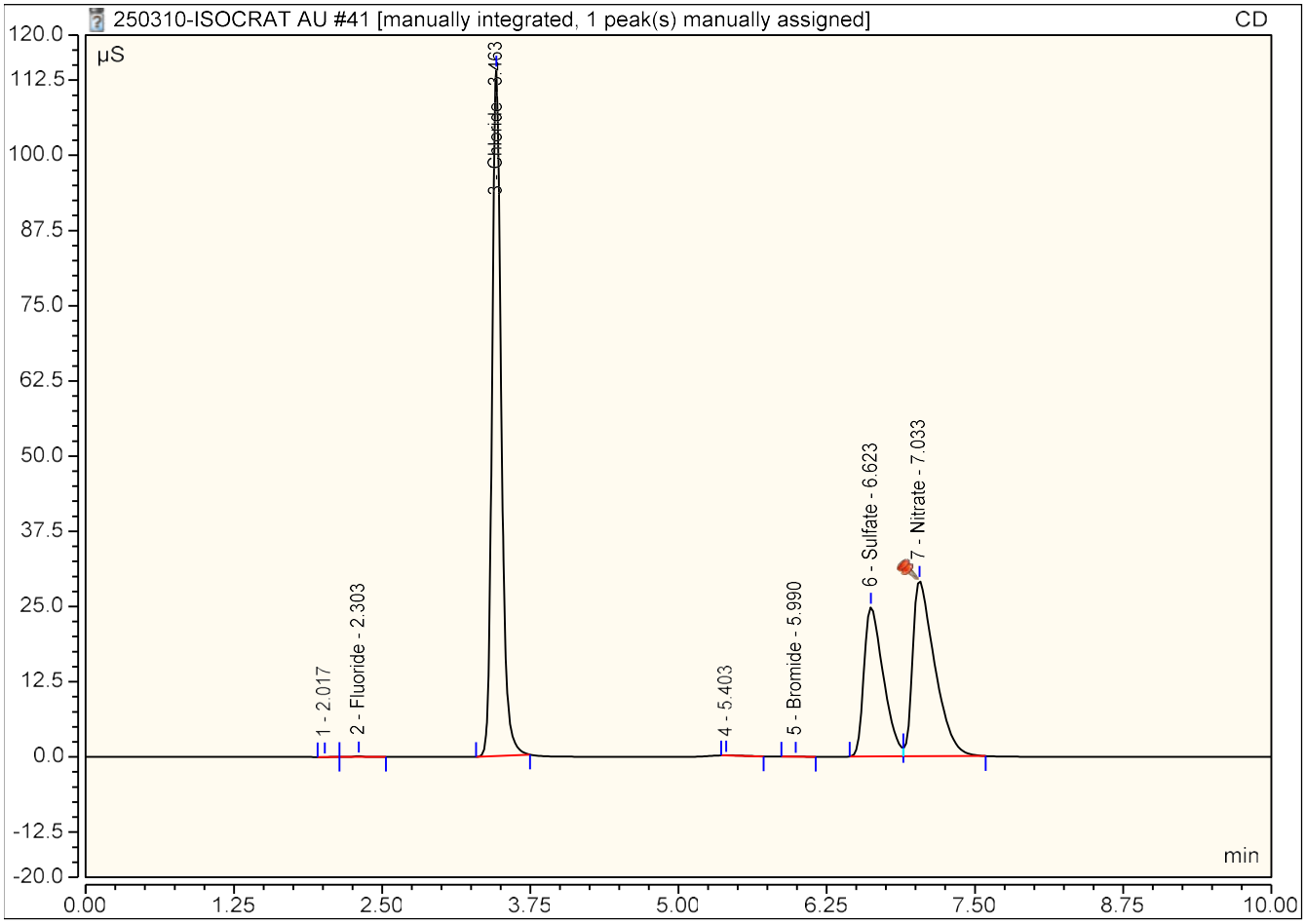
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.048 | 0.623 | 0.1171 |
| 3 | 3.46 | **Chloride** | BMB | 6.940 | 77.909 | 20.2694 |
| 5 | 6.56 | **Sulfate** | BM * | 8.112 | 36.620 | 31.8579 |
| 6 | 7.19 | **Nitrate** | MB* | 0.556 | 3.304 | 0.6794 |
| **TOTAL:** | | | | 15.66 | 118.46 | 52.92 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-05** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 22:01** | *Run Time:* | **10.00** |

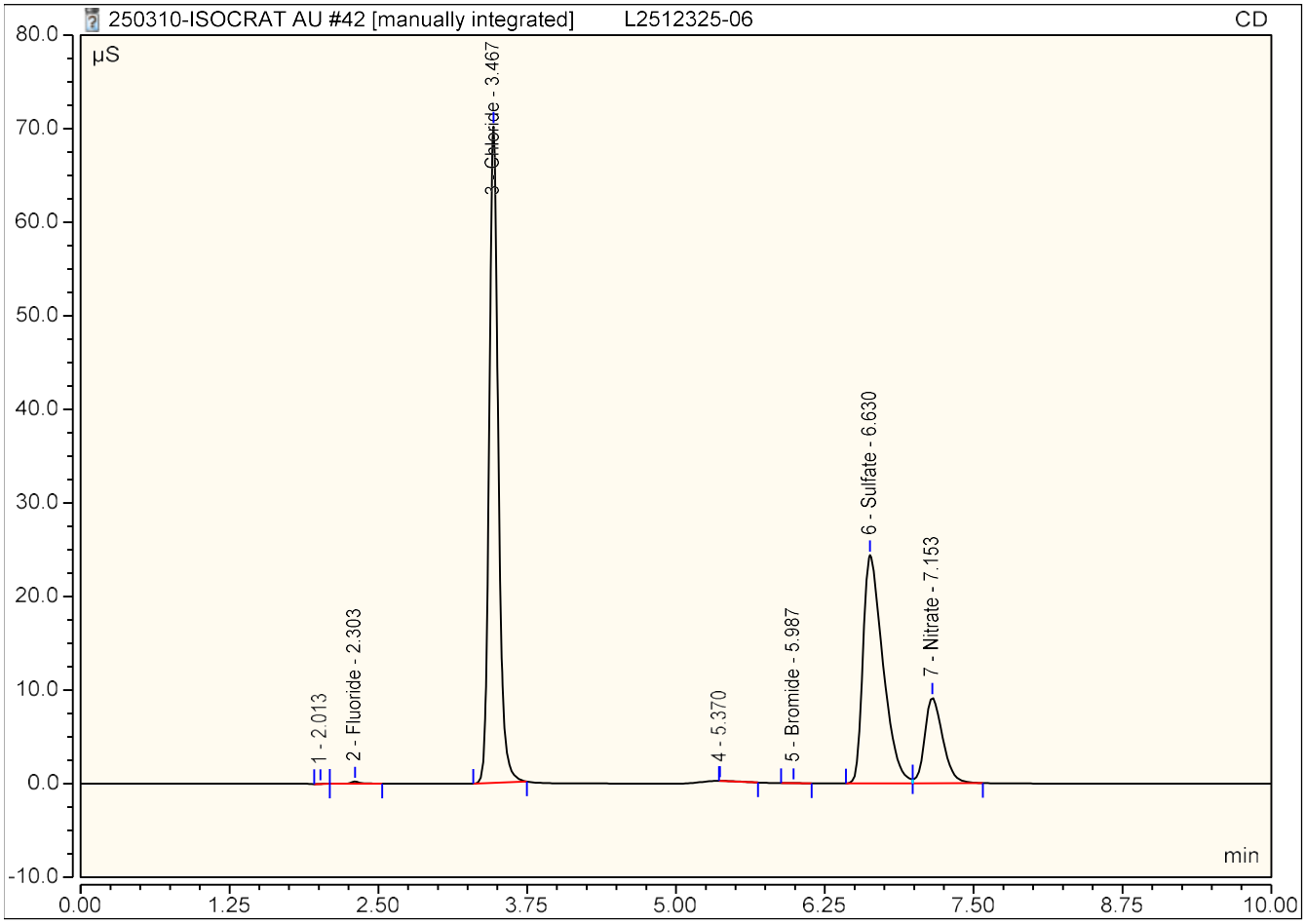
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.012 | 0.138 | 0.0481 |
| 3 | 3.46 | **Chloride** | BMB | 10.352 | 113.977 | 30.1901 |
| 5 | 5.99 | **Bromide** | BMB | 0.004 | 0.034 | 0.0673 |
| 6 | 6.62 | **Sulfate** | BM * | 4.710 | 24.775 | 18.5837 |
| 7 | 7.03 | **Nitrate** | MB*^ | 6.329 | 29.205 | 7.4230 |
| | | **TOTAL:** | | 21.41 | 168.13 | 56.31 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-06** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 22:13** | *Run Time:* | **10.00** |

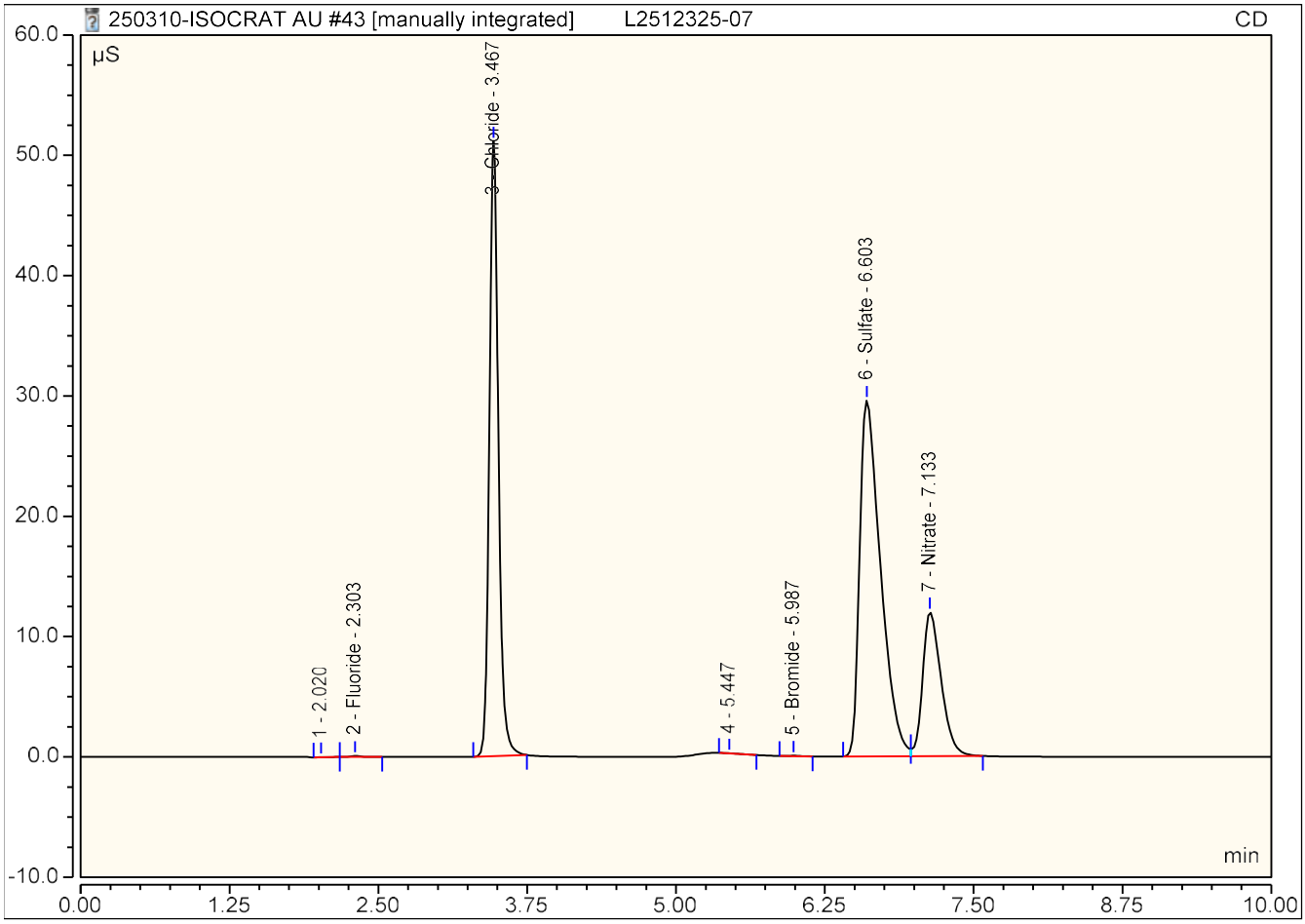
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.020 | 0.239 | 0.0631 |
| 3 | 3.47 | **Chloride** | BMB | 6.291 | 70.117 | 18.3804 |
| 5 | 5.99 | **Bromide** | BMB | 0.002 | 0.016 | 0.0496 |
| 6 | 6.63 | **Sulfate** | BM * | 4.745 | 24.381 | 18.7185 |
| 7 | 7.15 | **Nitrate** | MB* | 1.604 | 9.129 | 1.9041 |
| | | **TOTAL:** | | 12.66 | 103.88 | 39.12 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-07** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 22:25** | *Run Time:* | **10.00** |

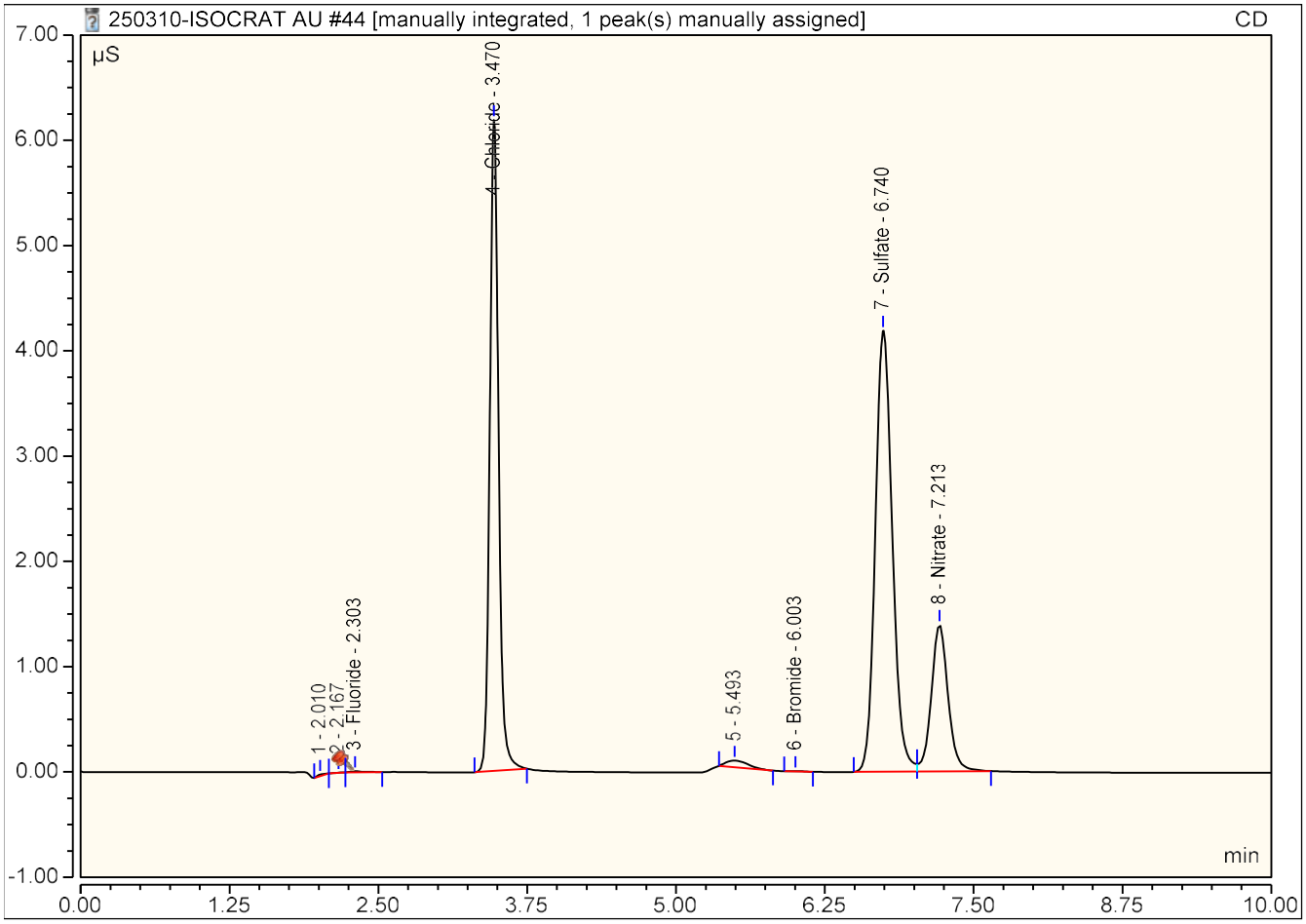
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.008 | 0.090 | 0.0398 |
| 3 | 3.47 | **Chloride** | BMB | 4.542 | 51.080 | 13.2952 |
| 5 | 5.99 | **Bromide** | BMB | 0.004 | 0.033 | 0.0663 |
| 6 | 6.60 | **Sulfate** | BM * | 6.036 | 29.555 | 23.7558 |
| 7 | 7.13 | **Nitrate** | MB* | 2.163 | 11.953 | 2.5570 |
| | | **TOTAL:** | | 12.75 | 92.71 | 39.71 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **XL2512325-07; 10X** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 22:37** | *Run Time:* | **10.00** |

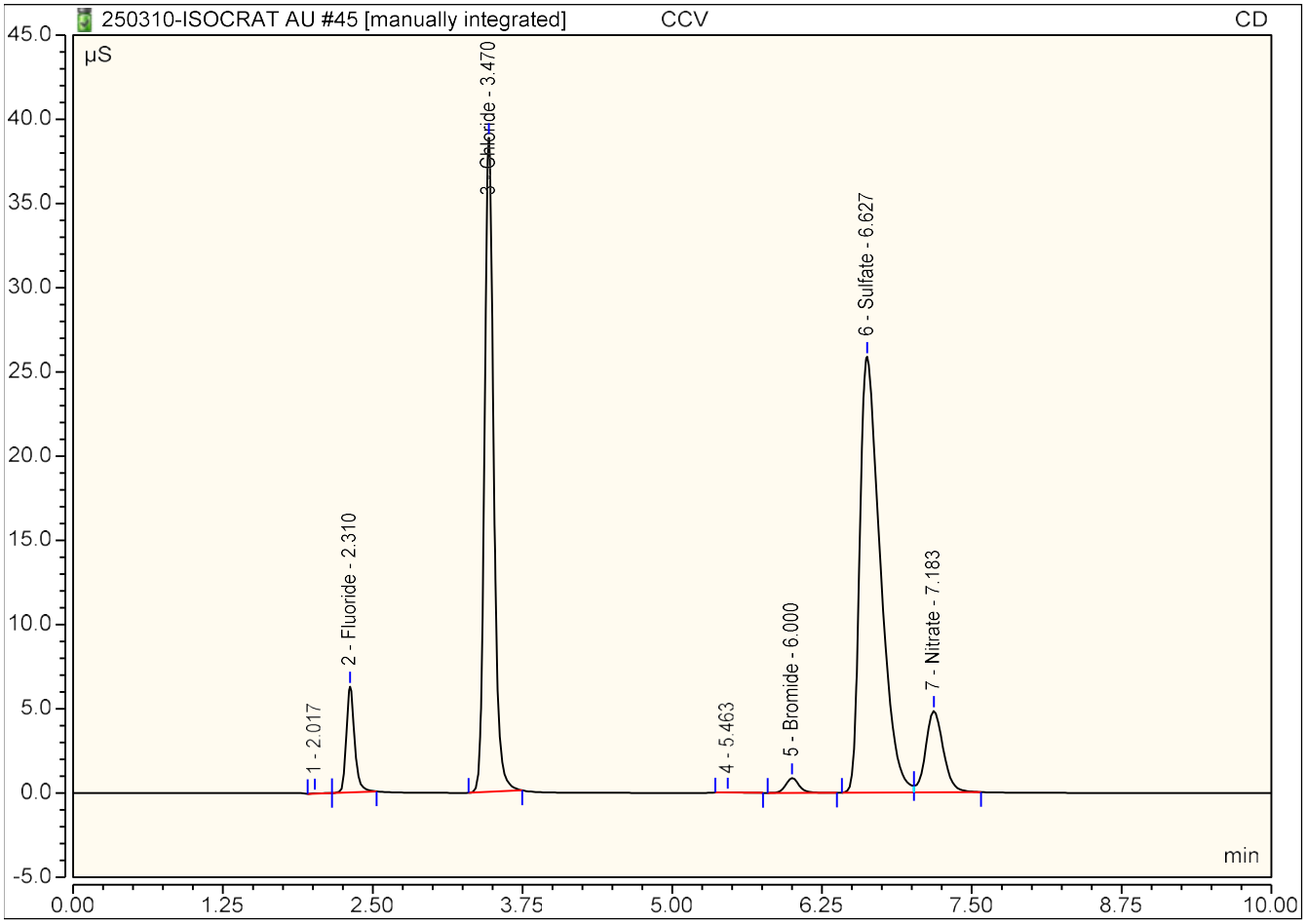
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB^ | 0.001 | 0.012 | 0.2687 |
| 4 | 3.47 | **Chloride** | BMB | 0.530 | 6.183 | 16.2940 |
| 6 | 6.00 | **Bromide** | BMB | 0.000 | 0.004 | 0.3801 |
| 7 | 6.74 | **Sulfate** | BM * | 0.690 | 4.190 | 28.9567 |
| 8 | 7.21 | **Nitrate** | MB* | 0.227 | 1.392 | 2.9525 |
| **TOTAL:** | | | | 1.45 | 11.78 | 48.85 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 22:49** | *Run Time:* | **10.00** |

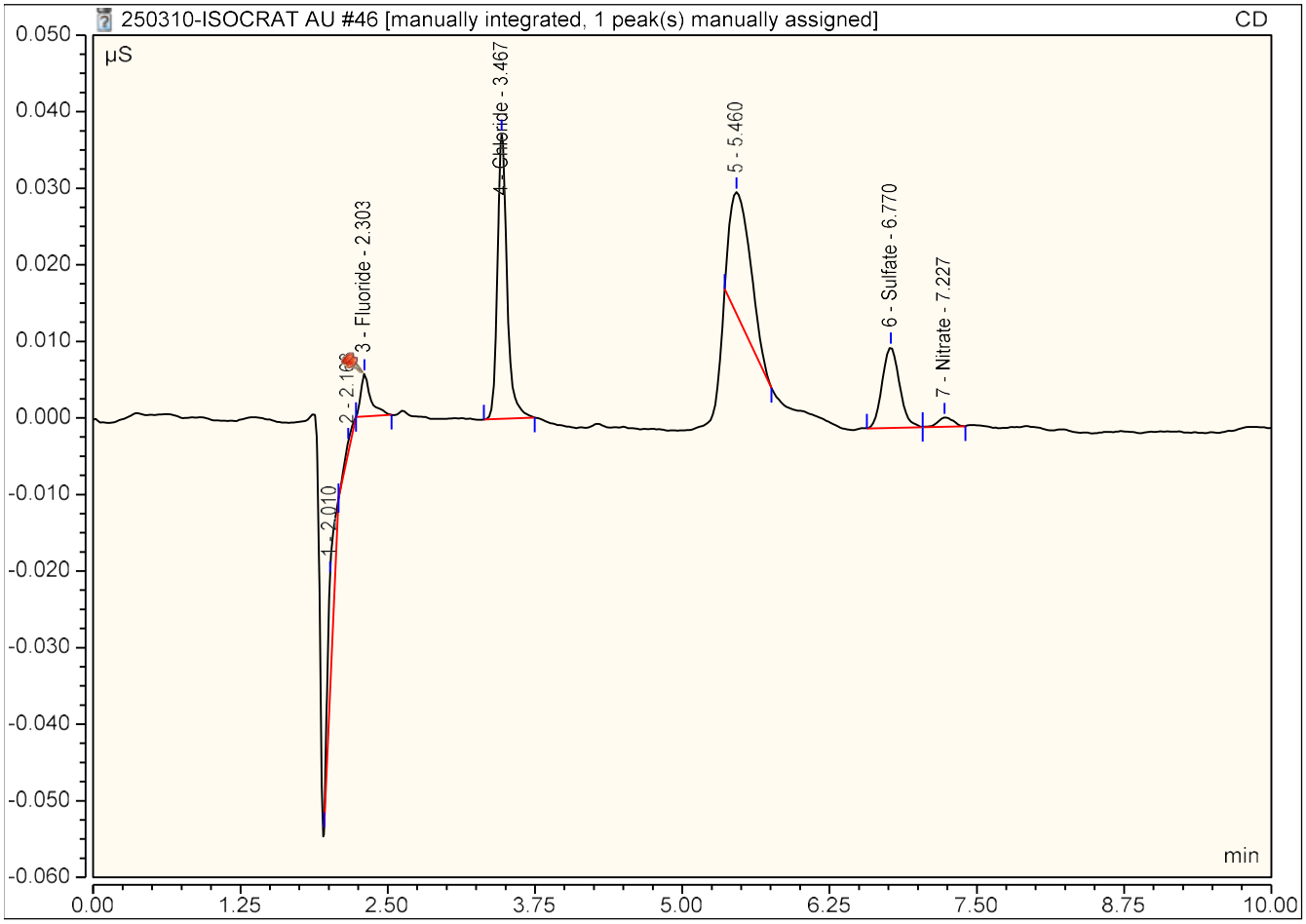
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.498 | 6.285 | 0.9800 |
| 3 | 3.47 | **Chloride** | BMB | 3.458 | 38.832 | 10.1440 |
| 5 | 6.00 | **Bromide** | BMB | 0.114 | 0.881 | 0.9482 |
| 6 | 6.63 | **Sulfate** | BM * | 5.142 | 25.872 | 20.2675 |
| 7 | 7.18 | **Nitrate** | MB* | 0.824 | 4.838 | 0.9920 |
| **TOTAL:** | | | | 10.04 | 76.71 | 33.33 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 23:01** | *Run Time:* | **10.00** |

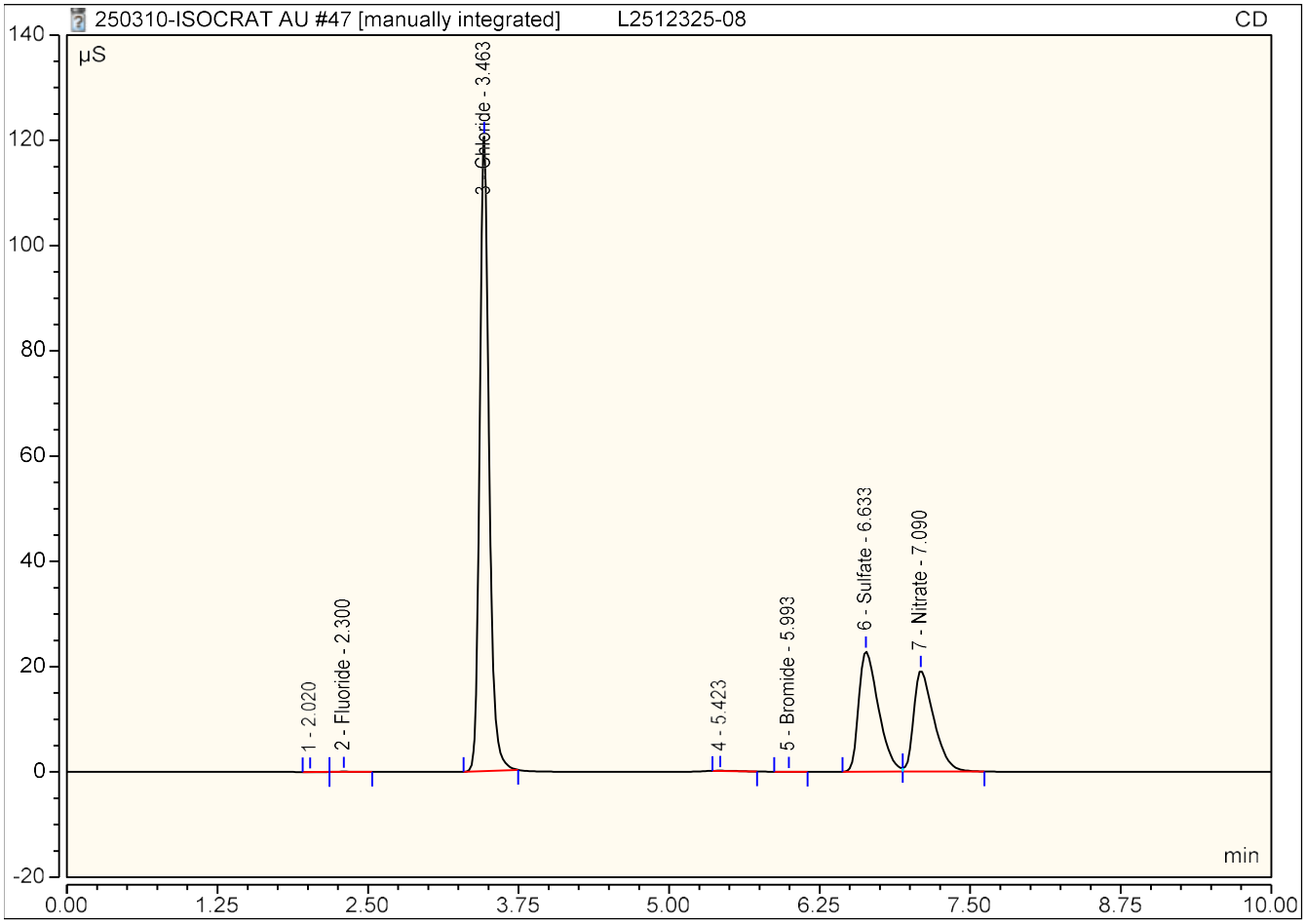
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB^ | 0.001 | 0.006 | 0.0257 |
| 4 | 3.47 | **Chloride** | BMB | 0.003 | 0.037 | 0.0990 |
| 6 | 6.77 | **Sulfate** | BM * | 0.002 | 0.011 | 0.2092 |
| 7 | 7.23 | **Nitrate** | MB* | 0.000 | 0.001 | 0.0300 |
| **TOTAL:** | | | | 0.01 | 0.05 | 0.36 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-08** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 23:13** | *Run Time:* | **10.00** |

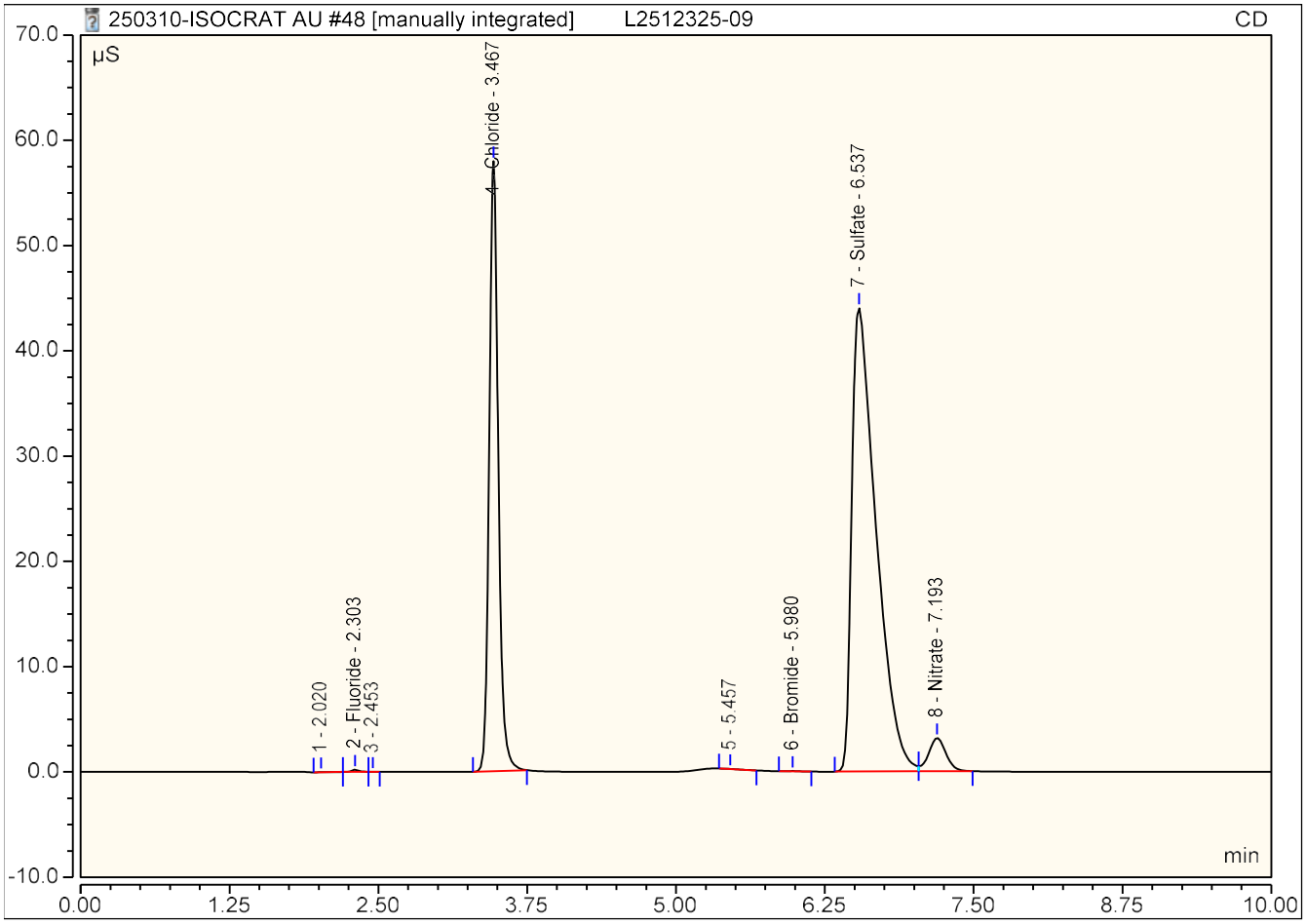
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.008 | 0.093 | 0.0406 |
| 3 | 3.46 | **Chloride** | BMB | 10.966 | 120.544 | 31.9748 |
| 5 | 5.99 | **Bromide** | BMB | 0.002 | 0.020 | 0.0536 |
| 6 | 6.63 | **Sulfate** | BM * | 4.334 | 22.894 | 17.1141 |
| 7 | 7.09 | **Nitrate** | MB* | 3.732 | 19.194 | 4.3901 |
| | | **TOTAL:** | | 19.04 | 162.75 | 53.57 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-09** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 23:26** | *Run Time:* | **10.00** |

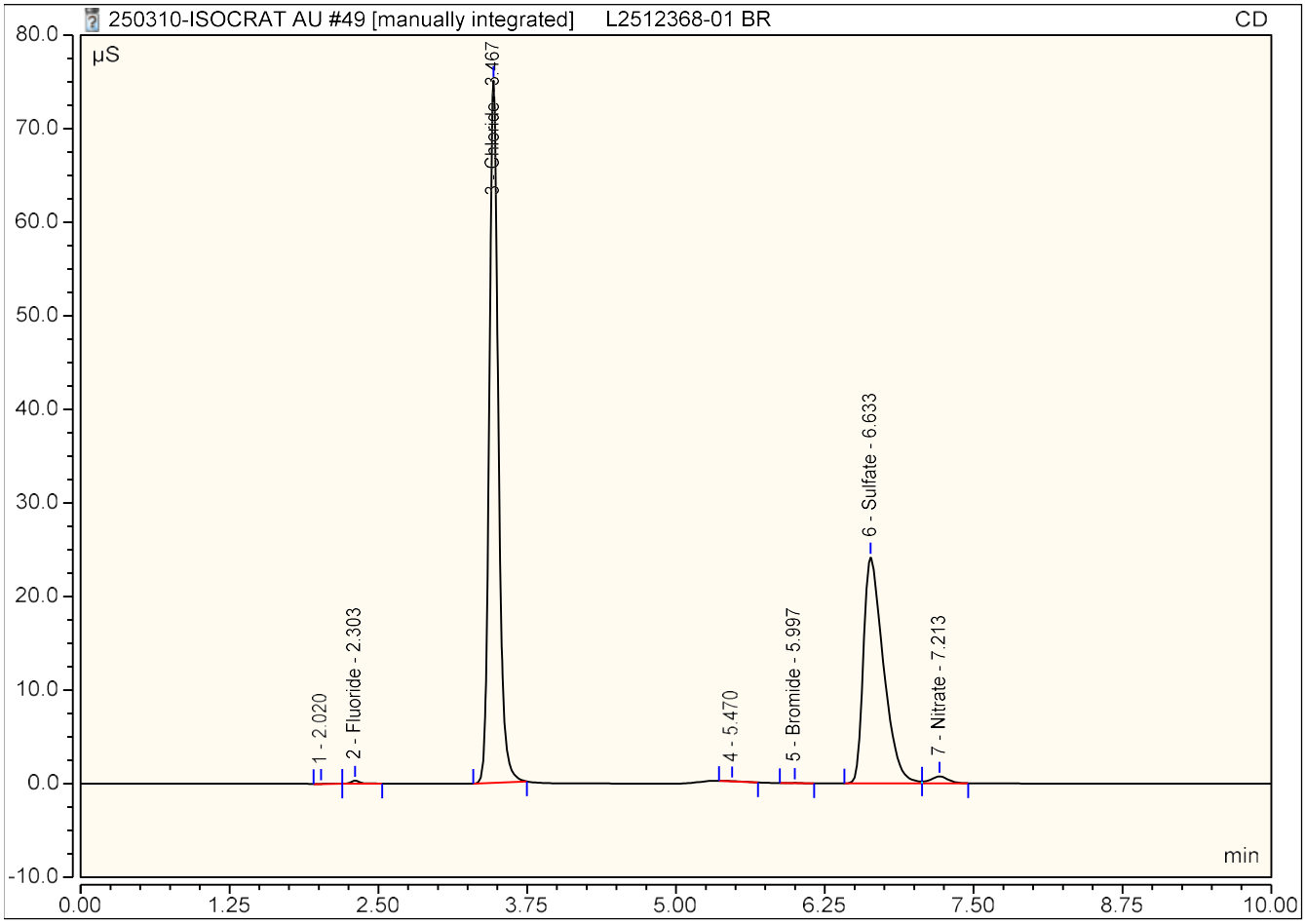
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.014 | 0.198 | 0.0512 |
| 4 | 3.47 | **Chloride** | BMB | 5.160 | 57.940 | 15.0919 |
| 6 | 5.98 | **Bromide** | BMB | 0.004 | 0.033 | 0.0657 |
| 7 | 6.54 | **Sulfate** | BM * | 10.384 | 44.050 | 40.7243 |
| 8 | 7.19 | **Nitrate** | MB* | 0.535 | 3.157 | 0.6552 |
| | | **TOTAL:** | | 16.10 | 105.38 | 56.59 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-01 BR** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 23:38** | *Run Time:* | **10.00** |

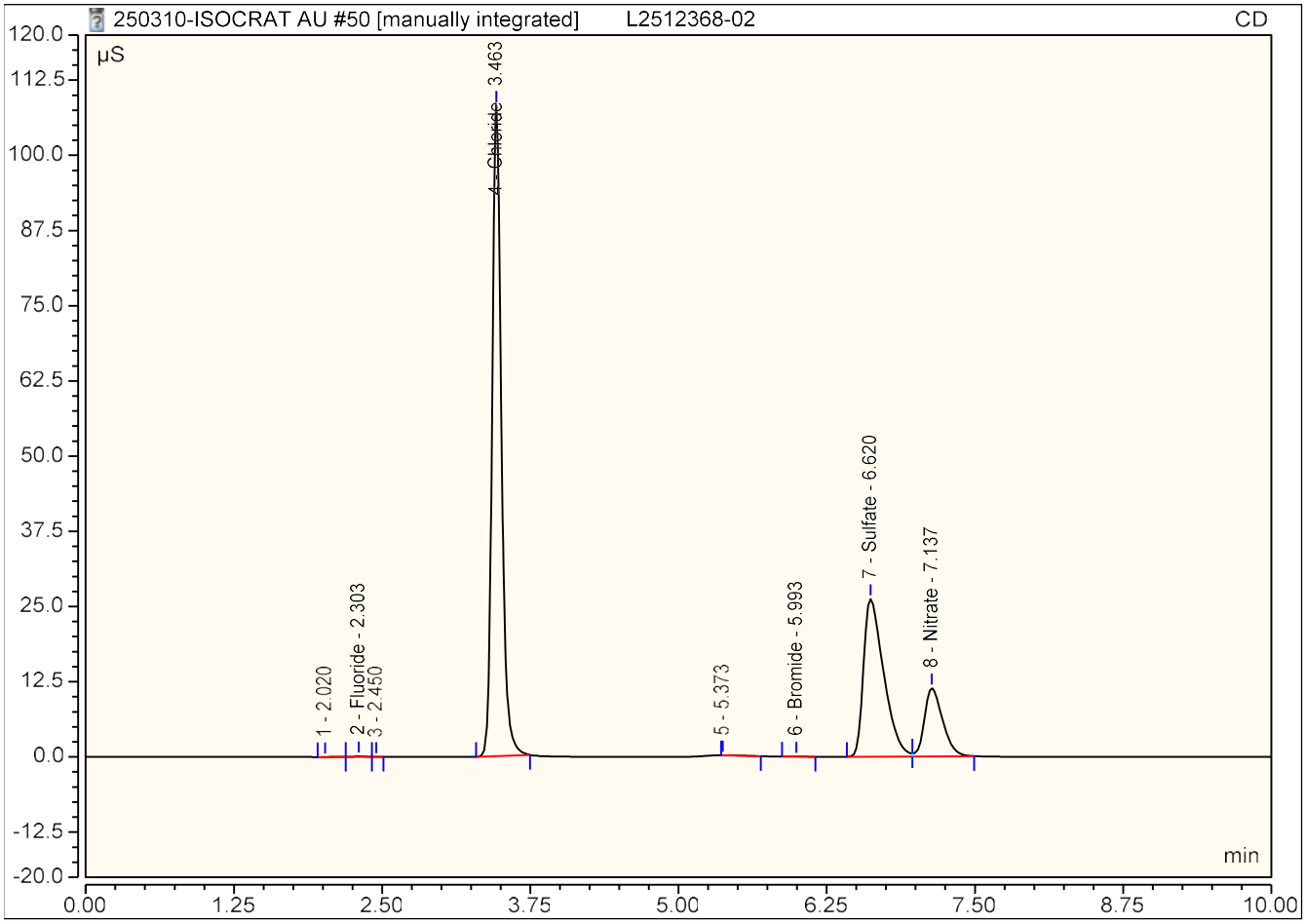
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.027 | 0.344 | 0.0765 |
| 3 | 3.47 | **Chloride** | BMB | 6.739 | 75.031 | 19.6842 |
| 5 | 6.00 | **Bromide** | BMB | 0.005 | 0.040 | 0.0728 |
| 6 | 6.63 | **Sulfate** | BM * | 4.726 | 24.154 | 18.6434 |
| 7 | 7.21 | **Nitrate** | MB* | 0.125 | 0.737 | 0.1756 |
| | | **TOTAL:** | | 11.62 | 100.30 | 38.65 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-02** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **10-Mar-2025 / 23:50** | *Run Time:* | **10.00** |

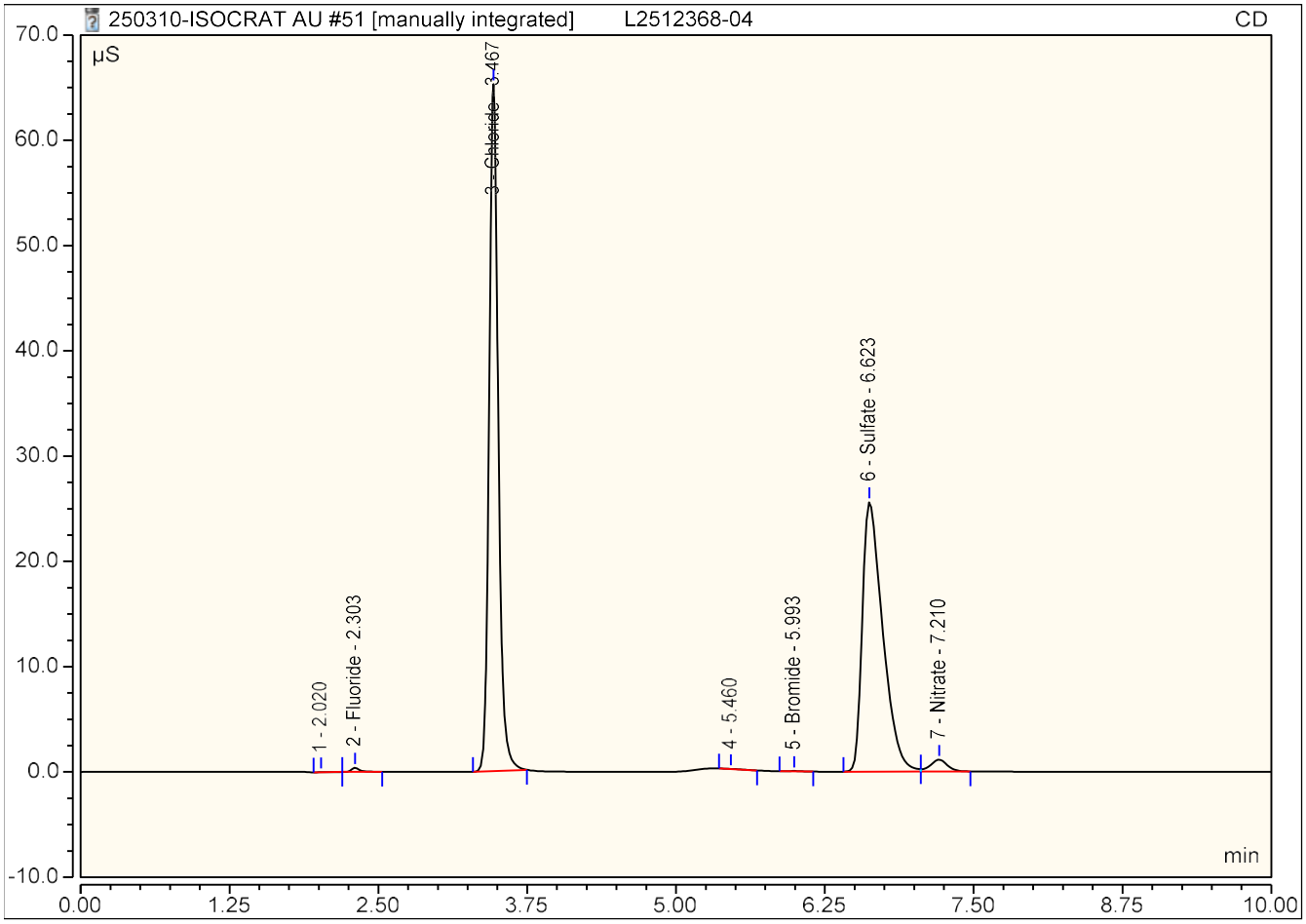
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.009 | 0.129 | 0.0424 |
| 4 | 3.46 | **Chloride** | BMB | 9.799 | 108.109 | 28.5818 |
| 6 | 5.99 | **Bromide** | BMB | 0.004 | 0.031 | 0.0636 |
| 7 | 6.62 | **Sulfate** | BM * | 5.175 | 26.209 | 20.3972 |
| 8 | 7.14 | **Nitrate** | MB* | 2.012 | 11.331 | 2.3804 |
| | | **TOTAL:** | | 17.00 | 145.81 | 51.47 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-04** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 00:02** | *Run Time:* | **10.00** |

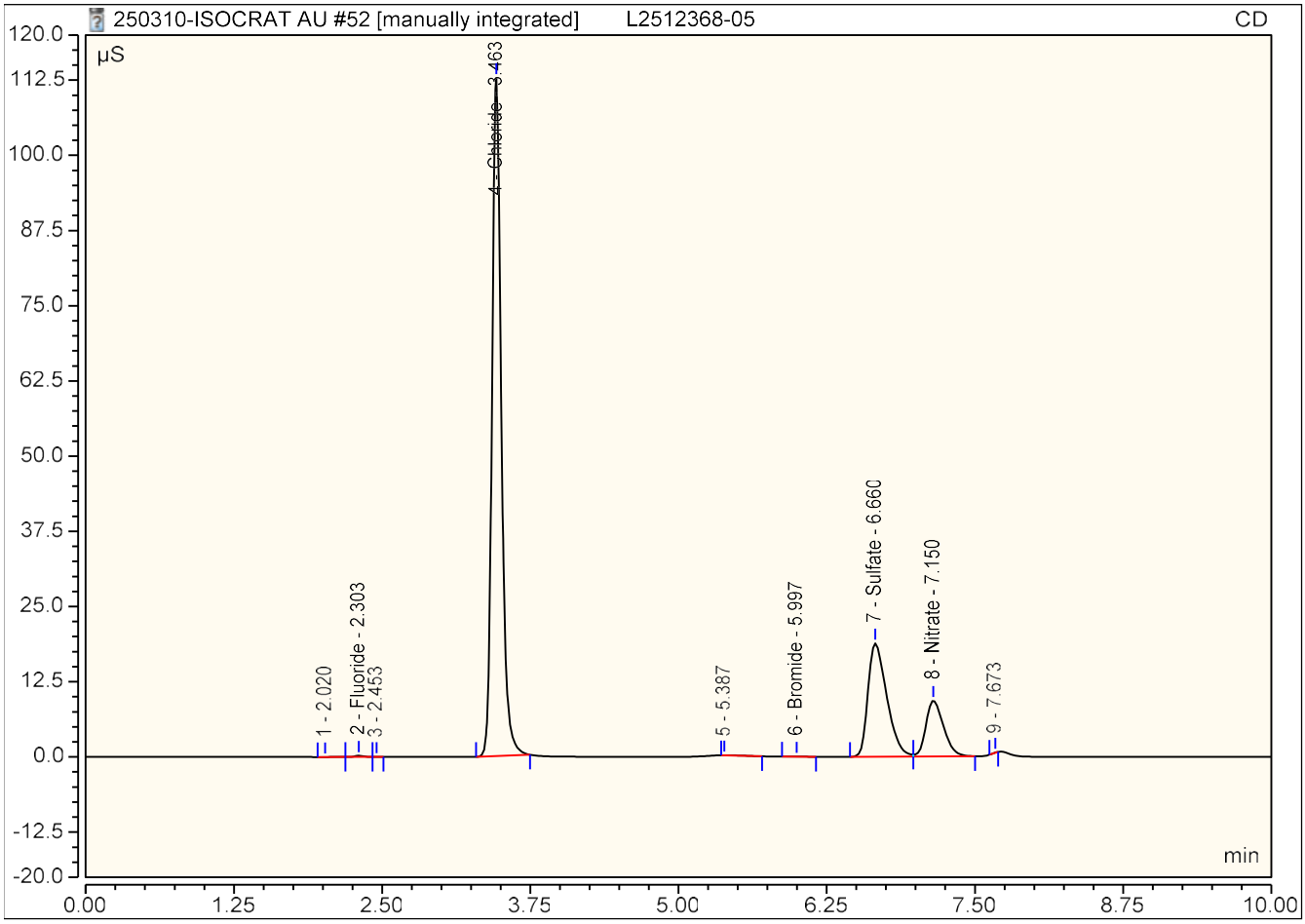
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.033 | 0.409 | 0.0876 |
| 3 | 3.47 | **Chloride** | BMB | 5.838 | 65.270 | 17.0634 |
| 5 | 5.99 | **Bromide** | BMB | 0.005 | 0.038 | 0.0704 |
| 6 | 6.62 | **Sulfate** | BM * | 5.099 | 25.622 | 20.1015 |
| 7 | 7.21 | **Nitrate** | MB* | 0.189 | 1.128 | 0.2502 |
| | | **TOTAL:** | | 11.16 | 92.47 | 37.57 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-05** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 00:14** | *Run Time:* | **10.00** |

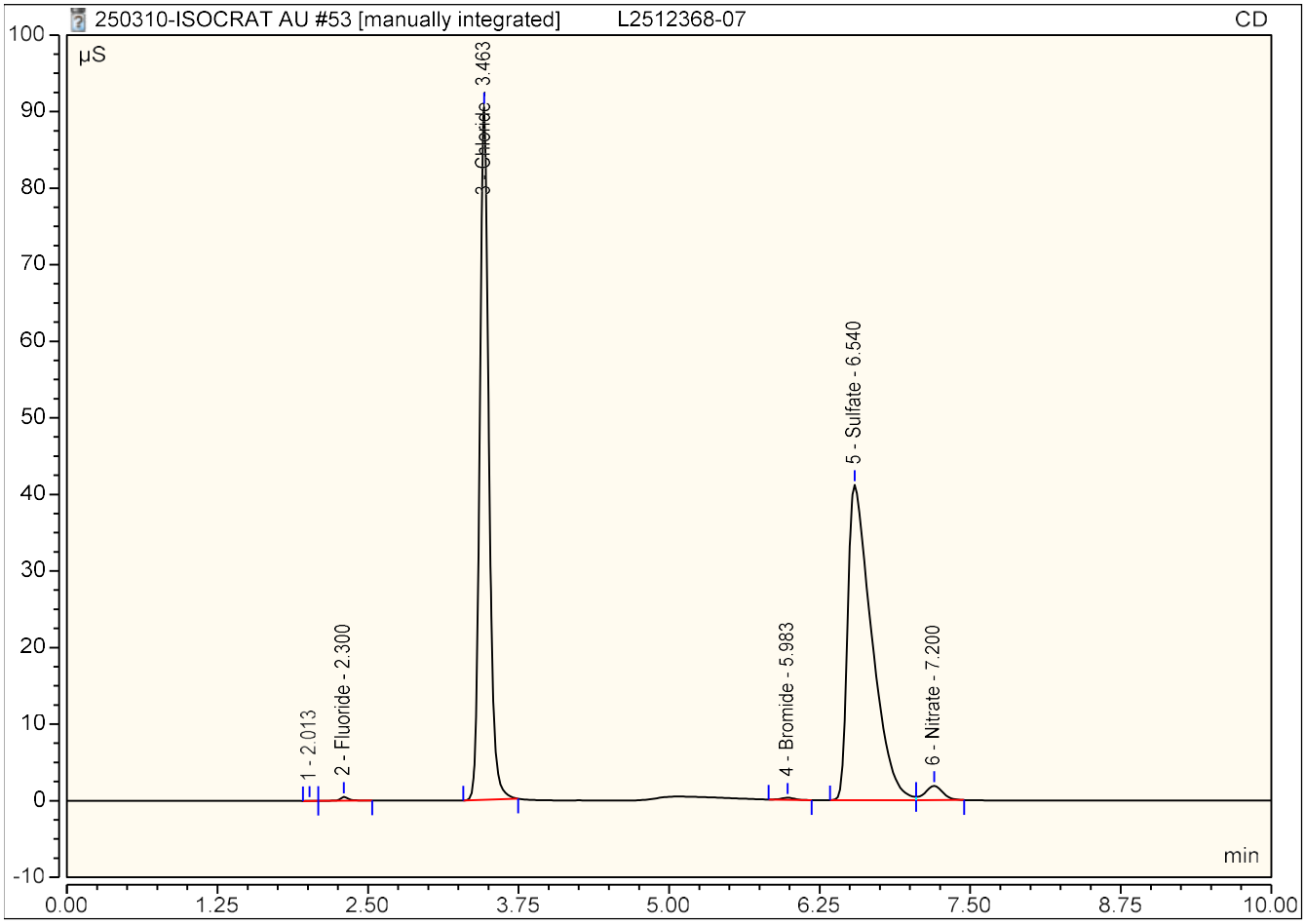
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.014 | 0.193 | 0.0509 |
| 4 | 3.46 | **Chloride** | BMB | 10.237 | 112.755 | 29.8547 |
| 6 | 6.00 | **Bromide** | BMB | 0.004 | 0.033 | 0.0661 |
| 7 | 6.66 | **Sulfate** | BM * | 3.463 | 18.839 | 13.7147 |
| 8 | 7.15 | **Nitrate** | MB* | 1.602 | 9.281 | 1.9007 |
| | | **TOTAL:** | | 15.32 | 141.10 | 45.59 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-07** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 00:26** | *Run Time:* | **10.00** |

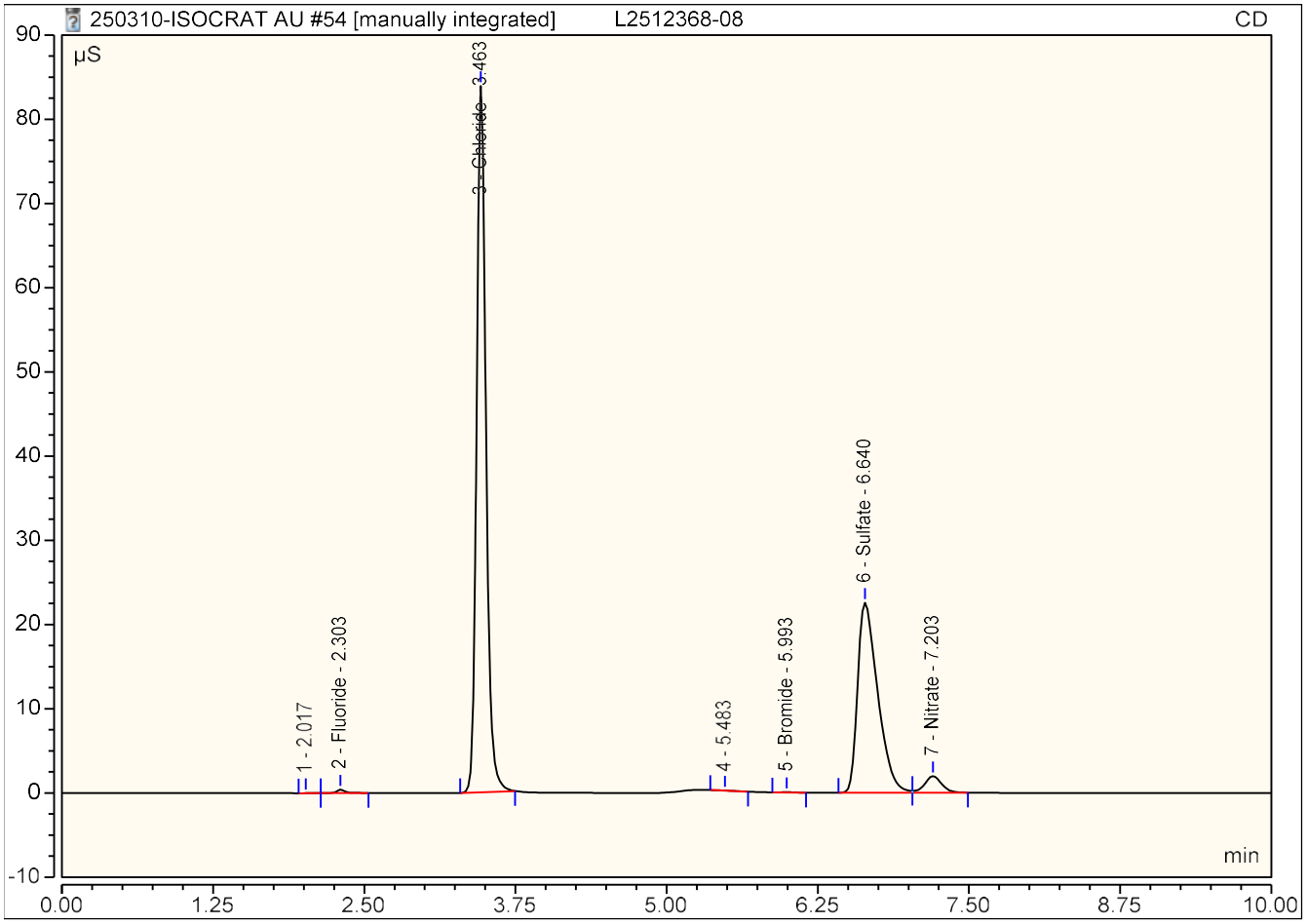
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.039 | 0.490 | 0.0989 |
| 3 | 3.46 | **Chloride** | BMB | 8.057 | 90.460 | 23.5176 |
| 4 | 5.98 | **Bromide** | BMB | 0.034 | 0.272 | 0.3073 |
| 5 | 6.54 | **Sulfate** | BM * | 9.507 | 41.187 | 37.3028 |
| 6 | 7.20 | **Nitrate** | MB* | 0.315 | 1.868 | 0.3978 |
| | | **TOTAL:** | | 17.95 | 134.28 | 61.62 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-08** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 00:38** | *Run Time:* | **10.00** |

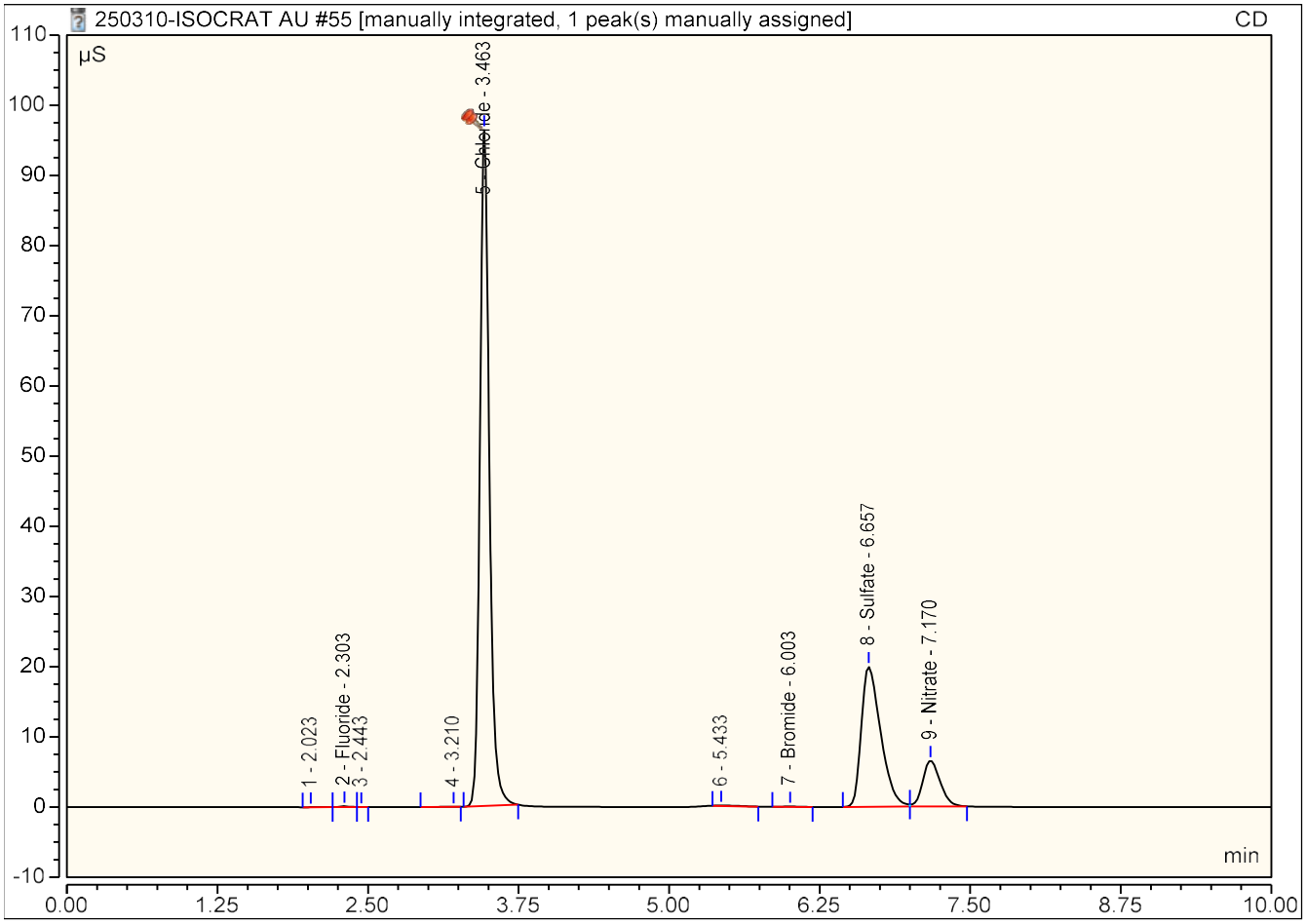
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.031 | 0.403 | 0.0850 |
| 3 | 3.46 | **Chloride** | BMB | 7.532 | 83.870 | 21.9893 |
| 5 | 5.99 | **Bromide** | BMB | 0.005 | 0.040 | 0.0729 |
| 6 | 6.64 | **Sulfate** | BM * | 4.345 | 22.561 | 17.1560 |
| 7 | 7.20 | **Nitrate** | MB* | 0.322 | 1.958 | 0.4058 |
| | | **TOTAL:** | | 12.23 | 108.83 | 39.71 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-10** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 00:50** | *Run Time:* | **10.00** |

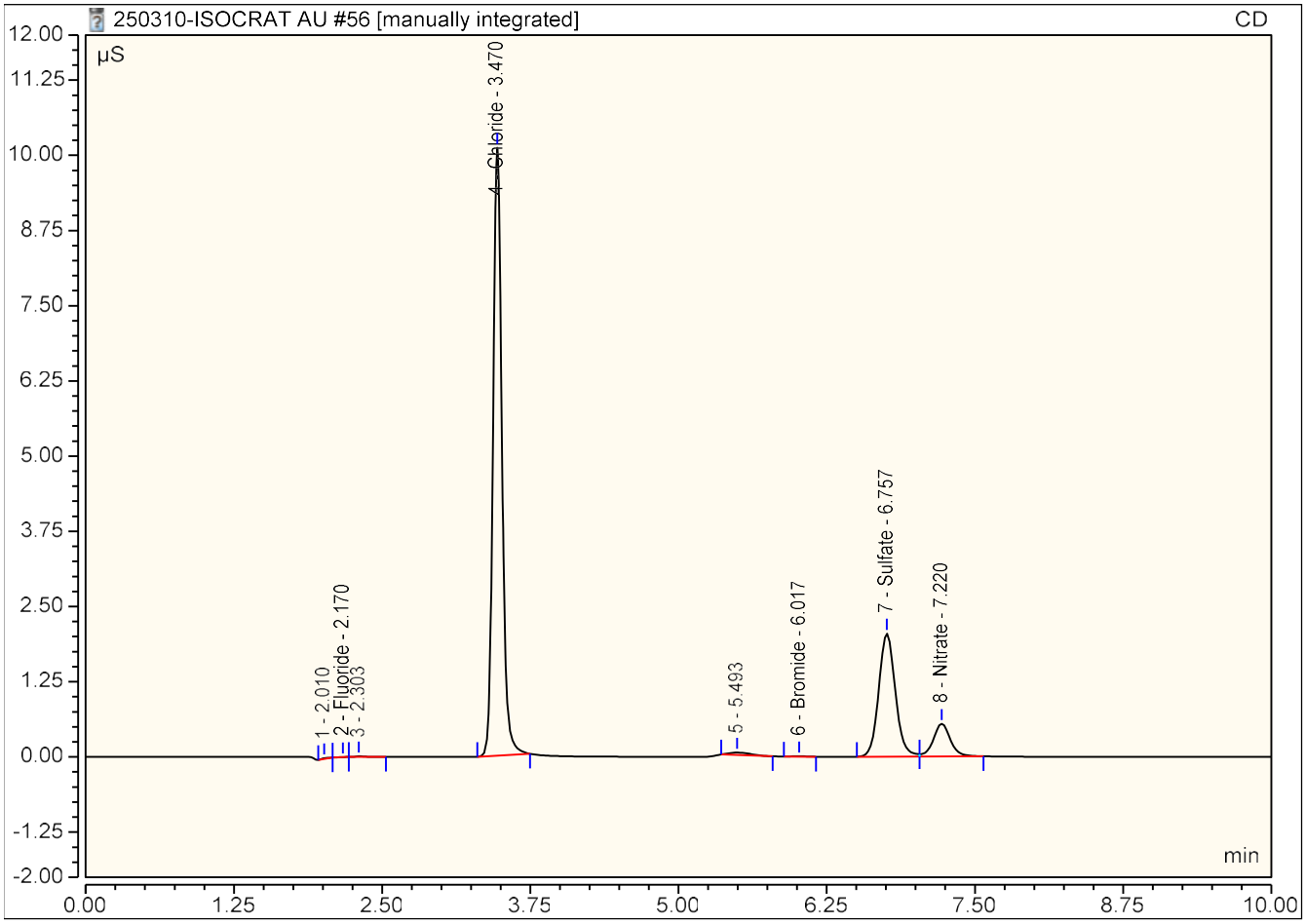
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.007 | 0.102 | 0.0384 |
| 5 | 3.46 | **Chloride** | BMB^ | 8.750 | 96.320 | 25.5319 |
| 7 | 6.00 | **Bromide** | BMB | 0.008 | 0.064 | 0.0983 |
| 8 | 6.66 | **Sulfate** | BM * | 3.724 | 19.948 | 14.7331 |
| 9 | 7.17 | **Nitrate** | MB* | 1.099 | 6.525 | 1.3133 |
| | | **TOTAL:** | | 13.59 | 122.96 | 41.72 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **XL2512368-10; 10X** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 01:02** | *Run Time:* | **10.00** |

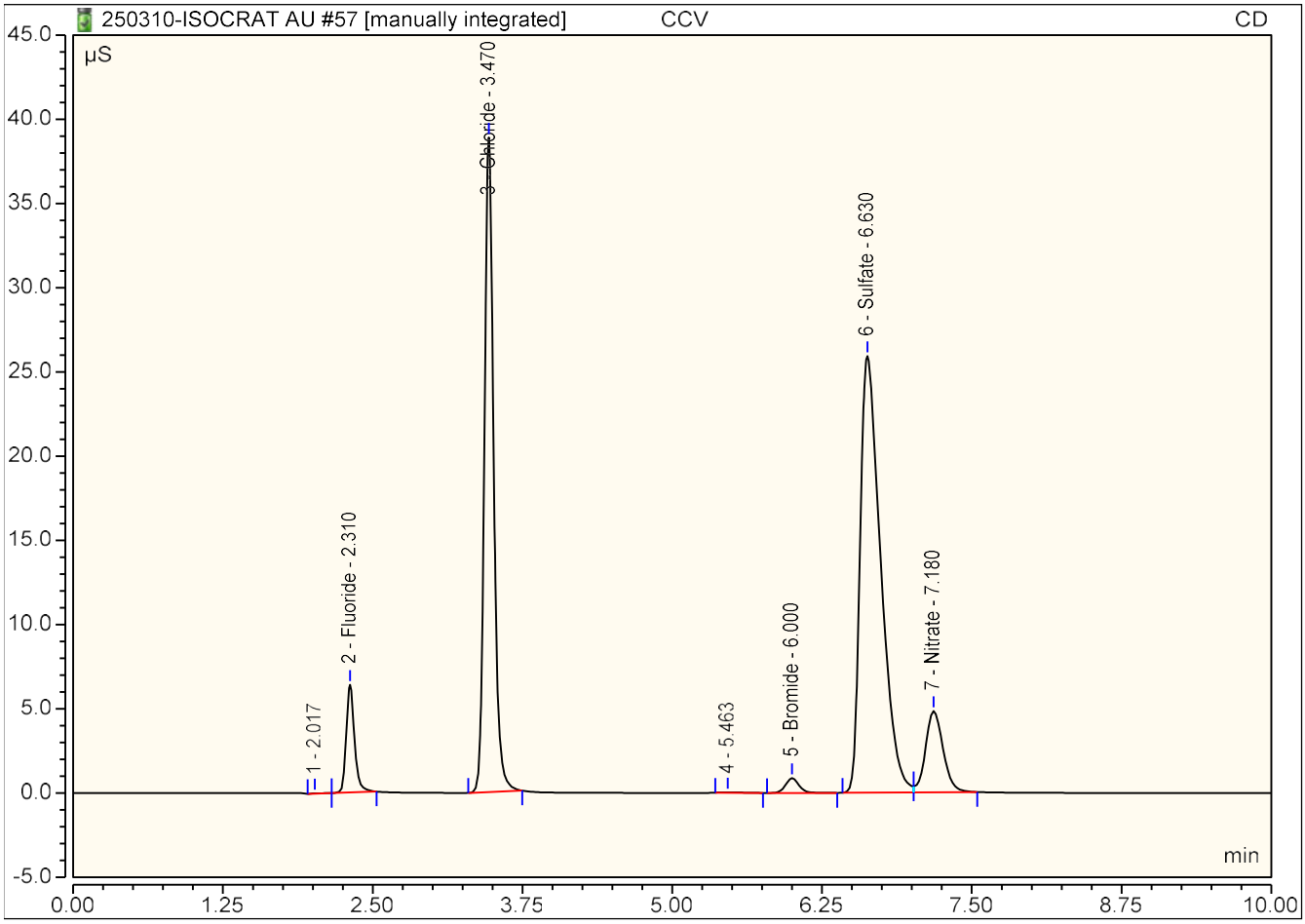
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.17 | **Fluoride** | BMB | 0.000 | 0.001 | 0.2482 |
| 4 | 3.47 | **Chloride** | BMB | 0.877 | 10.105 | 26.3838 |
| 6 | 6.02 | **Bromide** | BMB | 0.001 | 0.006 | 0.4044 |
| 7 | 6.76 | **Sulfate** | BM * | 0.333 | 2.047 | 15.0033 |
| 8 | 7.22 | **Nitrate** | MB* | 0.090 | 0.545 | 1.3520 |
| | | **TOTAL:** | | 1.30 | 12.70 | 43.39 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 01:14** | *Run Time:* | **10.00** |

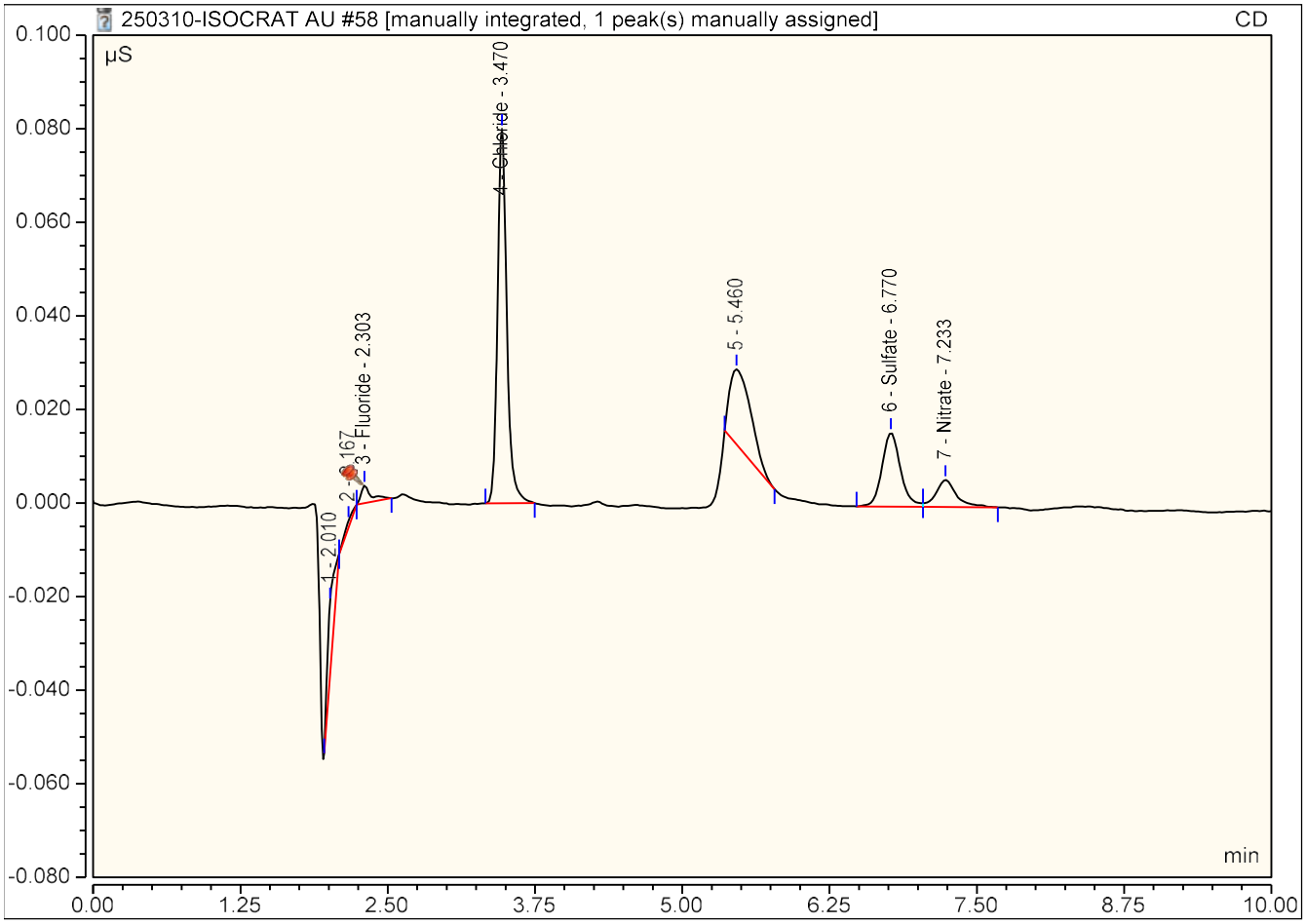
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.504 | 6.387 | 0.9917 |
| 3 | 3.47 | **Chloride** | BMB | 3.461 | 38.855 | 10.1540 |
| 5 | 6.00 | **Bromide** | BMB | 0.114 | 0.881 | 0.9456 |
| 6 | 6.63 | **Sulfate** | BM * | 5.144 | 25.911 | 20.2748 |
| 7 | 7.18 | **Nitrate** | MB* | 0.819 | 4.831 | 0.9864 |
| **TOTAL:** | | | | 10.04 | 76.86 | 33.35 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 01:26** | *Run Time:* | **10.00** |

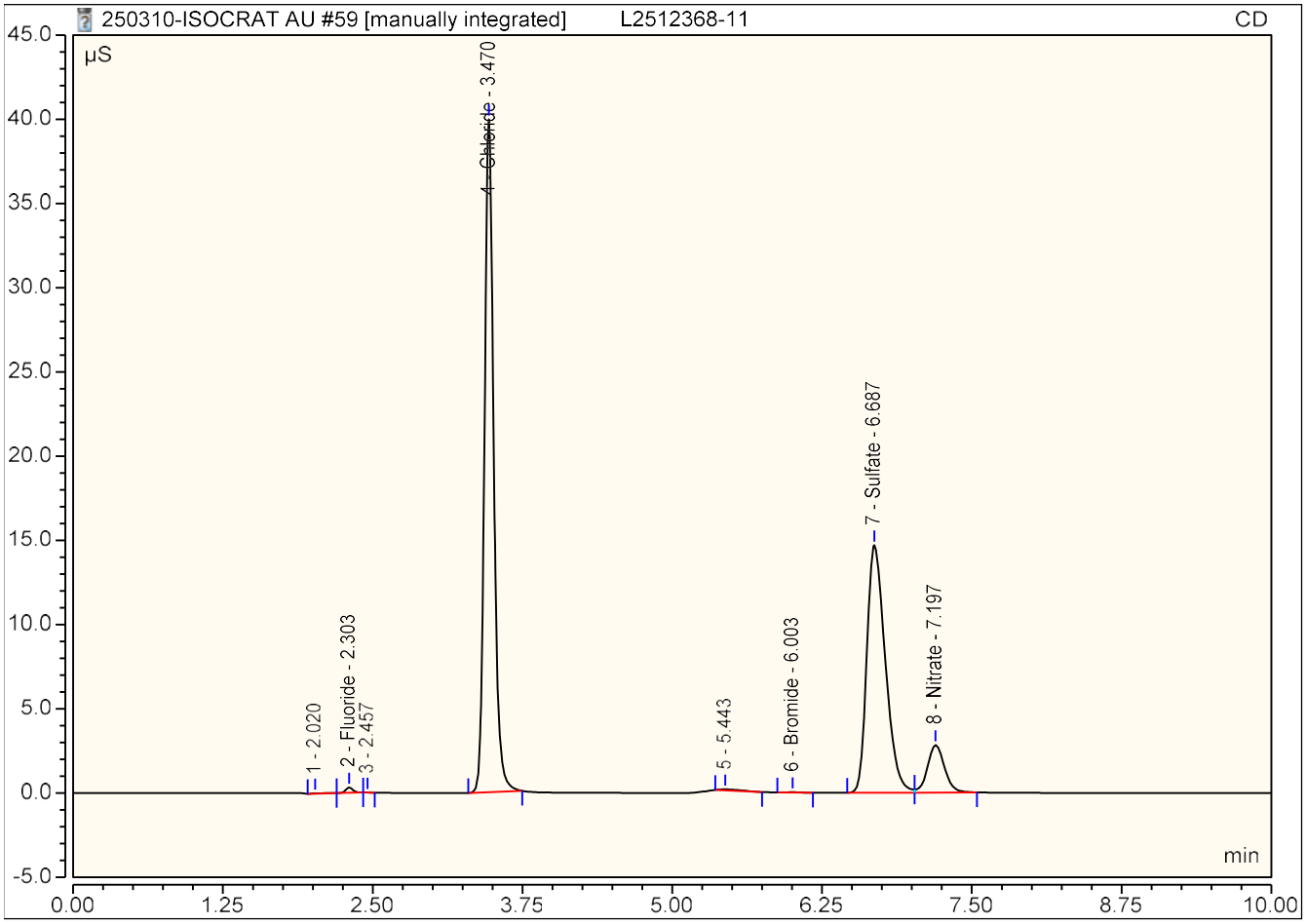
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB^ | 0.000 | 0.004 | 0.0254 |
| 4 | 3.47 | **Chloride** | BMB | 0.007 | 0.080 | 0.1101 |
| 6 | 6.77 | **Sulfate** | BM * | 0.003 | 0.016 | 0.2134 |
| 7 | 7.23 | **Nitrate** | MB* | 0.001 | 0.006 | 0.0311 |
| **TOTAL:** | | | | 0.01 | 0.11 | 0.38 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-11** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 01:38** | *Run Time:* | **10.00** |

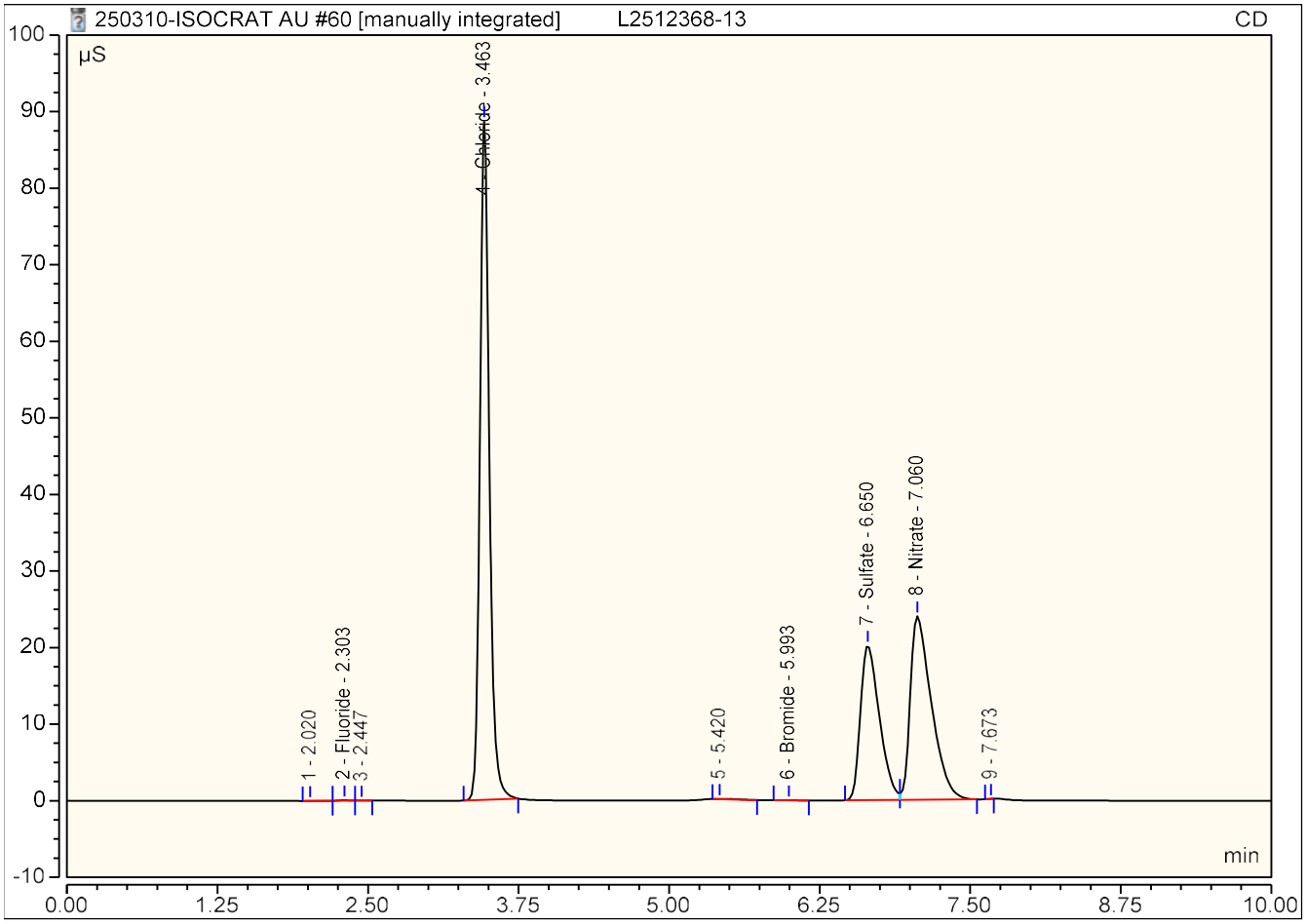
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.022 | 0.315 | 0.0665 |
| 4 | 3.47 | **Chloride** | BMB | 3.551 | 39.946 | 10.4134 |
| 6 | 6.00 | **Bromide** | BMB | 0.003 | 0.024 | 0.0573 |
| 7 | 6.69 | **Sulfate** | BM * | 2.620 | 14.694 | 10.4254 |
| 8 | 7.20 | **Nitrate** | MB* | 0.462 | 2.821 | 0.5693 |
| | | **TOTAL:** | | 6.66 | 57.80 | 21.53 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-13** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 01:50** | *Run Time:* | **10.00** |

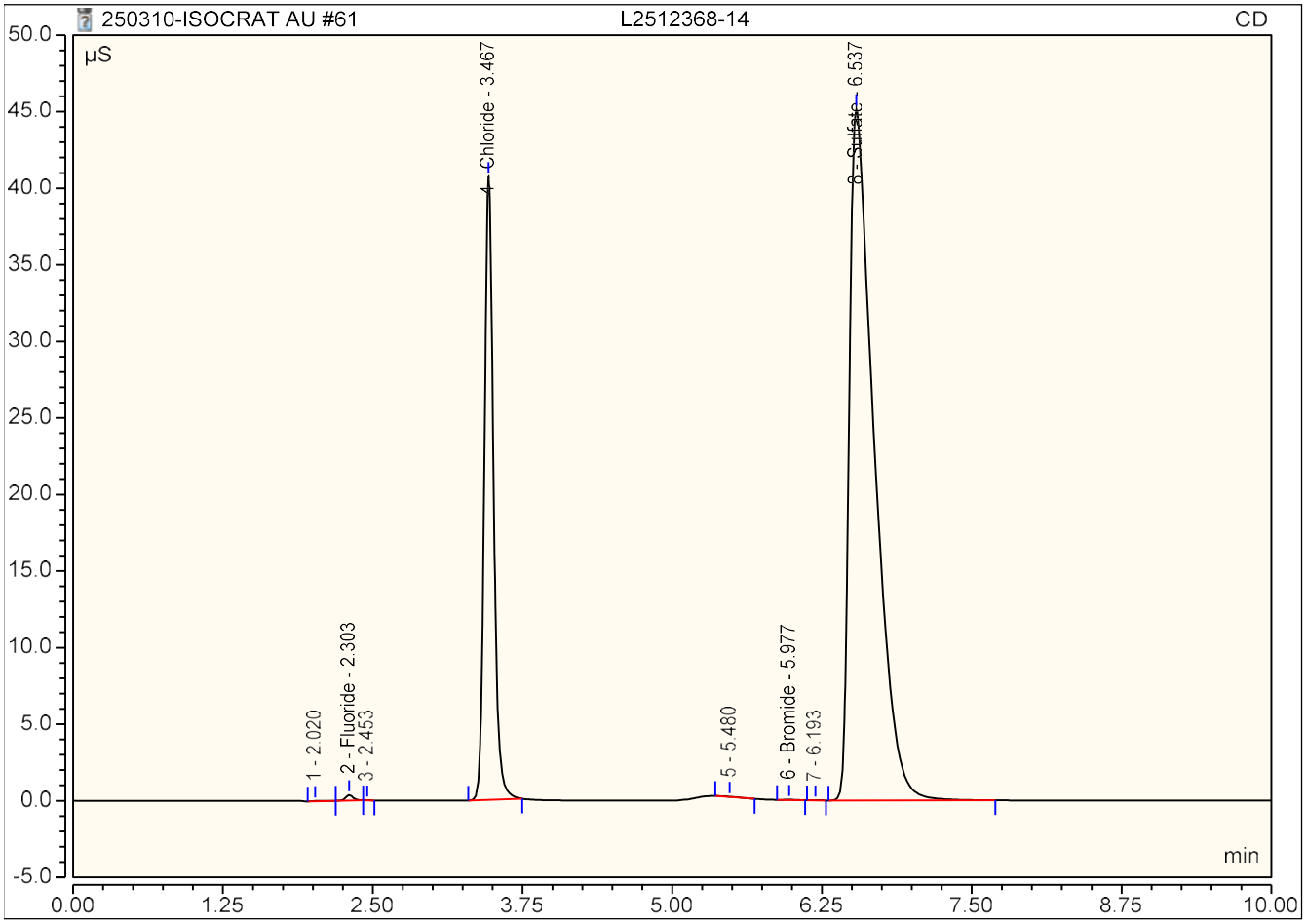
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.004 | 0.057 | 0.0322 |
| 4 | 3.46 | **Chloride** | BMB | 8.023 | 88.676 | 23.4188 |
| 6 | 5.99 | **Bromide** | BMB | 0.004 | 0.037 | 0.0695 |
| 7 | 6.65 | **Sulfate** | BM * | 3.691 | 20.187 | 14.6040 |
| 8 | 7.06 | **Nitrate** | MB* | 4.879 | 23.984 | 5.7294 |
| | | **TOTAL:** | | 16.60 | 132.94 | 43.85 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-14** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 02:03** | *Run Time:* | **10.00** |

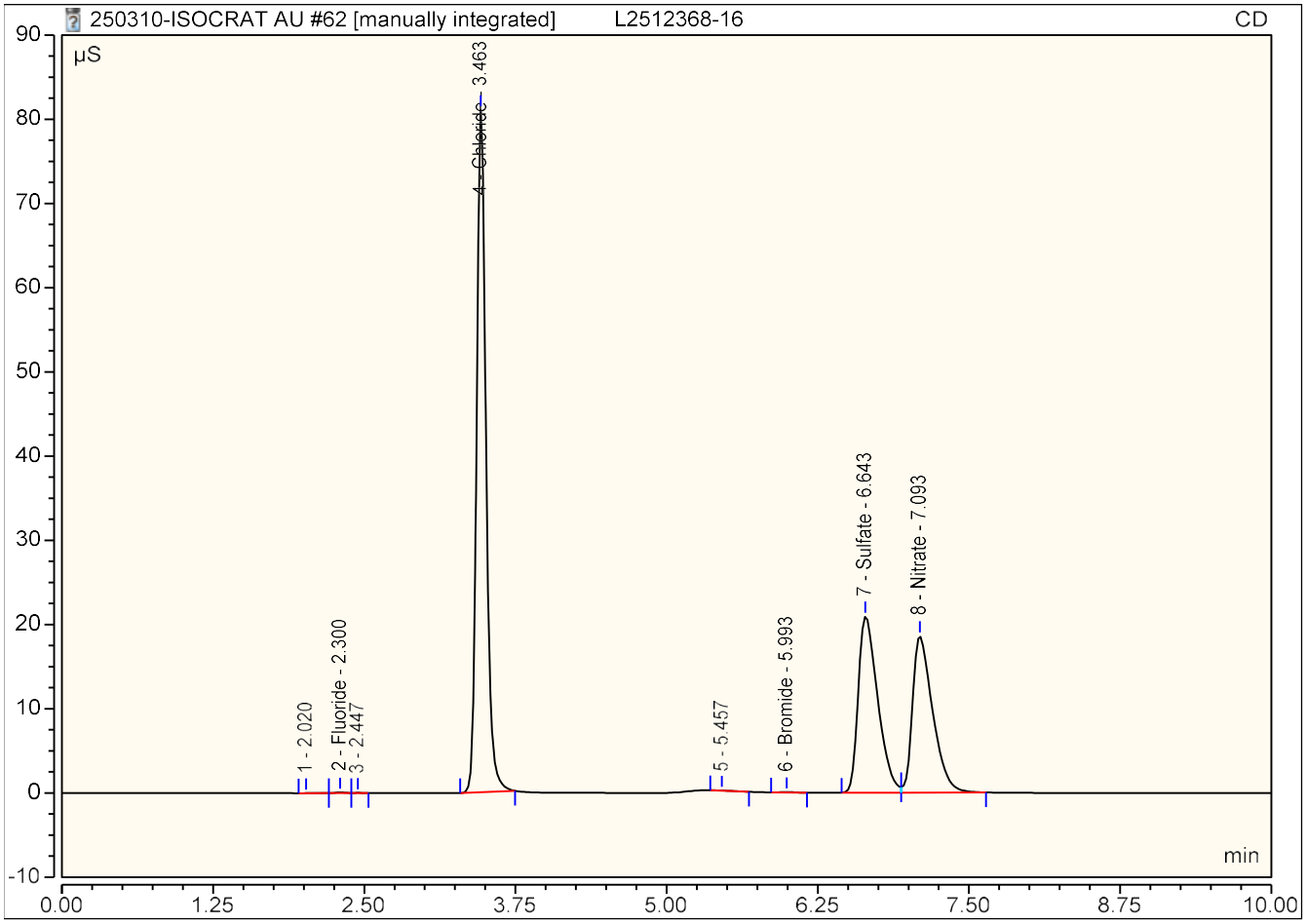
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.025 | 0.361 | 0.0725 |
| 4 | 3.47 | **Chloride** | BMB | 3.608 | 40.682 | 10.5797 |
| 6 | 5.98 | **Bromide** | BMB | 0.002 | 0.021 | 0.0531 |
| 8 | 6.54 | **Sulfate** | BMB | 10.856 | 45.136 | 42.5641 |
| **TOTAL:** | | | | 14.49 | 86.20 | 53.27 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-16** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 02:15** | *Run Time:* | **10.00** |

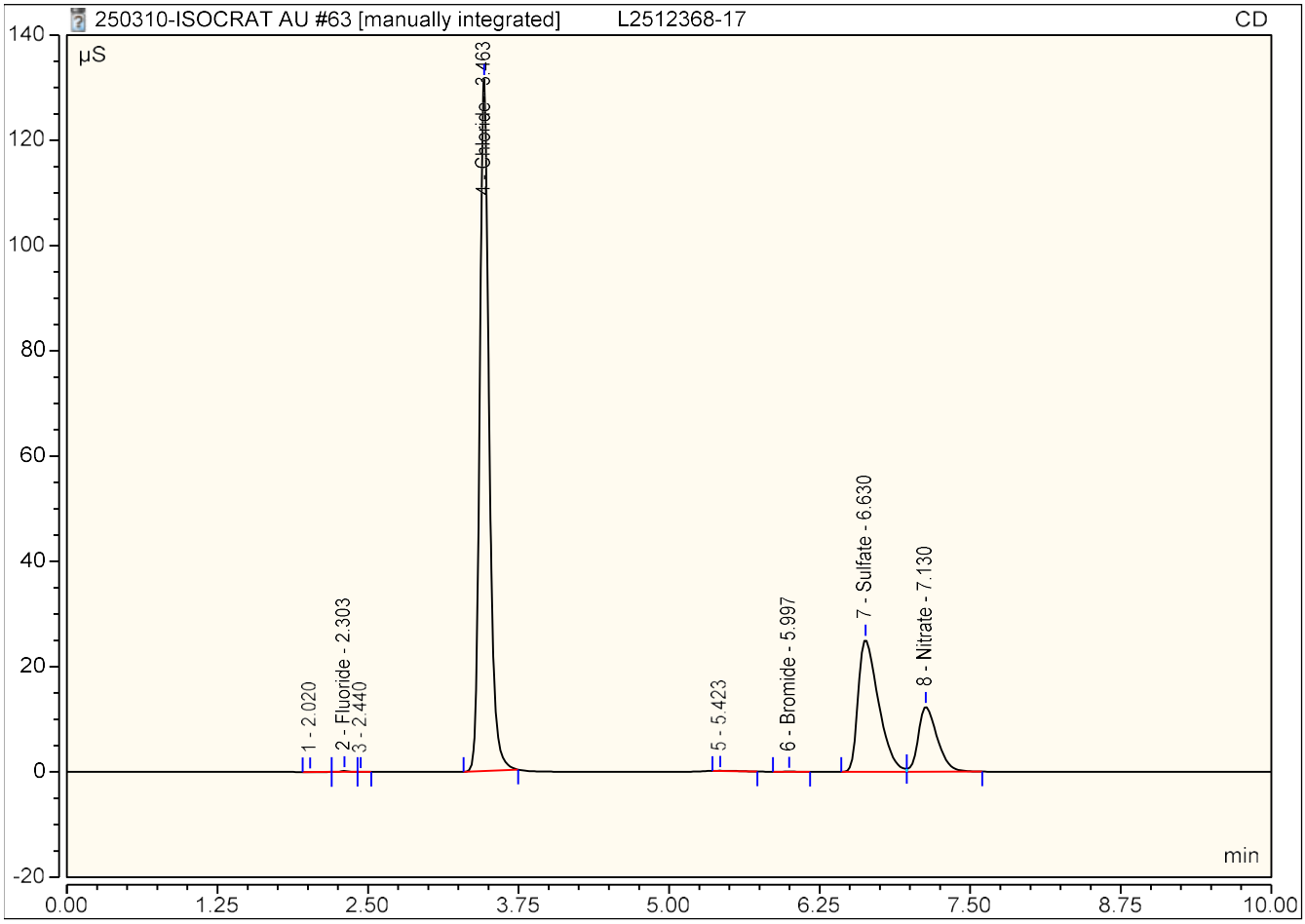
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.005 | 0.073 | 0.0342 |
| 4 | 3.46 | **Chloride** | BMB | 7.290 | 81.008 | 21.2861 |
| 6 | 5.99 | **Bromide** | BMB | 0.007 | 0.055 | 0.0876 |
| 7 | 6.64 | **Sulfate** | BM * | 3.904 | 20.932 | 15.4382 |
| 8 | 7.09 | **Nitrate** | MB* | 3.592 | 18.593 | 4.2260 |
| | | **TOTAL:** | | 14.80 | 120.66 | 41.07 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-17** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 02:27** | *Run Time:* | **10.00** |

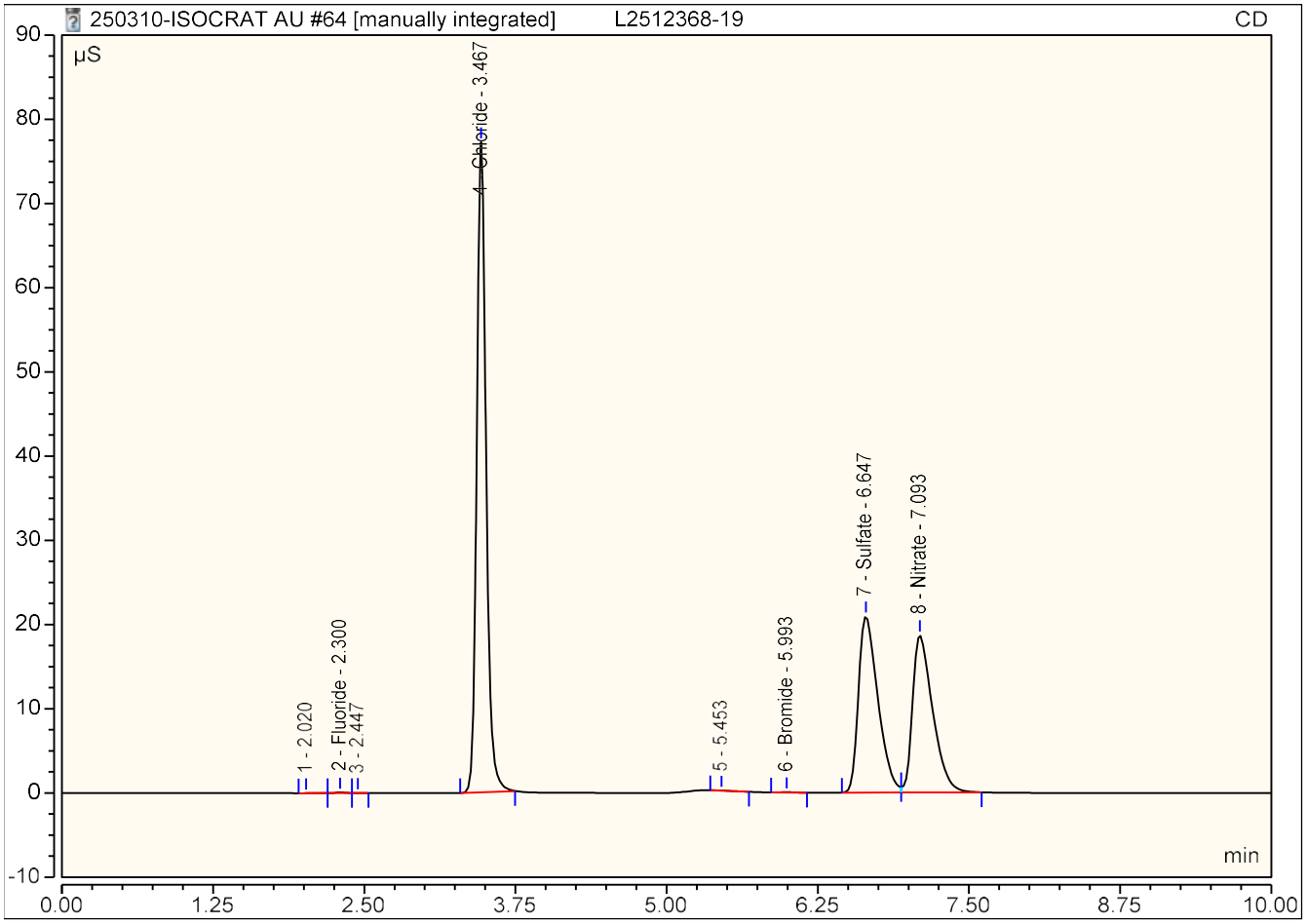
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.012 | 0.180 | 0.0485 |
| 4 | 3.46 | **Chloride** | BMB | 12.006 | 131.516 | 34.9995 |
| 6 | 6.00 | **Bromide** | BMB | 0.005 | 0.041 | 0.0748 |
| 7 | 6.63 | **Sulfate** | BM * | 4.905 | 25.144 | 19.3449 |
| 8 | 7.13 | **Nitrate** | MB* | 2.240 | 12.354 | 2.6463 |
| | | **TOTAL:** | | 19.17 | 169.24 | 57.11 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-19** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 02:39** | *Run Time:* | **10.00** |

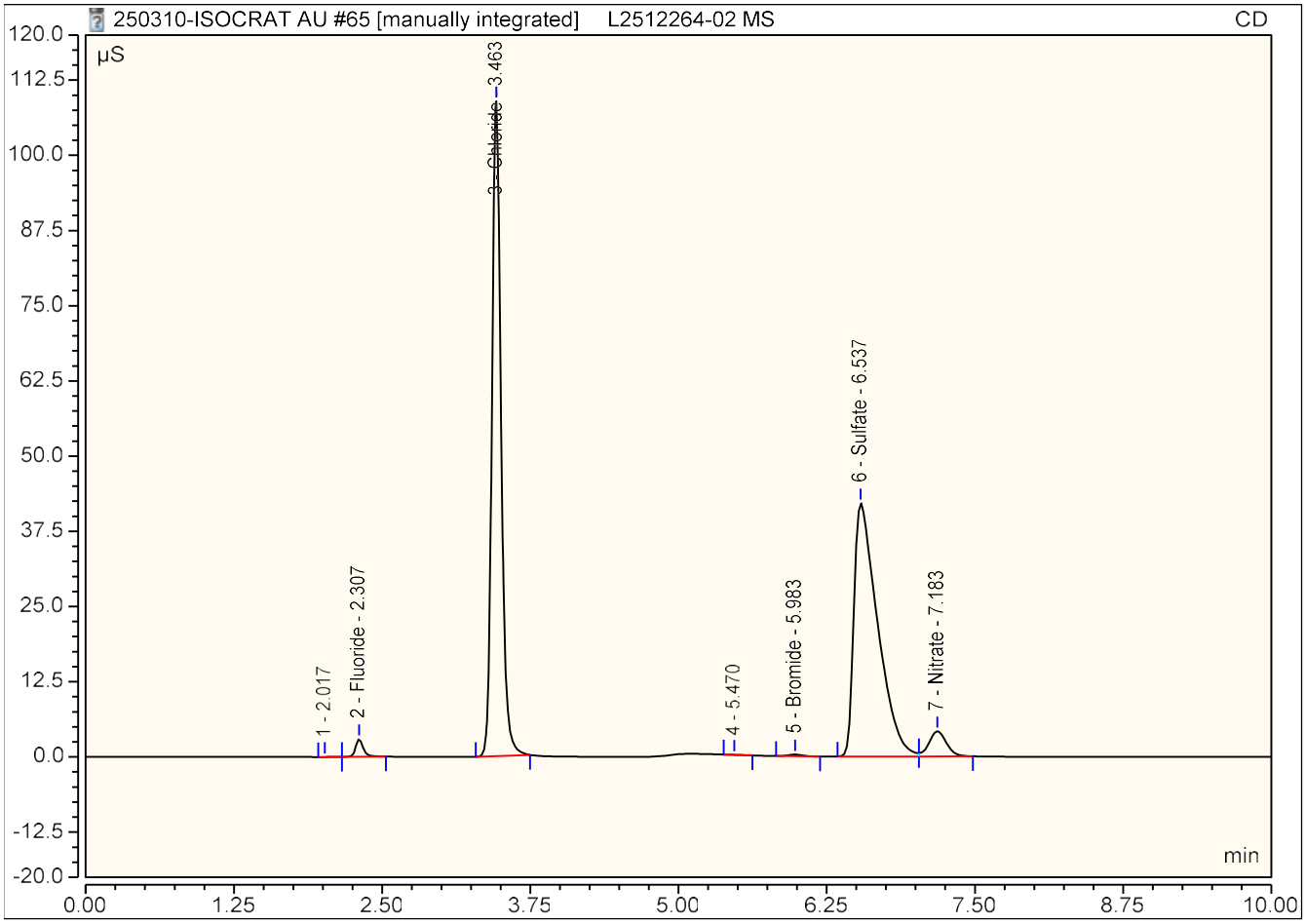
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.005 | 0.074 | 0.0344 |
| 4 | 3.47 | **Chloride** | BMB | 6.927 | 77.196 | 20.2318 |
| 6 | 5.99 | **Bromide** | BMB | 0.006 | 0.051 | 0.0840 |
| 7 | 6.65 | **Sulfate** | BM * | 3.899 | 20.942 | 15.4191 |
| 8 | 7.09 | **Nitrate** | MB* | 3.608 | 18.691 | 4.2450 |
| | | **TOTAL:** | | 14.45 | 116.95 | 40.01 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512264-02 MS** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 02:51** | *Run Time:* | **10.00** |

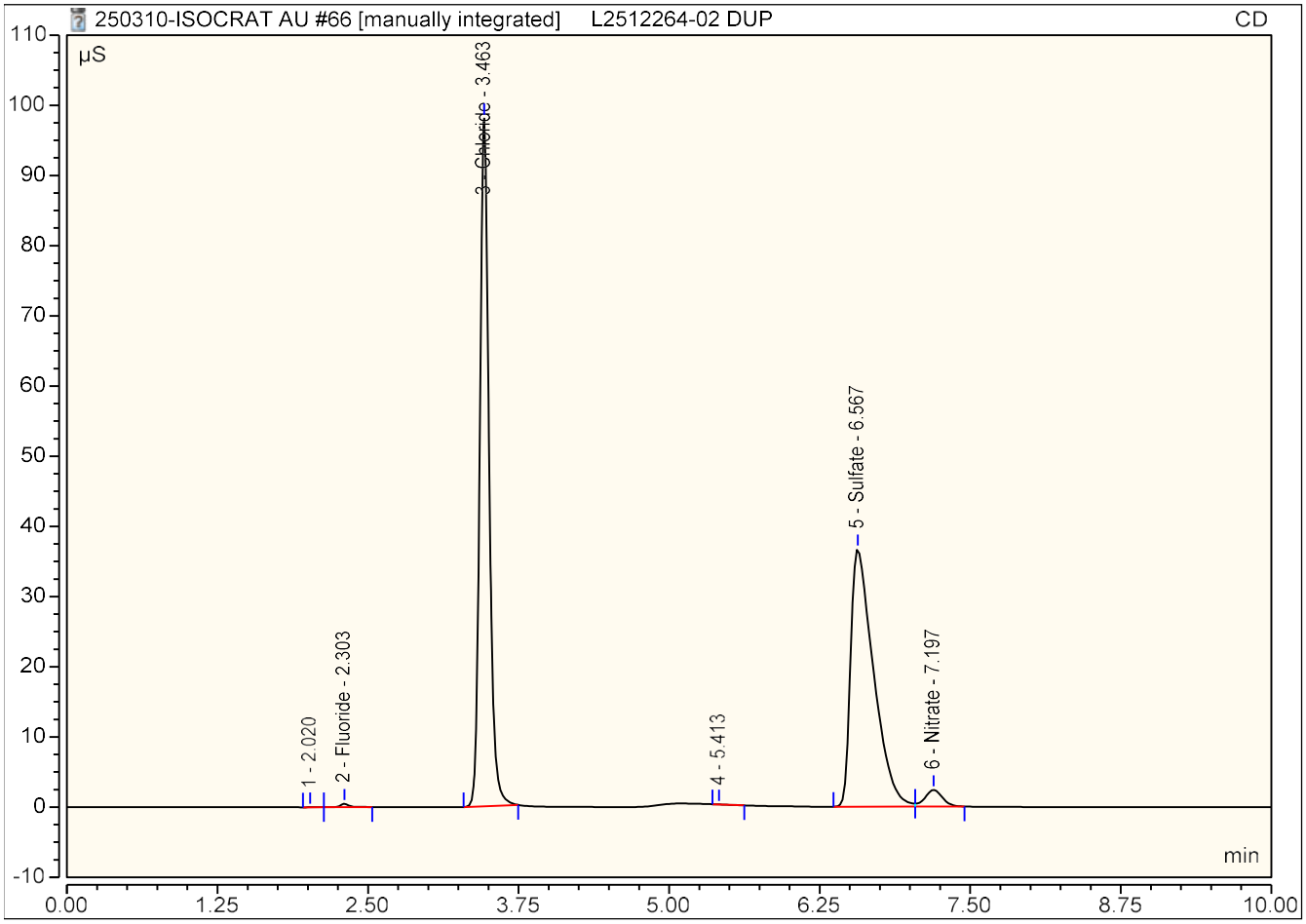
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.223 | 2.968 | 0.4528 |
| 3 | 3.46 | **Chloride** | BMB | 9.726 | 108.847 | 28.3707 |
| 5 | 5.98 | **Bromide** | BMB | 0.037 | 0.290 | 0.3261 |
| 6 | 6.54 | **Sulfate** | BM * | 9.770 | 42.110 | 38.3286 |
| 7 | 7.18 | **Nitrate** | MB* | 0.712 | 4.189 | 0.8612 |
| | | **TOTAL:** | | 20.47 | 158.40 | 68.34 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512264-02 DUP** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 03:03** | *Run Time:* | **10.00** |

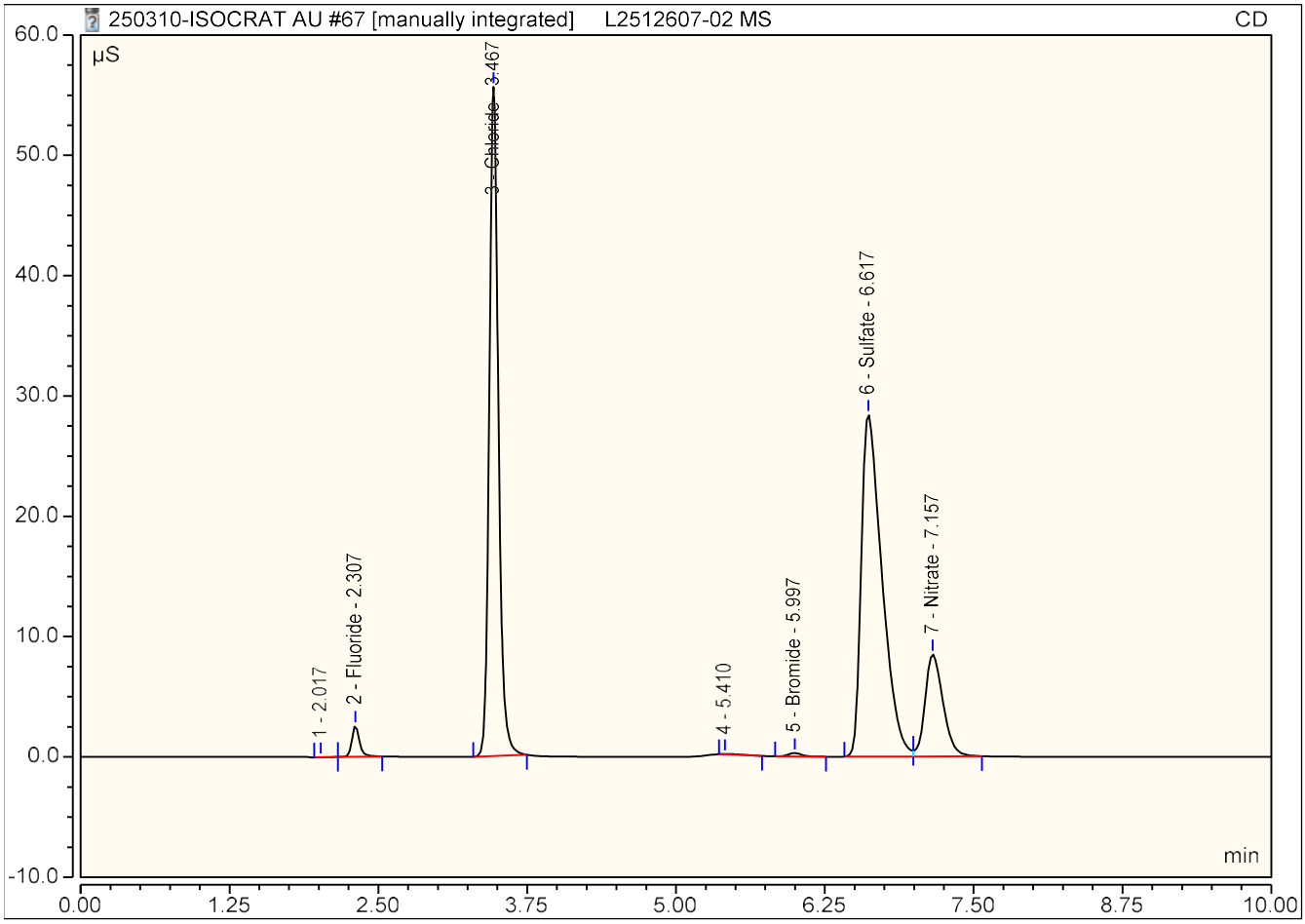
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.038 | 0.491 | 0.0976 |
| 3 | 3.46 | **Chloride** | BMB | 8.735 | 98.016 | 25.4880 |
| 5 | 6.57 | **Sulfate** | BM * | 8.104 | 36.705 | 31.8261 |
| 6 | 7.20 | **Nitrate** | MB* | 0.397 | 2.373 | 0.4937 |
| **TOTAL:** | | | | 17.27 | 137.58 | 57.91 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512607-02 MS** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 03:15** | *Run Time:* | **10.00** |

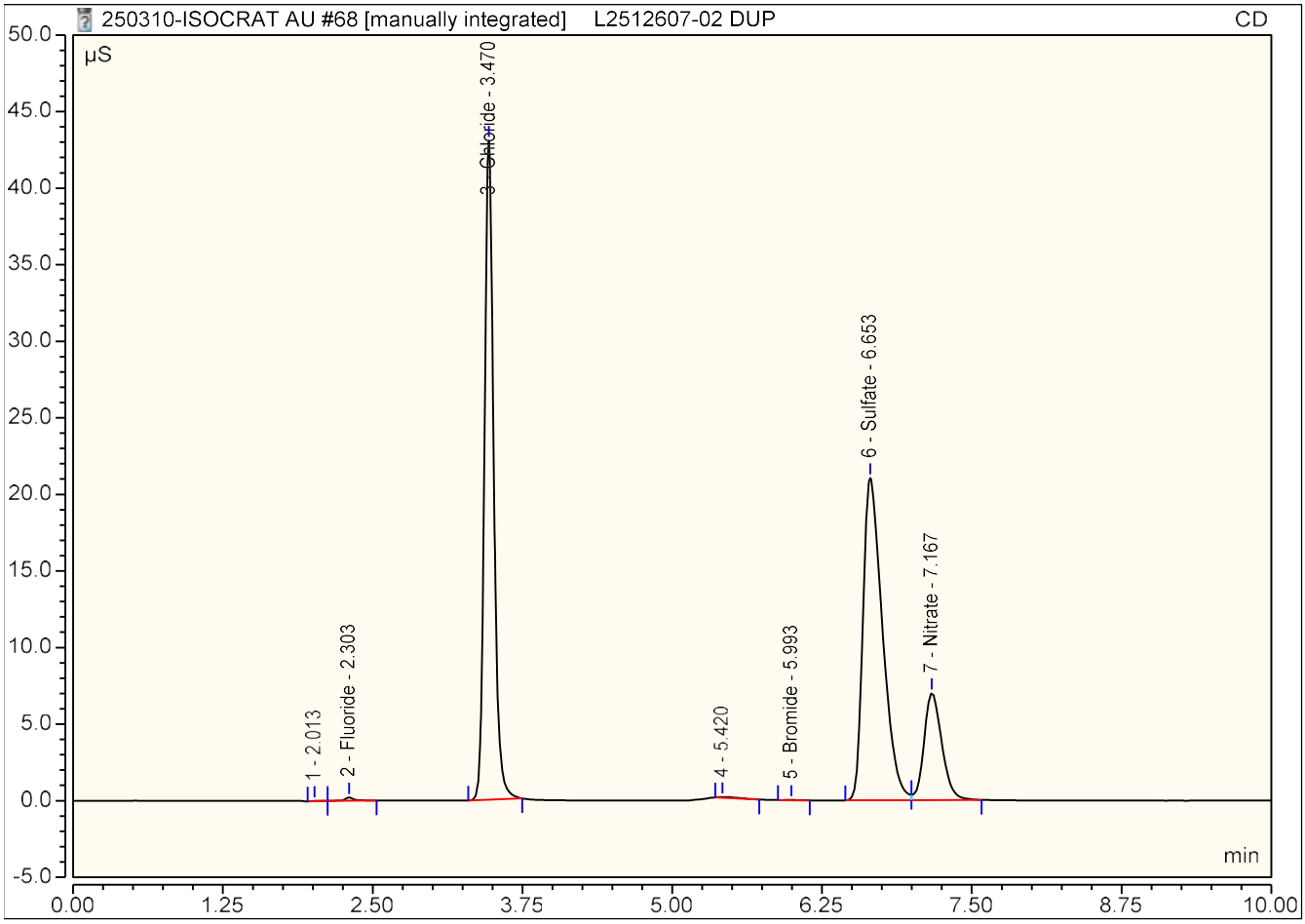
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.192 | 2.576 | 0.3929 |
| 3 | 3.47 | **Chloride** | BMB | 4.978 | 55.621 | 14.5625 |
| 5 | 6.00 | **Bromide** | BMB | 0.037 | 0.289 | 0.3302 |
| 6 | 6.62 | **Sulfate** | BM * | 5.746 | 28.418 | 22.6242 |
| 7 | 7.16 | **Nitrate** | MB* | 1.482 | 8.478 | 1.7606 |
| | | **TOTAL:** | | 12.43 | 95.38 | 39.67 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512607-02 DUP** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 03:27** | *Run Time:* | **10.00** |

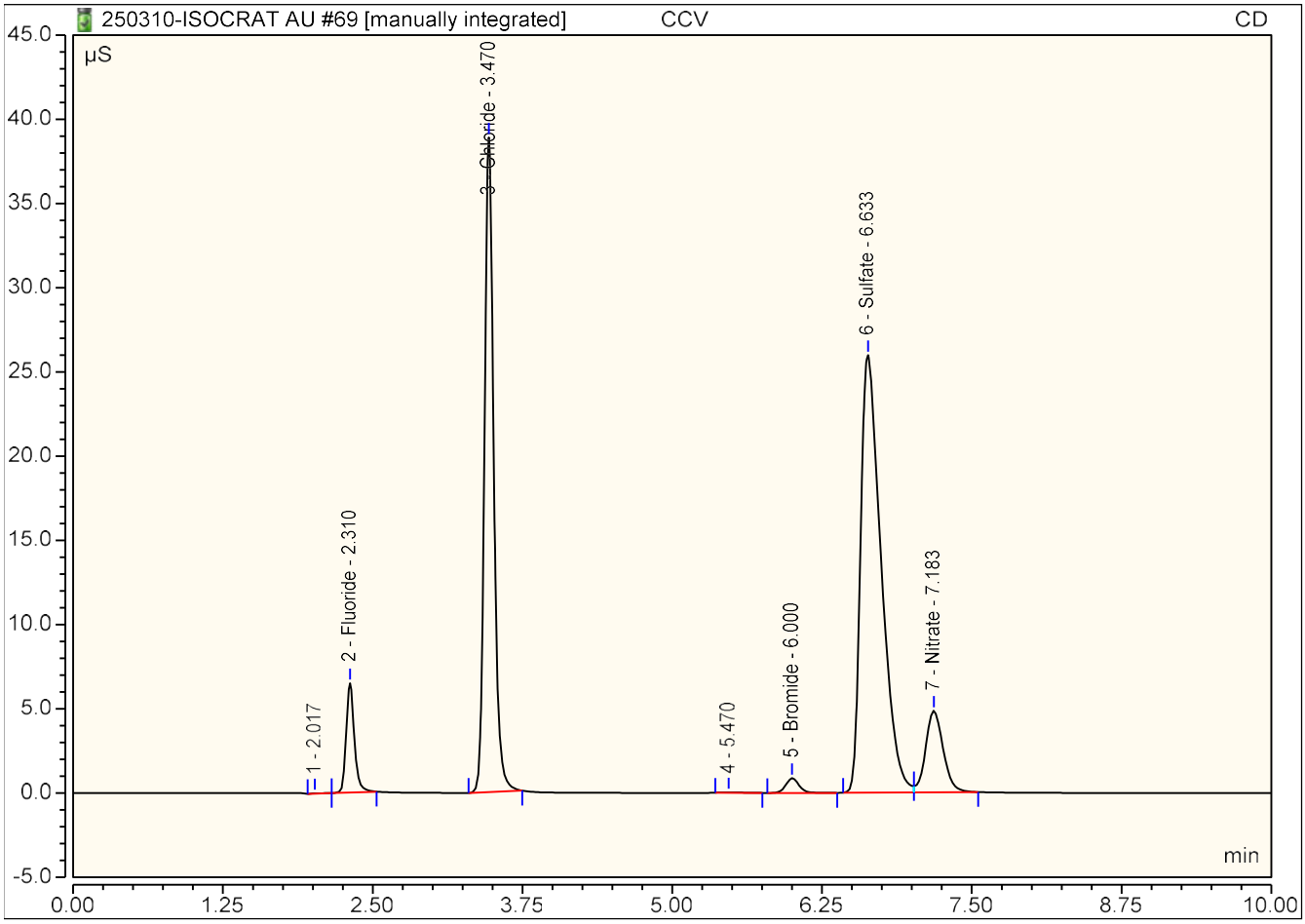
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.30 | **Fluoride** | BMB | 0.017 | 0.207 | 0.0581 |
| 3 | 3.47 | **Chloride** | BMB | 3.836 | 43.046 | 11.2425 |
| 5 | 5.99 | **Bromide** | BMB | 0.002 | 0.015 | 0.0482 |
| 6 | 6.65 | **Sulfate** | BM * | 3.969 | 21.048 | 15.6899 |
| 7 | 7.17 | **Nitrate** | MB* | 1.201 | 6.989 | 1.4325 |
| **TOTAL:** | | | | 9.02 | 71.30 | 28.47 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 03:39** | *Run Time:* | **10.00** |

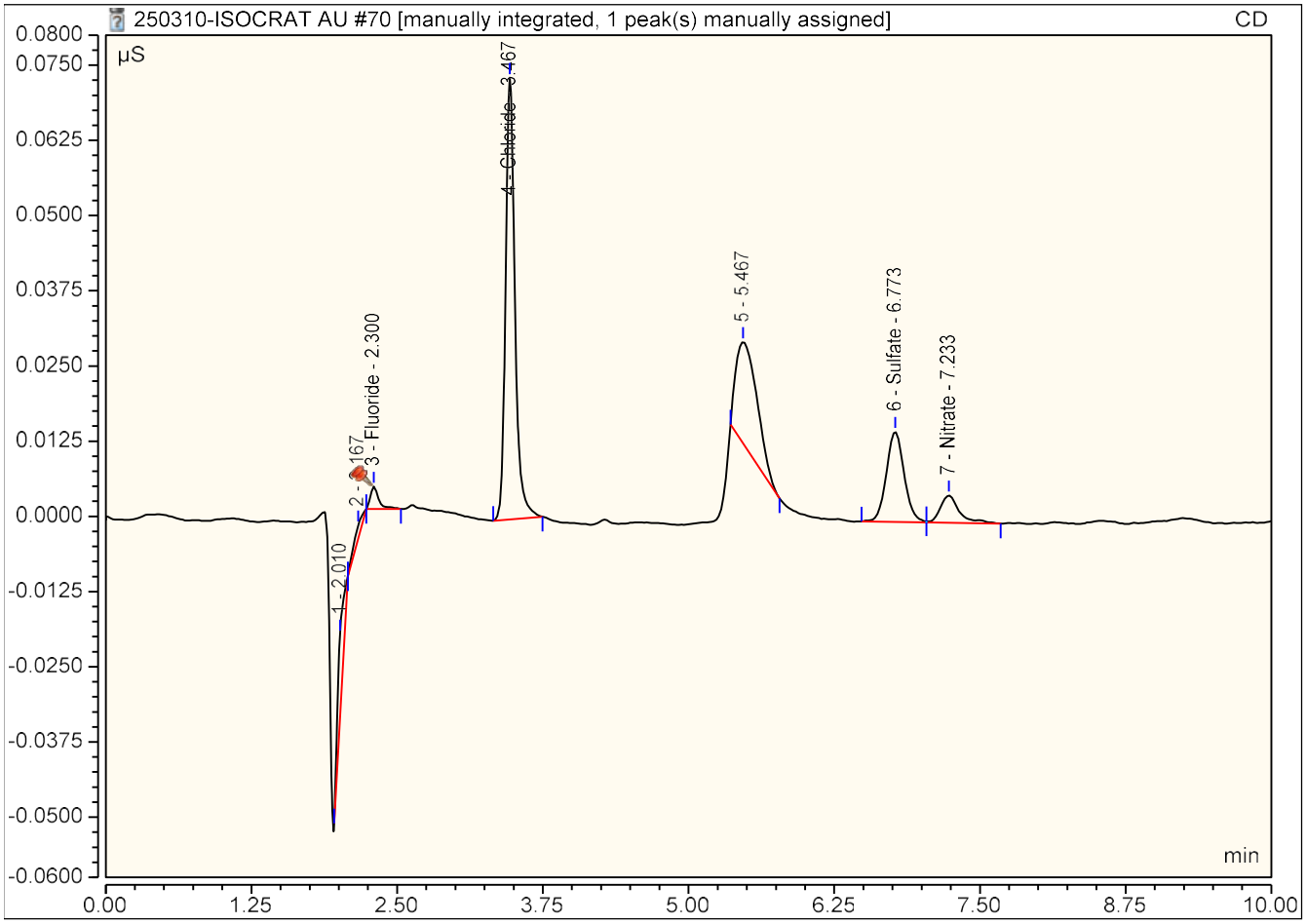
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.507 | 6.488 | 0.9985 |
| 3 | 3.47 | **Chloride** | BMB | 3.462 | 38.855 | 10.1565 |
| 5 | 6.00 | **Bromide** | BMB | 0.113 | 0.874 | 0.9401 |
| 6 | 6.63 | **Sulfate** | BM * | 5.144 | 25.965 | 20.2755 |
| 7 | 7.18 | **Nitrate** | MB* | 0.820 | 4.837 | 0.9874 |
| | | **TOTAL:** | | 10.05 | 77.02 | 33.36 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 03:51** | *Run Time:* | **10.00** |

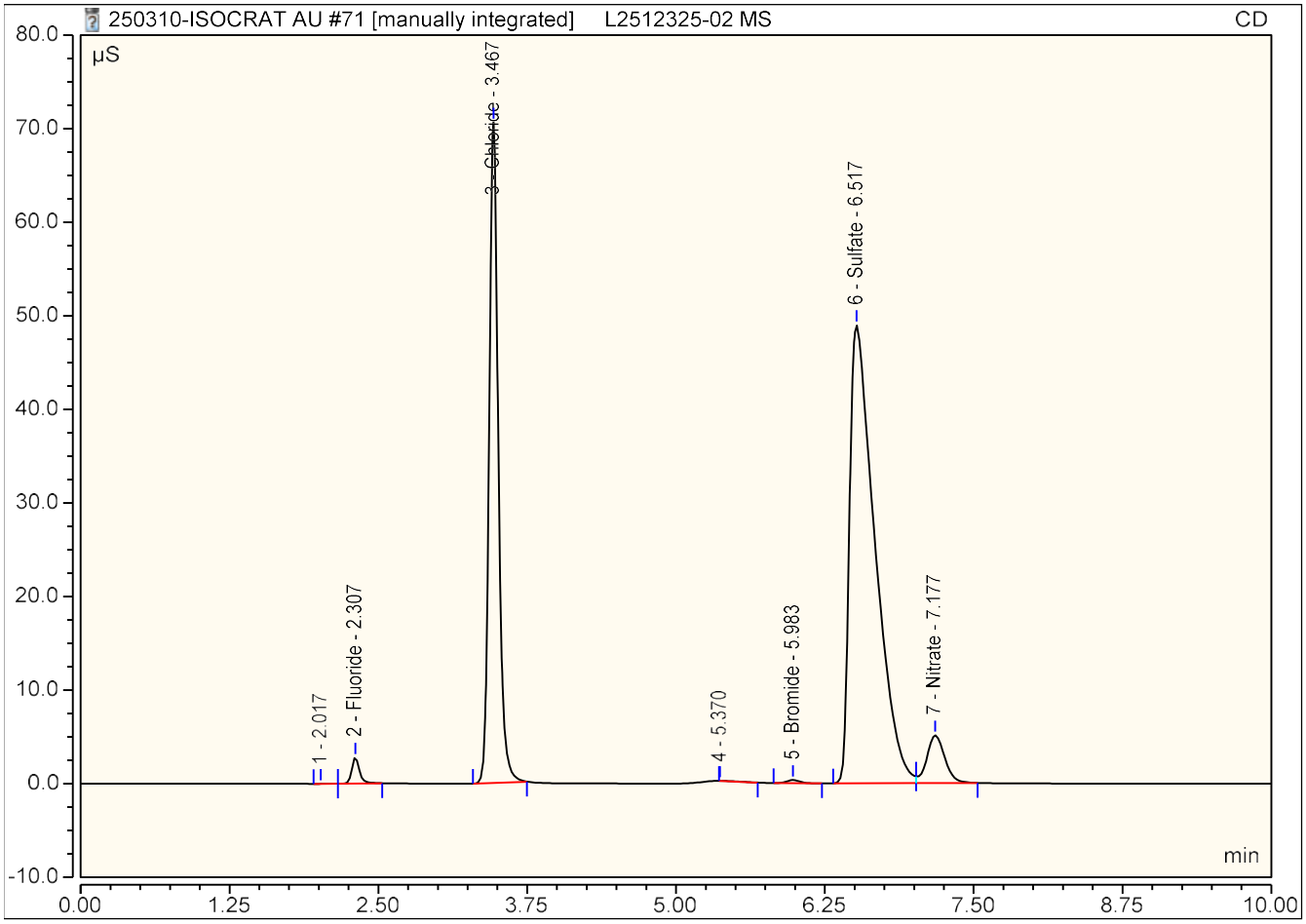
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB^ | 0.000 | 0.004 | 0.0252 |
| 4 | 3.47 | **Chloride** | BMB | 0.007 | 0.073 | 0.1086 |
| 6 | 6.77 | **Sulfate** | BM * | 0.003 | 0.015 | 0.2126 |
| 7 | 7.23 | **Nitrate** | MB* | 0.001 | 0.005 | 0.0308 |
| **TOTAL:** | | | | 0.01 | 0.10 | 0.38 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-02 MS** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 04:03** | *Run Time:* | **10.00** |

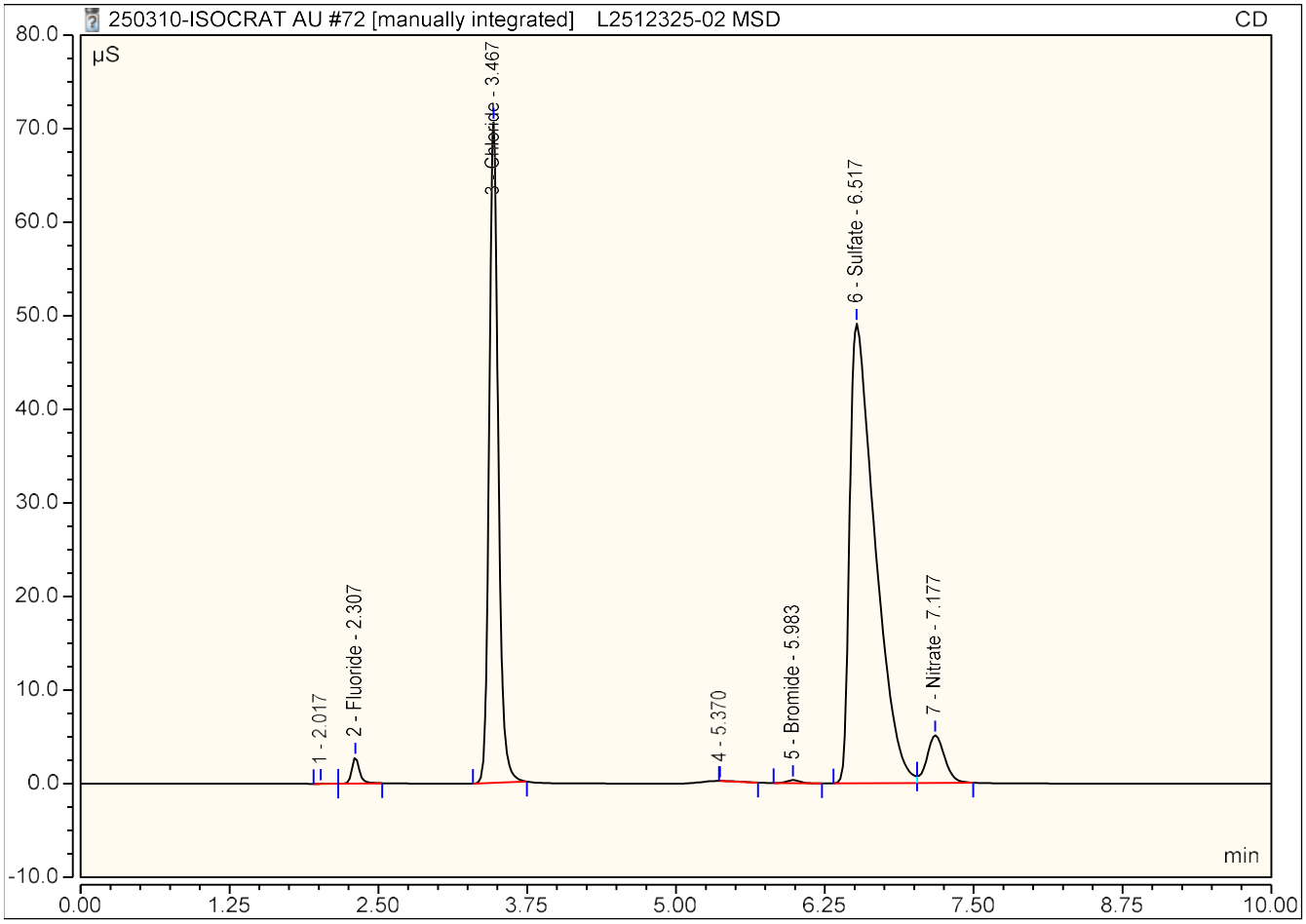
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.208 | 2.772 | 0.4243 |
| 3 | 3.47 | **Chloride** | BMB | 6.327 | 70.568 | 18.4867 |
| 5 | 5.98 | **Bromide** | BMB | 0.042 | 0.336 | 0.3728 |
| 6 | 6.52 | **Sulfate** | BM * | 12.078 | 48.975 | 47.3356 |
| 7 | 7.18 | **Nitrate** | MB* | 0.890 | 5.101 | 1.0695 |
| | | **TOTAL:** | | 19.55 | 127.75 | 67.69 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512325-02 MSD** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 04:15** | *Run Time:* | **10.00** |

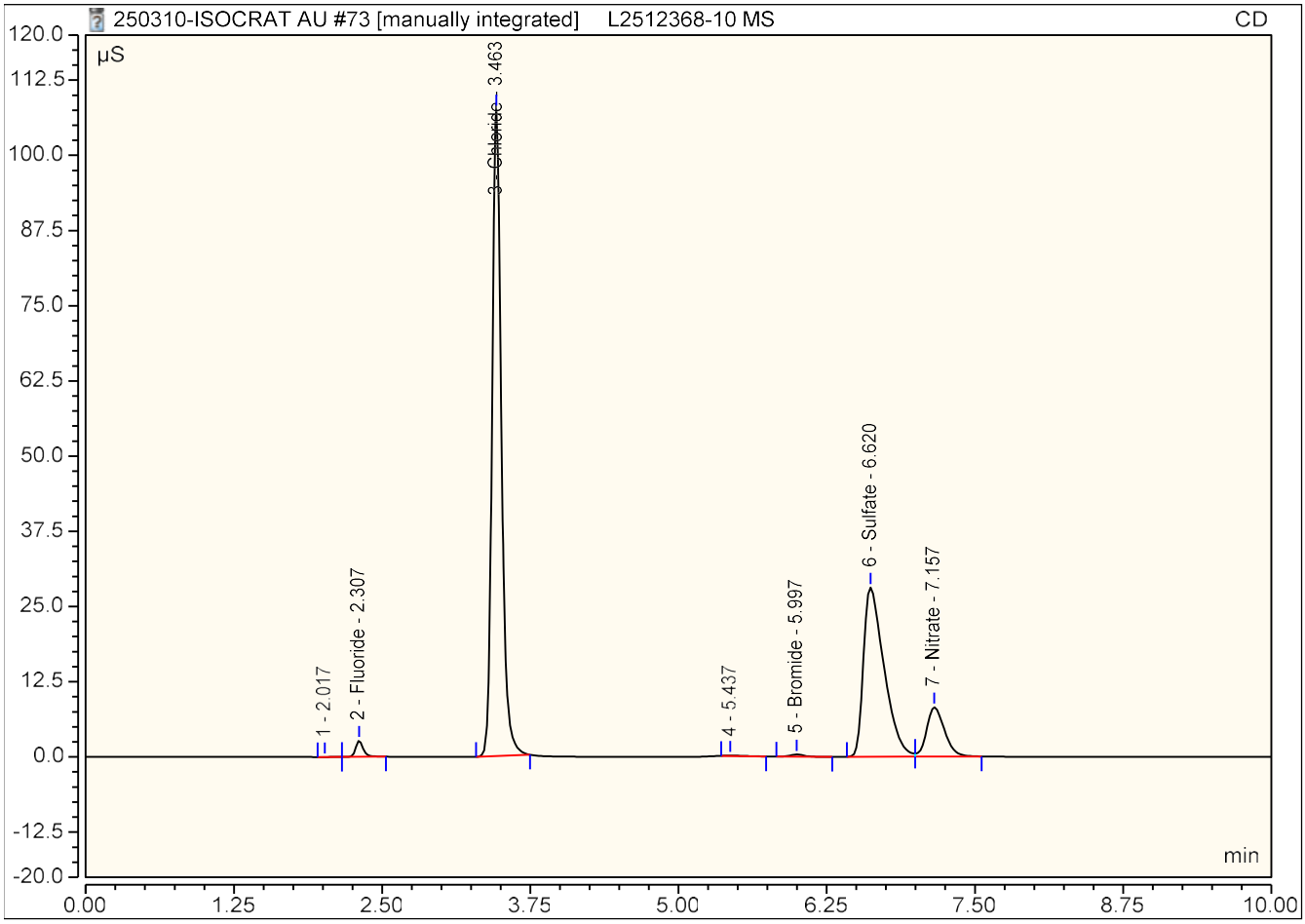
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.209 | 2.791 | 0.4252 |
| 3 | 3.47 | **Chloride** | BMB | 6.326 | 70.582 | 18.4842 |
| 5 | 5.98 | **Bromide** | BMB | 0.042 | 0.335 | 0.3723 |
| 6 | 6.52 | **Sulfate** | BM * | 12.081 | 49.115 | 47.3467 |
| 7 | 7.18 | **Nitrate** | MB* | 0.880 | 5.093 | 1.0576 |
| | | **TOTAL:** | | 19.54 | 127.92 | 67.69 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-10 MS** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 04:28** | *Run Time:* | **10.00** |

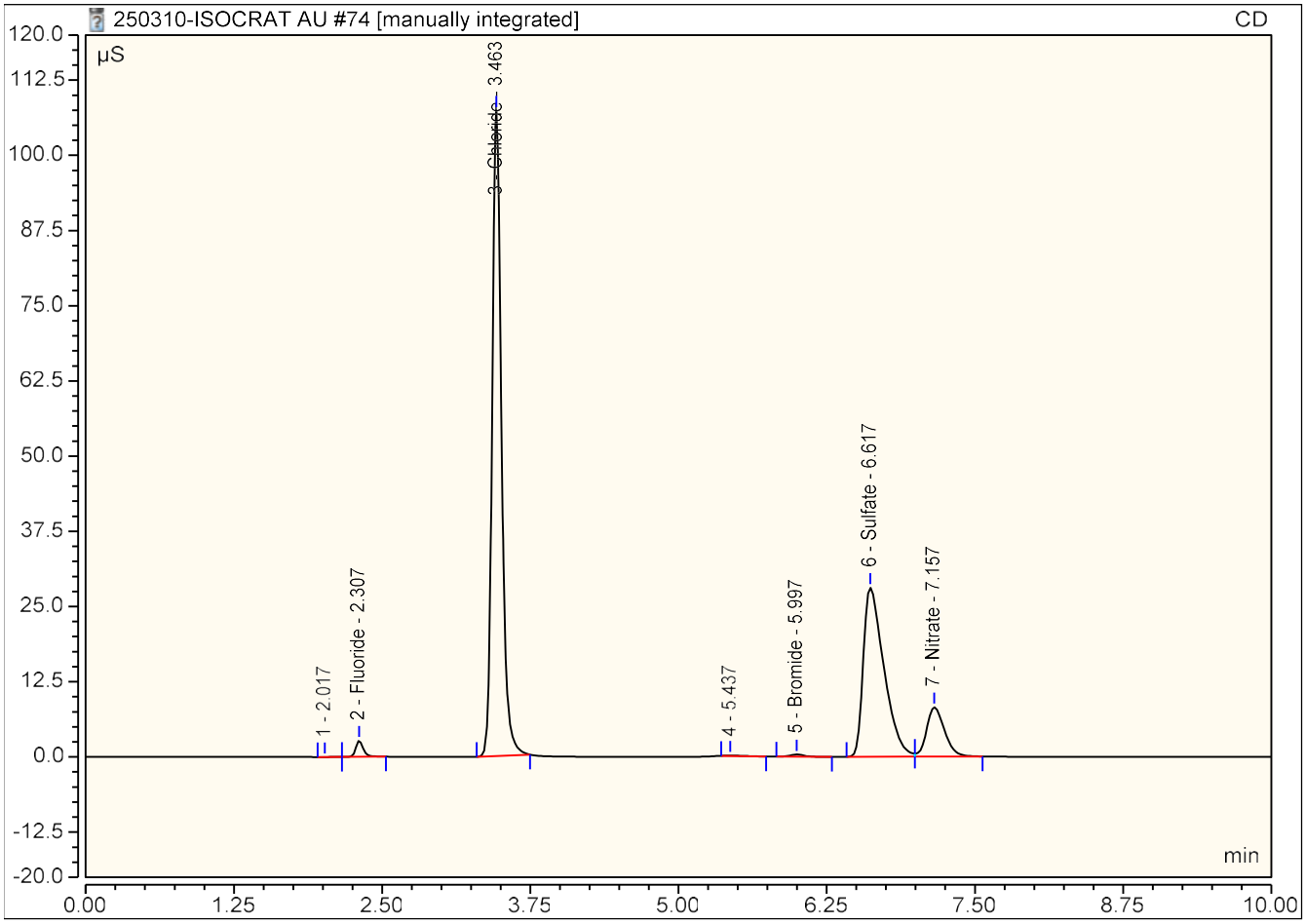
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.201 | 2.698 | 0.4110 |
| 3 | 3.46 | **Chloride** | BMB | 9.772 | 107.495 | 28.5048 |
| 5 | 6.00 | **Bromide** | BMB | 0.049 | 0.378 | 0.4216 |
| 6 | 6.62 | **Sulfate** | BM * | 5.671 | 28.112 | 22.3341 |
| 7 | 7.16 | **Nitrate** | MB* | 1.433 | 8.208 | 1.7034 |
| | | **TOTAL:** | | 17.13 | 146.89 | 53.37 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512368-10 MSD** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 04:40** | *Run Time:* | **10.00** |

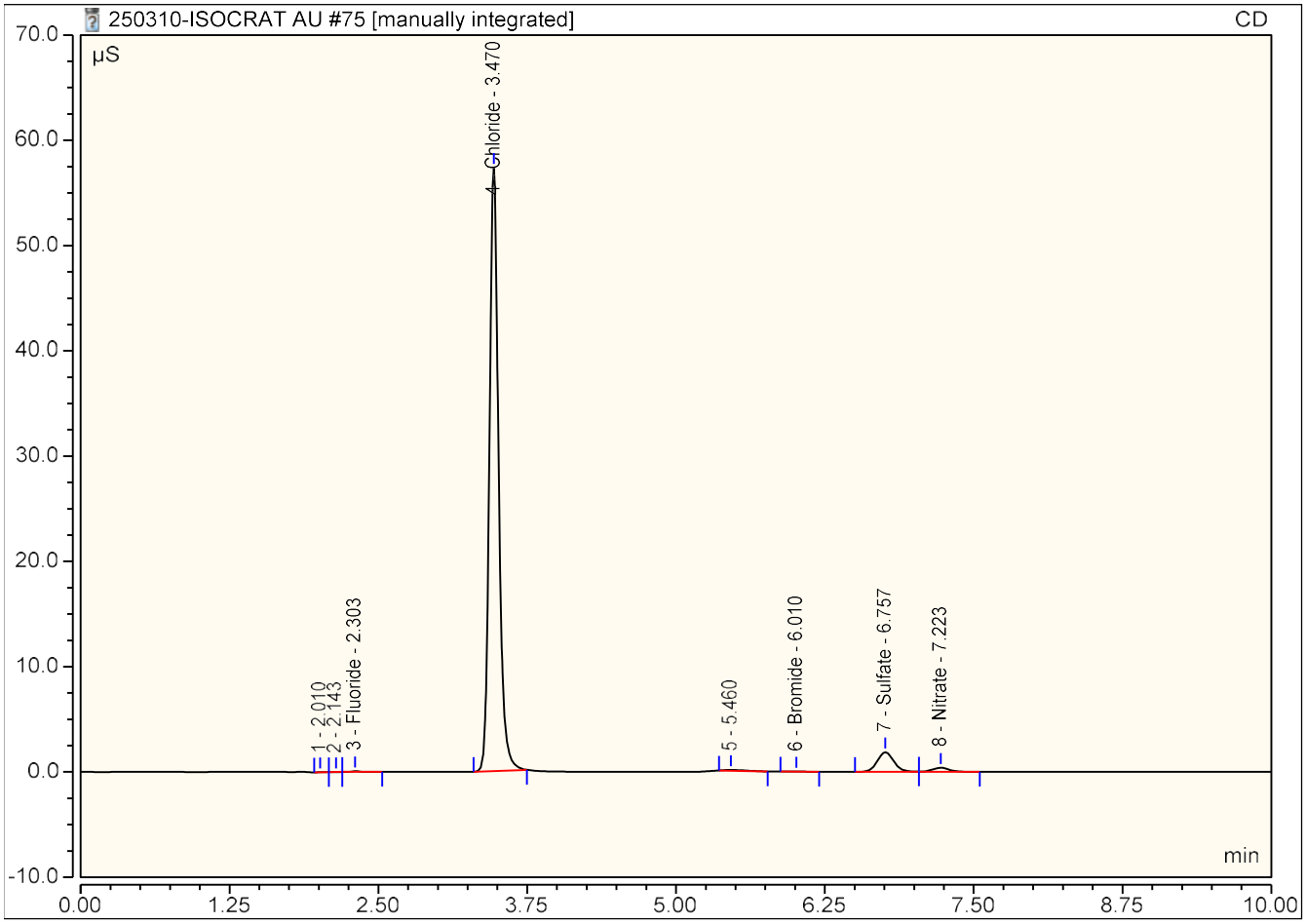
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.201 | 2.694 | 0.4101 |
| 3 | 3.46 | **Chloride** | BMB | 9.775 | 107.264 | 28.5126 |
| 5 | 6.00 | **Bromide** | BMB | 0.048 | 0.378 | 0.4212 |
| 6 | 6.62 | **Sulfate** | BM * | 5.669 | 28.093 | 22.3226 |
| 7 | 7.16 | **Nitrate** | MB* | 1.436 | 8.211 | 1.7075 |
| **TOTAL:** | | | | 17.13 | 146.64 | 53.37 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511911-07; 10X CL** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 04:52** | *Run Time:* | **10.00** |

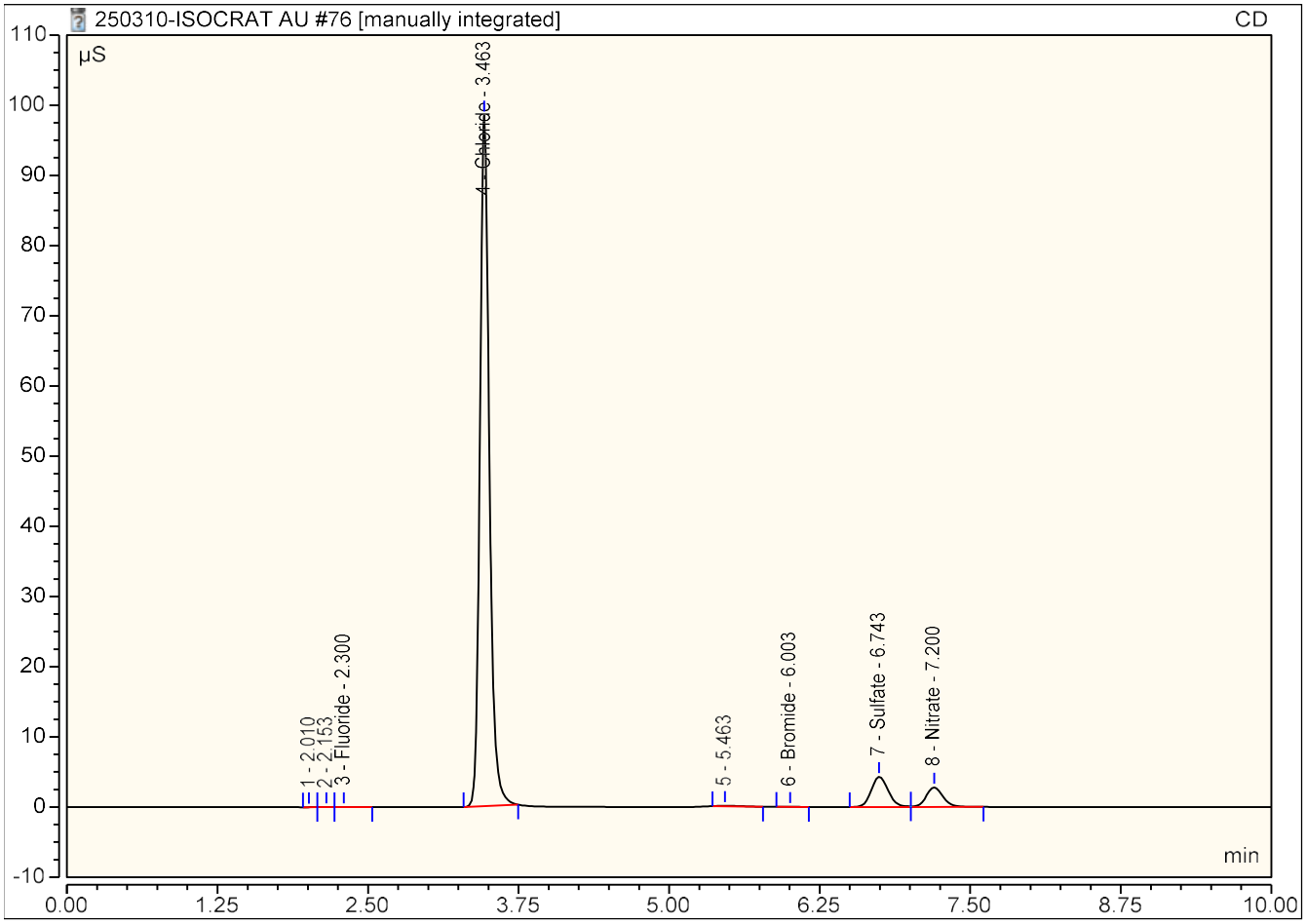
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB | 0.006 | 0.071 | 0.3632 |
| 4 | 3.47 | **Chloride** | BMB | 5.155 | 57.315 | 150.7808 |
| 6 | 6.01 | **Bromide** | BMB | 0.003 | 0.028 | 0.6213 |
| 7 | 6.76 | **Sulfate** | BM * | 0.303 | 1.871 | 13.8426 |
| 8 | 7.22 | **Nitrate** | MB* | 0.066 | 0.396 | 1.0708 |
| **TOTAL:** | | | | 5.53 | 59.68 | 166.68 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2511911-08; 10X CL** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 05:04** | *Run Time:* | **10.00** |

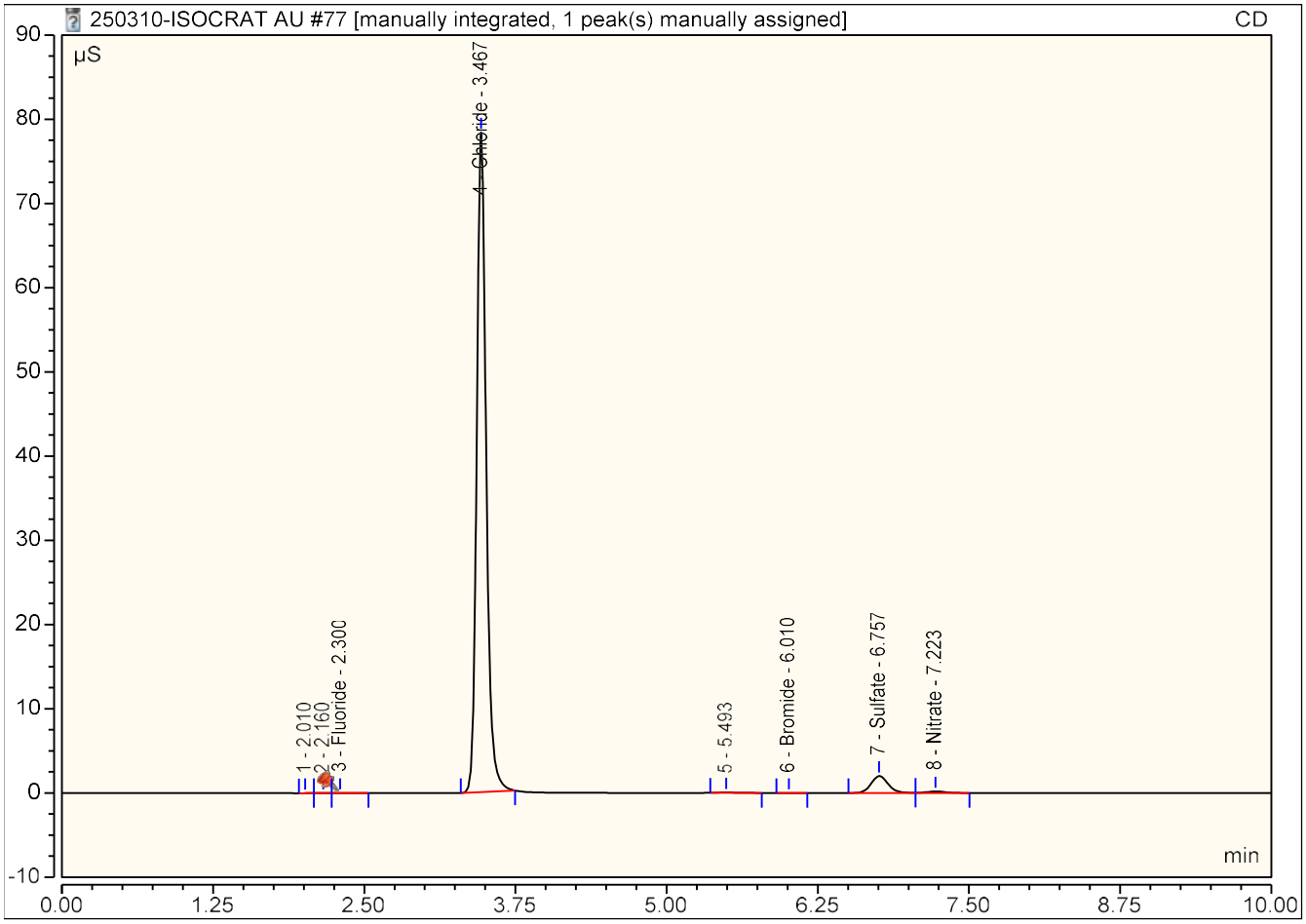
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB | 0.002 | 0.017 | 0.2756 |
| 4 | 3.46 | **Chloride** | BMB | 8.960 | 98.430 | 261.4338 |
| 6 | 6.00 | **Bromide** | BMB | 0.001 | 0.011 | 0.4525 |
| 7 | 6.74 | **Sulfate** | BM * | 0.704 | 4.291 | 29.4956 |
| 8 | 7.20 | **Nitrate** | MB* | 0.453 | 2.792 | 5.5874 |
| | | **TOTAL:** | | 10.12 | 105.54 | 297.24 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512264-05; 10X CL** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 05:16** | *Run Time:* | **10.00** |

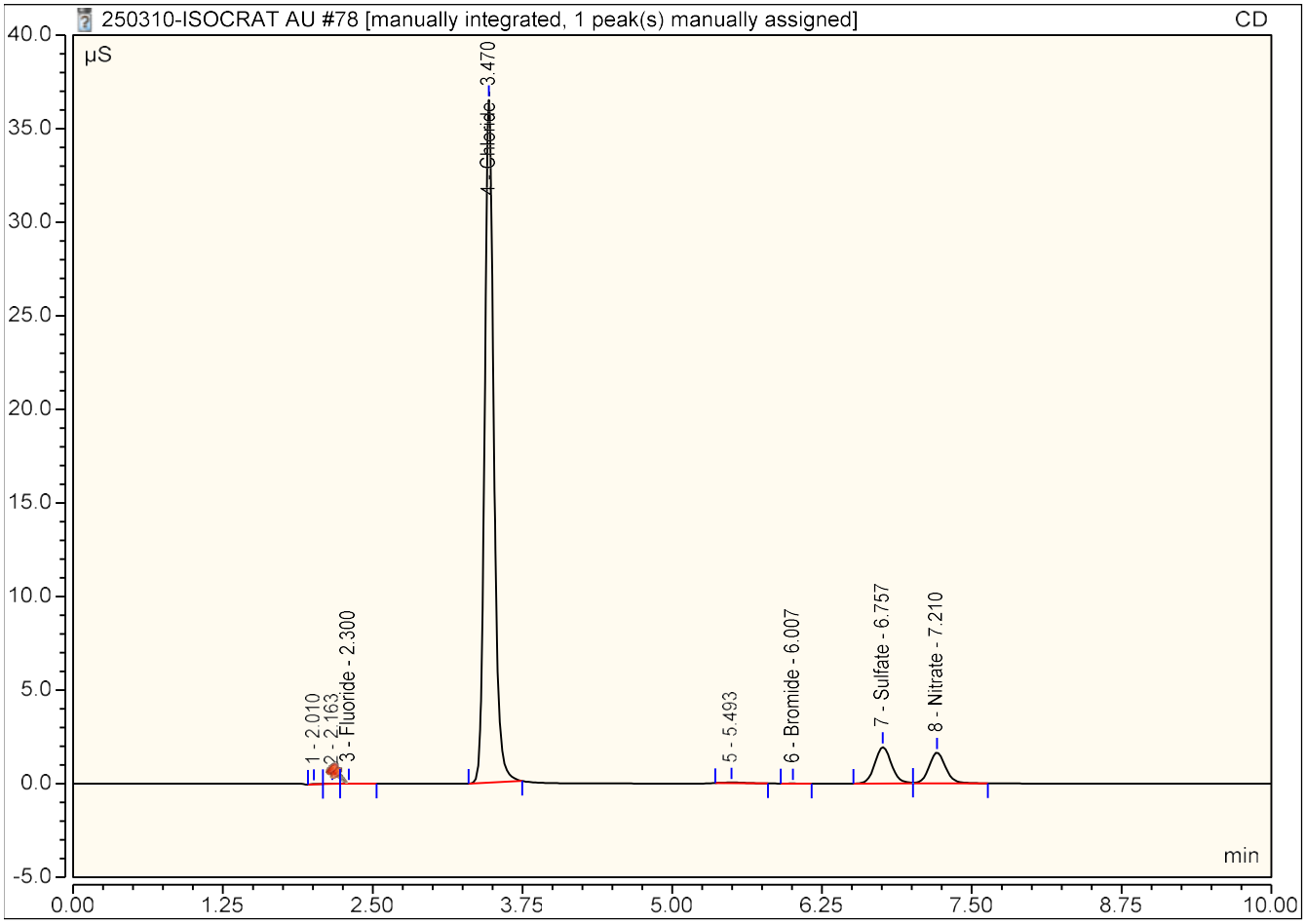
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB^ | 0.001 | 0.007 | 0.2590 |
| 4 | 3.47 | **Chloride** | BMB | 7.093 | 78.311 | 207.1341 |
| 6 | 6.01 | **Bromide** | BMB | 0.000 | 0.002 | 0.3674 |
| 7 | 6.76 | **Sulfate** | BM * | 0.328 | 2.017 | 14.8207 |
| 8 | 7.22 | **Nitrate** | MB* | 0.033 | 0.189 | 0.6817 |
| **TOTAL:** | | | | 7.45 | 80.53 | 223.26 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **L2512264-06; 10X CL** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **10.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 05:28** | *Run Time:* | **10.00** |

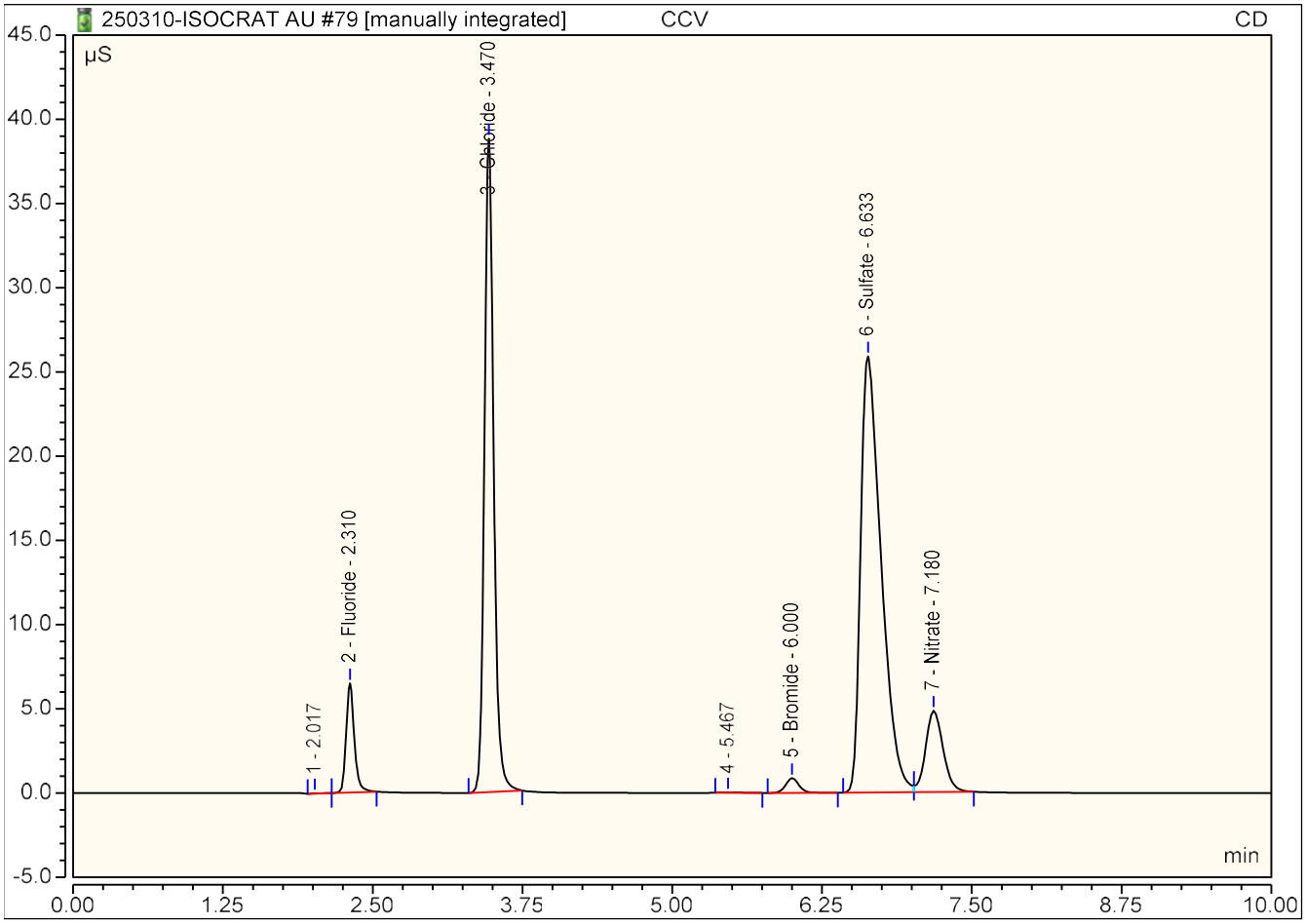
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB^ | 0.001 | 0.007 | 0.2590 |
| 4 | 3.47 | **Chloride** | BMB | 3.247 | 36.469 | 95.2921 |
| 6 | 6.01 | **Bromide** | BMB | 0.000 | 0.002 | 0.3611 |
| 7 | 6.76 | **Sulfate** | BM * | 0.315 | 1.950 | 14.2961 |
| 8 | 7.21 | **Nitrate** | MB* | 0.265 | 1.647 | 3.3876 |
| | | **TOTAL:** | | 3.83 | 40.07 | 113.60 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCV** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Check Standard** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 05:40** | *Run Time:* | **10.00** |

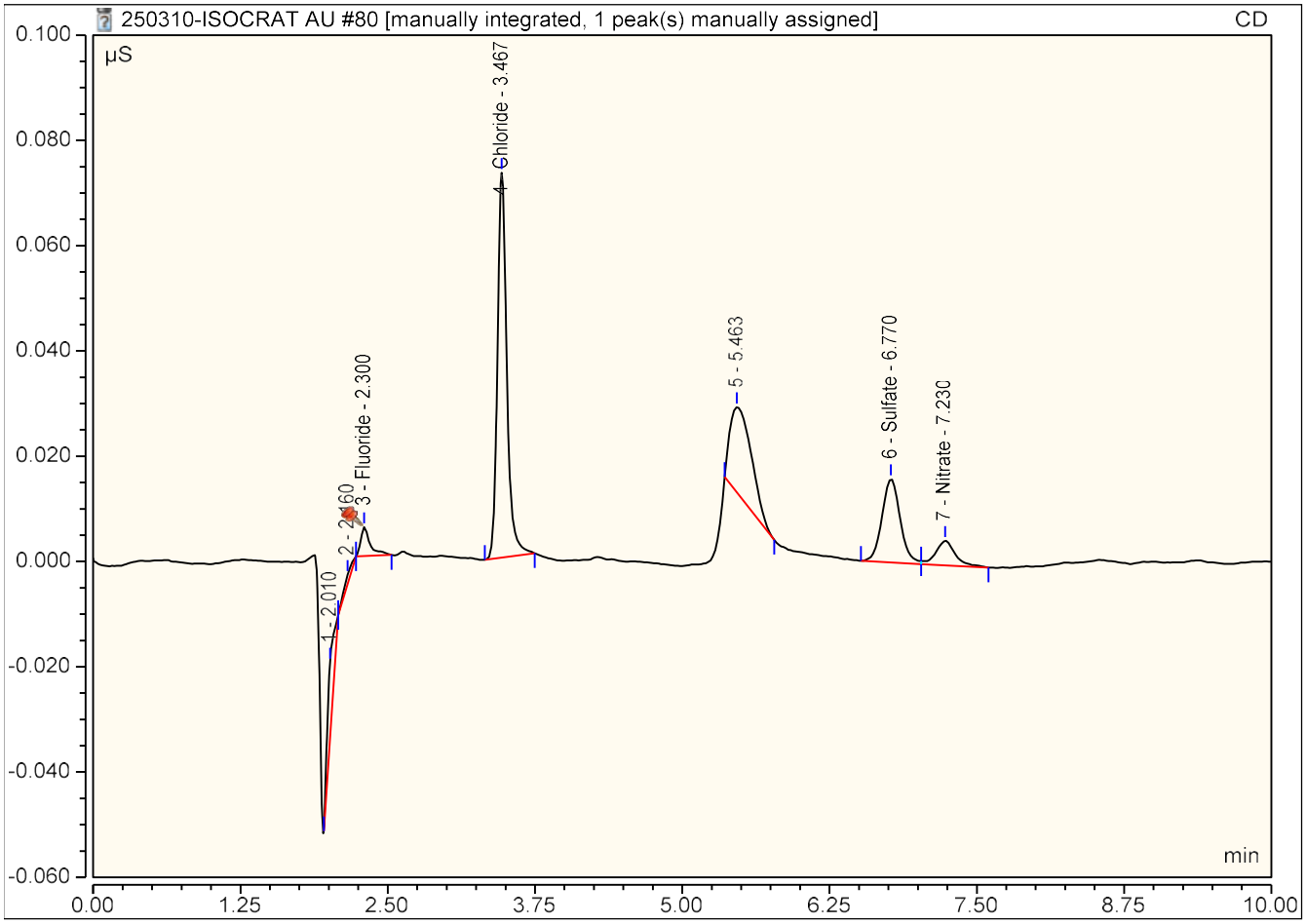
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 2 | 2.31 | **Fluoride** | BMB | 0.504 | 6.480 | 0.9922 |
| 3 | 3.47 | **Chloride** | BMB | 3.455 | 38.786 | 10.1340 |
| 5 | 6.00 | **Bromide** | BMB | 0.113 | 0.872 | 0.9389 |
| 6 | 6.63 | **Sulfate** | BM * | 5.127 | 25.888 | 20.2101 |
| 7 | 7.18 | **Nitrate** | MB* | 0.816 | 4.828 | 0.9826 |
| | | **TOTAL:** | | 10.01 | 76.85 | 33.26 |



## Peak Integration Report

| | | | |
|---|---|---|---|
| *Sample Name:* | **CCB** | *Inj. Vol.:* | **25.00** |
| *Injection Type:* | **Unknown** | *Dilution Factor:* | **1.0000** |
| *Instrument Method:* | **Anions_050420_ThermoFisher** | *Operator:* | **IC 4** |
| *Inj. Date / Time:* | **11-Mar-2025 / 05:52** | *Run Time:* | **10.00** |

| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount |
|---|---|---|---|---|---|---|
| 3 | 2.30 | **Fluoride** | BMB^ | 0.001 | 0.006 | 0.0257 |
| 4 | 3.47 | **Chloride** | BMB | 0.007 | 0.073 | 0.1084 |
| 6 | 6.77 | **Sulfate** | BM * | 0.003 | 0.016 | 0.2133 |
| 7 | 7.23 | **Nitrate** | MB* | 0.001 | 0.005 | 0.0308 |
| **TOTAL:** | | | | 0.01 | 0.10 | 0.38 |



Anion Summary Report

| No. | Name | Dilution | Amount CD Fluoride | Amount CD Chloride | Amount CD Nitrate | Amount CD Sulfate | Amount CD Bromide |
|---|---|---|---|---|---|---|---|
| 1 | BLANK | 1.0 | 0.0293 | 0.0946 | n.a. | 0.2070 | n.a. |
| 2 | STD 0.5 | 1.0 | 0.0395 | 0.2684 | 0.0463 | 0.5313 | 0.0514 |
| 3 | STD 1.0 | 1.0 | 0.0573 | 0.4952 | 0.0651 | 0.9629 | 0.0721 |
| 4 | STD 2.0 | 1.0 | 0.1825 | 1.9581 | 0.1855 | 3.8903 | 0.1900 |
| 5 | STD 3.0 | 1.0 | 0.4771 | 4.9752 | 0.4697 | 9.9595 | 0.4486 |
| 6 | STD 4.0 | 1.0 | 2.0262 | 20.0817 | 2.0084 | 40.2455 | 2.0130 |
| 7 | STD 5.0 | 1.0 | 4.9924 | 49.9715 | 5.2029 | 99.9104 | 5.3987 |
| 8 | RINSE | 1.0 | 0.0731 | 0.0956 | n.a. | 0.2064 | n.a. |
| 9 | CCV | 1.0 | 1.0020 | 10.1605 | 0.9973 | 20.3383 | 0.9823 |
| 10 | CCB | 1.0 | 0.0260 | 0.1007 | 0.0306 | 0.2137 | n.a. |
| 11 | ICV | 1.0 | 0.8225 | 8.5868 | 0.8080 | 8.4191 | 0.7676 |
| 12 | ICB | 1.0 | 0.0262 | 0.1016 | 0.0306 | 0.2112 | n.a. |
| 13 | BLK | 1.0 | 0.0251 | 0.0945 | n.a. | 0.2058 | n.a. |
| 14 | LCS | 1.0 | 0.8170 | 8.5887 | 0.7914 | 8.3873 | 0.7598 |
| 15 | BLK-2 | 1.0 | 0.0258 | 0.0948 | n.a. | 0.2077 | n.a. |
| 16 | LCS-2 | 1.0 | 0.8169 | 8.5869 | 0.7895 | 8.3844 | 0.7576 |
| 17 | L2511911-07 CL SO4 BR | 1.0 | 0.1671 | 155.6392 | 1.1038 | 14.9309 | 0.3950 |
| 18 | L2511911-08 | 1.0 | 0.0524 | 269.2638 | 6.3922 | 31.9544 | 0.1842 |
| 19 | L2513130-01; 10X CL | 10.0 | 0.3687 | 147.7753 | 1.4072 | 10.2355 | n.a. |
| 20 | L2513130-02; 10X | 10.0 | n.a. | 135.9644 | 0.5573 | 7.9633 | 0.3552 |
| 21 | CCV | 1.0 | 0.9881 | 10.1627 | 0.9812 | 20.3230 | 0.9476 |
| 22 | CCB | 1.0 | 0.0254 | 0.1027 | 0.0307 | 0.2103 | n.a. |
| 23 | L2512264-01 CL SO4 BR | 1.0 | 0.0550 | 29.6021 | 5.4421 | 91.1746 | 0.0528 |
| 24 | L2512264-02 | 1.0 | 0.0972 | 25.5874 | 0.4903 | 31.9534 | n.a. |
| 25 | L2512264-03 | 1.0 | 0.0888 | 6.4640 | 1.3078 | 17.9626 | 0.0360 |
| 26 | L2512264-04 | 1.0 | 0.0865 | 18.7790 | 1.6671 | 16.0785 | 0.0451 |
| 27 | L2512264-05 | 1.0 | 0.0367 | 212.1711 | 0.5493 | 16.4988 | 0.0657 |
| 28 | L2512264-06 | 1.0 | 0.0365 | 99.0999 | 3.9300 | 15.7808 | 0.0566 |
| 29 | L2512607-01 BR | 1.0 | 0.0411 | 75.8218 | 9.9109 | 11.2326 | 0.0501 |
| 30 | L2512607-02 | 1.0 | 0.0552 | 11.2464 | 1.4331 | 15.7181 | 0.0481 |
| 31 | L2512607-03 | 1.0 | 0.0383 | 110.2698 | 3.7949 | 19.5081 | 0.0472 |
| 32 | L2512607-06 | 1.0 | n.a. | 0.1046 | 0.0307 | 0.2092 | n.a. |
| 33 | CCV | 1.0 | 0.9799 | 10.1855 | 0.9920 | 20.2971 | 0.9520 |
| 34 | CCB | 1.0 | 0.0259 | 0.1018 | 0.0303 | 0.2114 | n.a. |
| 35 | L2512607-04 | 1.0 | 0.0466 | 20.3421 | 4.8808 | 19.0894 | 0.0703 |
| 36 | L2512607-05 | 1.0 | 0.0398 | 44.3040 | 4.0164 | 17.5048 | 0.0521 |
| 37 | L2512325-01 BR | 1.0 | 0.0803 | 23.2144 | 1.5007 | 18.9935 | 0.0489 |
| 38 | L2512325-02 | 1.0 | 0.0568 | 15.0830 | 0.6757 | 40.9294 | 0.0659 |
| 39 | L2512325-03 | 1.0 | 0.0439 | 3.4901 | 1.2462 | 12.9211 | 0.0402 |
| 40 | L2512325-04 | 1.0 | 0.1171 | 20.2694 | 0.6794 | 31.8579 | n.a. |
| 41 | L2512325-05 | 1.0 | 0.0481 | 30.1901 | 7.4230 | 18.5837 | 0.0673 |
| 42 | L2512325-06 | 1.0 | 0.0631 | 18.3804 | 1.9041 | 18.7185 | 0.0496 |
| 43 | L2512325-07 | 1.0 | 0.0398 | 13.2952 | 2.5570 | 23.7558 | 0.0663 |
| 44 | XL2512325-07; 10X | 10.0 | 0.2687 | 16.2940 | 2.9525 | 28.9567 | 0.3801 |
| 45 | CCV | 1.0 | 0.9800 | 10.1440 | 0.9920 | 20.2675 | 0.9482 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 46 | CCB | 1.0 | 0.0257 | 0.0990 | 0.0300 | 0.2092 | n.a. |
| 47 | L2512325-08 | 1.0 | 0.0406 | 31.9748 | 4.3901 | 17.1141 | 0.0536 |
| 48 | L2512325-09 | 1.0 | 0.0512 | 15.0919 | 0.6552 | 40.7243 | 0.0657 |
| 49 | L2512368-01 BR | 1.0 | 0.0765 | 19.6842 | 0.1756 | 18.6434 | 0.0728 |
| 50 | L2512368-02 | 1.0 | 0.0424 | 28.5818 | 2.3804 | 20.3972 | 0.0636 |
| 51 | L2512368-04 | 1.0 | 0.0876 | 17.0634 | 0.2502 | 20.1015 | 0.0704 |
| 52 | L2512368-05 | 1.0 | 0.0509 | 29.8547 | 1.9007 | 13.7147 | 0.0661 |
| 53 | L2512368-07 | 1.0 | 0.0989 | 23.5176 | 0.3978 | 37.3028 | 0.3073 |
| 54 | L2512368-08 | 1.0 | 0.0850 | 21.9893 | 0.4058 | 17.1560 | 0.0729 |
| 55 | L2512368-10 | 1.0 | 0.0384 | 25.5319 | 1.3133 | 14.7331 | 0.0983 |
| 56 | XL2512368-10; 10X | 10.0 | 0.2482 | 26.3838 | 1.3520 | 15.0033 | 0.4044 |
| 57 | CCV | 1.0 | 0.9917 | 10.1540 | 0.9864 | 20.2748 | 0.9456 |
| 58 | CCB | 1.0 | 0.0254 | 0.1101 | 0.0311 | 0.2134 | n.a. |
| 59 | L2512368-11 | 1.0 | 0.0665 | 10.4134 | 0.5693 | 10.4254 | 0.0573 |
| 60 | L2512368-13 | 1.0 | 0.0322 | 23.4188 | 5.7294 | 14.6040 | 0.0695 |
| 61 | L2512368-14 | 1.0 | 0.0725 | 10.5797 | n.a. | 42.5641 | 0.0531 |
| 62 | L2512368-16 | 1.0 | 0.0342 | 21.2861 | 4.2260 | 15.4382 | 0.0876 |
| 63 | L2512368-17 | 1.0 | 0.0485 | 34.9995 | 2.6463 | 19.3449 | 0.0748 |
| 64 | L2512368-19 | 1.0 | 0.0344 | 20.2318 | 4.2450 | 15.4191 | 0.0840 |
| 65 | L2512264-02 MS | 1.0 | 0.4528 | 28.3707 | 0.8612 | 38.3286 | 0.3261 |
| 66 | L2512264-02 DUP | 1.0 | 0.0976 | 25.4880 | 0.4937 | 31.8261 | n.a. |
| 67 | L2512607-02 MS | 1.0 | 0.3929 | 14.5625 | 1.7606 | 22.6242 | 0.3302 |
| 68 | L2512607-02 DUP | 1.0 | 0.0581 | 11.2425 | 1.4325 | 15.6899 | 0.0482 |
| 69 | CCV | 1.0 | 0.9985 | 10.1565 | 0.9874 | 20.2755 | 0.9401 |
| 70 | CCB | 1.0 | 0.0252 | 0.1086 | 0.0308 | 0.2126 | n.a. |
| 71 | L2512325-02 MS | 1.0 | 0.4243 | 18.4867 | 1.0695 | 47.3356 | 0.3728 |
| 72 | L2512325-02 MSD | 1.0 | 0.4252 | 18.4842 | 1.0576 | 47.3467 | 0.3723 |
| 73 | L2512368-10 MS | 1.0 | 0.4110 | 28.5048 | 1.7034 | 22.3341 | 0.4216 |
| 74 | L2512368-10 MSD | 1.0 | 0.4101 | 28.5126 | 1.7075 | 22.3226 | 0.4212 |
| 75 | L2511911-07; 10X CL | 10.0 | 0.3632 | 150.7808 | 1.0708 | 13.8426 | 0.6213 |
| 76 | L2511911-08; 10X CL | 10.0 | 0.2756 | 261.4338 | 5.5874 | 29.4956 | 0.4525 |
| 77 | L2512264-05; 10X CL | 10.0 | 0.2590 | 207.1341 | 0.6817 | 14.8207 | 0.3674 |
| 78 | L2512264-06; 10X CL | 10.0 | 0.2590 | 95.2921 | 3.3876 | 14.2961 | 0.3611 |
| 79 | CCV | 1.0 | 0.9922 | 10.1340 | 0.9826 | 20.2101 | 0.9389 |
| 80 | CCB | 1.0 | 0.0257 | 0.1084 | 0.0308 | 0.2133 | n.a. |
| | Sum: | 152.000 | 24.3872 | | 134.8332 | 1510.6599 | 25.0864 |
| | Average: | 1.900 | 0.3127 | | 1.7978 | 18.8832 | 0.3982 |
| | Rel.Std.Dev: | 143.002 % | 2.0748 | | 1.1069 | 0.9133 | 1.8616 |

| Inject Time | Comment |
|---|---|
| 06/Mar/2025 18:55 | AU |
| 06/Mar/2025 19:07 | LOT#250306-0.5 |
| 06/Mar/2025 19:19 | LOT#250306-1.0 |
| 06/Mar/2025 19:31 | LOT#250306-2.0 |
| 06/Mar/2025 19:43 | LOT#250306-3.0 |
| 06/Mar/2025 19:55 | LOT#250306-4.0 |
| 06/Mar/2025 20:08 | LOT#250306-5.0 |
| 10/Mar/2025 15:22 | VG2038790-91-92-93 |
| 10/Mar/2025 15:34 | LOT#250306-C |
| 10/Mar/2025 15:46 | AU |
| 10/Mar/2025 15:58 | LOT#250306-I |
| 10/Mar/2025 16:10 | AU |
| 10/Mar/2025 16:22 | AU |
| 10/Mar/2025 16:34 | LOT#250306-I |
| 10/Mar/2025 16:46 | AU |
| 10/Mar/2025 16:59 | LOT#250306-I |
| 10/Mar/2025 17:11 | AU |
| 10/Mar/2025 17:23 | AU |
| 10/Mar/2025 17:35 | AU |
| 10/Mar/2025 17:47 | AU |
| 10/Mar/2025 17:59 | LOT#250306-C |
| 10/Mar/2025 18:11 | AU |
| 10/Mar/2025 18:23 | AU |
| 10/Mar/2025 18:35 | AU |
| 10/Mar/2025 18:47 | AU |
| 10/Mar/2025 19:00 | AU |
| 10/Mar/2025 19:12 | AU |
| 10/Mar/2025 19:24 | AU |
| 10/Mar/2025 19:36 | AU |
| 10/Mar/2025 19:48 | AU |
| 10/Mar/2025 20:00 | AU |
| 10/Mar/2025 20:12 | AU |
| 10/Mar/2025 20:24 | LOT#250306-C |
| 10/Mar/2025 20:36 | AU |
| 10/Mar/2025 20:48 | AU |
| 10/Mar/2025 21:00 | AU |
| 10/Mar/2025 21:13 | AU |
| 10/Mar/2025 21:25 | AU |
| 10/Mar/2025 21:37 | AU |
| 10/Mar/2025 21:49 | AU |
| 10/Mar/2025 22:01 | AU |
| 10/Mar/2025 22:13 | AU |
| 10/Mar/2025 22:25 | AU |
| 10/Mar/2025 22:37 | AU |
| 10/Mar/2025 22:49 | LOT#250306-C |

| | |
|---|---|
| 10/Mar/2025 23:01 | AU |
| 10/Mar/2025 23:13 | AU |
| 10/Mar/2025 23:26 | AU |
| 10/Mar/2025 23:38 | AU |
| 10/Mar/2025 23:50 | AU |
| 11/Mar/2025 00:02 | AU |
| 11/Mar/2025 00:14 | AU |
| 11/Mar/2025 00:26 | AU |
| 11/Mar/2025 00:38 | AU |
| 11/Mar/2025 00:50 | AU |
| 11/Mar/2025 01:02 | AU |
| 11/Mar/2025 01:14 | LOT#250306-C |
| 11/Mar/2025 01:26 | AU |
| 11/Mar/2025 01:38 | AU |
| 11/Mar/2025 01:50 | AU |
| 11/Mar/2025 02:03 | AU |
| 11/Mar/2025 02:15 | AU |
| 11/Mar/2025 02:27 | AU |
| 11/Mar/2025 02:39 | AU |
| 11/Mar/2025 02:51 | AU |
| 11/Mar/2025 03:03 | AU |
| 11/Mar/2025 03:15 | AU |
| 11/Mar/2025 03:27 | AU |
| 11/Mar/2025 03:39 | LOT#250306-C |
| 11/Mar/2025 03:51 | AU |
| 11/Mar/2025 04:03 | AU |
| 11/Mar/2025 04:15 | AU |
| 11/Mar/2025 04:28 | AU |
| 11/Mar/2025 04:40 | AU |
| 11/Mar/2025 04:52 | AU |
| 11/Mar/2025 05:04 | AU |
| 11/Mar/2025 05:16 | AU |
| 11/Mar/2025 05:28 | AU |
| 11/Mar/2025 05:40 | LOT#250306-C |
| 11/Mar/2025 05:52 | AU |
| | 0.000 |
| | #DIV/0! |
| | #DIV/0! |

# Quality Control

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : 8A | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512368-10 | | |
| **Matrix Spike** | : WG2038792-3 | **MS Analysis Date** | : 03/11/25 04:28 |
| **Matrix Spike Dup** | : WG2038792-4 | **MSD Analysis Date** | : 03/11/25 04:40 |

| | | Matrix Spike Sample | | | | Matrix Spike Duplicate | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Sample Conc. (mg/l)** | **Spike Added (mg/l)** | **Spike Conc. (mg/l)** | **%R** | | **Spike Added (mg/l)** | **Spike Conc. (mg/l)** | **%R** | | **RPD** | **Recovery Limits** | **RPD Limit** |
| **Bromide** | 0.098 | 0.4 | 0.422 | 80 | Q | 0.4 | 0.421 | 80 | Q | 0 | 90-110 | 20 |

# Form 5a
# Matrix Spike

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : L2512607-02 | | |
| **Matrix Spike** | : WG2038793-3 | **MS Analysis Date** | : 03/11/25 03:15 |
| **Matrix Spike Dup** | : | **MSD Analysis Date** | : |

| | | Matrix Spike Sample | | | | Matrix Spike Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Sample Conc. (mg/l) | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | | Spike Added (mg/l) | Spike Conc. (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Bromide | 0.048J | 0.4 | 0.330 | 82 | Q | | | | | 90-110 | 20 |

# Form 6
# Lab Duplicates

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : NA | **Analysis Date** | : 03/10/25 19:48 |
| **Dup Sample ID** | : WG2038793-4 | **DUP Analysis Date** | : 03/11/25 03:27 |

| Parameter | Sample Concentration (mg/l) | Duplicate Concentration (mg/l) | RPD | RPD Limit |
|---|---|---|---|---|
| Bromide | 0.048J | 0.048J | NC | 20 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2038792-2 | **LCS Analysis Date** | : 03/10/25 16:34 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Bromide | 0.800 | 0.760 | 95. | | | | | 90-110 | 20 |

# Form 7
# Laboratory Control Sample

| | | | |
|---|---|---|---|
| **Client** | : P. W. Grosser | **Lab Number** | : L2512368 |
| **Project Name** | : ROANOKE SAND AND GRAVEL | **Project Number** | : BSD1504 |
| **Client Sample ID** | : NA | **Matrix** | : WATER |
| **Lab Sample ID** | : WG2038793-2 | **LCS Analysis Date** | : 03/10/25 16:59 |
| **Dup Sample ID** | : | **LCSD Analysis Date** | : |

| | Laboratory Control Sample | | | Laboratory Control Duplicate | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | True (mg/l) | Found (mg/l) | %R | True (mg/l) | Found (mg/l) | %R | RPD | Recovery Limits | RPD Limit |
| Bromide | 0.800 | 0.758 | 95. | | | | | 90-110 | 20 |

**Date Created:** 11/11/21
**Created By:** Jason Hebert
**File:** PM11467-1
**Page:** 1

**WETCHEM (WATER)**

| Analyte | CAS # | RL | MDL | Units | LCS Criteria | LCS RPD | MS Criteria | MS RPD | Duplicate RPD | Method | Holding Time | Container/Sample Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | 24959-67-9 | 0.05 | 0.0132 | mg/l | 90-110 | | 90-110 | 20 | 20 | 300.0 | 28 days | 1 - Plastic 250ml unpreserved |
| Chloride | 16887-00-6 | 0.5 | 0.0839 | mg/l | 90-110 | | 64-148 | 18 | 18 | 9056 | 28 days | 1 - Plastic 250ml unpreserved |
| Chloride | 16887-00-6 | 0.5 | 0.0839 | mg/l | 90-110 | | 90-110 | 18 | 18 | 300.0 | 28 days | 1 - Plastic 250ml unpreserved |
| Fluoride | 16984-48-8 | 0.05 | 0.037 | mg/l | 90-110 | | 81-124 | 15 | 15 | 9056 | 28 days | 1 - Plastic 500ml unpreserved |
| Fluoride | 16984-48-8 | 0.05 | 0.037 | mg/l | 90-110 | | 90-110 | 15 | 15 | 300.0 | 28 days | 1 - Plastic 500ml unpreserved |
| Nitrogen, Nitrate | 14797-55-8 | 0.05 | 0.0128 | mg/l | 90-110 | | 90-110 | 15 | 15 | 300.0 | 48 hours | 1 - Plastic 250ml unpreserved |
| Nitrogen, Nitrate | 14797-55-8 | 0.05 | 0.0128 | mg/l | 90-110 | | 80-120 | 15 | 15 | 9056 | 48 hours | 1 - Plastic 250ml unpreserved |
| Sulfate | 14808-79-8 | 1 | 0.454 | mg/l | 90-110 | | 72-124 | 20 | 20 | 9056 | 28 days | 1 - Plastic 500ml unpreserved |
| Sulfate | 14808-79-8 | 1 | 0.454 | mg/l | 90-110 | | 90-110 | 20 | 20 | 300.0 | 28 days | 1 - Plastic 500ml unpreserved |

*Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)*
*Please Note that the information provided in this table is subject to change at anytime at the discretion of the laboratory.*

# Calculations of Anions by Ion Chromatography

Aqueous samples:

The Dionex calculates the area of the peaks produced by the instrument, compares them to the peak area of the calibration standard stored in its memory, and calculates result in mg/L.

If the sample was manually diluted prior to analysis, the calculated mean must be manually multiplied by the dilution factor. The Reported Detection Limit is also multiplied by the same dilution factor.

$$\text{Result, mg/L} = \frac{\text{area} - \text{y-intercept}}{\text{slope}} \times \text{Dilution Factor}$$

# ATTACHMENT J


P.W. GROSSER CONSULTING, INC • P.W. GROSSER CONSULTING ENGINEER & HYDROGEOLOGIST, PC
631.589.6353 • WWW.PWGROSSER.COM • PWGC.INFO@PWGROSSER.COM
BOHEMIA • MANHATTAN • SARATOGA SPRINGS • MONTICELLO • SYRACUSE • SHELTON, CT

# Subcontracted Data

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

March 10, 2025

Reports
Alpha Analytical
8 Walkup Drive
Westborough, MA 01581

RE: Project: L2511919
Pace Project No.: 70341669

Dear Reports:

Enclosed are the analytical results for sample(s) received by the laboratory on March 07, 2025. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Melville

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Brianna D. Rivera
brianna.rivera@pacelabs.com
516-370-6007
Project Manager

Enclosures



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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

# CERTIFICATIONS

Project: L2511919
Pace Project No.: 70341669

Pace Analytical Services, LLC - Melville, NY
575 Broad Hollow Rd, Melville, NY 11747
Connecticut Certification #: PH-0435
Delaware Certification # NY 10478
Maryland Certification #: 208
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987
New Jersey Certification #: NY158
New York Certification #: 10478 Primary Accrediting Body
Pennsylvania Certification #: 68-00350
Rhode Island Certification #: LAO00340
Texas Certification #: T104704582
Florida Certification #: E871198



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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

# SAMPLE SUMMARY

Project: L2511919
Pace Project No.: 70341669

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| 70341669001 | 2A | Water | 03/04/25 14:43 | 03/07/25 06:00 |
| 70341669002 | 2B | Water | 03/04/25 14:40 | 03/07/25 06:00 |
| 70341669003 | 3A | Water | 03/04/25 12:25 | 03/07/25 06:00 |
| 70341669004 | 3B | Water | 03/04/25 12:45 | 03/07/25 06:00 |
| 70341669005 | 4A | Water | 03/04/25 09:25 | 03/07/25 06:00 |
| 70341669006 | 4B | Water | 03/04/25 10:10 | 03/07/25 06:00 |



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Melville, NY 11747
516-370-6000

# SAMPLE ANALYTE COUNT

Project: L2511919
Pace Project No.: 70341669

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| 70341669001 | 2A | SM22 4500-S2 F | JWM | 1 |
| 70341669002 | 2B | SM22 4500-S2 F | JWM | 1 |
| 70341669003 | 3A | SM22 4500-S2 F | JWM | 1 |
| 70341669004 | 3B | SM22 4500-S2 F | JWM | 1 |
| 70341669005 | 4A | SM22 4500-S2 F | JWM | 1 |
| 70341669006 | 4B | SM22 4500-S2 F | JWM | 1 |

PACE-MV = Pace Analytical Services - Melville



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Melville, NY 11747
516-370-6000

# PROJECT NARRATIVE

Project: L2511919
Pace Project No.: 70341669

Method: SM22 4500-S2 F
Description: 4500S2F W Sulfide Iodometric
Client: Alpha Analytical
Date: March 10, 2025

General Information:
6 samples were analyzed for SM22 4500-S2 F by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.



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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

# ANALYTICAL RESULTS

Project: L2511919
Pace Project No.: 70341669

Sample: 2A Lab ID: 70341669001 Collected: 03/04/25 14:43 Received: 03/07/25 06:00 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| 4500S2F W Sulfide Iodometric | Analytical Method: SM22 4500-S2 F<br>Pace Analytical Services - Melville | | | | | | | | |
| Sulfide | <2.0 | mg/L | 2.0 | 0.20 | 1 | | 03/10/25 12:41 | | |



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# ANALYTICAL RESULTS

Project: L2511919
Pace Project No.: 70341669

Sample: 2B Lab ID: 70341669002 Collected: 03/04/25 14:40 Received: 03/07/25 06:00 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| 4500S2F W Sulfide Iodometric | Analytical Method: SM22 4500-S2 F<br>Pace Analytical Services - Melville | | | | | | | | |
| Sulfide | <2.0 | mg/L | 2.0 | 0.20 | 1 | | 03/10/25 12:44 | | |



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# ANALYTICAL RESULTS

Project: L2511919
Pace Project No.: 70341669

Sample: 3A Lab ID: 70341669003 Collected: 03/04/25 12:25 Received: 03/07/25 06:00 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| 4500S2F W Sulfide Iodometric | Analytical Method: SM22 4500-S2 F<br>Pace Analytical Services - Melville | | | | | | | | |
| Sulfide | <2.0 | mg/L | 2.0 | 0.20 | 1 | | 03/10/25 12:47 | | |



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# ANALYTICAL RESULTS

Project: L2511919
Pace Project No.: 70341669

Sample: 3B Lab ID: 70341669004 Collected: 03/04/25 12:45 Received: 03/07/25 06:00 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| 4500S2F W Sulfide Iodometric | Analytical Method: SM22 4500-S2 F<br>Pace Analytical Services - Melville | | | | | | | | |
| Sulfide | <2.0 | mg/L | 2.0 | 0.20 | 1 | | 03/10/25 12:50 | | |



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# ANALYTICAL RESULTS

Project: L2511919
Pace Project No.: 70341669

Sample: 4A Lab ID: 70341669005 Collected: 03/04/25 09:25 Received: 03/07/25 06:00 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| 4500S2F W Sulfide Iodometric | Analytical Method: SM22 4500-S2 F<br>Pace Analytical Services - Melville | | | | | | | | |
| Sulfide | <2.0 | mg/L | 2.0 | 0.20 | 1 | | 03/10/25 12:53 | | |



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# ANALYTICAL RESULTS

Project: L2511919
Pace Project No.: 70341669

Sample: 4B Lab ID: 70341669006 Collected: 03/04/25 10:10 Received: 03/07/25 06:00 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| 4500S2F W Sulfide Iodometric | Analytical Method: SM22 4500-S2 F<br>Pace Analytical Services - Melville | | | | | | | | |
| Sulfide | <2.0 | mg/L | 2.0 | 0.20 | 1 | | 03/10/25 12:56 | | |



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# QUALITY CONTROL DATA

Project: L2511919
Pace Project No.: 70341669

QC Batch: 388494
QC Batch Method: SM22 4500-S2 F
Analysis Method: SM22 4500-S2 F
Analysis Description: 4500S2F W Sulfide Iodometric
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70341669001, 70341669002, 70341669003, 70341669004, 70341669005, 70341669006

METHOD BLANK: 2041544
Matrix: Water
Associated Lab Samples: 70341669001, 70341669002, 70341669003, 70341669004, 70341669005, 70341669006

| Parameter | Units | Blank Result | Reporting Limit | MDL | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| Sulfide | mg/L | ND | 2.0 | 0.20 | 03/10/25 12:21 | |

LABORATORY CONTROL SAMPLE & LCSD: 2041545 2041546

| Parameter | Units | Spike Conc. | LCS Result | LCSD Result | LCS % Rec | LCSD % Rec | % Rec Limits | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|---|
| Sulfide | mg/L | 14 | 14.0 | 14.0 | 100 | 100 | 85-115 | 0 | 20 | |

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



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# QUALIFIERS

Project: L2511919
Pace Project No.: 70341669

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.


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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: L2511919
Pace Project No.: 70341669

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| 70341669001 | 2A | SM22 4500-S2 F | 388494 | | |
| 70341669002 | 2B | SM22 4500-S2 F | 388494 | | |
| 70341669003 | 3A | SM22 4500-S2 F | 388494 | | |
| 70341669004 | 3B | SM22 4500-S2 F | 388494 | | |
| 70341669005 | 4A | SM22 4500-S2 F | 388494 | | |
| 70341669006 | 4B | SM22 4500-S2 F | 388494 | | |



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WO#: 70341669

70341669

# Subcontract Chain of Custody

Pace Analytical (Melville)
575 Broad Hollow Road
Melville, NY 11747

**Pace Job Number**
L2511919

Page 1

## Client Information

Client: Pace Analytical Labs
Address: Eight Walkup Drive
Westborough, MA 01581-1019

Report To:west.subreports@pacelabs.com
Bill To:invoices@pacelabs.coupahost.com

Phone: 508.844.4115
Email: Mitchell.Ostrowski@pacelabs.com

## Project Information

Project Location: NY
Project Manager: Mitchell Ostrowski

## Turnaround & Deliverables Information

Due Date:
Deliverables: ASP Category B Deliverables

## Regulatory Requirements/Report Limits

State/Federal Program:
Regulatory Criteria: NY-AWQS

Report to MDL

## Project Specific Requirements and/or Report Requirements

Reference following Pace Job Number on final report/deliverables: L2511919 Report to include Method and/or Regulatory required batch QC

Additional Comments: Need Data Package

| Lab ID | Pace ID | Client ID | Collection Date/Time | Sample Matrix | Analysis | Sample Level Comments | Sample Specific QC | Container Count |
|---|---|---|---|---|---|---|---|---|
| | L2511919-01 | 2A | 03-04-25 14:43 | WATER | Sulfide | | | 1 |
| | L2511919-02 | 2B | 03-04-25 14:40 | WATER | Sulfide | | | 1 |
| | L2511919-04 | 3A | 03-04-25 12:25 | WATER | Sulfide | | | 1 |
| | L2511919-05 | 3B | 03-04-25 12:45 | WATER | Sulfide | | | 1 |
| | L2511919-07 | 4A | 03-04-25 09:25 | WATER | Sulfide | | | 1 |
| | L2511919-08 | 4B | 03-04-25 10:10 | WATER | Sulfide | | | 1 |

| Relinquished By: | Date/Time: | Received By: | Date/Time: |
|---|---|---|---|
| | 3/6/25 1835 | | 3/6/25 1835 |
| 3/6/25 | 2245 | Paul Maggella | 3/6/25 2330 |
| Paul Maggella | 3/7/25 0230 | | |
| LS 3/7 | | ASF PACE LS | 3/7/25 6:00 |

Form No: AL_subcoc



Serial_No:04182514:54

DC#_Title: ENV-FRM-MELV-0024 v07_SCUR
Effective Date: 4/12/2024

**WO#: 70341669**
**PM: BDR** **Due Date: 03/14/25**
**CLIENT: ALPHA**

Client Name: Alpha Project

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No Seals intact: ☐ Yes ☑ No Temperature Blank Present: ☐ Yes ☑ No
Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Ziploc ☑ None ☐ Other Type of Ice: (Wet) Blue None

Thermometer Used: THZn Correction Factor: +0.2 ☐ Samples on ice, cooling process has begun
Cooler Temperature(°C): 0.2 Cooler Temperature Corrected(°C): 0.4 Date/Time 5035A kits placed in freezer
Temp should be above freezing to 6 0°C

USDA Regulated Soil ( ☑ N/A, water sample)

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples orignate from a foreign source including Hawaii and Puerto Rico)? ☐ Yes ☐ No

**If Yes to either question, fill out a Regulated Soil Checklist (ENV-FRM-MELV-0076) and include with SCUR/COC paperwork.**

**Date and Initials of person examining contents:** ADS 3/7/25

| | | | | COMMENTS: |
|---|---|---|---|---|
| Chain of Custody Present: | ☑ Yes | ☐ No | | 1. |
| Chain of Custody Filled Out: | ☑ Yes | ☐ No | | 2. |
| Chain of Custody Relinquished: | ☑ Yes | ☐ No | | 3. |
| Sampler Name & Signature on COC: | ☑ Yes | ☐ No | ☐ N/A | 4. |
| Samples Arrived within Hold Time: | ☑ Yes | ☐ No | | 5. |
| **Short Hold Time Analysis (<72hr):** | ☐ Yes | ☑ No | | 6. |
| **Rush Turn Around Time Requested:** | ☐ Yes | ☑ No | | 7. |
| Sufficient Volume: (Triple volume provided for MS/MSD) | ☑ Yes | ☐ No | | 8. |
| Correct Containers Used: | ☑ Yes | ☐ No | | 9. |
| -Pace Containers Used: | ☑ Yes | ☐ No | | |
| Containers Intact: | ☑ Yes | ☐ No | | 10. |
| Filtered volume received for Dissolved tests | ☐ Yes | ☐ No | ☑ N/A | 11. Note: if sediment is visible in the dissolved container |
| Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: SL WT OIL OTHER | ☑ Yes | ☐ No | | 12. |

**Date and Initials of person checking preservation:** ADS 3/7/25

| | | | | |
|---|---|---|---|---|
| All containers needing preservation have been pH paper Lot # 231224 | ☑ Yes | ☐ No | ☐ N/A | 13. ☐ $HNO_3$ ☐ $H_2SO_4$ ☐ NaOH ☐ HCl Sample # |
| All containers needing preservation are found to be in compliance with method recommendation? ($HNO_3$, $H_2SO_4$, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide) | ☑ Yes | ☐ No | ☐ N/A | |
| Exceptions VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis | | | | Initial when completed / Lot # of added preservative / Date/Time preservative added |
| Samples checked for dechlorination: KI starch test strips Lot # Residual chlorine strips Lot # | ☐ Yes | ☐ No | ☑ N/A | 14. Positive for Res. Chlorine? Y N |
| SM 4500 CN samples checked for sulf Lead Acetate Strips Lot # | ☐ Yes | ☐ No | ☑ N/A | 15. Positive for Sulfide? Y N |
| Headspace in ALK Bottle ( >6mm): | ☐ Yes | ☐ No | ☑ N/A | |
| Headspace in VOA Vials ( >6mm): | ☐ Yes | ☐ No | ☑ N/A | 16. |
| Trip Blank Present: | ☐ Yes | ☐ No | ☑ N/A | 17. |
| Trip Blank Custody Seals Present | ☐ Yes | ☐ No | ☑ N/A | |

Client Notification/ Resolution: Field Data Required? Y / N
Person Contacted: Date/Time:
Comments/ Resolution:

* PM (Project Manager) review (which includes the SCUR) is documented electronically in LIMS

**Pace Analytical Services, LLC**
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

March 13, 2025

Pace MA
Pace MA
Eight Walkup Drive
Westborough, MA 01581

RE: Project: L2511919
Pace Project No.: 50395620

Dear Pace MA:

Enclosed are the analytical results for sample(s) received by the laboratory on March 07, 2025. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Indianapolis

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tina Sayer

Tina Sayer
tina.sayer@pacelabs.com
(317)228-3127
Project Manager

Enclosures

cc: Mitchell Ostrowski, Pace MA

**REPORT OF LABORATORY ANALYSIS**

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## CERTIFICATIONS

Project: L2511919
Pace Project No.: 50395620

**Pace Analytical Services Indianapolis**
7726 Moller Road, Indianapolis, IN 46268
Illinois Accreditation #: 200074
Indiana Drinking Water Laboratory #: C-49-06
Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Louisiana Certification #: 04076
Michigan Drinking Water Laboratory #9050
Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
Washington Dept of Ecology #: C1081
Wisconsin Laboratory #: 999788130
USDA Foreign Soil Permit #: 525-23-13-23119
USDA Compliance Agreement #: IN-SL-22-001



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## SAMPLE SUMMARY

Project: L2511919
Pace Project No.: 50395620

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| **50395620001** | **2A** | Water | 03/04/25 14:43 | 03/07/25 08:30 |
| **50395620002** | **2B** | Water | 03/04/25 14:40 | 03/07/25 08:30 |
| **50395620003** | **3A** | Water | 03/04/25 12:25 | 03/07/25 08:30 |
| **50395620004** | **3B** | Water | 03/04/25 12:45 | 03/07/25 08:30 |
| **50395620005** | **4A** | Water | 03/04/25 09:25 | 03/07/25 08:30 |
| **50395620006** | **4B** | Water | 03/04/25 10:10 | 03/07/25 08:30 |



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## SAMPLE ANALYTE COUNT

Project: L2511919
Pace Project No.: 50395620

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| **50395620001** | **2A** | EPA 9056 | GLT | 1 |
| **50395620002** | **2B** | EPA 9056 | GLT | 1 |
| **50395620003** | **3A** | EPA 9056 | GLT | 1 |
| **50395620004** | **3B** | EPA 9056 | GLT | 1 |
| **50395620005** | **4A** | EPA 9056 | GLT | 1 |
| **50395620006** | **4B** | EPA 9056 | GLT | 1 |

PASI-I = Pace Analytical Services - Indianapolis



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## ANALYTICAL RESULTS

Project: L2511919
Pace Project No.: 50395620

**Sample: 2A** **Lab ID: 50395620001** Collected: 03/04/25 14:43 Received: 03/07/25 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **9056 Iodide by IC** | Analytical Method: EPA 9056<br>Pace Analytical Services - Indianapolis | | | | | | | | |
| Iodide | ND | mg/L | 0.50 | 0.15 | 1 | | 03/10/25 19:18 | | |



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## ANALYTICAL RESULTS

Project: L2511919
Pace Project No.: 50395620

**Sample: 2B** **Lab ID: 50395620002** Collected: 03/04/25 14:40 Received: 03/07/25 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **9056 Iodide by IC** | Analytical Method: EPA 9056<br>Pace Analytical Services - Indianapolis | | | | | | | | |
| Iodide | ND | mg/L | 0.50 | 0.15 | 1 | | 03/10/25 19:37 | | |



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## ANALYTICAL RESULTS

Project: L2511919
Pace Project No.: 50395620

**Sample: 3A** **Lab ID: 50395620003** Collected: 03/04/25 12:25 Received: 03/07/25 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **9056 Iodide by IC** | Analytical Method: EPA 9056<br>Pace Analytical Services - Indianapolis | | | | | | | | |
| Iodide | ND | mg/L | 0.50 | 0.15 | 1 | | 03/10/25 19:55 | | |



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## ANALYTICAL RESULTS

Project: L2511919
Pace Project No.: 50395620

**Sample: 3B** **Lab ID: 50395620004** Collected: 03/04/25 12:45 Received: 03/07/25 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **9056 Iodide by IC** | Analytical Method: EPA 9056<br>Pace Analytical Services - Indianapolis | | | | | | | | |
| Iodide | ND | mg/L | 0.50 | 0.15 | 1 | | 03/10/25 20:13 | | |



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## ANALYTICAL RESULTS

Project: L2511919
Pace Project No.: 50395620

**Sample: 4A** **Lab ID: 50395620005** Collected: 03/04/25 09:25 Received: 03/07/25 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **9056 Iodide by IC** | Analytical Method: EPA 9056<br>Pace Analytical Services - Indianapolis | | | | | | | | |
| Iodide | ND | mg/L | 0.50 | 0.15 | 1 | | 03/10/25 20:32 | | |



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## ANALYTICAL RESULTS

Project: L2511919
Pace Project No.: 50395620

**Sample: 4B** **Lab ID: 50395620006** Collected: 03/04/25 10:10 Received: 03/07/25 08:30 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **9056 Iodide by IC** | Analytical Method: EPA 9056<br>Pace Analytical Services - Indianapolis | | | | | | | | |
| Iodide | ND | mg/L | 0.50 | 0.15 | 1 | | 03/10/25 20:50 | | |



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# QUALITY CONTROL DATA

Project: L2511919
Pace Project No.: 50395620

QC Batch: 833553 | Analysis Method: EPA 9056
QC Batch Method: EPA 9056 | Analysis Description: 9056 Iodide by IC
Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50395620001, 50395620002, 50395620003, 50395620004, 50395620005, 50395620006

METHOD BLANK: 3814123 Matrix: Water

Associated Lab Samples: 50395620001, 50395620002, 50395620003, 50395620004, 50395620005, 50395620006

| Parameter | Units | Blank Result | Reporting Limit | MDL | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| Iodide | mg/L | ND | 0.50 | 0.15 | 03/10/25 14:44 | |

LABORATORY CONTROL SAMPLE: 3814124

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Iodide | mg/L | 5 | 5.6 | 111 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3814125 3814126

| Parameter | Units | 50395615002 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Iodide | mg/L | ND | 5 | 5 | 4.7 | 4.7 | 95 | 94 | 80-120 | 0 | 15 | |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**

## REPORT OF LABORATORY ANALYSIS

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# QUALIFIERS

Project: L2511919
Pace Project No.: 50395620

**DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.



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**Pace Analytical Services, LLC**
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: L2511919
Pace Project No.: 50395620

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| **50395620001** | **2A** | EPA 9056 | 833553 | | |
| **50395620002** | **2B** | EPA 9056 | 833553 | | |
| **50395620003** | **3A** | EPA 9056 | 833553 | | |
| **50395620004** | **3B** | EPA 9056 | 833553 | | |
| **50395620005** | **4A** | EPA 9056 | 833553 | | |
| **50395620006** | **4B** | EPA 9056 | 833553 | | |



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WO# : 50395620

50395620

## Subcontract Chain of Custody

Pace Analytical (Indianapolois, IN)
7726 Moller Road
Indianapolis, IN 46268

**Pace Job Number**
L2511919

Page 1

### Client Information

Client: Pace Analytical Labs
Address: Eight Walkup Drive
Westborough, MA 01581-1019

Report To:west.subreports@pacelabs.com
Bill To:invoices@pacelabs.coupahost.com

Phone: 508.844.4115
Email: Mitchell.Ostrowski@pacelabs.com

### Project Information

Project Location: NY
Project Manager: Mitchell Ostrowski

### Turnaround & Deliverables Information

Due Date:
Deliverables: ASP Category B Deliverables

### Regulatory Requirements/Report Limits

State/Federal Program:
Regulatory Criteria: NY-AWQS

Report to MDL

### Project Specific Requirements and/or Report Requirements

Reference following Pace Job Number on final report/deliverables: L2511919 Report to include Method and/or Regulatory required batch QC

Additional Comments: Need Data Package

| Lab ID | Pace ID | Client ID | Collection Date/Time | Sample Matrix | Analysis | Sample Level Comments | Sample Specific QC | Container Count |
|---|---|---|---|---|---|---|---|---|
| | L2511919-01 | 2A | 03-04-25 14:43 | WATER | Iodide | | | 1 |
| | L2511919-02 | 2B | 03-04-25 14:40 | WATER | Iodide | | | 1 |
| | L2511919-04 | 3A | 03-04-25 12:25 | WATER | Iodide | | | 1 |
| | L2511919-05 | 3B | 03-04-25 12:45 | WATER | Iodide | | | 1 |
| | L2511919-07 | 4A | 03-04-25 09:25 | WATER | Iodide | | | 1 |
| | L2511919-08 | 4B | 03-04-25 10:10 | WATER | Iodide | | | 1 |

| Relinquished By: | Date/Time: | Received By: | Date/Time: |
|---|---|---|---|
| C Velvean | | Fedex | |
| Fedex | 3/7/25 8:30 | [illegible] Pace | 3/7/25 8:30 |

Form No: AL_subcoc

F-IN-Q-290-rev.29, 4Oct2024

Pace

# SAMPLE CONDITION UPON RECEIPT FORM

Date/Time and Initials of person examining contents: 3/7/25 15:47 JG

1. **Thermometer:** 1 2 3 4 5 6 7 8 9 A B C D E F G H I
2. **Cooler Temperature(s):** 1.5/1.3 (Initial/Corrected) — RECORD TEMPS OF ALL COOLERS RECEIVED (use Comments below to add more)
3. **Courier:** Circle One: Fed Ex UPS Client Pace Now/Jett Other
4. **Custody Seal on Cooler/Box Present:** ☑ Yes ☐ No
   (If yes)**Seals Intact:** ☑ Yes ☐ No **(leave blank if no seals were present)**
5. **Packing Material:** ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other _____
6. **Ice Type:** ☑ Wet ☐ Blue ☐ None
7. **Was the PM notified of out of temp cooler?** ☐ Yes ☐ No
   Cooler temp should be above freezing to 6°C
   If the PM was contacted in the comments below please write how they instructed the project to proceed

**All discrepancies will be written out in the comments section below.**

| | Yes | No | | Yes | No | N/A |
|---|---|---|---|---|---|---|
| USDA Regulated Soils? (HI, ID, NY, WA, OR,CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico) | | — | All containers needing acid/base preservation have been pH CHECKED?: **Exceptions: VOA, coliform, LLHg, O&G, RAD CHEM, and any container with a septum cap or preserved with HCl.** **Circle: HNO3 (<2) H2SO4 (<2) NaOH (>10) NaOH/ZnAc (>9)** Any non-conformance to pH recommendations will be noted on the container count form | | | |
| Short Hold Time Analysis (48 hours or less)? Analysis: | | — | | | | — |
| Time 503. A TC placed in Freezer or Short Holds To Lab | Time: | | Residual Chlorine Check (SVOC 625 Pest/PCB 608) | Present | Absent | N/A — |
| Rush TAT Requested (4 days or less): | | — | Residual Chlorine Check (Total/Amenable/Free Cyanide) | | | — |
| Custody Signatures Present? | — | | Headspace in **VOA Vials** (>6mm): See Containter Count form for details | Present | Absent | No VOA Vials Sent — |
| Containers Intact?: | — | | Trip Blank Present? | | — | |
| Sample Label (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID | — | | Trip Blank Custody Seals?: | | | — |
| Extra labels on Terracore Vials? (soils only) | | | Out Of Temp Instructions if applicable: | | | |

COMMENTS:

| SWI Location | Note Discription |
|---|---|

COC PAGE ____ of ____

## Sample Container Count

Serial_No:04182514154

Place a PINK dot on containers that are out of conformance **

| COC Line Item | WGFU | WGKU BG1U | MeOH (only) SBS DI R | DG9H VG9H | VOA VIAL HS (>6mm) | VG9U DG9U | VG9T | AMBER GLASS AG0U | AG1H | AG1U | AG3U | AG3S | AG3SF | AG3B | PLASTIC BP1U | BP1N | BP2U | BP3U | BP3N | BP3F | BP3S | BP3B | BP3Z | OTHER CG3H | CG3F | Syringe Kit | | | Matrix |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | WT |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Nitric | Sulfuric | Sodium Hydroxide | Sodium Hydroxide/ ZnAc |
|---|---|---|---|
| Red | Yellow | Green | Black |
| HNO3 <2 | H2SO4 <2 | NaOH >10 | NaOH/Zn Ac >9 |
| | | | |

Container Codes

## Glass

| | | | |
|---|---|---|---|
| DG9H | 40mL HCl amber voa vial | BG1T | 1L Na Thiosulfate clear glass |
| DG9P | 40mL TSP amber vial | BG1U | 1L unpreserved glass |
| DG9S | 40mL H2SO4 amber vial | CG3H | 250mL HCl Clear Glass |
| DG9T | 40mL Na Thio amber vial | CG3U | 250mL Unpres Clear Glass |
| DG9U | 40mL unpreserved amber vial | AG0U | 100mL unpres amber glass |
| VG9H | 40mL HCl clear vial | AG1H | 1L HCl amber glass |
| VG9T | 40mL Na Thio. clear vial | AG1S | 1L H2SO4 amber glass |
| VG9U | 40mL unpreserved clear vial | AG1T | 1L Na Thiosulfate amber glass |
| I | 40mL w/hexane wipe vial | AG1U | 1liter unpres amber glass |
| WGKU | 8oz unpreserved clear jar | AG2N | 500mL HNO3 amber glass |
| WGFU | 4oz clear soil jar | AG2S | 500mL H2SO4 amber glass |
| JGFU | 4oz unpreserved amber wide | AG2U | 500mL unpres amber glass |
| CG3H | 250mL clear glass HCl | AG3S | 250mL H2SO4 amber glass |
| CG3F | 250mL clear glass HCl, Field Filter | AG3SF | 250mL H2SO4 amb glass -field filtered |
| BG1H | 1L HCl clear glass | AG3U | 250mL unpres amber glass |
| BG1S | 1L H2SO4 clear glass | AG3B | 250mL NaOH amber glass |

## Plastic

| | |
|---|---|
| BP1B | 1L NaOH plastic |
| BP1N | 1L HNO3 plastic |
| BP1S | 1L H2SO4 plastic |
| BP1U | 1L unpreserved plastic |
| BP1Z | 1L NaOH, Zn, Ac |
| BP2N | 500mL HNO3 plastic |
| BP2C | 500mL NaOH plastic |
| BP2S | 500mL H2SO4 plastic |
| BP2U | 500mL unpreserved plastic |
| BP2Z | 500mL NaOH, Zn Ac |
| BP3B | 250mL NaOH plastic |
| BP3N | 250mL HNO3 plastic |
| BP3F | 250mL HNO3 plastic-field filtered |
| BP3U | 250mL unpreserved plastic |
| BP3S | 250mL H2SO4 plastic |
| BP3Z | 250mL NaOH, ZnAc plastic |
| NT3U | Non Teflon 250mL unpreserved plastic |
| BP4U | 125mL unpreserved plastic |
| BP4N | 125mL HNO3 plastic |
| BP4S | 125mL H2SO4 plastic |

## Miscellaneous

| | |
|---|---|
| Syringe Kit | LL Cr+6 sampling kit |
| ZPLC | Ziploc Bag |
| R | Terracore Kit |
| SP5T | 120mL Coliform Sodium Thiosulfate |
| GN | General Container |
| U | Summa Can (air sample) |
| WT | Water |
| SL | Solid |
| OL: | Oil |
| NAL | Non-aqueous liquid |
| WP | Wipe |

**Pace Analytical Services, LLC**
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

April 18, 2025

Mitchell Ostrowski
Alpha Analytical
Eight Walkup Drive
Westborough, MA 01581

RE: Project: L2511919
Pace Project No.: 30762039

Dear Mitchell Ostrowski:

Enclosed are the analytical results for sample(s) received by the laboratory on March 10, 2025. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

(Greensburg, PA) - Revision 1 - This report replaces the 3/27/25 report. This project was revised on 4/18/25 to report uranium by HSL method.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Skyler C. Richmond
skyler.richmond@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Customer Service, Alpha Analytical



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## CERTIFICATIONS

Project: L2511919
Pace Project No.: 30762039

**Pace Analytical Services Pennsylvania**
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad


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(724)850-5600

## SAMPLE SUMMARY

Project: L2511919
Pace Project No.: 30762039

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| **30762039001** | **L2511919-04 3A** | Water | 03/04/25 12:25 | 03/10/25 09:10 |



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## SAMPLE ANALYTE COUNT

Project: L2511919
Pace Project No.: 30762039

| Lab ID | Sample ID | Method | Analysts | Analytes Reported | Laboratory |
|---|---|---|---|---|---|
| **30762039001** | **L2511919-04 3A** | EPA 903.1 | LL1 | 1 | PASI-PA |
| | | EPA 904.0 | ZPC | 1 | PASI-PA |
| | | HSL-300 | JJY | 6 | PASI-PA |

PASI-PA = Pace Analytical Services - Greensburg



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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: L2511919
Pace Project No.: 30762039

**Sample: L2511919-04 3A** **Lab ID: 30762039001** Collected: 03/04/25 12:25 Received: 03/10/25 09:10 Matrix: Water
PWS: Site ID: Sample Type:

| Parameters | Method | Act ± Unc (MDC) Carr Trac | Units | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|
| | Pace Analytical Services - Greensburg | | | | | |
| Radium-226 | EPA 903.1 | **0.252 ± 0.357 (0.604)**<br>**C:NA T:99%** | pCi/L | 03/20/25 15:03 | 13982-63-3 | |
| | Pace Analytical Services - Greensburg | | | | | |
| Radium-228 | EPA 904.0 | **0.481 ± 0.451 (0.929)**<br>**C:74% T:89%** | pCi/L | 03/26/25 12:06 | 15262-20-1 | |
| | Pace Analytical Services - Greensburg | | | | | |
| Thorium-228 | HSL-300 | **0.193 ± 0.171 (0.232)**<br>**C:NA T:84%** | pCi/L | 03/18/25 09:00 | 14274-82-9 | |
| Thorium-230 | HSL-300 | **0.000 ± 0.113 (0.085)**<br>**C:NA T:84%** | pCi/L | 03/18/25 09:00 | 14269-63-7 | |
| Thorium-232 | HSL-300 | **0.000 ± 0.113 (0.085)**<br>**C:NA T:84%** | pCi/L | 03/18/25 09:00 | 7440-29-1 | |
| Uranium-234 | HSL-300 | **0.129 ± 0.074 (0.063)**<br>**C:NA T:102%** | pCi/L | 04/16/25 13:54 | 13966-29-5 | |
| Uranium-235 | HSL-300 | **0.072 ± 0.060 (0.034)**<br>**C:NA T:102%** | pCi/L | 04/16/25 13:54 | 15117-96-1 | |
| Uranium-238 | HSL-300 | **0.156 ± 0.081 (0.063)**<br>**C:NA T:102%** | pCi/L | 04/16/25 13:54 | | |



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## QUALITY CONTROL - RADIOCHEMISTRY

Project: L2511919
Pace Project No.: 30762039

QC Batch: 731930
QC Batch Method: EPA 904.0
Analysis Method: EPA 904.0
Analysis Description: 904.0 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30762039001

METHOD BLANK: 3563078
Matrix: Water
Associated Lab Samples: 30762039001

| Parameter | Act ± Unc (MDC) Carr Trac | Units | Analyzed | Qualifiers |
|---|---|---|---|---|
| Radium-228 | 0.603 ± 0.390 (0.725) C:73% T:88% | pCi/L | 03/26/25 12:08 | |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**



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## QUALITY CONTROL - RADIOCHEMISTRY

Project: L2511919
Pace Project No.: 30762039

QC Batch: 731823
QC Batch Method: HSL-300
Analysis Method: HSL-300
Analysis Description: HSL300(AS) Actinides
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30762039001

METHOD BLANK: 3562756
Matrix: Water
Associated Lab Samples: 30762039001

| Parameter | Act ± Unc (MDC) Carr Trac | Units | Analyzed | Qualifiers |
|---|---|---|---|---|
| Thorium-228 | 0.173 ± 0.162 (0.218) C:NA T:83% | pCi/L | 03/18/25 09:00 | |
| Thorium-230 | -0.008 ± 0.118 (0.163) C:NA T:83% | pCi/L | 03/18/25 09:00 | |
| Thorium-232 | -0.008 ± 0.118 (0.163) C:NA T:83% | pCi/L | 03/18/25 09:00 | |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**



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Greensburg, PA 15601
(724)850-5600

## QUALITY CONTROL - RADIOCHEMISTRY

Project: L2511919
Pace Project No.: 30762039

QC Batch: 739378
QC Batch Method: HSL-300
Analysis Method: HSL-300
Analysis Description: HSL300(AS) Actinides
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30762039001

METHOD BLANK: 3598561
Matrix: Water
Associated Lab Samples: 30762039001

| Parameter | Act ± Unc (MDC) Carr Trac | Units | Analyzed | Qualifiers |
|---|---|---|---|---|
| Uranium-234 | 0.260 ± 0.104 (0.061) C:NA T:97% | pCi/L | 04/16/25 13:54 | |
| Uranium-235 | 0.159 ± 0.089 (0.033) C:NA T:97% | pCi/L | 04/16/25 13:54 | |
| Uranium-238 | 0.157 ± 0.082 (0.076) C:NA T:97% | pCi/L | 04/16/25 13:54 | |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**



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## QUALITY CONTROL - RADIOCHEMISTRY

Project: L2511919
Pace Project No.: 30762039

QC Batch: 731926
QC Batch Method: EPA 903.1
Analysis Method: EPA 903.1
Analysis Description: 903.1 Radium-226
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30762039001

METHOD BLANK: 3563073
Matrix: Water
Associated Lab Samples: 30762039001

| Parameter | Act ± Unc (MDC) Carr Trac | Units | Analyzed | Qualifiers |
|---|---|---|---|---|
| Radium-226 | 0.344 ± 0.360 (0.564) C:NA T:97% | pCi/L | 03/20/25 14:48 | |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**

## REPORT OF LABORATORY ANALYSIS

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

# QUALIFIERS

Project: L2511919
Pace Project No.: 30762039

**DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.



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**Pace Analytical Services, LLC**
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: L2511919
Pace Project No.: 30762039

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| **30762039001** | **L2511919-04 3A** | EPA 903.1 | 731926 | | |
| **30762039001** | **L2511919-04 3A** | EPA 904.0 | 731930 | | |
| **30762039001** | **L2511919-04 3A** | HSL-300 | 731823 | | |
| **30762039001** | **L2511919-04 3A** | HSL-300 | 739378 | | |



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WO# : 30762039

30762039

Pace

# Subcontract Chain of Custody

Pace Analytical (Greensburg, PA)
1638 Roseytown Rd, Suite 2
Greensburg, PA 15601

**Pace Job Number**
L2511919

Page 1

## Client Information

Client: Pace Analytical Labs
Address: Eight Walkup Drive
Westborough, MA 01581-1019

Report To:west.subreports@pacelabs.com
Bill To:invoices@pacelabs.coupahost.com

Phone: 508.844.4115
Email: Mitchell.Ostrowski@pacelabs.com

## Project Information

Project Location: NY
Project Manager: Mitchell Ostrowski

## Turnaround & Deliverables Information

Due Date:
Deliverables: ASP Category B Deliverables

## Regulatory Requirements/Report Limits

State/Federal Program:
Regulatory Criteria: NY-AWQS

Report to MDL

## Project Specific Requirements and/or Report Requirements

Reference following Pace Job Number on final report/deliverables: L2511919 Report to include Method and/or Regulatory required batch QC

Additional Comments: Need Data Package; Must use 903.1 /904.0 (Radium) Need Data Package; Must use HASL-300

| Lab ID | Pace ID | Client ID | Collection Date/Time | Sample Matrix | Analysis | Sample Level Comments | Sample Specific QC | Container Count |
|---|---|---|---|---|---|---|---|---|
| | L2511919-04 | 3A | 03-04-25 12:25 | WATER<br>WATER<br>WATER<br>WATER | Isotopic Uranium<br>Radium 226<br>Radium 228<br>Thorium | | | 1<br>1<br>1<br>1 |

Received by Pace Greensburg
Therm ID 14 Corr Factor +0.0
Receipt Temp 5.6 2.6
Corrected Temp 5.2 2.2
Correct Preservation Y/N

| Relinquished By: | Date/Time: | Received By: | Date/Time: |
|---|---|---|---|
| | 3/6/25 1835 | | 3/6/25 1835 |
| | 3/6/25 2245 | Paul Marcella | 3/6/25 2330 |
| Paul Marcella | 3/7/25 0230 | | 3/7 12:40 |
| | 3/7 16:40 | | 3/7 1960 |
| Fmc Corke | 3/7 3.10.25 9:10 | Fmc Corke | 3.10.25 7:10 |

Form No: AL_subcoc



Serial_No:04182514:54

Pace® Location Requested (City/State):

# CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

**WO#: 30762039**

PM: SCR Due Date: 03/31/25

CLIENT: ALPHA ANALYT

Company Name: Alpha Analytical

Street Address:

Customer Project #:

Project Name: L2511919

Site Collection Info/Facility ID (as applicable):

Contact/Report To:

Phone #:

E-Mail:

Cc E-Mail:

Invoice to:

Invoice E-mail:

Purchase Order # (if applicable):

Quote #:

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET

County / State origin of sample(s):

Data Deliverables:

[ ] Level II [ ] Level III [ ] Level IV

[ ] EQUIS

[ ] Other_____

Regulatory Program (DW, RCRA, etc.) as applicable:

Reportable [ ] Yes [ ] No

**Rush (Pre-approval required):**

[ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day Other _____

**Date Results Requested:**

DW PWSID # or WW Permit # as applicable:

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only: Proj. Mgr: / AcctNum / Client ID: / Table #: / Profile / Template: / Prelog / Bottle Ord. ID:

Preservation non-conformance identified for sample.

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

| Customer Sample ID | Matrix * | Comp / Grab | Composite Start Date | Composite Start Time | Collected or Composite End Date | Collected or Composite End Time | # Cont. | Residual Chlorine Result | Residual Chlorine Units | Sample Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |
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Additional Instructions from Pace® :

Collected By:

Printed Name

Signature

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers: | Thermometer ID: | Correction Factor (°C): | Obs. Temp. (°C): | Corrected Temp. (°C): | [ ] On Ice

| Relinquished by/Company: (Signature) | Date/Time: | Received by/Company: (Signature) | Date/Time: |
|---|---|---|---|
| Relinquished by/Company: (Signature) | Date/Time: | Received by/Company: (Signature) | Date/Time: |
| Relinquished by/Company: (Signature) | Date/Time: | Received by/Company: (Signature) | Date/Time: |
| Relinquished by/Company: (Signature) | Date/Time: | Received by/Company: (Signature) | Date/Time: |

Tracking Number:

Delivered by: [ ] In-Person [ ] Courier [ ] FedEX [ ] UPS [ ] Other

Page: 2 of 2

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

ENV-FRM-CORQ-0019_v02_110123 ©



Serial_No:04182514:54

| Pace ANALYTICAL SERVICES | DC#_Title: ENV-FRM-GBUR-0088 v07_Sa Greensburg<br>Effective Date: 01/04/2024 | WO# : 30762039<br>PM: SCR Due Date: 03/31/25<br>CLIENT: ALPHA ANALYT |
|---|---|---|

**Client Name:** Alpha Analytical

**Courier:** ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace ☐ Other

**Tracking Number:** Dropoff

**Custody Seal on Cooler/Box Present:** ☐ Yes ☒No **Seals Intact:** ☐ Yes ☒No

**Thermometer Used:** 19 **Type of Ice:** Wet Blue None

**Cooler Temperature:** Observed Temp 5.6 °C Correction Factor: -0.4 °C Final Temp: 5.2 °C
2.6 2.2

Temp should be above freezing to 6°C

| Initial / Date | |
|---|---|
| Examined By: | LB 3-10-25 |
| Labeled By: | LB 3-10-25 |
| Temped By: | LB 3-10-25 |

| Comments: | Yes | No | NA | pH paper Lot# 1003241 / D.P.D. Residual Chlorine Lot # |
|---|---|---|---|---|
| Chain of Custody Present | X | | | 1. |
| Chain of Custody Filled Out: | X | | | 2. |
| -Were client corrections present on COC | | X | | |
| Chain of Custody Relinquished | X | | | 3. |
| Sampler Name & Signature on COC: | | X | | 4. |
| Sample Labels match COC: | X | | | 5. |
| -Includes date/time/ID | | | | |
| Matrix: WT | | | | |
| Samples Arrived within Hold Time: | X | | | 6. |
| **Short Hold Time Analysis (<72hr remaining):** | | X | | 7. |
| **Rush Turn Around Time Requested:** | | X | | 8. |
| Sufficient Volume: | X | | | 9. |
| Correct Containers Used: | X | | | 10. |
| -Pace Containers Used | | X | | |
| Containers Intact: | X | | | 11. |
| Orthophosphate field filtered: | | | X | 12. |
| Hex Cr Aqueous samples field filtered: | | | X | 13. |
| Organic Samples checked for dichlorination | | | X | 14: |
| Filtered volume received for dissolved tests: | | | X | 15: |
| **All containers checked for preservation:** | X | | | 16. |
| exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix | | | | pH<2 |
| **All containers meet method preservation requirements:** | X | | | Initial when completed LB / Date/Time of Preservation / Lot# of added Preservative |
| **8260C/D**: Headspace in VOA Vials (> 6mm) | | | X | 17. |
| **624.1:** Headspace in VOA Vials (0mm) | | | X | 18. |
| **Radon:** Headspace in RAD Vials (0mm) | | | X | 19. |
| Trip Blank Present: | | | X | Trip blank custody seal present? YES or NO |
| **Rad Samples Screened <.05 mrem/hr.** | X | | | Initial when completed LB / Date: 3-10-25 / Survey Meter SN: 2501438 |

**Comments:**

**Note:** For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
**PM Review** is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Qualtrax ID: 55680

DC#_Title: ENV-FRM-GBUR-0072 v04_Sample Container Count Offshore Projects
Effective Date: 04/18/2024

Client

Site L2511919

Page 1 of 1

Profile/EZ Login Number 21604

Notes

| Sample Line Item | Matrix | Amber Glass | | | | | Plastic | | | | | | | | Vials | | | | | Other | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AG1H | AG3S | AG3U | AG5U | AG5T | BP1N | BP1U | BP2S | BP2U | BP3B | BP3N | BP3S | BP3U | DG9S | VG9H | VG9T | VG9U | VOAK | WGFU | WGKU | ZPLC | GCUB | GJN | 12GN | AG1U | BG1U | BP2N | |
| 00 | WT | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | |

Container Codes

## Glass

| | | | |
|---|---|---|---|
| GJN | 1 Gallon Jug with HNO3 | DG9S | 40mL amber VOA vial H2SO4 |
| AG5U | 100mL amber glass unpreserved | VG9U | 40mL clear VOA vial |
| AG5T | 100mL amber glass Na Thiosulfate | VG9T | 40mL clear VOA vial Na Thiosulfate |
| GJN | 1 Gallon Jug | VG9H | 40mL clear VOA vial HCl |
| AG1S | 1L amber glass H2SO4 | JGFU | 4oz amber wide jar |
| AG1H | 1L amber glass HCl | WGFU | 4oz wide jar unpreserved |
| AG1T | 1L amber glass NA Thiosulfate | BG2U | 500mL clear glass unpreserved |
| BG1U | 1L clear glass unpreserved | AG2U | 500mL amber |
| AG3S | 250mL amber glass H2SO4 | WGKU | 8oz wide jar u |
| AG3U | 250mL amber glass unpreserved | GN | General |

## Plastic/Misc.

| | |
|---|---|
| GCUB | 1 gallon cubitainer |
| 12GN | 1/2 gallon cubitainer |
| SP5T | 120mL coliform Na Thiosulfate |
| BP1N | 1L plastic HNO3 |
| BP1U | 1L plastic unpreserved |
| BP3S | 250mL plastic H2SO4 |
| | mL plastic HNO3 |
| | mL plastic unpreserved |
| | mL plastic NAOH |
| | mL plastic H2SO4 |
| | mL plastic unpreserved |

| | |
|---|---|
| EZI | 5g Encore |
| VOAK | Kit Volatile Solid |
| I | Wipe/Swab |
| ZPLC | Siploc Bag |

| | |
|---|---|
| WT | Water |
| SL | Solid |
| OL | Non-Aq Liquid |
| WP | Wipe |

WO#: 30762039
PM: SCR Due Date: 03/31/25
CLIENT: ALPHA ANALYT

Qualtrax ID: 55678

Services, LLC

Page 1 of 1



Serial_No:04182514:54

# *Amended Laboratory Report*

***Report prepared for:***
Mitchell Ostrowski
Pace Analytical Services, LLC
8 Walkup Dr
Westborough, MA 01581
*Email:* mitchell.ostrowski@pacelabs.com, west.subreports@alphalab.com

***Report prepared by:***
Debbie S Robertson

***Purchase Order:***

***For further assistance, contact:***
Debbie S Robertson
Report Production Coordinator
PO Box 51610
Knoxville, TN 37950 -1610
(865) 546-1335
debbierobertson@galbraith.com

**Sample:** Alpha Job #L2470744 2A
**Lab ID:** 2025-V-6131 **Received:** 2025-03-07

| Analysis | Method | Result | Basis | Sample Amount Used | Date (Time) |
|---|---|---|---|---|---|
| *711: Ammonium* | | | | | |
| | GLI Procedure ME-4D | < 5 ppm | As Received | 206.02 mg | 2025-03-17 |

**Sample:** Alpha Job #L2470744 2B
**Lab ID:** 2025-V-6132 **Received:** 2025-03-07

| Analysis | Method | Result | Basis | Sample Amount Used | Date (Time) |
|---|---|---|---|---|---|
| *711: Ammonium* | | | | | |
| | GLI Procedure ME-4D | < 5 ppm | As Received | 206.49 mg | 2025-03-17 |

**Sample:** Alpha Job #L2470744 3A
**Lab ID:** 2025-V-6133 **Received:** 2025-03-07

| Analysis | Method | Result | Basis | Sample Amount Used | Date (Time) |
|---|---|---|---|---|---|
| *711: Ammonium* | | | | | |
| | GLI Procedure ME-4D | < 5 ppm | As Received | 205.91 mg | 2025-03-17 |

**Sample:** Alpha Job #L2470744 3B
**Lab ID:** 2025-V-6134 **Received:** 2025-03-07

| Analysis | Method | Result | Basis | Sample Amount Used | Date (Time) |
|---|---|---|---|---|---|
| *711: Ammonium* | | | | | |
| | GLI Procedure ME-4D | < 5 ppm | As Received | 206.13 mg | 2025-03-17 |

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**Sample:** Alpha Job #L2470744 4A
**Lab ID:** 2025-V-6135 **Received:** 2025-03-07

| Analysis | Method | Result | Basis | Sample Amount Used | Date (Time) |
|---|---|---|---|---|---|
| *711: Ammonium* | | | | | |
| | GLI Procedure ME-4D | < 5 ppm | As Received | 206.23 mg | 2025-03-17 |

**Sample:** Alpha Job #L2470744 4B
**Lab ID:** 2025-V-6136 **Received:** 2025-03-07

| Analysis | Method | Result | Basis | Sample Amount Used | Date (Time) |
|---|---|---|---|---|---|
| *711: Ammonium* | | | | | |
| | GLI Procedure ME-4D | < 5 ppm | As Received | 206.40 mg | 2025-03-17 |

### *For all samples on this report:*

1. Amended Report: This report amends data included in report 159656

### *Signatures:*

| | | |
|---|---|---|
| Published By: | Debbie.S.Robertson | 2025-03-20T13:36:00.057-04:00 |
| Created By: | Debbie.S.Robertson | 2025-03-20T13:35:44.457-04:00 |

- Physical signatures are on file.
- "Published By" signature indicates authorized release of data.

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**Pace Analytical Services, LLC**
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

March 12, 2025

Reports
Alpha Analytical
8 Walkup Drive
Westborough, MA 01581

RE: Project: L2512368
Pace Project No.: 70341900

Dear Reports:

Enclosed are the analytical results for sample(s) received by the laboratory on March 08, 2025. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Melville

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Brianna D. Rivera
brianna.rivera@pacelabs.com
516-370-6007
Project Manager

Enclosures

**REPORT OF LABORATORY ANALYSIS**

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575 Broad Hollow Road
Melville, NY 11747
516-370-6000

## CERTIFICATIONS

Project: L2512368
Pace Project No.: 70341900

**Pace Analytical Services, LLC - Melville, NY**

575 Broad Hollow Rd, Melville, NY 11747
Connecticut Certification #: PH-0435
Delaware Certification # NY 10478
Maryland Certification #: 208
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987
New Jersey Certification #: NY158
New York Certification #: 10478 Primary Accrediting Body
Pennsylvania Certification #: 68-00350
Rhode Island Certification #: LAO00340
Texas Certification #: T104704582
Florida Certification #: E871198



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575 Broad Hollow Road
Melville, NY 11747
516-370-6000

## SAMPLE SUMMARY

Project: L2512368
Pace Project No.: 70341900

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| **70341900001** | **5A** | Water | 03/05/25 11:20 | 03/08/25 08:20 |
| **70341900002** | **5B** | Water | 03/05/25 11:25 | 03/08/25 08:20 |
| **70341900003** | **6A** | Water | 03/05/25 09:25 | 03/08/25 08:20 |
| **70341900004** | **6B** | Water | 03/05/25 09:27 | 03/08/25 08:20 |
| **70341900005** | **7A** | Water | 03/05/25 08:15 | 03/08/25 08:20 |
| **70341900006** | **7B** | Water | 03/05/25 08:13 | 03/08/25 08:20 |
| **70341900007** | **8A** | Water | 03/05/25 16:20 | 03/08/25 08:20 |
| **70341900008** | **8B** | Water | 03/05/25 16:45 | 03/08/25 08:20 |
| **70341900009** | **9A** | Water | 03/05/25 14:10 | 03/08/25 08:20 |
| **70341900010** | **9B** | Water | 03/05/25 15:15 | 03/08/25 08:20 |
| **70341900011** | **10A** | Water | 03/05/25 12:45 | 03/08/25 08:20 |
| **70341900012** | **10B** | Water | 03/05/25 12:55 | 03/08/25 08:20 |
| **70341900013** | **DUP001** | Water | 03/05/25 00:00 | 03/08/25 08:20 |



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Melville, NY 11747
516-370-6000

## SAMPLE ANALYTE COUNT

Project: L2512368
Pace Project No.: 70341900

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| **70341900001** | **5A** | SM22 4500-S2 F | GEL | 1 |
| **70341900002** | **5B** | SM22 4500-S2 F | GEL | 1 |
| **70341900003** | **6A** | SM22 4500-S2 F | GEL | 1 |
| **70341900004** | **6B** | SM22 4500-S2 F | GEL | 1 |
| **70341900005** | **7A** | SM22 4500-S2 F | GEL | 1 |
| **70341900006** | **7B** | SM22 4500-S2 F | GEL | 1 |
| **70341900007** | **8A** | SM22 4500-S2 F | JWM | 1 |
| **70341900008** | **8B** | SM22 4500-S2 F | JWM | 1 |
| **70341900009** | **9A** | SM22 4500-S2 F | JWM | 1 |
| **70341900010** | **9B** | SM22 4500-S2 F | JWM | 1 |
| **70341900011** | **10A** | SM22 4500-S2 F | JWM | 1 |
| **70341900012** | **10B** | SM22 4500-S2 F | JWM | 1 |
| **70341900013** | **DUP001** | SM22 4500-S2 F | JWM | 1 |

PACE-MV = Pace Analytical Services - Melville



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516-370-6000

# PROJECT NARRATIVE

Project: L2512368
Pace Project No.: 70341900

**Method:** **SM22 4500-S2 F**
**Description:** 4500S2F W Sulfide Iodometric
**Client:** Alpha Analytical
**Date:** March 12, 2025

**General Information:**
13 samples were analyzed for SM22 4500-S2 F by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**
The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**
All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 388857

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70341900007

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2043526)
  - Sulfide
- MSD (Lab ID: 2043527)
  - Sulfide

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.



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575 Broad Hollow Road
Melville, NY 11747
516-370-6000

## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 70341900

**Sample: 5A** **Lab ID: 70341900001** Collected: 03/05/25 11:20 Received: 03/08/25 08:20 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **4500S2F W Sulfide Iodometric** | Analytical Method: SM22 4500-S2 F<br>Pace Analytical Services - Melville | | | | | | | | |
| Sulfide | **<2.0** | mg/L | 2.0 | 0.20 | 1 | | 03/11/25 21:09 | | |



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**Pace Analytical Services, LLC**
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 70341900

**Sample: 5B** **Lab ID: 70341900002** Collected: 03/05/25 11:25 Received: 03/08/25 08:20 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **4500S2F W Sulfide Iodometric** | Analytical Method: SM22 4500-S2 F<br>Pace Analytical Services - Melville | | | | | | | | |
| Sulfide | **<2.0** | mg/L | 2.0 | 0.20 | 1 | | 03/11/25 21:15 | | |



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**Pace Analytical Services, LLC**
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 70341900

**Sample: 6A** **Lab ID: 70341900003** Collected: 03/05/25 09:25 Received: 03/08/25 08:20 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **4500S2F W Sulfide Iodometric** | Analytical Method: SM22 4500-S2 F<br>Pace Analytical Services - Melville | | | | | | | | |
| Sulfide | **<2.0** | mg/L | 2.0 | 0.20 | 1 | | 03/11/25 21:21 | | |



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575 Broad Hollow Road
Melville, NY 11747
516-370-6000

## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 70341900

**Sample: 6B** **Lab ID: 70341900004** Collected: 03/05/25 09:27 Received: 03/08/25 08:20 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **4500S2F W Sulfide Iodometric** | Analytical Method: SM22 4500-S2 F<br>Pace Analytical Services - Melville | | | | | | | | |
| Sulfide | **<2.0** | mg/L | 2.0 | 0.20 | 1 | | 03/11/25 21:27 | | |



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575 Broad Hollow Road
Melville, NY 11747
516-370-6000

## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 70341900

**Sample: 7A** **Lab ID: 70341900005** Collected: 03/05/25 08:15 Received: 03/08/25 08:20 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **4500S2F W Sulfide Iodometric** | Analytical Method: SM22 4500-S2 F<br>Pace Analytical Services - Melville | | | | | | | | |
| Sulfide | **<2.0** | mg/L | 2.0 | 0.20 | 1 | | 03/11/25 21:36 | | |



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## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 70341900

**Sample: 7B** **Lab ID: 70341900006** Collected: 03/05/25 08:13 Received: 03/08/25 08:20 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **4500S2F W Sulfide Iodometric** | Analytical Method: SM22 4500-S2 F<br>Pace Analytical Services - Melville | | | | | | | | |
| Sulfide | **<2.0** | mg/L | 2.0 | 0.20 | 1 | | 03/11/25 21:42 | | |



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## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 70341900

**Sample: 8A** **Lab ID: 70341900007** Collected: 03/05/25 16:20 Received: 03/08/25 08:20 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **4500S2F W Sulfide Iodometric** | Analytical Method: SM22 4500-S2 F<br>Pace Analytical Services - Melville | | | | | | | | |
| Sulfide | **<2.0** | mg/L | 2.0 | 0.20 | 1 | | 03/12/25 15:44 | | M1 |



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## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 70341900

**Sample: 8B** **Lab ID: 70341900008** Collected: 03/05/25 16:45 Received: 03/08/25 08:20 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **4500S2F W Sulfide Iodometric** | Analytical Method: SM22 4500-S2 F<br>Pace Analytical Services - Melville | | | | | | | | |
| Sulfide | **<2.0** | mg/L | 2.0 | 0.20 | 1 | | 03/12/25 15:55 | | |



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## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 70341900

**Sample: 9A** **Lab ID: 70341900009** Collected: 03/05/25 14:10 Received: 03/08/25 08:20 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **4500S2F W Sulfide Iodometric** | Analytical Method: SM22 4500-S2 F<br>Pace Analytical Services - Melville | | | | | | | | |
| Sulfide | **<2.0** | mg/L | 2.0 | 0.20 | 1 | | 03/12/25 15:58 | | |



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## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 70341900

**Sample: 9B** **Lab ID: 70341900010** Collected: 03/05/25 15:15 Received: 03/08/25 08:20 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **4500S2F W Sulfide Iodometric** | Analytical Method: SM22 4500-S2 F<br>Pace Analytical Services - Melville | | | | | | | | |
| Sulfide | **<2.0** | mg/L | 2.0 | 0.20 | 1 | | 03/12/25 16:01 | | |



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## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 70341900

**Sample: 10A** **Lab ID: 70341900011** Collected: 03/05/25 12:45 Received: 03/08/25 08:20 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **4500S2F W Sulfide Iodometric** | Analytical Method: SM22 4500-S2 F<br>Pace Analytical Services - Melville | | | | | | | | |
| Sulfide | **<2.0** | mg/L | 2.0 | 0.20 | 1 | | 03/12/25 16:04 | | |



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## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 70341900

**Sample: 10B** **Lab ID: 70341900012** Collected: 03/05/25 12:55 Received: 03/08/25 08:20 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **4500S2F W Sulfide Iodometric** | Analytical Method: SM22 4500-S2 F<br>Pace Analytical Services - Melville | | | | | | | | |
| Sulfide | **<2.0** | mg/L | 2.0 | 0.20 | 1 | | 03/12/25 16:07 | | |



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## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 70341900

**Sample: DUP001** **Lab ID: 70341900013** Collected: 03/05/25 00:00 Received: 03/08/25 08:20 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **4500S2F W Sulfide Iodometric** | Analytical Method: SM22 4500-S2 F<br>Pace Analytical Services - Melville | | | | | | | | |
| Sulfide | **<2.0** | mg/L | 2.0 | 0.20 | 1 | | 03/12/25 16:10 | | |



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# QUALITY CONTROL DATA

Project: L2512368
Pace Project No.: 70341900

QC Batch: 388802
QC Batch Method: SM22 4500-S2 F
Analysis Method: SM22 4500-S2 F
Analysis Description: 4500S2F W Sulfide Iodometric
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70341900001, 70341900002, 70341900003, 70341900004, 70341900005, 70341900006

METHOD BLANK: 2043358
Matrix: Water
Associated Lab Samples: 70341900001, 70341900002, 70341900003, 70341900004, 70341900005, 70341900006

| Parameter | Units | Blank Result | Reporting Limit | MDL | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| Sulfide | mg/L | ND | 2.0 | 0.20 | 03/11/25 20:45 | |

LABORATORY CONTROL SAMPLE & LCSD: 2043359 2043360

| Parameter | Units | Spike Conc. | LCS Result | LCSD Result | LCS % Rec | LCSD % Rec | % Rec Limits | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|---|
| Sulfide | mg/L | 14 | 14.0 | 14.0 | 100 | 100 | 85-115 | 0 | 20 | |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**



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# QUALITY CONTROL DATA

Project: L2512368
Pace Project No.: 70341900

QC Batch: 388857
QC Batch Method: SM22 4500-S2 F
Analysis Method: SM22 4500-S2 F
Analysis Description: 4500S2F W Sulfide Iodometric
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70341900007, 70341900008, 70341900009, 70341900010, 70341900011, 70341900012, 70341900013

METHOD BLANK: 2043524
Matrix: Water
Associated Lab Samples: 70341900007, 70341900008, 70341900009, 70341900010, 70341900011, 70341900012, 70341900013

| Parameter | Units | Blank Result | Reporting Limit | MDL | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| Sulfide | mg/L | ND | 2.0 | 0.20 | 03/12/25 15:34 | |

LABORATORY CONTROL SAMPLE: 2043525

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Sulfide | mg/L | 14 | 14.0 | 100 | 85-115 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2043526 2043527

| Parameter | Units | 70341900007 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfide | mg/L | <2.0 | 2.8 | 2.8 | <2.0 | <2.0 | 56 | 54 | 70-130 | | 20 | M1 |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**

## REPORT OF LABORATORY ANALYSIS

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575 Broad Hollow Road
Melville, NY 11747
516-370-6000

# QUALIFIERS

Project: L2512368
Pace Project No.: 70341900

## DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

## ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.



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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: L2512368
Pace Project No.: 70341900

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| **70341900001** | **5A** | SM22 4500-S2 F | 388802 | | |
| **70341900002** | **5B** | SM22 4500-S2 F | 388802 | | |
| **70341900003** | **6A** | SM22 4500-S2 F | 388802 | | |
| **70341900004** | **6B** | SM22 4500-S2 F | 388802 | | |
| **70341900005** | **7A** | SM22 4500-S2 F | 388802 | | |
| **70341900006** | **7B** | SM22 4500-S2 F | 388802 | | |
| **70341900007** | **8A** | SM22 4500-S2 F | 388857 | | |
| **70341900008** | **8B** | SM22 4500-S2 F | 388857 | | |
| **70341900009** | **9A** | SM22 4500-S2 F | 388857 | | |
| **70341900010** | **9B** | SM22 4500-S2 F | 388857 | | |
| **70341900011** | **10A** | SM22 4500-S2 F | 388857 | | |
| **70341900012** | **10B** | SM22 4500-S2 F | 388857 | | |
| **70341900013** | **DUP001** | SM22 4500-S2 F | 388857 | | |



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WO#: 70341900

70341900

Pace

# Subcontract Chain of Custody

Pace Analytical (Melville)
575 Broad Hollow Road
Melville, NY 11747

**Pace Job Number**
L2512368

Page 1

## Client Information

Client: Pace Analytical Labs
Address: Eight Walkup Drive
Westborough, MA 01581-1019

Report To:west.subreports@pacelabs.com
Bill To:invoices@pacelabs.coupahost.com

Phone: 508.844.4115
Email: Mitchell.Ostrowski@pacelabs.com

## Project Information

Project Location: NY
Project Manager: Mitchell Ostrowski

## Turnaround & Deliverables Information

Due Date:
Deliverables: ASP Category B Deliverables

## Regulatory Requirements/Report Limits

State/Federal Program:
Regulatory Criteria:

Report to MDL

## Project Specific Requirements and/or Report Requirements

Reference following Pace Job Number on final report/deliverables: L2512368 Report to include Method and/or Regulatory required batch QC

Additional Comments: Need Data Package

| Lab ID | Pace ID | Client ID | Collection Date/Time | Sample Matrix | Analysis | Sample Level Comments | Sample Specific QC | Container Count |
|---|---|---|---|---|---|---|---|---|
| | L2512368-01 | 5A | 03-05-25 11:20 | WATER | Sulfide | | | 1 |
| | L2512368-02 | 5B | 03-05-25 11:25 | WATER | Sulfide | | | 1 |
| | L2512368-04 | 6A | 03-05-25 09:25 | WATER | Sulfide | | | 1 |
| | L2512368-05 | 6B | 03-05-25 09:27 | WATER | Sulfide | | | 1 |
| | L2512368-07 | 7A | 03-05-25 08:15 | WATER | Sulfide | | | 1 |
| | L2512368-08 | 7B | 03-05-25 08:13 | WATER | Sulfide | | | 1 |
| | L2512368-10 | 8A | 03-05-25 16:20 | WATER | Sulfide | | MS;MSD | 3 |
| | L2512368-11 | 8B | 03-05-25 16:45 | WATER | Sulfide | | | 1 |
| | L2512368-13 | 9A | 03-05-25 14:10 | WATER | Sulfide | | | 1 |
| | L2512368-14 | 9B | 03-05-25 15:15 | WATER | Sulfide | | | 1 |
| | L2512368-16 | 10A | 03-05-25 12:45 | WATER | Sulfide | | | 1 |
| | L2512368-17 | 10B | 03-05-25 12:55 | WATER | Sulfide | | | 1 |
| | L2512368-19 | DUP001 | 03-05-25 00:00 | WATER | Sulfide | | | 1 |

| Relinquished By: | Date/Time: | Received By: | Date/Time: |
|---|---|---|---|
| | 3/7/25 1840 | | 3/7/25 1840 |
| 3/7/25 2320 | | PHS | 3/7/25 2320 |
| PHS | 3/8/25 0200 | | |
| Omon | 3-8-25 8:20 | ASF PACE LI | 3/8/25 8:20 |

Form No: AL_subcoc



Serial_No:04182514:55

DC#_Title: ENV-FRM-MELV-0024 v07_SCUR
Effective Date: 4/12/2024

**WO#: 70341900**
PM: BDR Due Date: 03/17/25
CLIENT: ALPHA

Client Name: Alpha Projec

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☐ No Seals intact: ☐ Yes ☐ No Temperature Blank Present: ☑ Yes ☐ No
Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ Ziploc ☐ None ☐ Other Type of Ice: (Wet) Blue None

Thermometer Used: TH211 Correction Factor: 0.2 ☐ Samples on ice, cooling process has begun
Cooler Temperature(°C): 0.7 Cooler Temperature Corrected(°C) 0.9 Date/Time 5035A kits placed in freezer _____
Temp should be above freezing to 6 0°C

USDA Regulated Soil ( ☑ N/A, water sample)
Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples orignate from a foreign source including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (ENV-FRM-MELV-0076) and include with SCUR/COC paperwork.

Date and Initials of person examining contents: ASF 3/8/25

| | | | | COMMENTS: |
|---|---|---|---|---|
| Chain of Custody Present: | ☑Yes | ☐No | | 1 |
| Chain of Custody Filled Out: | ☑Yes | ☐No | | 2 |
| Chain of Custody Relinquished: | ☑Yes | ☐No | | 3 |
| Sampler Name & Signature on COC: | ☐Yes | ☑No | ☐N/A | 4 |
| Samples Arrived within Hold Time: | ☑Yes | ☐No | | 5 |
| Short Hold Time Analysis (<72hr): | ☐Yes | ☑No | | 6 |
| Rush Turn Around Time Requested: | ☐Yes | ☑No | | 7 |
| Sufficient Volume. (Triple volume provided for MS/MSD) | ☑Yes | ☐No | | 8 |
| Correct Containers Used<br>-Pace Containers Used | ☑Yes<br>☑Yes | ☐No<br>☐No | | 9 |
| Containers Intact | ☑Yes | ☐No | | 10 |
| Filtered volume received for Dissolved tests | ☐Yes | ☐No | ☑N/A | 11 Note if sediment is visible in the dissolved container |
| Sample Labels match COC<br>-Includes date/time/ID/Analysis Matrix: SL WT OIL OTHER | ☑Yes | ☐No | | 12 |

Date and Initials of person checking preservation: ASF 3/8/25

| | | | | |
|---|---|---|---|---|
| All containers needing preservation have been<br>pH paper Lot # 213624<br>All containers needing preservation are found to be in compliance with method recommendation? ($HNO_3$ $H_2SO_4$, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)<br>Exceptions VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water)<br>Per Method, VOA pH is checked after analysis | ☑Yes<br>☑Yes | ☐No<br>☐No | ☐N/A<br>☐N/A | 13 ☐ $HNO_3$ ☐ $H_2SO_4$ ☐ NaOH ☐ HCl<br>Sample #<br>Initial when completed / Lot # of added preservative / Date/Time preservative added |
| Samples checked for dechlorination<br>KI starch test strips Lot #<br>Residual chlorine strips Lot # | ☐Yes | ☐No | ☑N/A | 14<br>Positive for Res Chlorine? Y N |
| SM 4500 CN samples checked for sulf<br>Lead Acetate Strips Lot # | ☐Yes | ☐No | ☑N/A | 15<br>Positive for Sulfide? Y N |
| Headspace in ALK Bottle ( >6mm): | ☐Yes | ☐No | ☑N/A | |
| Headspace in VOA Vials ( >6mm): | ☐Yes | ☐No | ☑N/A | 16 |
| Trip Blank Present | ☐Yes | ☐No | ☑N/A | 17 |
| Trip Blank Custody Seals Present | ☐Yes | ☐No | ☑N/A | |

Client Notification/ Resolution: Field Data Required? Y / N
Person Contacted: Date/Time:
Comments/ Resolution:

* PM (Project Manager) review (which includes the SCUR) is documented electronically in LIMS

**Pace Analytical Services, LLC**
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

March 20, 2025

Pace MA
Pace MA
Eight Walkup Drive
Westborough, MA 01581

RE: Project: L2512368
Pace Project No.: 50395809

Dear Pace MA:

Enclosed are the analytical results for sample(s) received by the laboratory on March 11, 2025. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Indianapolis

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tina Sayer

Tina Sayer
tina.sayer@pacelabs.com
(317)228-3127
Project Manager

Enclosures

cc: Mitchell Ostrowski, Pace MA

**REPORT OF LABORATORY ANALYSIS**

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**Pace Analytical Services, LLC**
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

## CERTIFICATIONS

Project: L2512368
Pace Project No.: 50395809

**Pace Analytical Services Indianapolis**
7726 Moller Road, Indianapolis, IN 46268
Illinois Accreditation #: 200074
Indiana Drinking Water Laboratory #: C-49-06
Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Louisiana Certification #: 04076
Michigan Drinking Water Laboratory #9050
Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
Washington Dept of Ecology #: C1081
Wisconsin Laboratory #: 999788130
USDA Foreign Soil Permit #: 525-23-13-23119
USDA Compliance Agreement #: IN-SL-22-001



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## SAMPLE SUMMARY

Project: L2512368
Pace Project No.: 50395809

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| **50395809001** | **5A** | Water | 03/05/25 11:20 | 03/11/25 08:40 |
| **50395809002** | **5B** | Water | 03/05/25 11:25 | 03/11/25 08:40 |
| **50395809003** | **6A** | Water | 03/05/25 09:25 | 03/11/25 08:40 |
| **50395809004** | **6B** | Water | 03/05/25 09:27 | 03/11/25 08:40 |
| **50395809005** | **7A** | Water | 03/05/25 08:15 | 03/11/25 08:40 |
| **50395809006** | **7B** | Water | 03/05/25 08:13 | 03/11/25 08:40 |
| **50395809007** | **8A** | Water | 03/05/25 16:20 | 03/11/25 08:40 |
| **50395809008** | **8B** | Water | 03/05/25 16:45 | 03/11/25 08:40 |
| **50395809009** | **9A** | Water | 03/05/25 14:10 | 03/11/25 08:40 |
| **50395809010** | **9B** | Water | 03/05/25 15:15 | 03/11/25 08:40 |
| **50395809011** | **10A** | Water | 03/05/25 12:45 | 03/11/25 08:40 |
| **50395809012** | **10B** | Water | 03/05/25 12:55 | 03/11/25 08:40 |
| **50395809013** | **DUP001** | Water | 03/05/25 00:00 | 03/11/25 08:40 |



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(317)228-3100

## SAMPLE ANALYTE COUNT

Project: L2512368
Pace Project No.: 50395809

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| **50395809001** | **5A** | EPA 9056 | GLT | 1 |
| **50395809002** | **5B** | EPA 9056 | GLT | 1 |
| **50395809003** | **6A** | EPA 9056 | GLT | 1 |
| **50395809004** | **6B** | EPA 9056 | GLT | 1 |
| **50395809005** | **7A** | EPA 9056 | GLT | 1 |
| **50395809006** | **7B** | EPA 9056 | GLT | 1 |
| **50395809007** | **8A** | EPA 9056 | GLT | 1 |
| **50395809008** | **8B** | EPA 9056 | GLT | 1 |
| **50395809009** | **9A** | EPA 9056 | GLT | 1 |
| **50395809010** | **9B** | EPA 9056 | GLT | 1 |
| **50395809011** | **10A** | EPA 9056 | GLT | 1 |
| **50395809012** | **10B** | EPA 9056 | GLT | 1 |
| **50395809013** | **DUP001** | EPA 9056 | GLT | 1 |

PASI-I = Pace Analytical Services - Indianapolis



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## SUMMARY OF DETECTION

Project: L2512368
Pace Project No.: 50395809

| Lab Sample ID<br>Method | Client Sample ID<br>Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **50395809005** | **7A** | | | | | |
| EPA 9056 | Iodide | 0.17J | mg/L | 0.50 | 03/14/25 22:16 | |



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## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 50395809

**Sample: 5A** **Lab ID: 50395809001** Collected: 03/05/25 11:20 Received: 03/11/25 08:40 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **9056 Iodide by IC** | Analytical Method: EPA 9056<br>Pace Analytical Services - Indianapolis | | | | | | | | |
| Iodide | ND | mg/L | 0.50 | 0.15 | 1 | | 03/14/25 21:03 | | |



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## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 50395809

**Sample: 5B** **Lab ID: 50395809002** Collected: 03/05/25 11:25 Received: 03/11/25 08:40 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **9056 Iodide by IC** | Analytical Method: EPA 9056<br>Pace Analytical Services - Indianapolis | | | | | | | | |
| Iodide | ND | mg/L | 0.50 | 0.15 | 1 | | 03/14/25 21:21 | | |



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## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 50395809

**Sample: 6A** **Lab ID: 50395809003** Collected: 03/05/25 09:25 Received: 03/11/25 08:40 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **9056 Iodide by IC** | Analytical Method: EPA 9056<br>Pace Analytical Services - Indianapolis | | | | | | | | |
| Iodide | ND | mg/L | 0.50 | 0.15 | 1 | | 03/14/25 21:39 | | |



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## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 50395809

**Sample: 6B** **Lab ID: 50395809004** Collected: 03/05/25 09:27 Received: 03/11/25 08:40 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **9056 Iodide by IC** | Analytical Method: EPA 9056<br>Pace Analytical Services - Indianapolis | | | | | | | | |
| Iodide | ND | mg/L | 0.50 | 0.15 | 1 | | 03/14/25 21:57 | | |



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## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 50395809

**Sample: 7A** **Lab ID: 50395809005** Collected: 03/05/25 08:15 Received: 03/11/25 08:40 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **9056 Iodide by IC** | Analytical Method: EPA 9056<br>Pace Analytical Services - Indianapolis | | | | | | | | |
| Iodide | **0.17J** | mg/L | 0.50 | 0.15 | 1 | | 03/14/25 22:16 | | |



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## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 50395809

**Sample: 7B** **Lab ID: 50395809006** Collected: 03/05/25 08:13 Received: 03/11/25 08:40 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **9056 Iodide by IC** | Analytical Method: EPA 9056<br>Pace Analytical Services - Indianapolis | | | | | | | | |
| Iodide | ND | mg/L | 0.50 | 0.15 | 1 | | 03/14/25 22:34 | | |



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## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 50395809

**Sample: 8A** **Lab ID: 50395809007** Collected: 03/05/25 16:20 Received: 03/11/25 08:40 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **9056 Iodide by IC** | Analytical Method: EPA 9056<br>Pace Analytical Services - Indianapolis | | | | | | | | |
| Iodide | ND | mg/L | 0.50 | 0.15 | 1 | | 03/14/25 22:52 | | |



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## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 50395809

**Sample: 8B** **Lab ID: 50395809008** Collected: 03/05/25 16:45 Received: 03/11/25 08:40 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **9056 Iodide by IC** | Analytical Method: EPA 9056<br>Pace Analytical Services - Indianapolis | | | | | | | | |
| Iodide | ND | mg/L | 0.50 | 0.15 | 1 | | 03/15/25 00:24 | | |



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## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 50395809

**Sample: 9A** **Lab ID: 50395809009** Collected: 03/05/25 14:10 Received: 03/11/25 08:40 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **9056 Iodide by IC** | Analytical Method: EPA 9056<br>Pace Analytical Services - Indianapolis | | | | | | | | |
| Iodide | ND | mg/L | 0.50 | 0.15 | 1 | | 03/15/25 00:42 | | |



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## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 50395809

**Sample: 9B** **Lab ID: 50395809010** Collected: 03/05/25 15:15 Received: 03/11/25 08:40 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **9056 Iodide by IC** | Analytical Method: EPA 9056<br>Pace Analytical Services - Indianapolis | | | | | | | | |
| Iodide | ND | mg/L | 0.50 | 0.15 | 1 | | 03/15/25 01:00 | | |



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## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 50395809

**Sample: 10A** **Lab ID: 50395809011** Collected: 03/05/25 12:45 Received: 03/11/25 08:40 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **9056 Iodide by IC** | Analytical Method: EPA 9056<br>Pace Analytical Services - Indianapolis | | | | | | | | |
| Iodide | ND | mg/L | 0.50 | 0.15 | 1 | | 03/15/25 01:19 | | |



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## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 50395809

**Sample: 10B** **Lab ID: 50395809012** Collected: 03/05/25 12:55 Received: 03/11/25 08:40 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **9056 Iodide by IC** | Analytical Method: EPA 9056<br>Pace Analytical Services - Indianapolis | | | | | | | | |
| Iodide | ND | mg/L | 0.50 | 0.15 | 1 | | 03/15/25 01:37 | | |



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## ANALYTICAL RESULTS

Project: L2512368
Pace Project No.: 50395809

**Sample: DUP001** **Lab ID: 50395809013** Collected: 03/05/25 00:00 Received: 03/11/25 08:40 Matrix: Water

| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **9056 Iodide by IC** | Analytical Method: EPA 9056<br>Pace Analytical Services - Indianapolis | | | | | | | | |
| Iodide | ND | mg/L | 0.50 | 0.15 | 1 | | 03/15/25 01:55 | | |



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# QUALITY CONTROL DATA

Project: L2512368
Pace Project No.: 50395809

QC Batch: 833942
QC Batch Method: EPA 9056
Analysis Method: EPA 9056
Analysis Description: 9056 Iodide by IC
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50395809001, 50395809002, 50395809003, 50395809004, 50395809005, 50395809006, 50395809007, 50395809008, 50395809009, 50395809010, 50395809011, 50395809012, 50395809013

METHOD BLANK: 3815714
Matrix: Water
Associated Lab Samples: 50395809001, 50395809002, 50395809003, 50395809004, 50395809005, 50395809006, 50395809007, 50395809008, 50395809009, 50395809010, 50395809011, 50395809012, 50395809013

| Parameter | Units | Blank Result | Reporting Limit | MDL | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| Iodide | mg/L | ND | 0.50 | 0.15 | 03/14/25 20:26 | |

LABORATORY CONTROL SAMPLE: 3815715

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Iodide | mg/L | 5 | 5.6 | 111 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3815716 3815717

| Parameter | Units | 50395809007 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Iodide | mg/L | ND | 5 | 5 | 4.7 | 4.7 | 94 | 94 | 80-120 | 0 | 15 | |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**

## REPORT OF LABORATORY ANALYSIS

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# QUALIFIERS

Project: L2512368
Pace Project No.: 50395809

**DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.



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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: L2512368
Pace Project No.: 50395809

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| **50395809001** | **5A** | EPA 9056 | 833942 | | |
| **50395809002** | **5B** | EPA 9056 | 833942 | | |
| **50395809003** | **6A** | EPA 9056 | 833942 | | |
| **50395809004** | **6B** | EPA 9056 | 833942 | | |
| **50395809005** | **7A** | EPA 9056 | 833942 | | |
| **50395809006** | **7B** | EPA 9056 | 833942 | | |
| **50395809007** | **8A** | EPA 9056 | 833942 | | |
| **50395809008** | **8B** | EPA 9056 | 833942 | | |
| **50395809009** | **9A** | EPA 9056 | 833942 | | |
| **50395809010** | **9B** | EPA 9056 | 833942 | | |
| **50395809011** | **10A** | EPA 9056 | 833942 | | |
| **50395809012** | **10B** | EPA 9056 | 833942 | | |
| **50395809013** | **DUP001** | EPA 9056 | 833942 | | |



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**Subcontract Chain of Custo**

Pace Analytical (Indianapolis, IN
7726 Moller Road
Indianapolis, IN 46268

**WO# : 50395809**

50395809

**Number**
68

| Client Information | Project Information | Regulatory Requirements/Report Limits |
|---|---|---|
| Client: Pace Analytical Labs<br>Address: Eight Walkup Drive<br>Westborough, MA 01581-1019<br><br>Report To:west.subreports@pacelabs.com<br>Bill To:invoices@pacelabs.coupahost.com<br><br>Phone: 508.844.4115<br>Email: Mitchell.Ostrowski@pacelabs.com | Project Location: NY<br>Project Manager: Mitchell Ostrowski<br><br>**Turnaround & Deliverables Information**<br><br>Due Date:<br>Deliverables: ASP Category B Deliverables | State/Federal Program:<br>Regulatory Criteria:<br><br>Report to MDL |

**Project Specific Requirements and/or Report Requirements**

Reference following Pace Job Number on final report/deliverables: L2512368 Report to include Method and/or Regulatory required batch QC

Additional Comments: Need Data Package

| Lab ID | Pace ID | Client ID | Collection Date/Time | Sample Matrix | Analysis | Sample Level Comments | Sample Specific QC | Container Count |
|---|---|---|---|---|---|---|---|---|
| | L2512368-01 | 5A | 03-05-25 11:20 | WATER | Iodide | | | 1 |
| | L2512368-02 | 5B | 03-05-25 11:25 | WATER | Iodide | | | 1 |
| | L2512368-04 | 6A | 03-05-25 09:25 | WATER | Iodide | | | 1 |
| | L2512368-05 | 6B | 03-05-25 09:27 | WATER | Iodide | | | 1 |
| | L2512368-07 | 7A | 03-05-25 08:15 | WATER | Iodide | | | 1 |
| | L2512368-08 | 7B | 03-05-25 08:13 | WATER | Iodide | | | 1 |
| | L2512368-10 | 8A | 03-05-25 16:20 | WATER | Iodide | | MS;MSD | 3 |
| | L2512368-11 | 8B | 03-05-25 16:45 | WATER | Iodide | | | 1 |
| | L2512368-13 | 9A | 03-05-25 14:10 | WATER | Iodide | | | 1 |
| | L2512368-14 | 9B | 03-05-25 15:15 | WATER | Iodide | | | 1 |
| | L2512368-16 | 10A | 03-05-25 12:45 | WATER | Iodide | | | 1 |
| | L2512368-17 | 10B | 03-05-25 12:55 | WATER | Iodide | | | 1 |
| | L2512368-19 | DUP001 | 03-05-25 00:00 | WATER | Iodide | | | 1 |

| Relinquished By: | Date/Time: | Received By: | Date/Time: |
|---|---|---|---|
| [illegible] | 3/10/25 | Fedex | |
| Fedex | 3-11-25 840 | [illegible] | 3-11-25 840 |
| | | | |

Form No: AL_subcoc

Pace

# SAMPLE CONDITION UPON RECEIPT FORM

**Date/Time and Initials of person examining contents:** TRH 3-11-25 1156

**1. Thermometer:** 1 2 3 4 5 6 7 8 9 A B C D E F G H I

**2. Cooler Temperature(s):** 0.9 | 0.8 | | |
(Initial/Corrected) RECORD TEMPS OF ALL COOLERS RECEIVED (use Comments below to add more)

**3. Courier:** Circle One: Fed Ex UPS Client Pace Now/Jett Other

**4. Custody Seal on Cooler/Box Present:** ☑ Yes ☐ No

**(If yes)Seals Intact:** ☑ Yes ☐ No (leave blank if no seals were present)

**5. Packing Material:** ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other _____

**6. Ice Type:** ☑ Wet ☐ Blue ☐ None

**7. Was the PM notified of out of temp cooler?** ☐ Yes ☐ No

Cooler temp should be above freezing to 6°C

If the PM was contacted in the comments below please write how they instructed the project to proceed

**All discrepancies will be written out in the comments section below.**

| | Yes | No |
|---|---|---|
| **USDA Regulated Soils?** (HI, ID, NY, WA, OR,CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico) | | ✓ |
| **Short Hold Time Analysis (48 hours or less)?** **Analysis:** | | ✓ |
| **Time 5035A TC placed in Freezer or Short Holds To Lab** | Time: | |
| **Rush TAT Requested (4 days or less):** | | ✓ |
| Custody Signatures Present? | ✓ | |
| Containers Intact?: | ✓ | |
| Sample Label (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID | ✓ | |
| Extra labels on Terracore Vials? (soils only) | | |

| | Yes | No | N/A |
|---|---|---|---|
| All containers needing acid/base preservation have been pH CHECKED?: **Exceptions: VOA, coliform, LLHg, O&G, RAD CHEM, and any container with a septum cap or preserved with HCl.** **Circle: HNO3 (<2) H2SO4 (<2) NaOH (>10) NaOH/ZnAc (>9)** Any non-conformance to pH recommendations will be noted on the container count form | | | ✓ |
| | Present | Absent | N/A |
| Residual Chlorine Check (SVOC 625 Pest/PCB 608) | | | ✓ |
| Residual Chlorine Check (Total/Amenable/Free Cyanide) | | | ✓ |
| | Present | Absent | No VOA Vials Sent |
| Headspace in **VOA Vials** (>6mm): See Containter Count form for details | | | ✓ |
| Trip Blank Present? | | ✓ | |
| Trip Blank Custody Seals?: | | | ✓ |
| Out Of Temp Instructions if applicable: | | | |

COMMENTS:

COC PAGE 1 of 2

## Sample Container Count

Serial_No:04182514:55

Place a PINK dot on containers that are out of conformance **

| | | | | | | | | | AMBER GLASS | | | | | | | PLASTIC | | | | | | | | | OTHER | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | MeOH (only) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | SBS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | DI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COC Line Item | WGFU | WGKU BG1U | R | DG9H VG9H | VOA -VIAL HS (>6mm) | VG9U DG9U | VG9T | AG0U | AG1H | AG1U | AG3U | AG3S | AG3SF | AG3B | BP1U | BP1N | BP2U | BP3U | BP3N | BP3F | BP3S | BP3B | BP3Z | CG3H | CG3F | Syringe Kit | | | Matrix | Nitric Red HNO3 <2 | Sulfuric Yellow H2SO4 <2 | Sodium Hydroxide Green NaOH >10 | Sodium Hydroxide/ ZnAc Black NaOH/Zn Ac >9 |
| 1 | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | WT | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | 3 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

BE 3-11-25

Container Codes

## Glass

| | | | |
|---|---|---|---|
| DG9H | 40mL HCl amber voa vial | BG1T | 1L Na Thiosulfate clear glass |
| DG9P | 40mL TSP amber vial | BG1U | 1L unpreserved glass |
| DG9S | 40mL H2SO4 amber vial | CG3H | 250mL HCl Clear Glass |
| DG9T | 40mL Na Thio amber vial | CG3U | 250mL Unpres Clear Glass |
| DG9U | 40mL unpreserved amber vial | AG0U | 100mL unpres amber glass |
| VG9H | 40mL HCl clear vial | AG1H | 1L HCl amber glass |
| VG9T | 40mL Na Thio. clear vial | AG1S | 1L H2SO4 amber glass |
| VG9U | 40mL unpreserved clear vial | AG1T | 1L Na Thiosulfate amber glass |
| I | 40mL w/hexane wipe vial | AG1U | 1liter unpres amber glass |
| WGKU | 8oz unpreserved clear jar | AG2N | 500mL HNO3 amber glass |
| WGFU | 4oz clear soil jar | AG2S | 500mL H2SO4 amber glass |
| JGFU | 4oz unpreserved amber wide | AG2U | 500mL unpres amber glass |
| CG3H | 250mL clear glass HCl | AG3S | 250mL H2SO4 amber glass |
| CG3F | 250mL clear glass HCl, Field Filter | AG3SF | 250mL H2SO4 amb glass -field filtered |
| BG1H | 1L HCl clear glass | AG3U | 250mL unpres amber glass |
| BG1S | 1L H2SO4 clear glass | AG3B | 250mL NaOH amber glass |

## Plastic

| | |
|---|---|
| BP1B | 1L NaOH plastic |
| BP1N | 1L HNO3 plastic |
| BP1S | 1L H2SO4 plastic |
| BP1U | 1L unpreserved plastic |
| BP1Z | 1L NaOH, Zn, Ac |
| BP2N | 500mL HNO3 plastic |
| BP2C | 500mL NaOH plastic |
| BP2S | 500mL H2SO4 plastic |
| BP2U | 500mL unpreserved plastic |
| BP2Z | 500mL NaOH, Zn Ac |
| BP3B | 250mL NaOH plastic |
| BP3N | 250mL HNO3 plastic |
| BP3F | 250mL HNO3 plastic-field filtered |
| BP3U | 250mL unpreserved plastic |
| BP3S | 250mL H2SO4 plastic |
| BP3Z | 250mL NaOH, ZnAc plastic |
| NT3U | Non Teflon 250mL unpreserved plastic |
| BP4U | 125mL unpreserved plastic |
| BP4N | 125mL HNO3 plastic |
| BP4S | 125mL H2SO4 plastic |

## Miscellaneous

| | |
|---|---|
| Syringe Kit | LL Cr+6 sampling kit |
| ZPLC | Ziploc Bag |
| R | Terracore Kit |
| SP5T | 120mL Coliform Sodium Thiosulfate |
| GN | General Container |
| U | Summa Can (air sample) |
| WT | Water |
| SL | Solid |
| OL: | Oil |
| NAL | Non-aqueous liquid |
| WP | Wipe |

## Sample Container Count



Place a Pink dot on containers that are out of conformance **

| COC Line Item | WGFU | WGKU BG1U | MeOH (only) SBS DI R | DG9H VG9H | VOA VIAL HS (>6mm) | VG9U DG9U | VG9T | AG0U | AG1H | AG1U | AG3U | AG3S | AG3SF | AG3B | BP1U | BP1N | BP2U | BP3U | BP3N | BP3F | BP3S | BP3B | BP3Z | CG3H | CG3F | Syringe Kit | | | Matrix |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | RC 3/4/25 | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Nitric | Sulfuric | Sodium Hydroxide | Sodium Hydroxide/ ZnAc |
|---|---|---|---|
| Red | Yellow | Green | Black |
| HNO3 <2 | H2SO4 <2 | NaOH >10 | NaOH/Zn Ac >9 |

Container Codes

### Glass

| | | | |
|---|---|---|---|
| DG9H | 40mL HCl amber voa vial | BG1T | 1L Na Thiosulfate clear glass |
| DG9P | 40mL TSP amber vial | BG1U | 1L unpreserved glass |
| DG9S | 40mL H2SO4 amber vial | CG3H | 250mL HCl Clear Glass |
| DG9T | 40mL Na Thio amber vial | CG3U | 250mL Unpres Clear Glass |
| DG9U | 40mL unpreserved amber vial | AG0U | 100mL unpres amber glass |
| VG9H | 40mL HCl clear vial | AG1H | 1L HCl amber glass |
| VG9T | 40mL Na Thio. clear vial | AG1S | 1L H2SO4 amber glass |
| VG9U | 40mL unpreserved clear vial | AG1T | 1L Na Thiosulfate amber glass |
| I | 40mL w/hexane wipe vial | AG1U | 1liter unpres amber glass |
| WGKU | 8oz unpreserved clear jar | AG2N | 500mL HNO3 amber glass |
| WGFU | 4oz clear soil jar | AG2S | 500mL H2SO4 amber glass |
| JGFU | 4oz unpreserved amber wide | AG2U | 500mL unpres amber glass |
| CG3H | 250mL clear glass HCl | AG3S | 250mL H2SO4 amber glass |
| CG3F | 250mL clear glass HCl, Field Filter | AG3SF | 250mL H2SO4 amb glass -field filtered |
| BG1H | 1L HCl clear glass | AG3U | 250mL unpres amber glass |
| BG1S | 1L H2SO4 clear glass | AG3B | 250mL NaOH amber glass |

### Plastic

| | |
|---|---|
| BP1B | 1L NaOH plastic |
| BP1N | 1L HNO3 plastic |
| BP1S | 1L H2SO4 plastic |
| BP1U | 1L unpreserved plastic |
| BP1Z | 1L NaOH, Zn, Ac |
| BP2N | 500mL HNO3 plastic |
| BP2C | 500mL NaOH plastic |
| BP2S | 500mL H2SO4 plastic |
| BP2U | 500mL unpreserved plastic |
| BP2Z | 500mL NaOH, Zn Ac |
| BP3B | 250mL NaOH plastic |
| BP3N | 250mL HNO3 plastic |
| BP3F | 250mL HNO3 plastic-field filtered |
| BP3U | 250mL unpreserved plastic |
| BP3S | 250mL H2SO4 plastic |
| BP3Z | 250mL NaOH, ZnAc plastic |
| NT3U | Non Teflon 250mL unpreserved plastic |
| BP4U | 125mL unpreserved plastic |
| BP4N | 125mL HNO3 plastic |
| BP4S | 125mL H2SO4 plastic |

### Miscellaneous

| | |
|---|---|
| Syringe Kit | LL Cr+6 sampling kit |
| ZPLC | Ziploc Bag |
| R | Terracore Kit |
| SP5T | 120mL Coliform Sodium Thiosulfate |
| GN | General Container |
| U | Summa Can (air sample) |
| WT | Water |
| SL | Solid |
| OL: | Oil |
| NAL | Non-aqueous liquid |
| WP | Wipe |

# *Amended Laboratory Report*

***Report prepared for:***
Mitchell Ostrowski
Pace Analytical Services, LLC
8 Walkup Dr
Westborough, MA 01581
*Email:* mitchell.ostrowski@pacelabs.com, west.subreports@alphalab.com

***Report prepared by:***
Debbie S Robertson

***Purchase Order:***

***For further assistance, contact:***
Debbie S Robertson
Report Production Coordinator
PO Box 51610
Knoxville, TN 37950 -1610
(865) 546-1335
debbierobertson@galbraith.com

**Sample:** L2512368 5A
**Lab ID:** 2025-V-6234 **Received:** 2025-03-11

| Analysis | Method | Result | Basis | Sample Amount Used | Date (Time) |
|---|---|---|---|---|---|
| *711: Ammonium* | | | | | |
| | GLI Procedure ME-4D | < 5 ppm | As Received | 206.83 mg | 2025-03-17 |

**Sample:** L2512368 5B
**Lab ID:** 2025-V-6235 **Received:** 2025-03-11

| Analysis | Method | Result | Basis | Sample Amount Used | Date (Time) |
|---|---|---|---|---|---|
| *711: Ammonium* | | | | | |
| | GLI Procedure ME-4D | < 5 ppm | As Received | 206.90 mg | 2025-03-17 |

**Sample:** L2512368 6A
**Lab ID:** 2025-V-6236 **Received:** 2025-03-11

| Analysis | Method | Result | Basis | Sample Amount Used | Date (Time) |
|---|---|---|---|---|---|
| *711: Ammonium* | | | | | |
| | GLI Procedure ME-4D | < 5 ppm | As Received | 208.29 mg | 2025-03-17 |

**Sample:** L2512368 6B
**Lab ID:** 2025-V-6237 **Received:** 2025-03-11

| Analysis | Method | Result | Basis | Sample Amount Used | Date (Time) |
|---|---|---|---|---|---|
| *711: Ammonium* | | | | | |
| | GLI Procedure ME-4D | < 5 ppm | As Received | 206.34 mg | 2025-03-17 |

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**Sample:** L2512368 7A
**Lab ID:** 2025-V-6238 **Received:** 2025-03-11

| Analysis | Method | Result | Basis | Sample Amount Used | Date (Time) |
|---|---|---|---|---|---|
| *711: Ammonium* | | | | | |
| | GLI Procedure ME-4D | < 5 ppm | As Received | 206.22 mg | 2025-03-17 |

**Sample:** L2512368 7B
**Lab ID:** 2025-V-6239 **Received:** 2025-03-11

| Analysis | Method | Result | Basis | Sample Amount Used | Date (Time) |
|---|---|---|---|---|---|
| *711: Ammonium* | | | | | |
| | GLI Procedure ME-4D | < 5 ppm | As Received | 205.65 mg | 2025-03-17 |

**Sample:** L2512368 8A
**Lab ID:** 2025-V-6240 **Received:** 2025-03-11

| Analysis | Method | Result | Basis | Sample Amount Used | Date (Time) |
|---|---|---|---|---|---|
| *711: Ammonium* | | | | | |
| | GLI Procedure ME-4D | < 5 ppm | As Received | 205.95 mg | 2025-03-17 |

**Sample:** L2512368 8A-MS
**Lab ID:** 2025-V-6241 **Received:** 2025-03-11

| Analysis | Method | Result | Basis | Sample Amount Used | Date (Time) |
|---|---|---|---|---|---|
| *711: Ammonium* | | | | | |
| | GLI Procedure ME-4D | < 5 ppm | As Received | 206.18 mg | 2025-03-17 |

**Sample:** L2512368 8A-MSD
**Lab ID:** 2025-V-6242 **Received:** 2025-03-11

| Analysis | Method | Result | Basis | Sample Amount Used | Date (Time) |
|---|---|---|---|---|---|
| *711: Ammonium* | | | | | |
| | GLI Procedure ME-4D | < 5 ppm | As Received | 205.78 mg | 2025-03-17 |

**Sample:** L2512368 8A-B
**Lab ID:** 2025-V-6243 **Received:** 2025-03-11

| Analysis | Method | Result | Basis | Sample Amount Used | Date (Time) |
|---|---|---|---|---|---|
| *711: Ammonium* | | | | | |
| | GLI Procedure ME-4D | < 5 ppm | As Received | 205.84 mg | 2025-03-17 |

**Sample:** L2512368 9A

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**Lab ID:** 2025-V-6244 **Received:** 2025-03-11

| Analysis | Method | Result | Basis | Sample Amount Used | Date (Time) |
|---|---|---|---|---|---|
| *711: Ammonium* | | | | | |
| | GLI Procedure ME-4D | < 5 ppm | As Received | 206.29 mg | 2025-03-17 |

**Sample:** L2512368 9B
**Lab ID:** 2025-V-6245 **Received:** 2025-03-11

| Analysis | Method | Result | Basis | Sample Amount Used | Date (Time) |
|---|---|---|---|---|---|
| *711: Ammonium* | | | | | |
| | GLI Procedure ME-4D | < 5 ppm | As Received | 205.98 mg | 2025-03-17 |

**Sample:** L2512368 10A
**Lab ID:** 2025-V-6246 **Received:** 2025-03-11

| Analysis | Method | Result | Basis | Sample Amount Used | Date (Time) |
|---|---|---|---|---|---|
| *711: Ammonium* | | | | | |
| | GLI Procedure ME-4D | < 5 ppm | As Received | 206.32 mg | 2025-03-17 |

**Sample:** L2512368 10B
**Lab ID:** 2025-V-6247 **Received:** 2025-03-11

| Analysis | Method | Result | Basis | Sample Amount Used | Date (Time) |
|---|---|---|---|---|---|
| *711: Ammonium* | | | | | |
| | GLI Procedure ME-4D | < 5 ppm | As Received | 206.35 mg | 2025-03-17 |

**Sample:** L2512368 DUP001
**Lab ID:** 2025-V-6248 **Received:** 2025-03-11

| Analysis | Method | Result | Basis | Sample Amount Used | Date (Time) |
|---|---|---|---|---|---|
| *711: Ammonium* | | | | | |
| | GLI Procedure ME-4D | < 5 ppm | As Received | 205.62 mg | 2025-03-17 |

### *For all samples on this report:*

1. Amended Report: This report amends data included in report 159656

### *Signatures:*

| | | |
|---|---|---|
| Created By: | Debbie.S.Robertson | 2025-03-20T13:37:46.123-04:00 |
| Published By: | Debbie.S.Robertson | 2025-03-20T13:38:08.12-04:00 |

- Physical signatures are on file.
- "Published By" signature indicates authorized release of data.

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**Pace Analytical Services, LLC**
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

April 18, 2025

Mitchell Ostrowski
Alpha Analytical
Eight Walkup Drive
Westborough, MA 01581

RE: Project: L2512368
Pace Project No.: 30762958

Dear Mitchell Ostrowski:

Enclosed are the analytical results for sample(s) received by the laboratory between March 12, 2025 and March 14, 2025. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

(Greensburg, PA) - Revision 1 - This report replaces the 4/7/25 report. This project was revised on 4/18/25 to report uranium by HSL method.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Skyler C. Richmond
skyler.richmond@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Customer Service, Alpha Analytical



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Greensburg, PA 15601
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## CERTIFICATIONS

Project: L2512368
Pace Project No.: 30762958

**Pace Analytical Services Pennsylvania**
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad


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## SAMPLE SUMMARY

Project: L2512368
Pace Project No.: 30762958

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| **30762958001** | **L2512368-04 6A** | Water | 03/05/25 09:25 | 03/12/25 12:00 |
| **30762958002** | **L2512368-10 8A** | Water | 03/05/25 16:20 | 03/12/25 12:00 |
| **30762958003** | **L2512368-19 DUP001** | Water | 03/05/25 00:00 | 03/12/25 12:00 |
| **30762958004** | **L2512368-16 10A** | Water | 03/05/25 12:45 | 03/14/25 13:00 |
| **30762958005** | **L2512368-10 8A MS** | Water | 03/05/25 16:20 | 03/12/25 12:00 |
| **30762958006** | **L2512368-10 8A MSD** | Water | 03/05/25 16:20 | 03/12/25 12:00 |



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## SAMPLE ANALYTE COUNT

Project: L2512368
Pace Project No.: 30762958

| Lab ID | Sample ID | Method | Analysts | Analytes Reported | Laboratory |
|---|---|---|---|---|---|
| **30762958001** | **L2512368-04 6A** | EPA 903.1 | CLM | 1 | PASI-PA |
| | | EPA 904.0 | JJS1 | 1 | PASI-PA |
| | | HSL-300 | JJY | 6 | PASI-PA |
| **30762958002** | **L2512368-10 8A** | EPA 903.1 | LL1 | 1 | PASI-PA |
| | | EPA 904.0 | ZPC | 1 | PASI-PA |
| | | HSL-300 | JJY | 6 | PASI-PA |
| **30762958003** | **L2512368-19 DUP001** | EPA 903.1 | CLM | 1 | PASI-PA |
| | | EPA 904.0 | JJS1 | 1 | PASI-PA |
| | | HSL-300 | JJY | 6 | PASI-PA |
| **30762958004** | **L2512368-16 10A** | EPA 903.1 | LL1 | 1 | PASI-PA |
| | | EPA 904.0 | ZPC | 1 | PASI-PA |
| | | HSL-300 | JJY | 6 | PASI-PA |
| **30762958005** | **L2512368-10 8A MS** | EPA 903.1 | LL1 | 1 | PASI-PA |
| | | EPA 904.0 | ZPC | 1 | PASI-PA |
| | | HSL-300 | JJY | 3 | PASI-PA |
| **30762958006** | **L2512368-10 8A MSD** | EPA 903.1 | LL1 | 1 | PASI-PA |
| | | EPA 904.0 | ZPC | 1 | PASI-PA |
| | | HSL-300 | JJY | 3 | PASI-PA |

PASI-PA = Pace Analytical Services - Greensburg



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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: L2512368
Pace Project No.: 30762958

**Sample: L2512368-04 6A** **Lab ID: 30762958001** Collected: 03/05/25 09:25 Received: 03/12/25 12:00 Matrix: Water
PWS: Site ID: Sample Type:

| Parameters | Method | Act ± Unc (MDC) Carr Trac | Units | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|
| | Pace Analytical Services - Greensburg | | | | | |
| Radium-226 | EPA 903.1 | **-0.435 ± 0.416 (0.971) C:NA T:97%** | pCi/L | 03/27/25 19:31 | 13982-63-3 | |
| | Pace Analytical Services - Greensburg | | | | | |
| Radium-228 | EPA 904.0 | **0.297 ± 0.401 (0.858) C:74% T:96%** | pCi/L | 03/30/25 14:53 | 15262-20-1 | |
| | Pace Analytical Services - Greensburg | | | | | |
| Thorium-228 | HSL-300 | **0.029 ± 0.152 (0.383) C:NA T:79%** | pCi/L | 03/18/25 09:02 | 14274-82-9 | |
| Thorium-230 | HSL-300 | **0.055 ± 0.113 (0.156) C:NA T:79%** | pCi/L | 03/18/25 09:02 | 14269-63-7 | |
| Thorium-232 | HSL-300 | **0.000 ± 0.112 (0.085) C:NA T:79%** | pCi/L | 03/18/25 09:02 | 7440-29-1 | |
| Uranium-234 | HSL-300 | **0.218 ± 0.100 (0.090) C:NA T:96%** | pCi/L | 04/16/25 13:54 | 13966-29-5 | |
| Uranium-235 | HSL-300 | **0.183 ± 0.097 (0.034) C:NA T:96%** | pCi/L | 04/16/25 13:54 | 15117-96-1 | |
| Uranium-238 | HSL-300 | **0.091 ± 0.063 (0.063) C:NA T:96%** | pCi/L | 04/16/25 13:54 | | |

**Sample: L2512368-10 8A** **Lab ID: 30762958002** Collected: 03/05/25 16:20 Received: 03/12/25 12:00 Matrix: Water
PWS: Site ID: Sample Type:

| Parameters | Method | Act ± Unc (MDC) Carr Trac | Units | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|
| | Pace Analytical Services - Greensburg | | | | | |
| Radium-226 | EPA 903.1 | **0.0510 ± 0.388 (0.766) C:NA T:94%** | pCi/L | 04/07/25 12:17 | 13982-63-3 | |
| | Pace Analytical Services - Greensburg | | | | | |
| Radium-228 | EPA 904.0 | **0.507 ± 0.460 (0.932) C:71% T:86%** | pCi/L | 03/31/25 14:59 | 15262-20-1 | |
| | Pace Analytical Services - Greensburg | | | | | |
| Thorium-228 | HSL-300 | **0.076 ± 0.131 (0.277) C:NA T:92%** | pCi/L | 03/18/25 09:02 | 14274-82-9 | |
| Thorium-230 | HSL-300 | **-0.013 ± 0.099 (0.164) C:NA T:92%** | pCi/L | 03/18/25 09:02 | 14269-63-7 | |
| Thorium-232 | HSL-300 | **-0.007 ± 0.099 (0.138) C:NA T:92%** | pCi/L | 03/18/25 09:02 | 7440-29-1 | |
| Uranium-234 | HSL-300 | **0.325 ± 0.119 (0.027) C:NA T:96%** | pCi/L | 04/16/25 13:54 | 13966-29-5 | |
| Uranium-235 | HSL-300 | **0.091 ± 0.069 (0.035) C:NA T:96%** | pCi/L | 04/16/25 13:54 | 15117-96-1 | |
| Uranium-238 | HSL-300 | **0.211 ± 0.096 (0.065) C:NA T:96%** | pCi/L | 04/16/25 13:54 | | |



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## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: L2512368
Pace Project No.: 30762958

**Sample: L2512368-19 DUP001** **Lab ID: 30762958003** Collected: 03/05/25 00:00 Received: 03/12/25 12:00 Matrix: Water
PWS: Site ID: Sample Type:

| Parameters | Method | Act ± Unc (MDC) Carr Trac | Units | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|
| | Pace Analytical Services - Greensburg | | | | | |
| Radium-226 | EPA 903.1 | **0.0581 ± 0.674 (1.27) C:NA T:101%** | pCi/L | 03/27/25 19:31 | 13982-63-3 | |
| | Pace Analytical Services - Greensburg | | | | | |
| Radium-228 | EPA 904.0 | **0.774 ± 0.428 (0.756) C:71% T:94%** | pCi/L | 03/30/25 14:54 | 15262-20-1 | |
| | Pace Analytical Services - Greensburg | | | | | |
| Thorium-228 | HSL-300 | **0.200 ± 0.163 (0.182) C:NA T:86%** | pCi/L | 03/18/25 09:02 | 14274-82-9 | |
| Thorium-230 | HSL-300 | **-0.015 ± 0.109 (0.179) C:NA T:86%** | pCi/L | 03/18/25 09:02 | 14269-63-7 | |
| Thorium-232 | HSL-300 | **0.000 ± 0.109 (0.082) C:NA T:86%** | pCi/L | 03/18/25 09:02 | 7440-29-1 | |
| Uranium-234 | HSL-300 | **0.237 ± 0.100 (0.027) C:NA T:94%** | pCi/L | 04/16/25 13:54 | 13966-29-5 | |
| Uranium-235 | HSL-300 | **0.118 ± 0.078 (0.035) C:NA T:94%** | pCi/L | 04/16/25 13:54 | 15117-96-1 | |
| Uranium-238 | HSL-300 | **0.178 ± 0.093 (0.093) C:NA T:94%** | pCi/L | 04/16/25 13:54 | | |

**Sample: L2512368-16 10A** **Lab ID: 30762958004** Collected: 03/05/25 12:45 Received: 03/14/25 13:00 Matrix: Water
PWS: Site ID: Sample Type:

| Parameters | Method | Act ± Unc (MDC) Carr Trac | Units | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|
| | Pace Analytical Services - Greensburg | | | | | |
| Radium-226 | EPA 903.1 | **0.286 ± 0.562 (0.989) C:NA T:101%** | pCi/L | 04/01/25 14:06 | 13982-63-3 | |
| | Pace Analytical Services - Greensburg | | | | | |
| Radium-228 | EPA 904.0 | **0.911 ± 0.515 (0.950) C:65% T:96%** | pCi/L | 03/31/25 14:59 | 15262-20-1 | |
| | Pace Analytical Services - Greensburg | | | | | |
| Thorium-228 | HSL-300 | **-0.024 ± 0.117 (0.218) C:NA T:84%** | pCi/L | 03/27/25 10:10 | 14274-82-9 | |
| Thorium-230 | HSL-300 | **0.049 ± 0.115 (0.190) C:NA T:84%** | pCi/L | 03/27/25 10:10 | 14269-63-7 | |
| Thorium-232 | HSL-300 | **-0.008 ± 0.115 (0.159) C:NA T:84%** | pCi/L | 03/27/25 10:10 | 7440-29-1 | |
| Uranium-234 | HSL-300 | **0.153 ± 0.079 (0.027) C:NA T:92%** | pCi/L | 04/16/25 13:54 | 13966-29-5 | |
| Uranium-235 | HSL-300 | **0.118 ± 0.078 (0.035) C:NA T:92%** | pCi/L | 04/16/25 13:54 | 15117-96-1 | |
| Uranium-238 | HSL-300 | **0.077 ± 0.063 (0.081) C:NA T:92%** | pCi/L | 04/16/25 13:54 | | |



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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: L2512368
Pace Project No.: 30762958

**Sample: L2512368-10 8A MS** **Lab ID: 30762958005** Collected: 03/05/25 16:20 Received: 03/12/25 12:00 Matrix: Water
PWS: Site ID: Sample Type:

| Parameters | Method | Act ± Unc (MDC) Carr Trac | Units | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|
| | Pace Analytical Services - Greensburg | | | | | |
| Radium-226 | EPA 903.1 | **122.82 %REC ± NA (NA) C:NA T:NA** | pCi/L | 04/07/25 12:17 | 13982-63-3 | |
| | Pace Analytical Services - Greensburg | | | | | |
| Radium-228 | EPA 904.0 | **57.24 %REC ± NA (NA) C:NA T:NA** | pCi/L | 03/31/25 14:59 | 15262-20-1 | 1c |
| | Pace Analytical Services - Greensburg | | | | | |
| Thorium-230 | HSL-300 | **108.72 %REC ± NA (NA) C:NA T:NA** | pCi/L | 03/27/25 10:10 | 14269-63-7 | |
| Uranium-234 | HSL-300 | **110.65 %REC ± NA (NA) C:NA T:NA** | pCi/L | 04/16/25 14:11 | 13966-29-5 | |
| Uranium-238 | HSL-300 | **110.03 %REC ± NA (NA) C:NA T:NA** | pCi/L | 04/16/25 14:11 | | |

**Sample: L2512368-10 8A MSD** **Lab ID: 30762958006** Collected: 03/05/25 16:20 Received: 03/12/25 12:00 Matrix: Water
PWS: Site ID: Sample Type:

| Parameters | Method | Act ± Unc (MDC) Carr Trac | Units | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|
| | Pace Analytical Services - Greensburg | | | | | |
| Radium-226 | EPA 903.1 | **103.34 %REC 17.23RPD ± NA (NA) C:NA T:NA** | pCi/L | 04/07/25 12:17 | 13982-63-3 | |
| | Pace Analytical Services - Greensburg | | | | | |
| Radium-228 | EPA 904.0 | **68.19 %REC 17.47RPD ± NA (NA) C:NA T:NA** | pCi/L | 03/31/25 14:59 | 15262-20-1 | |
| | Pace Analytical Services - Greensburg | | | | | |
| Thorium-230 | HSL-300 | **103.11 %REC 5.30RPD ± NA (NA) C:NA T:NA** | pCi/L | 03/27/25 10:10 | 14269-63-7 | |
| Uranium-234 | HSL-300 | **111.53 %REC 0.79RPD ± NA (NA) C:NA T:NA** | pCi/L | 04/16/25 13:54 | 13966-29-5 | |
| Uranium-238 | HSL-300 | **109.59 %REC 0.40RPD ± NA (NA) C:NA T:NA** | pCi/L | 04/16/25 13:54 | | |



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(724)850-5600

## QUALITY CONTROL - RADIOCHEMISTRY

Project: L2512368
Pace Project No.: 30762958

QC Batch: 733284
QC Batch Method: HSL-300
Analysis Method: HSL-300
Analysis Description: HSL300(AS) Actinides
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30762958004, 30762958005, 30762958006

METHOD BLANK: 3569710
Matrix: Water
Associated Lab Samples: 30762958004, 30762958005, 30762958006

| Parameter | Act ± Unc (MDC) Carr Trac | Units | Analyzed | Qualifiers |
|---|---|---|---|---|
| Thorium-228 | 0.155 ± 0.152 (0.224) C:NA T:82% | pCi/L | 03/27/25 10:10 | |
| Thorium-230 | 0.016 ± 0.111 (0.183) C:NA T:82% | pCi/L | 03/27/25 10:10 | |
| Thorium-232 | 0.029 ± 0.111 (0.113) C:NA T:82% | pCi/L | 03/27/25 10:10 | |

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## QUALITY CONTROL - RADIOCHEMISTRY

Project: L2512368
Pace Project No.: 30762958

QC Batch: 733588 | Analysis Method: EPA 904.0
QC Batch Method: EPA 904.0 | Analysis Description: 904.0 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30762958002, 30762958004, 30762958005, 30762958006

METHOD BLANK: 3571134 | Matrix: Water
Associated Lab Samples: 30762958002, 30762958004, 30762958005, 30762958006

| Parameter | Act ± Unc (MDC) Carr Trac | Units | Analyzed | Qualifiers |
|---|---|---|---|---|
| Radium-228 | 0.299 ± 0.321 (0.662) C:77% T:86% | pCi/L | 03/31/25 14:59 | |

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## QUALITY CONTROL - RADIOCHEMISTRY

Project: L2512368
Pace Project No.: 30762958

QC Batch: 739378 | Analysis Method: HSL-300
QC Batch Method: HSL-300 | Analysis Description: HSL300(AS) Actinides
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30762958001, 30762958002, 30762958003, 30762958004, 30762958005, 30762958006

METHOD BLANK: 3598561 | Matrix: Water
Associated Lab Samples: 30762958001, 30762958002, 30762958003, 30762958004, 30762958005, 30762958006

| Parameter | Act ± Unc (MDC) Carr Trac | Units | Analyzed | Qualifiers |
|---|---|---|---|---|
| Uranium-234 | 0.260 ± 0.104 (0.061) C:NA T:97% | pCi/L | 04/16/25 13:54 | |
| Uranium-235 | 0.159 ± 0.089 (0.033) C:NA T:97% | pCi/L | 04/16/25 13:54 | |
| Uranium-238 | 0.157 ± 0.082 (0.076) C:NA T:97% | pCi/L | 04/16/25 13:54 | |

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## QUALITY CONTROL - RADIOCHEMISTRY

Project: L2512368
Pace Project No.: 30762958

QC Batch: 732719
QC Batch Method: EPA 904.0
Analysis Method: EPA 904.0
Analysis Description: 904.0 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30762958001, 30762958003

METHOD BLANK: 3567100
Matrix: Water
Associated Lab Samples: 30762958001, 30762958003

| Parameter | Act ± Unc (MDC) Carr Trac | Units | Analyzed | Qualifiers |
|---|---|---|---|---|
| Radium-228 | 0.562 ± 0.378 (0.715) C:72% T:92% | pCi/L | 03/30/25 14:52 | |

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## QUALITY CONTROL - RADIOCHEMISTRY

Project: L2512368
Pace Project No.: 30762958

QC Batch: 732718
QC Batch Method: EPA 903.1
Analysis Method: EPA 903.1
Analysis Description: 903.1 Radium-226
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30762958001, 30762958003

METHOD BLANK: 3567099
Matrix: Water
Associated Lab Samples: 30762958001, 30762958003

| Parameter | Act ± Unc (MDC) Carr Trac | Units | Analyzed | Qualifiers |
|---|---|---|---|---|
| Radium-226 | 0.112 ± 0.171 (0.274) C:NA T:98% | pCi/L | 03/27/25 19:04 | |

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## QUALITY CONTROL - RADIOCHEMISTRY

Project: L2512368
Pace Project No.: 30762958

QC Batch: 733587 | Analysis Method: EPA 903.1
QC Batch Method: EPA 903.1 | Analysis Description: 903.1 Radium-226
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30762958002, 30762958004, 30762958005, 30762958006

METHOD BLANK: 3571133 | Matrix: Water
Associated Lab Samples: 30762958002, 30762958004, 30762958005, 30762958006

| Parameter | Act ± Unc (MDC) Carr Trac | Units | Analyzed | Qualifiers |
|---|---|---|---|---|
| Radium-226 | 0.423 ± 0.313 (0.423) C:NA T:99% | pCi/L | 04/01/25 14:06 | |

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## QUALITY CONTROL - RADIOCHEMISTRY

Project: L2512368
Pace Project No.: 30762958

QC Batch: 732476 | Analysis Method: HSL-300
QC Batch Method: HSL-300 | Analysis Description: HSL300(AS) Actinides
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30762958001, 30762958002, 30762958003

METHOD BLANK: 3566158 | Matrix: Water
Associated Lab Samples: 30762958001, 30762958002, 30762958003

| Parameter | Act ± Unc (MDC) Carr Trac | Units | Analyzed | Qualifiers |
|---|---|---|---|---|
| Thorium-228 | 0.064 ± 0.114 (0.229) C:NA T:82% | pCi/L | 03/18/25 09:02 | |
| Thorium-230 | 0.024 ± 0.113 (0.157) C:NA T:82% | pCi/L | 03/18/25 09:02 | |
| Thorium-232 | 0.000 ± 0.113 (0.086) C:NA T:82% | pCi/L | 03/18/25 09:02 | |

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# QUALIFIERS

Project: L2512368
Pace Project No.: 30762958

## DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

## ANALYTE QUALIFIERS

| | |
|---|---|
| 1c | Matrix spike recovery is low and outside of default acceptance criteria. Results reported based on acceptable RPD for the RQS set. |


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Greensburg, PA 15601
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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: L2512368
Pace Project No.: 30762958

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| **30762958001** | **L2512368-04 6A** | EPA 903.1 | 732718 | | |
| **30762958002** | **L2512368-10 8A** | EPA 903.1 | 733587 | | |
| **30762958003** | **L2512368-19 DUP001** | EPA 903.1 | 732718 | | |
| **30762958004** | **L2512368-16 10A** | EPA 903.1 | 733587 | | |
| **30762958005** | **L2512368-10 8A MS** | EPA 903.1 | 733587 | | |
| **30762958006** | **L2512368-10 8A MSD** | EPA 903.1 | 733587 | | |
| **30762958001** | **L2512368-04 6A** | EPA 904.0 | 732719 | | |
| **30762958002** | **L2512368-10 8A** | EPA 904.0 | 733588 | | |
| **30762958003** | **L2512368-19 DUP001** | EPA 904.0 | 732719 | | |
| **30762958004** | **L2512368-16 10A** | EPA 904.0 | 733588 | | |
| **30762958005** | **L2512368-10 8A MS** | EPA 904.0 | 733588 | | |
| **30762958006** | **L2512368-10 8A MSD** | EPA 904.0 | 733588 | | |
| **30762958001** | **L2512368-04 6A** | HSL-300 | 732476 | | |
| **30762958001** | **L2512368-04 6A** | HSL-300 | 739378 | | |
| **30762958002** | **L2512368-10 8A** | HSL-300 | 732476 | | |
| **30762958002** | **L2512368-10 8A** | HSL-300 | 739378 | | |
| **30762958003** | **L2512368-19 DUP001** | HSL-300 | 732476 | | |
| **30762958003** | **L2512368-19 DUP001** | HSL-300 | 739378 | | |
| **30762958004** | **L2512368-16 10A** | HSL-300 | 733284 | | |
| **30762958004** | **L2512368-16 10A** | HSL-300 | 739378 | | |
| **30762958005** | **L2512368-10 8A MS** | HSL-300 | 733284 | | |
| **30762958005** | **L2512368-10 8A MS** | HSL-300 | 739378 | | |
| **30762958006** | **L2512368-10 8A MSD** | HSL-300 | 733284 | | |
| **30762958006** | **L2512368-10 8A MSD** | HSL-300 | 739378 | | |



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WO# : 30762958

30762958

# Pac ocontract Chain of Custody

ace Analytical (Greensburg, PA)
538 Roseytown Rd, Suite 2
reensburg, PA 15601

**Pace Job Number**
L2512368

Page 1

## Client Information

Client: Pace Analytical Labs
Address: Eight Walkup Drive
Westborough, MA 01581-1019

Report To:west.subreports@pacelabs.com
Bill To:invoices@pacelabs.coupahost.com

Phone: 508.844.4115
Email: Mitchell.Ostrowski@pacelabs.com

## Project Information

Project Location: NY
Project Manager: Mitchell Ostrowski

## Turnaround & Deliverables Information

Due Date:
Deliverables: ASP Category B Deliverables

## Regulatory Requirements/Report Limits

State/Federal Program:
Regulatory Criteria:

Report to MDL

Received by Pace Greensburg
Therm ID 19 Corr Factor +0.4
Receipt Temp 1.5
Corrected Temp 1.1
Correct Preservation Y/N

## Project Specific Requirements and/or Report Requirements

Reference following Pace Job Number on final report/deliverables: L2512368 Report to include Method and/or Regulatory required batch QC

Additional Comments: Need Data Package; Must use 903.1 /904.0 (Radium) Need Data Package; Must use HASL-300

| Lab ID | Pace ID | Client ID | Collection Date/Time | Sample Matrix | Analysis | Sample Level Comments | Sample Specific QC | Container Count |
|---|---|---|---|---|---|---|---|---|
| | L2512368-04 | 6A | 03-05-25 09:25 | WATER | Isotopic Uranium | | | 1 |
| | | | | WATER | Radium 226 | | | 1 |
| | | | | WATER | Radium 228 | | | 1 |
| | | | | WATER | Thorium | | | 1 |
| | L2512368-10 | 8A | 03-05-25 16:20 | WATER | Isotopic Uranium | | MS;MSD | 3 |
| | | | | WATER | Radium 226 | | MS;MSD | 3 |
| | | | | WATER | Radium 228 | | MS;MSD | 3 |
| | | | | WATER | Thorium | | MS;MSD | 3 |
| | L2512368-19 | DUP001 | 03-05-25 00:00 | WATER | Isotopic Uranium | | | 1 |
| | | | | WATER | Radium 226 | | | 1 |
| | | | | WATER | Radium 228 | | | 1 |
| | | | | WATER | Thorium | | | 1 |

001
002
003

| | Relinquished By: | Date/Time: | Received By: | Date/Time: |
|---|---|---|---|---|
| | | 3/10/25 1825 | | 3/10/25 1825 |
| | | 3/10/25 2200 | Paul Marcella | 3/10/25 2245 |
| | Paul Marcella | 3/11/25 0245 | | 3/11 1230 |
| Form No: AL_subcoc | | 3/11 1624 | | 3/11 1900 |
| | SM | 3/11 | DB | 3/12/25 10:00 |
| | DB | 3-12-25 1200 | | 3/12/25 1200 |



Serial_No:04182514:55

| Pace Analytical Services | DC#_Title: ENV-FRM-GBUR-0088 v07_Sample Co Greensburg<br>Effective Date: 01/04/2024 |
|---|---|

**WO#: 30762958**
PM: SCR Due Date: 04/02/25
CLIENT: ALPHA ANALYT

**Client Name:** Alpha Analytical **Proje**

**Courier:** ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

**Tracking Number:** Drop-off

| Initial / Date | |
|---|---|
| Examined By: | EL 3/12/25 |
| Labeled By: | EL 3/12/25 |
| Temped By: | EL 3/12/25 |

**Custody Seal on Cooler/Box Present:** ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

**Thermometer Used:** 19 **Type of Ice:** (Wet) Blue None

**Cooler Temperature:** Observed Temp 1.5 °C Correction Factor: -0.4 °C Final Temp: 1.1 °C
1.3 0.7

Temp should be above freezing to 6°C

| Comments: | Yes | No | NA | pH paper Lot# 10D1041 | D.P.D. Residual Chlorine Lot # |
|---|---|---|---|---|---|
| Chain of Custody Present | ✓ | | | 1. | |
| Chain of Custody Filled Out: | ✓ | | | 2. | |
| -Were client corrections present on COC | | ✓ | | | |
| Chain of Custody Relinquished | ✓ | | | 3. | |
| Sampler Name & Signature on COC: | | ✓ | | 4. | |
| Sample Labels match COC: | ✓ | | | 5. | |
| -Includes date/time/ID | | | | | |
| Matrix: WT | | | | | |
| Samples Arrived within Hold Time: | ✓ | | | 6. | |
| **Short Hold Time Analysis (<72hr remaining):** | | ✓ | | 7. | |
| **Rush Turn Around Time Requested:** | | ✓ | | 8. | |
| Sufficient Volume: | ✓ | | | 9. | |
| Correct Containers Used: | ✓ | | | 10. | |
| -Pace Containers Used | | ✓ | | | |
| Containers Intact: | ✓ | | | 11. | |
| Orthophosphate field filtered: | | | ✓ | 12. | |
| Hex Cr Aqueous samples field filtered: | | | ✓ | 13. | |
| Organic Samples checked for dichlorination | | | ✓ | 14: | |
| Filtered volume received for dissolved tests: | | | ✓ | 15: | |
| **All containers checked for preservation:** | ✓ | | | 16. | |
| exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix | | | | pH<2 | |
| **All containers meet method preservation requirements:** | ✓ | | | Initial when completed EL<br>Lot# of added Preservative | Date/Time of Preservation |
| **8260C/D:** Headspace in VOA Vials (> 6mm) | | | ✓ | 17. | |
| **624.1:** Headspace in VOA Vials (0mm) | | | ✓ | 18. | |
| **Radon:** Headspace in RAD Vials (0mm) | | | ✓ | 19. | |
| Trip Blank Present: | | | ✓ | Trip blank custody seal present? YES or NO | |
| **Rad Samples Screened <.05 mrem/hr.** | ✓ | | | Initial when completed EL | Date: 3/12/25 Survey Meter SN: 25014380 |

**Comments:**

**Note:** For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
**PM Review** is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Qualtrax ID: 55680

DC#_Title: ENV-FRM-GBUR-0072 v04_Sample Container Count Offshore Projects
Effective Date: 04/18/2024

Client Site L2512368

Page ____ of ____

Profile/EZ Login Number 21604

Notes

| Sample Line Item | Matrix | Amber Glass | | | | | Plastic | | | | | | | | Vials | | | | | Other | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AG1H | AG3S | AG3U | AG5U | AG5T | BP1N | BP1U | BP2S | BP2U | BP3B | BP3N | BP3S | BP3U | DG9S | VG9H | VG9T | VG9U | VOAK | WGFU | WGKU | ZPLC | GCUB | GJN | 12GN | AG1U | BG1U | BP2N | |
| 001 | WT | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | |
| 002 | ↓ | | | | | | 12 | | | | | | | | | | | | | | | | | | | | | | |
| 003 | ↓ | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | |

Container Codes

| Glass | | | |
|---|---|---|---|
| GJN | 1 Gallon Jug with HNO3 | DG9S | 40mL amber VOA vial H2SO4 |
| AG5U | 100mL amber glass unpreserved | VG9U | 40mL clear VOA vial |
| AG5T | 100mL amber glass Na Thiosulfate | VG9T | 40mL clear VOA vial Na Thiosulfate |
| GJN | 1 Gallon Jug | VG9H | 40mL clear VOA vial HCl |
| AG1S | 1L amber glass H2SO4 | JGFU | 4oz amber wide jar |
| AG1H | 1L amber glass HCl | WGFU | 4oz wide jar unpreserved |
| AG1T | 1L amber glass NA Thiosulfate | BG2U | 500mL clear glass unpreserved |
| BG1U | 1L clear glass unpreserved | AG2U | 500mL amber glass unpreserved |
| AG3S | 250mL amber glass H2SO4 | WGKU | 8oz wide jar unpreserved |
| AG3U | 250mL amber glass unpreserved | GN | General |

| Plastic/Misc. | | | |
|---|---|---|---|
| GCUB | 1 gallon cubitainer | EZI | 5g Encore |
| 12GN | 1/2 gallon cubitainer | VOAK | Kit Volatile Solid |
| SP5T | 120mL coliform Na Thiosulfate | | Wipe/Swab |
| BP | | PLC | Siploc Bag |
| BP | | | |
| BP | | T | Water |
| BP | | | Solid |
| BP | | | Non-Aq Liquid |
| BP3B | 250mL plastic NAOH | WP | Wipe |
| BP2S | 500mL plastic H2SO4 | | |
| BP2U | 500mL plastic unpreserved | | |

WO#: 30762958
PM: SCR Due Date: 04/02/25
CLIENT: ALPHA ANALYT

Serial_No:04182514:55



Qualtrax ID: 55678

WO#: 30762958
PM: SCR Due Date: 04/02/25
CLIENT: ALPHA ANALYT

Pace

# Subcontract Chain of Custody

Pace Analytical (Greensburg, PA)
1638 Roseytown Rd, Suite 2
Greensburg, PA 15601

**Pace Job Number**
L2512368

Page 1

## Client Information

Client: Pace Analytical Labs
Address: Eight Walkup Drive
Westborough, MA 01581-1019

Report To:west.subreports@pacelabs.com
Bill To:invoices@pacelabs.coupahost.com

Phone: 508.844.4115
Email: Mitchell.Ostrowski@pacelabs.com

## Project Information

Project Location: NY
Project Manager: Mitchell Ostrowski

## Turnaround & Deliverables Information

Due Date:
Deliverables: ASP Category B Deliverables

## Regulatory Requirements/Report Limits

State/Federal Program:
Regulatory Criteria:

Report to MDL

Received by Pace Greensburg
Therm ID 22 Corr Factor +/- 0
Receipt Temp 4.4
Corrected Temp 4.4
Correct Preservation Y/N

## Project Specific Requirements and/or Report Requirements

Reference following Pace Job Number on final report/deliverables: L2512368 Report to include Method and/or Regulatory required batch QC

Additional Comments: Need Data Package; Must use 903.1 /904.0 (Radium) Need Data Package; Must use HASL-300

| Lab ID | Pace ID | Client ID | Collection Date/Time | Sample Matrix | Analysis | Sample Level Comments | Sample Specific QC | Container Count |
|---|---|---|---|---|---|---|---|---|
| | L2512368-04 | 6A | 03-05-25 09:25 | WATER | Isotopic Uranium | | | 1 |
| | | | | WATER | Radium 226 | | | 1 |
| | | | | WATER | Radium 228 | | | 1 |
| | | | | WATER | Thorium | | | 1 |
| | L2512368-10 | 8A | 03-05-25 16:20 | WATER | Isotopic Uranium | | MS;MSD | 3 |
| | | | | WATER | Radium 226 | | MS;MSD | 3 |
| | | | | WATER | Radium 228 | | MS;MSD | 3 |
| | | | | WATER | Thorium | | MS;MSD | 3 |
| | L2512368-16 | 10A | 03-05-25 12:45 | WATER | Isotopic Uranium | | | 1 |
| | | | | WATER | Radium 226 | | | 1 |
| | | | | WATER | Radium 228 | | | 1 |
| | | | | WATER | Thorium | | | 1 |
| | L2512368-19 | DUP001 | 03-05-25 00:00 | WATER | Isotopic Uranium | | | 1 |
| | | | | WATER | Radium 226 | | | 1 |
| | | | | WATER | Radium 228 | | | 1 |
| | | | | WATER | Thorium | | | 1 |

~~004~~ PS 3/15/25
~~E~~ PS 3/15/25
004

| | Relinquished By: | Date/Time: | Received By: | Date/Time: |
|---|---|---|---|---|
| | | 3/12/25 1820 | | 3/12/25 1820 |
| | | 3/12/25 2200 | | 3/12/25 2230 |
| | Se Pace | 3/13/25 0200 | Se Pace | 3/13 12:30 |
| Form No: AL_subcoc | | 3/13 16:40 | DB | 3/14/25 11:20 |
| | DB | 3/14/25 13:40 | | 3/14/25 1300 |

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-GBUR-0088 v07_Sample Condition Upon Receipt
Greensburg

Effective Date: 01/04/2024

**WO# : 30762958**

PM: SCR Due Date: 04/02/25
CLIENT: ALPHA ANALYT

**Client Name:** Alpha

**Courier:** ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

**Tracking Number:** _____

**Custody Seal on Cooler/Box Present:** ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

**Thermometer Used:** 22 **Type of Ice:** (Wet) Blue None

**Cooler Temperature:** Observed Temp 4.4 °C Correction Factor: 0 °C Final Temp: 4.4 °C

Temp should be above freezing to 6°C

| Initial / Date | |
|---|---|
| Examined By: | PS 3/15/25 |
| Labeled By: | PS 3/15/25 |
| Temped By: | EL 3/14/25 |

| Comments: | Yes | No | NA | pH paper Lot# 1001041 | D.P.D. Residual Chlorine Lot # |
|---|---|---|---|---|---|
| Chain of Custody Present | ✓ | | | 1. | |
| Chain of Custody Filled Out: | ✓ | | | 2. | |
| -Were client corrections present on COC | | ✓ | | | |
| Chain of Custody Relinquished | ✓ | | | 3. | |
| Sampler Name & Signature on COC: | | ✓ | | 4. | |
| Sample Labels match COC: | ✓ | | | 5. | |
| -Includes date/time/ID | | | | | |
| Matrix: | WT | | | | |
| Samples Arrived within Hold Time: | ✓ | | | 6. | |
| **Short Hold Time Analysis (<72hr remaining):** | | ✓ | | 7. | |
| **Rush Turn Around Time Requested:** | | ✓ | | 8. | |
| Sufficient Volume: | ✓ | | | 9. | |
| Correct Containers Used: | ✓ | | | 10. | |
| -Pace Containers Used | | ✓ | | | |
| Containers Intact: | ✓ | | | 11. | |
| Orthophosphate field filtered: | | | ✓ | 12. | |
| Hex Cr Aqueous samples field filtered: | | | ✓ | 13. | |
| Organic Samples checked for dichlorination | | | ✓ | 14: | |
| Filtered volume received for dissolved tests: | | | ✓ | 15: | |
| **All containers checked for preservation:** | ✓ | | | 16. | |
| exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix | | | | PH<2 | |
| **All containers meet method preservation requirements:** | ✓ | | | Initial when completed PS | Date/Time of Preservation |
| | | | | Lot# of added Preservative | |
| **8260C/D**: Headspace in VOA Vials (> 6mm) | | | ✓ | 17. | |
| **624.1:** Headspace in VOA Vials (0mm) | | | ✓ | 18. | |
| **Radon:** Headspace in RAD Vials (0mm) | | | ✓ | 19. | |
| Trip Blank Present: | | | ✓ | Trip blank custody seal present? YES or NO | |
| **Rad Samples Screened <.05 mrem/hr.** | ✓ | | | Initial when completed EL | Date: 3/14/25 Survey Meter SN: 25014380 |

**Comments:** Received 4 x BPN bottles for L2512368-16 10A. Added to WO.

**Note:** For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
**PM Review** is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Qualtrax ID: 55680