# Inter-Mountain Labs

Sheridan, WY and Gillette, WY

## - CHAIN OF CUSTODY RECORD -



# 154591

*All shaded fields must be completed.*
This is a legal document: any misrepresentation may be construed as fraud.

| Client Name | Project Identification | Sampler (Signature/Attestation of Authenticity) | Telephone # |
|---|---|---|---|
| Cameco Resources | M21 Stability Monitoring | Gwen Jamm | 307 358 6541 |

| Report Address | Contact Name | Purchase Order # | Quote # |
|---|---|---|---|
| PO Box 1210 Glenrock WY 82637 | Larry Wilbanks | 4560458888 | |
| Invoice Address | Email: Larry.Wilbanks@cameco.com | | |
| | Phone: 307 358 6541 x427 | | |

ANALYSES / PARAMETERS

| ITEM | LAB ID (Lab Use Only) | DATE SAMPLED | TIME SAMPLED | SAMPLE IDENTIFICATION | Matrix | # of Containers | New guideline | Temp | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | S1506333-001 | 6-15-15 | 7:45 | B-001 | WT | 7 | | 9.1 | Filtered, preserved in Field |
| 2 | 002 | | 7:55 | B-002 | | | | 9.1 | |
| 3 | 003 | | 8:00 | B-003 | | | | 9.1 | |
| 4 | 004 | | 8:55 | B-004 | | | | 4.5 | |
| 5 | 005 | | 9:05 | B-005 | | | | 4.5 | |
| 6 | 006 | | 9:10 | B-006 | | | | 4.5 | |
| 7 | 007 | | 9:45 | B-007 | | | | 4.8 | |
| 8 | 008 | | 10:35 | B-008 | | | | 5.5 | |
| 9 | 009 | | 10:45 | B-009 | | | | 5.5 | |
| 10 | 010 | | 11:50 | B-011 | | | | 5.1 | |
| 11 | 011 | | 12:00 | B-012 | | | | 5.1 | |
| 12 | 012 | | 12:40 | B-013 | | | | 4.6 | |
| 13 | 013 | | 12:50 | B-014 | | | | 4.6 | |
| 14 | 014 | | 8:20 | B-015 | | | | 4.8 | |

| LAB COMMENTS | Relinquished By (Signature/Printed) | DATE | TIME | Received By (Signature/Printed) | DATE | TIME |
|---|---|---|---|---|---|---|
| 4°C | Gwen Jamm / Gwen Trammell | 6-15-15 | 2:30 | Ken Garoutte Ken Garoutte | 6/15/15 | 1430 |
| | Ken Garoutte Ken Garoutte | 6-15-15 | 1615 | Kathy Bopp | 6.16.15 | 11:55 |

| SHIPPING INFO | MATRIX CODES | | TURNAROUND TIMES | COMPLIANCE INFORMATION | ADDITIONAL REMARKS |
|---|---|---|---|---|---|
| ☐ UPS | Water | WT | Check desired service | Compliance Monitoring? (Y) N | |
| ☐ Fed Express | Soil | SL | ☑ Standard turnaround | Program (SDWA, NPDES,...) | |
| ☑ US Mail | Solid | SD | ☐ **RUSH - 5 Working Days** | PWSID / Permit # | |
| ☐ Hand Carried | Filter | FT | ☐ **URGENT** - < 2 Working Days | Chlorinated? Y (N) | |
| ☐ Other _____ | Other | OT | ***Rush & Urgent Surcharges will be applied*** | Sample Disposal: Lab Client | |

# Inter-Mountain Labs

Sheridan, WY and Gillette, WY

## - CHAIN OF CUSTODY RECORD -



# 154589

*All shaded fields must be completed.*
This is a legal document: any misrepresentation may be construed as fraud.

| Client Name | Project Identification | Sampler (Signature/Attestation of Authenticity) | Telephone # |
|---|---|---|---|
| Cameco Resources | MU1 Stability Monitoring | | 307 358 6541 |

| Report Address | Contact Name | Invoice Address |
|---|---|---|
| PO Box 1210<br>Glenrock WY 82637 | Larry Wilbanks<br>Email Larry_Wilbanks@cameco.com<br>Phone 307 358 6541 x4487 | |

| Purchase Order # | Quote # |
|---|---|
| 4500458888 | |

**ANALYSES / PARAMETERS**

| ITEM | LAB ID (Lab Use Only) | DATE SAMPLED | TIME SAMPLED | SAMPLE IDENTIFICATION | Matrix | # of Containers | New Guideline | Temp | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 51506333 015 | 6-15-15 | 9:55 | B-016 | WT | 1 | | 3.6 | Filtered/preserved in Field |
| 2 | 016 | | 10:55 | B-017 | | | | 5.5 | |
| 3 | 017 | | 12:10 | B-018 | | | | 5.1 | |
| 4 | 018 | | 8:25 | B-019 | | | | 4.8 | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |

| LAB COMMENTS | Relinquished By (Signature/Printed) | DATE | TIME | Received By (Signature/Printed) | DATE | TIME |
|---|---|---|---|---|---|---|
| 6.7 | Gwen Trammell / Gwen Trammell | 6-15-15 | 2:30 | Ken Garoutte Ken Garoutte | 6/15/15 | 1430 |
| | Ken Garoutte Ken Garoutte | 6/15/15 | 1615 | Kathy Bond | 6.16.15 | 11:55 |

**SHIPPING INFO**

- ☐ UPS
- ☐ Fed Express
- ☐ US Mail
- ☑ Hand Carried
- ☐ Other _____

**MATRIX CODES**

| | |
|---|---|
| Water | WT |
| Soil | SL |
| Solid | SD |
| Filter | FT |
| Other | OT |

**TURNAROUND TIMES**

Check desired service
- ☑ Standard turnaround
- ☐ **RUSH - 5 Working Days**
- ☐ **URGENT** - < 2 Working Days

***Rush & Urgent Surcharges will be applied***

**COMPLIANCE INFORMATION**

Compliance Monitoring? (Y) N
Program (SDWA, NPDES,...)
PWSID / Permit #
Chlorinated? Y (N)
Sample Disposal: Lab Client

**ADDITIONAL REMARKS**

Inter-Mountain Labs
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Your Environmental Monitoring Partner

**Date:** 7/17/2015

**CLIENT:** Power Resources (Cameco)
**Project:** MU1 Stability Monitoring
**Lab Order:** S1506333

# CASE NARRATIVE

**Report ID:** S1506333001

Samples B-001, B-002, B-003, B-004, B-005, B-006, B-007, B-008, B-009, B-011, B-012, B-013, B-014, B-015, B-016, B-017, B-018, and B-019 were received on June 16, 2015.

All samples were received and analyzed within the EPA recommended holding times, except those noted below in this case narrative. Samples were analyzed using the methods outlined in the following references:

"Standard Methods For The Examination of Water and Wastewater", approved method versions
Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Edition
40 CFR Parts 136 and 141
40 CFR Part 50, Appendices B, J, L, and O
Methods indicated in the Methods Update Rule published in the Federal Register Friday, May 18, 2012
ASTM approved and recognized standards

All Quality Control parameters met the acceptance criteria defined by EPA and Inter-Mountain Laboratories except as indicated in this case narrative.

Qualifiers by sample

S1506333-016 - Nitrogen, Ammonia (as N)/Nitrogen, Ammonia (As N) - Analyte detected below quantitation limits
S1506333-016 - Nitrogen, Ammonia (as N)/Nitrogen, Ammonia (As N) - Spike Recovery outside accepted recovery limits
S1506333-014 - Dissolved Metals by ICP - EPA 200.7 - Water/Beryllium - Spike Recovery outside accepted recovery limits

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

Inter-Mountain Labs
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Your Environmental Monitoring Partner

# Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-001
**ClientSample ID:** B-001
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 7:45:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Anions/Cations** | | | | | | | |
| Alkalinity, Total (As CaCO3) | 107 | mg/L | | 5 | SM 2320B | 06/16/2015 2039 | MRL |
| Alkalinity, Bicarbonate as HCO3 | 130 | mg/L | | 5 | SM 2320B | 06/16/2015 2039 | MRL |
| Alkalinity, Carbonate as CO3 | ND | mg/L | | 5 | SM 2320B | 06/16/2015 2039 | MRL |
| Chloride | 10 | mg/L | | 1 | EPA 300.0 | 06/26/2015 639 | AB |
| Fluoride | 0.1 | mg/L | | 0.1 | SM 4500FC | 06/16/2015 2039 | MRL |
| Nitrogen, Nitrate+Nitrite (as N) | ND | mg/L | | 0.1 | EPA 353.2 | 06/17/2015 1845 | AMB |
| Sulfate | 73 | mg/L | | 1 | EPA 300.0 | 06/26/2015 639 | AB |
| Calcium | 43 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1229 | DG |
| Magnesium | 12 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1229 | DG |
| Potassium | 6 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1229 | DG |
| Sodium | 15 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1229 | DG |
| Nitrogen, Ammonia (As N) | ND | mg/L | | 0.1 | EPA 350.1 | 06/19/2015 1633 | AMB |
| Silica as SiO2 | 14 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1229 | DG |
| **General Parameters** | | | | | | | |
| pH | 7.3 | s.u. | | 0.1 | SM 4500 H B | 06/16/2015 2039 | MRL |
| Electrical Conductivity | 389 | µmhos/cm | | 5 | SM 2510B | 06/16/2015 2039 | MRL |
| Total Dissolved Solids (180) | 250 | mg/L | | 10 | SM 2540 | 06/16/2015 1357 | TS |
| **Data Quality** | | | | | | | |
| Cation Sum | 3.92 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Anion Sum | 3.95 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Cation-Anion Balance (± 5%) | 0.42 | % | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Solids, Total Dissolved (Calc) | 240 | mg/L | | 10 | SM 1030E | 06/29/2015 1623 | JJ |
| Calculated TDS/TDS Ratio (0.80-1.20) | 1.04 | dec. % | | 0.01 | Calculation | 07/08/2015 1207 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| E | Value above quantitation range |
| J | Analyte detected below quantitation limits |
| M | Value exceeds Monthly Ave or MCL or is less than LCL |
| O | Outside the Range of Dilutions |
| X | Matrix Effect |
| C | Calculated Value |
| H | Holding times for preparation or analysis exceeded |
| L | Analyzed by a contract laboratory |
| ND | Not Detected at the Reporting Limit |
| S | Spike Recovery outside accepted recovery limits |

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

# Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-001
**ClientSample ID:** B-001
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 7:45:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Metals - Dissolved** | | | | | | | |
| Aluminum | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1229 | DG |
| Arsenic | 0.019 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 1934 | MS |
| Barium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 1934 | MS |
| Beryllium | ND | mg/L | | 0.001 | EPA 200.7 | 06/17/2015 1229 | DG |
| Boron | 0.1 | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1229 | DG |
| Cadmium | ND | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 1934 | MS |
| Chromium | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1229 | DG |
| Copper | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 1934 | MS |
| Iron | 2.69 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1229 | DG |
| Lead | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 1934 | MS |
| Manganese | 0.08 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1229 | DG |
| Mercury | ND | mg/L | | 0.001 | EPA 245.1 | 06/19/2015 1231 | AW |
| Molybdenum | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 1934 | MS |
| Nickel | ND | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1229 | DG |
| Selenium | 0.006 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 1934 | MS |
| Uranium | 0.0305 | mg/L | | 0.0003 | EPA 200.8 | 06/16/2015 1934 | MS |
| Vanadium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 1934 | MS |
| Zinc | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1229 | DG |
| **Metals - Total** | | | | | | | |
| Iron | 2.67 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1726 | DG |
| Manganese | 0.08 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1726 | DG |
| **Radionuclides - Dissolved** | | | | | | | |
| Gross Alpha | 613 | pCi/L | | 2 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Alpha Precision (±) | 10.8 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta | 240 | pCi/L | | 3 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta Precision (±) | 5.0 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Radium 226 | 213 | pCi/L | | 0.2 | SM 7500 Ra-B | 07/08/2015 817 | WN |
| Radium 226 Precision (±) | 1.7 | pCi/L | | | SM 7500 Ra-B | 07/08/2015 817 | WN |
| Radium 228 | 3.9 | pCi/L | | 1 | Ga-Tech | 07/02/2015 408 | WN |
| Radium 228 Precision (±) | 1.9 | pCi/L | | | Ga-Tech | 07/02/2015 408 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- C Calculated Value
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- L Analyzed by a contract laboratory
- M Value exceeds Monthly Ave or MCL or is less than LCL
- ND Not Detected at the Reporting Limit
- O Outside the Range of Dilutions
- S Spike Recovery outside accepted recovery limits
- X Matrix Effect

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-002
**ClientSample ID:** B-002
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 7:55:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Anions/Cations** | | | | | | | |
| Alkalinity, Total (As CaCO3) | 211 | mg/L | | 5 | SM 2320B | 06/16/2015 2051 | MRL |
| Alkalinity, Bicarbonate as HCO3 | 258 | mg/L | | 5 | SM 2320B | 06/16/2015 2051 | MRL |
| Alkalinity, Carbonate as CO3 | ND | mg/L | | 5 | SM 2320B | 06/16/2015 2051 | MRL |
| Chloride | 14 | mg/L | | 1 | EPA 300.0 | 06/26/2015 652 | AB |
| Fluoride | 0.2 | mg/L | | 0.1 | SM 4500FC | 06/16/2015 2051 | MRL |
| Nitrogen, Nitrate+Nitrite (as N) | ND | mg/L | | 0.1 | EPA 353.2 | 06/17/2015 1846 | AMB |
| Sulfate | 96 | mg/L | | 1 | EPA 300.0 | 06/26/2015 652 | AB |
| Calcium | 74 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1231 | DG |
| Magnesium | 19 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1231 | DG |
| Potassium | 8 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1231 | DG |
| Sodium | 19 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1231 | DG |
| Nitrogen, Ammonia (As N) | 0.4 | mg/L | | 0.1 | EPA 350.1 | 06/19/2015 1634 | AMB |
| Silica as SiO2 | 13 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1231 | DG |
| **General Parameters** | | | | | | | |
| pH | 7.6 | s.u. | | 0.1 | SM 4500 H B | 06/16/2015 2051 | MRL |
| Electrical Conductivity | 593 | µmhos/cm | | 5 | SM 2510B | 06/16/2015 2051 | MRL |
| Total Dissolved Solids (180) | 390 | mg/L | | 10 | SM 2540 | 06/16/2015 1358 | TS |
| **Data Quality** | | | | | | | |
| Cation Sum | 6.35 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Anion Sum | 6.62 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Cation-Anion Balance (± 5%) | 2.11 | % | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Solids, Total Dissolved (Calc) | 370 | mg/L | | 10 | SM 1030E | 06/29/2015 1623 | JJ |
| Calculated TDS/TDS Ratio (0.80-1.20) | 1.05 | dec. % | | 0.01 | Calculation | 07/08/2015 1207 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| E | Value above quantitation range |
| J | Analyte detected below quantitation limits |
| M | Value exceeds Monthly Ave or MCL or is less than LCL |
| O | Outside the Range of Dilutions |
| X | Matrix Effect |
| C | Calculated Value |
| H | Holding times for preparation or analysis exceeded |
| L | Analyzed by a contract laboratory |
| ND | Not Detected at the Reporting Limit |
| S | Spike Recovery outside accepted recovery limits |

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

# Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-002
**ClientSample ID:** B-002
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 7:55:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Metals - Dissolved** | | | | | | | |
| Aluminum | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1231 | DG |
| Arsenic | 0.006 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 1956 | MS |
| Barium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 1956 | MS |
| Beryllium | ND | mg/L | | 0.001 | EPA 200.7 | 06/17/2015 1231 | DG |
| Boron | 0.1 | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1231 | DG |
| Cadmium | ND | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 1956 | MS |
| Chromium | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1231 | DG |
| Copper | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 1956 | MS |
| Iron | 0.51 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1231 | DG |
| Lead | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 1956 | MS |
| Manganese | 0.08 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1231 | DG |
| Mercury | ND | mg/L | | 0.001 | EPA 245.1 | 06/19/2015 1233 | AW |
| Molybdenum | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 1956 | MS |
| Nickel | ND | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1231 | DG |
| Selenium | 0.099 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 1956 | MS |
| Uranium | 1.59 | mg/L | | 0.0003 | EPA 200.8 | 06/16/2015 1956 | MS |
| Vanadium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 1956 | MS |
| Zinc | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1231 | DG |
| **Metals - Total** | | | | | | | |
| Iron | 0.55 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1728 | DG |
| Manganese | 0.08 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1728 | DG |
| **Radionuclides - Dissolved** | | | | | | | |
| Gross Alpha | 1410 | pCi/L | | 2 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Alpha Precision (±) | 18.1 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta | 520 | pCi/L | | 3 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta Precision (±) | 7.5 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Radium 226 | 406 | pCi/L | | 0.2 | SM 7500 Ra-B | 07/08/2015 1207 | WN |
| Radium 226 Precision (±) | 2.3 | pCi/L | | | SM 7500 Ra-B | 07/08/2015 1207 | WN |
| Radium 228 | 4.3 | pCi/L | | 1 | Ga-Tech | 07/02/2015 609 | WN |
| Radium 228 Precision (±) | 2.4 | pCi/L | | | Ga-Tech | 07/02/2015 609 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- C Calculated Value
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- L Analyzed by a contract laboratory
- M Value exceeds Monthly Ave or MCL or is less than LCL
- ND Not Detected at the Reporting Limit
- O Outside the Range of Dilutions
- S Spike Recovery outside accepted recovery limits
- X Matrix Effect

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-003
**ClientSample ID:** B-003
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 8:00:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Anions/Cations** | | | | | | | |
| Alkalinity, Total (As CaCO3) | 140 | mg/L | | 5 | SM 2320B | 06/16/2015 2102 | MRL |
| Alkalinity, Bicarbonate as HCO3 | 171 | mg/L | | 5 | SM 2320B | 06/16/2015 2102 | MRL |
| Alkalinity, Carbonate as CO3 | ND | mg/L | | 5 | SM 2320B | 06/16/2015 2102 | MRL |
| Chloride | 5 | mg/L | | 1 | EPA 300.0 | 06/26/2015 941 | AB |
| Fluoride | 0.2 | mg/L | | 0.1 | SM 4500FC | 06/16/2015 2102 | MRL |
| Nitrogen, Nitrate+Nitrite (as N) | ND | mg/L | | 0.1 | EPA 353.2 | 06/17/2015 1857 | AMB |
| Sulfate | 111 | mg/L | | 1 | EPA 300.0 | 06/26/2015 941 | AB |
| Calcium | 57 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1233 | DG |
| Magnesium | 14 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1233 | DG |
| Potassium | 7 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1233 | DG |
| Sodium | 17 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1233 | DG |
| Nitrogen, Ammonia (As N) | ND | mg/L | | 0.1 | EPA 350.1 | 06/19/2015 1636 | AMB |
| Silica as SiO2 | 14 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1233 | DG |
| **General Parameters** | | | | | | | |
| pH | 7.3 | s.u. | | 0.1 | SM 4500 H B | 06/16/2015 2102 | MRL |
| Electrical Conductivity | 493 | µmhos/cm | | 5 | SM 2510B | 06/16/2015 2102 | MRL |
| Total Dissolved Solids (180) | 330 | mg/L | | 10 | SM 2540 | 06/16/2015 1400 | TS |
| **Data Quality** | | | | | | | |
| Cation Sum | 4.92 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Anion Sum | 5.25 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Cation-Anion Balance (± 5%) | 3.31 | % | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Solids, Total Dissolved (Calc) | 310 | mg/L | | 10 | SM 1030E | 06/29/2015 1623 | JJ |
| Calculated TDS/TDS Ratio (0.80-1.20) | 1.06 | dec. % | | 0.01 | Calculation | 07/08/2015 1207 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| E | Value above quantitation range |
| J | Analyte detected below quantitation limits |
| M | Value exceeds Monthly Ave or MCL or is less than LCL |
| O | Outside the Range of Dilutions |
| X | Matrix Effect |
| C | Calculated Value |
| H | Holding times for preparation or analysis exceeded |
| L | Analyzed by a contract laboratory |
| ND | Not Detected at the Reporting Limit |
| S | Spike Recovery outside accepted recovery limits |

Reviewed by:
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-003
**ClientSample ID:** B-003
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 8:00:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Metals - Dissolved** | | | | | | | |
| Aluminum | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1233 | DG |
| Arsenic | 0.014 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2001 | MS |
| Barium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2001 | MS |
| Beryllium | ND | mg/L | | 0.001 | EPA 200.7 | 06/17/2015 1233 | DG |
| Boron | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1233 | DG |
| Cadmium | ND | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2001 | MS |
| Chromium | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1233 | DG |
| Copper | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2001 | MS |
| Iron | 5.07 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1233 | DG |
| Lead | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2001 | MS |
| Manganese | 0.16 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1233 | DG |
| Mercury | ND | mg/L | | 0.001 | EPA 245.1 | 06/19/2015 1235 | AW |
| Molybdenum | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2001 | MS |
| Nickel | ND | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1233 | DG |
| Selenium | 0.063 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2001 | MS |
| Uranium | 0.272 | mg/L | | 0.0003 | EPA 200.8 | 06/16/2015 2001 | MS |
| Vanadium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2001 | MS |
| Zinc | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1233 | DG |
| **Metals - Total** | | | | | | | |
| Iron | 4.85 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1730 | DG |
| Manganese | 0.16 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1730 | DG |
| **Radionuclides - Dissolved** | | | | | | | |
| Gross Alpha | 1540 | pCi/L | | 2 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Alpha Precision (±) | 17.5 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta | 740 | pCi/L | | 3 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta Precision (±) | 8.7 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Radium 226 | 861 | pCi/L | | 0.2 | SM 7500 Ra-B | 07/08/2015 1207 | WN |
| Radium 226 Precision (±) | 3.3 | pCi/L | | | SM 7500 Ra-B | 07/08/2015 1207 | WN |
| Radium 228 | 6.9 | pCi/L | | 1 | Ga-Tech | 07/02/2015 810 | WN |
| Radium 228 Precision (±) | 1.7 | pCi/L | | | Ga-Tech | 07/02/2015 810 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- C Calculated Value
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- L Analyzed by a contract laboratory
- M Value exceeds Monthly Ave or MCL or is less than LCL
- ND Not Detected at the Reporting Limit
- O Outside the Range of Dilutions
- S Spike Recovery outside accepted recovery limits
- X Matrix Effect

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-004
**ClientSample ID:** B-004
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 8:55:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Anions/Cations** | | | | | | | |
| Alkalinity, Total (As CaCO3) | 158 | mg/L | | 5 | SM 2320B | 06/16/2015 2113 | MRL |
| Alkalinity, Bicarbonate as HCO3 | 192 | mg/L | | 5 | SM 2320B | 06/16/2015 2113 | MRL |
| Alkalinity, Carbonate as CO3 | ND | mg/L | | 5 | SM 2320B | 06/16/2015 2113 | MRL |
| Chloride | 6 | mg/L | | 1 | EPA 300.0 | 06/26/2015 955 | AB |
| Fluoride | 0.1 | mg/L | | 0.1 | SM 4500FC | 06/16/2015 2113 | MRL |
| Nitrogen, Nitrate+Nitrite (as N) | ND | mg/L | | 0.1 | EPA 353.2 | 06/17/2015 1858 | AMB |
| Sulfate | 119 | mg/L | | 1 | EPA 300.0 | 06/26/2015 955 | AB |
| Calcium | 66 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1235 | DG |
| Magnesium | 16 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1235 | DG |
| Potassium | 8 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1235 | DG |
| Sodium | 21 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1235 | DG |
| Nitrogen, Ammonia (As N) | 0.2 | mg/L | | 0.1 | EPA 350.1 | 06/19/2015 1637 | AMB |
| Silica as SiO2 | 12 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1235 | DG |
| **General Parameters** | | | | | | | |
| pH | 7.4 | s.u. | | 0.1 | SM 4500 H B | 06/16/2015 2113 | MRL |
| Electrical Conductivity | 536 | µmhos/cm | | 5 | SM 2510B | 06/16/2015 2113 | MRL |
| Total Dissolved Solids (180) | 360 | mg/L | | 10 | SM 2540 | 06/16/2015 1401 | TS |
| **Data Quality** | | | | | | | |
| Cation Sum | 5.69 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Anion Sum | 5.81 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Cation-Anion Balance (± 5%) | 1.01 | % | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Solids, Total Dissolved (Calc) | 340 | mg/L | | 10 | SM 1030E | 06/29/2015 1623 | JJ |
| Calculated TDS/TDS Ratio (0.80-1.20) | 1.06 | dec. % | | 0.01 | Calculation | 07/08/2015 1207 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| E | Value above quantitation range |
| J | Analyte detected below quantitation limits |
| M | Value exceeds Monthly Ave or MCL or is less than LCL |
| O | Outside the Range of Dilutions |
| X | Matrix Effect |
| C | Calculated Value |
| H | Holding times for preparation or analysis exceeded |
| L | Analyzed by a contract laboratory |
| ND | Not Detected at the Reporting Limit |
| S | Spike Recovery outside accepted recovery limits |

Reviewed by:
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-004
**ClientSample ID:** B-004
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 8:55:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Metals - Dissolved** | | | | | | | |
| Aluminum | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1235 | DG |
| Arsenic | 0.038 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2007 | MS |
| Barium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2007 | MS |
| Beryllium | ND | mg/L | | 0.001 | EPA 200.7 | 06/17/2015 1235 | DG |
| Boron | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1235 | DG |
| Cadmium | ND | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2007 | MS |
| Chromium | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1235 | DG |
| Copper | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2007 | MS |
| Iron | 2.63 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1235 | DG |
| Lead | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2007 | MS |
| Manganese | 0.10 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1235 | DG |
| Mercury | ND | mg/L | | 0.001 | EPA 245.1 | 06/19/2015 1237 | AW |
| Molybdenum | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2007 | MS |
| Nickel | ND | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1235 | DG |
| Selenium | 0.023 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2007 | MS |
| Uranium | 3.11 | mg/L | | 0.0003 | EPA 200.8 | 06/16/2015 2007 | MS |
| Vanadium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2007 | MS |
| Zinc | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1235 | DG |
| **Metals - Total** | | | | | | | |
| Iron | 2.69 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1733 | DG |
| Manganese | 0.10 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1733 | DG |
| **Radionuclides - Dissolved** | | | | | | | |
| Gross Alpha | 3160 | pCi/L | | 2 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Alpha Precision (±) | 26.0 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta | 1120 | pCi/L | | 3 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta Precision (±) | 10.9 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Radium 226 | 596 | pCi/L | | 0.2 | SM 7500 Ra-B | 07/08/2015 1207 | WN |
| Radium 226 Precision (±) | 2.8 | pCi/L | | | SM 7500 Ra-B | 07/08/2015 1207 | WN |
| Radium 228 | 11.8 | pCi/L | | 1 | Ga-Tech | 07/02/2015 1011 | WN |
| Radium 228 Precision (±) | 2.1 | pCi/L | | | Ga-Tech | 07/02/2015 1011 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- C Calculated Value
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- L Analyzed by a contract laboratory
- M Value exceeds Monthly Ave or MCL or is less than LCL
- ND Not Detected at the Reporting Limit
- O Outside the Range of Dilutions
- S Spike Recovery outside accepted recovery limits
- X Matrix Effect

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-005
**ClientSample ID:** B-005
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 9:05:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Anions/Cations** | | | | | | | |
| Alkalinity, Total (As CaCO3) | 125 | mg/L | | 5 | SM 2320B | 06/16/2015 2124 | MRL |
| Alkalinity, Bicarbonate as HCO3 | 153 | mg/L | | 5 | SM 2320B | 06/16/2015 2124 | MRL |
| Alkalinity, Carbonate as CO3 | ND | mg/L | | 5 | SM 2320B | 06/16/2015 2124 | MRL |
| Chloride | 7 | mg/L | | 1 | EPA 300.0 | 06/28/2015 1504 | AB |
| Fluoride | 0.2 | mg/L | | 0.1 | SM 4500FC | 06/16/2015 2124 | MRL |
| Nitrogen, Nitrate+Nitrite (as N) | ND | mg/L | | 0.1 | EPA 353.2 | 06/17/2015 1900 | AMB |
| Sulfate | 50 | mg/L | | 1 | EPA 300.0 | 06/28/2015 1504 | AB |
| Calcium | 42 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1237 | DG |
| Magnesium | 10 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1237 | DG |
| Potassium | 6 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1237 | DG |
| Sodium | 11 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1237 | DG |
| Nitrogen, Ammonia (As N) | ND | mg/L | | 0.1 | EPA 350.1 | 06/19/2015 1638 | AMB |
| Silica as SiO2 | 12 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1237 | DG |
| **General Parameters** | | | | | | | |
| pH | 7.6 | s.u. | | 0.1 | SM 4500 H B | 06/16/2015 2124 | MRL |
| Electrical Conductivity | 351 | µmhos/cm | | 5 | SM 2510B | 06/16/2015 2124 | MRL |
| Total Dissolved Solids (180) | 220 | mg/L | | 10 | SM 2540 | 06/16/2015 1402 | TS |
| **Data Quality** | | | | | | | |
| Cation Sum | 3.56 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Anion Sum | 3.75 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Cation-Anion Balance (± 5%) | 2.60 | % | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Solids, Total Dissolved (Calc) | 210 | mg/L | | 10 | SM 1030E | 06/29/2015 1623 | JJ |
| Calculated TDS/TDS Ratio (0.80-1.20) | 1.05 | dec. % | | 0.01 | Calculation | 07/08/2015 1207 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| E | Value above quantitation range |
| J | Analyte detected below quantitation limits |
| M | Value exceeds Monthly Ave or MCL or is less than LCL |
| O | Outside the Range of Dilutions |
| X | Matrix Effect |
| C | Calculated Value |
| H | Holding times for preparation or analysis exceeded |
| L | Analyzed by a contract laboratory |
| ND | Not Detected at the Reporting Limit |
| S | Spike Recovery outside accepted recovery limits |

Reviewed by:
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-005
**ClientSample ID:** B-005
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 9:05:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Metals - Dissolved** | | | | | | | |
| Aluminum | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1237 | DG |
| Arsenic | 0.005 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2012 | MS |
| Barium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2012 | MS |
| Beryllium | ND | mg/L | | 0.001 | EPA 200.7 | 06/17/2015 1237 | DG |
| Boron | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1237 | DG |
| Cadmium | ND | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2012 | MS |
| Chromium | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1237 | DG |
| Copper | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2012 | MS |
| Iron | 0.98 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1237 | DG |
| Lead | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2012 | MS |
| Manganese | 0.06 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1237 | DG |
| Mercury | ND | mg/L | | 0.001 | EPA 245.1 | 06/19/2015 1239 | AW |
| Molybdenum | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2012 | MS |
| Nickel | ND | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1237 | DG |
| Selenium | 0.022 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2012 | MS |
| Uranium | 0.214 | mg/L | | 0.0003 | EPA 200.8 | 06/16/2015 2012 | MS |
| Vanadium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2012 | MS |
| Zinc | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1237 | DG |
| **Metals - Total** | | | | | | | |
| Iron | 0.97 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1735 | DG |
| Manganese | 0.06 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1735 | DG |
| **Radionuclides - Dissolved** | | | | | | | |
| Gross Alpha | 575 | pCi/L | | 2 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Alpha Precision (±) | 10.9 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta | 217 | pCi/L | | 3 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta Precision (±) | 5.1 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Radium 226 | 259 | pCi/L | | 0.2 | SM 7500 Ra-B | 07/08/2015 1207 | WN |
| Radium 226 Precision (±) | 2.1 | pCi/L | | | SM 7500 Ra-B | 07/08/2015 1207 | WN |
| Radium 228 | ND | pCi/L | | 1 | Ga-Tech | 07/02/2015 1211 | WN |
| Radium 228 Precision (±) | NA | pCi/L | | | Ga-Tech | 07/02/2015 1211 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- C Calculated Value
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- L Analyzed by a contract laboratory
- M Value exceeds Monthly Ave or MCL or is less than LCL
- ND Not Detected at the Reporting Limit
- O Outside the Range of Dilutions
- S Spike Recovery outside accepted recovery limits
- X Matrix Effect

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-006
**ClientSample ID:** B-006
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 9:10:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Anions/Cations** | | | | | | | |
| Alkalinity, Total (As CaCO3) | 153 | mg/L | | 5 | SM 2320B | 06/16/2015 2135 | MRL |
| Alkalinity, Bicarbonate as HCO3 | 186 | mg/L | | 5 | SM 2320B | 06/16/2015 2135 | MRL |
| Alkalinity, Carbonate as CO3 | ND | mg/L | | 5 | SM 2320B | 06/16/2015 2135 | MRL |
| Chloride | 11 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1022 | AB |
| Fluoride | 0.2 | mg/L | | 0.1 | SM 4500FC | 06/16/2015 2135 | MRL |
| Nitrogen, Nitrate+Nitrite (as N) | ND | mg/L | | 0.1 | EPA 353.2 | 06/17/2015 1907 | AMB |
| Sulfate | 115 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1022 | AB |
| Calcium | 64 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1240 | DG |
| Magnesium | 16 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1240 | DG |
| Potassium | 7 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1240 | DG |
| Sodium | 20 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1240 | DG |
| Nitrogen, Ammonia (As N) | 0.2 | mg/L | | 0.1 | EPA 350.1 | 06/19/2015 1640 | AMB |
| Silica as SiO2 | 13 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1240 | DG |
| **General Parameters** | | | | | | | |
| pH | 7.4 | s.u. | | 0.1 | SM 4500 H B | 06/16/2015 2135 | MRL |
| Electrical Conductivity | 538 | µmhos/cm | | 5 | SM 2510B | 06/16/2015 2135 | MRL |
| Total Dissolved Solids (180) | 360 | mg/L | | 10 | SM 2540 | 06/16/2015 1403 | TS |
| **Data Quality** | | | | | | | |
| Cation Sum | 5.59 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Anion Sum | 5.75 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Cation-Anion Balance (± 5%) | 1.43 | % | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Solids, Total Dissolved (Calc) | 340 | mg/L | | 10 | SM 1030E | 06/29/2015 1623 | JJ |
| Calculated TDS/TDS Ratio (0.80-1.20) | 1.06 | dec. % | | 0.01 | Calculation | 07/08/2015 1207 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| E | Value above quantitation range |
| J | Analyte detected below quantitation limits |
| M | Value exceeds Monthly Ave or MCL or is less than LCL |
| O | Outside the Range of Dilutions |
| X | Matrix Effect |
| C | Calculated Value |
| H | Holding times for preparation or analysis exceeded |
| L | Analyzed by a contract laboratory |
| ND | Not Detected at the Reporting Limit |
| S | Spike Recovery outside accepted recovery limits |

Reviewed by:
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-006
**ClientSample ID:** B-006
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 9:10:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Metals - Dissolved** | | | | | | | |
| Aluminum | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1240 | DG |
| Arsenic | 0.016 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2018 | MS |
| Barium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2018 | MS |
| Beryllium | ND | mg/L | | 0.001 | EPA 200.7 | 06/17/2015 1240 | DG |
| Boron | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1240 | DG |
| Cadmium | ND | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2018 | MS |
| Chromium | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1240 | DG |
| Copper | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2018 | MS |
| Iron | 6.56 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1240 | DG |
| Lead | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2018 | MS |
| Manganese | 0.10 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1240 | DG |
| Mercury | ND | mg/L | | 0.001 | EPA 245.1 | 06/19/2015 1241 | AW |
| Molybdenum | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2018 | MS |
| Nickel | ND | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1240 | DG |
| Selenium | 0.014 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2018 | MS |
| Uranium | 0.895 | mg/L | | 0.0003 | EPA 200.8 | 06/16/2015 2018 | MS |
| Vanadium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2018 | MS |
| Zinc | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1240 | DG |
| **Metals - Total** | | | | | | | |
| Iron | 7.85 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1739 | DG |
| Manganese | 0.10 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1739 | DG |
| **Radionuclides - Dissolved** | | | | | | | |
| Gross Alpha | 1750 | pCi/L | | 2 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Alpha Precision (±) | 20.7 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta | 578 | pCi/L | | 3 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta Precision (±) | 8.3 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Radium 226 | 536 | pCi/L | | 0.2 | SM 7500 Ra-B | 07/08/2015 1207 | WN |
| Radium 226 Precision (±) | 2.8 | pCi/L | | | SM 7500 Ra-B | 07/08/2015 1207 | WN |
| Radium 228 | 8.0 | pCi/L | | 1 | Ga-Tech | 07/02/2015 1412 | WN |
| Radium 228 Precision (±) | 2.7 | pCi/L | | | Ga-Tech | 07/02/2015 1412 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- C Calculated Value
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- L Analyzed by a contract laboratory
- M Value exceeds Monthly Ave or MCL or is less than LCL
- ND Not Detected at the Reporting Limit
- O Outside the Range of Dilutions
- S Spike Recovery outside accepted recovery limits
- X Matrix Effect

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-007
**ClientSample ID:** B-007
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 9:45:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Anions/Cations** | | | | | | | |
| Alkalinity, Total (As CaCO3) | 171 | mg/L | | 5 | SM 2320B | 06/16/2015 2147 | MRL |
| Alkalinity, Bicarbonate as HCO3 | 208 | mg/L | | 5 | SM 2320B | 06/16/2015 2147 | MRL |
| Alkalinity, Carbonate as CO3 | ND | mg/L | | 5 | SM 2320B | 06/16/2015 2147 | MRL |
| Chloride | 12 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1036 | AB |
| Fluoride | 0.2 | mg/L | | 0.1 | SM 4500FC | 06/16/2015 2147 | MRL |
| Nitrogen, Nitrate+Nitrite (as N) | ND | mg/L | | 0.1 | EPA 353.2 | 06/23/2015 1622 | AMB |
| Sulfate | 73 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1036 | AB |
| Calcium | 60 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1244 | DG |
| Magnesium | 15 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1244 | DG |
| Potassium | 7 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1244 | DG |
| Sodium | 13 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1244 | DG |
| Nitrogen, Ammonia (As N) | ND | mg/L | | 0.1 | EPA 350.1 | 06/19/2015 1649 | AMB |
| Silica as SiO2 | 12 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1244 | DG |
| **General Parameters** | | | | | | | |
| pH | 7.8 | s.u. | | 0.1 | SM 4500 H B | 06/16/2015 2147 | MRL |
| Electrical Conductivity | 491 | µmhos/cm | | 5 | SM 2510B | 06/16/2015 2147 | MRL |
| Total Dissolved Solids (180) | 320 | mg/L | | 10 | SM 2540 | 06/16/2015 1404 | TS |
| **Data Quality** | | | | | | | |
| Cation Sum | 4.96 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Anion Sum | 5.28 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Cation-Anion Balance (± 5%) | 3.10 | % | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Solids, Total Dissolved (Calc) | 290 | mg/L | | 10 | SM 1030E | 06/29/2015 1623 | JJ |
| Calculated TDS/TDS Ratio (0.80-1.20) | 1.10 | dec. % | | 0.01 | Calculation | 07/08/2015 1207 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| E | Value above quantitation range |
| J | Analyte detected below quantitation limits |
| M | Value exceeds Monthly Ave or MCL or is less than LCL |
| O | Outside the Range of Dilutions |
| X | Matrix Effect |
| C | Calculated Value |
| H | Holding times for preparation or analysis exceeded |
| L | Analyzed by a contract laboratory |
| ND | Not Detected at the Reporting Limit |
| S | Spike Recovery outside accepted recovery limits |

Reviewed by:
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-007
**ClientSample ID:** B-007
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 9:45:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Metals - Dissolved** | | | | | | | |
| Aluminum | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1244 | DG |
| Arsenic | 0.011 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2034 | MS |
| Barium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2034 | MS |
| Beryllium | ND | mg/L | | 0.001 | EPA 200.7 | 06/17/2015 1244 | DG |
| Boron | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1244 | DG |
| Cadmium | ND | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2034 | MS |
| Chromium | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1244 | DG |
| Copper | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2034 | MS |
| Iron | 1.24 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1244 | DG |
| Lead | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2034 | MS |
| Manganese | 0.14 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1244 | DG |
| Mercury | ND | mg/L | | 0.001 | EPA 245.1 | 06/19/2015 1251 | AW |
| Molybdenum | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2034 | MS |
| Nickel | ND | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1244 | DG |
| Selenium | 0.002 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2034 | MS |
| Uranium | 0.566 | mg/L | | 0.0003 | EPA 200.8 | 06/16/2015 2034 | MS |
| Vanadium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2034 | MS |
| Zinc | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1244 | DG |
| **Metals - Total** | | | | | | | |
| Iron | 1.37 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1746 | DG |
| Manganese | 0.14 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1746 | DG |
| **Radionuclides - Dissolved** | | | | | | | |
| Gross Alpha | 806 | pCi/L | | 2 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Alpha Precision (±) | 13.7 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta | 279 | pCi/L | | 3 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta Precision (±) | 5.8 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Radium 226 | 382 | pCi/L | | 0.2 | SM 7500 Ra-B | 07/08/2015 1207 | WN |
| Radium 226 Precision (±) | 2.4 | pCi/L | | | SM 7500 Ra-B | 07/08/2015 1207 | WN |
| Radium 228 | 2.0 | pCi/L | | 1 | Ga-Tech | 07/02/2015 1613 | WN |
| Radium 228 Precision (±) | 2.2 | pCi/L | | | Ga-Tech | 07/02/2015 1613 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- C Calculated Value
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- L Analyzed by a contract laboratory
- M Value exceeds Monthly Ave or MCL or is less than LCL
- ND Not Detected at the Reporting Limit
- O Outside the Range of Dilutions
- S Spike Recovery outside accepted recovery limits
- X Matrix Effect

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-008
**ClientSample ID:** B-008
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 10:35:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Anions/Cations** | | | | | | | |
| Alkalinity, Total (As CaCO3) | 149 | mg/L | | 5 | SM 2320B | 06/16/2015 2158 | MRL |
| Alkalinity, Bicarbonate as HCO3 | 182 | mg/L | | 5 | SM 2320B | 06/16/2015 2158 | MRL |
| Alkalinity, Carbonate as CO3 | ND | mg/L | | 5 | SM 2320B | 06/16/2015 2158 | MRL |
| Chloride | 15 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1049 | AB |
| Fluoride | 0.2 | mg/L | | 0.1 | SM 4500FC | 06/16/2015 2158 | MRL |
| Nitrogen, Nitrate+Nitrite (as N) | ND | mg/L | | 0.1 | EPA 353.2 | 06/23/2015 1624 | AMB |
| Sulfate | 48 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1049 | AB |
| Calcium | 48 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1257 | DG |
| Magnesium | 11 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1257 | DG |
| Potassium | 6 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1257 | DG |
| Sodium | 12 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1257 | DG |
| Nitrogen, Ammonia (As N) | ND | mg/L | | 0.1 | EPA 350.1 | 06/19/2015 1650 | AMB |
| Silica as SiO2 | 11 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1257 | DG |
| **General Parameters** | | | | | | | |
| pH | 7.9 | s.u. | | 0.1 | SM 4500 H B | 06/16/2015 2158 | MRL |
| Electrical Conductivity | 412 | µmhos/cm | | 5 | SM 2510B | 06/16/2015 2158 | MRL |
| Total Dissolved Solids (180) | 240 | mg/L | | 10 | SM 2540 | 06/16/2015 1405 | TS |
| **Data Quality** | | | | | | | |
| Cation Sum | 3.99 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Anion Sum | 4.41 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Cation-Anion Balance (± 5%) | 4.94 | % | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Solids, Total Dissolved (Calc) | 240 | mg/L | | 10 | SM 1030E | 06/29/2015 1623 | JJ |
| Calculated TDS/TDS Ratio (0.80-1.20) | 1.00 | dec. % | | 0.01 | Calculation | 07/08/2015 1207 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| E | Value above quantitation range |
| J | Analyte detected below quantitation limits |
| M | Value exceeds Monthly Ave or MCL or is less than LCL |
| O | Outside the Range of Dilutions |
| X | Matrix Effect |
| C | Calculated Value |
| H | Holding times for preparation or analysis exceeded |
| L | Analyzed by a contract laboratory |
| ND | Not Detected at the Reporting Limit |
| S | Spike Recovery outside accepted recovery limits |

Reviewed by:
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-008
**ClientSample ID:** B-008
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 10:35:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Metals - Dissolved** | | | | | | | |
| Aluminum | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1257 | DG |
| Arsenic | 0.009 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2040 | MS |
| Barium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2040 | MS |
| Beryllium | ND | mg/L | | 0.001 | EPA 200.7 | 06/17/2015 1257 | DG |
| Boron | 0.1 | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1257 | DG |
| Cadmium | ND | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2040 | MS |
| Chromium | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1257 | DG |
| Copper | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2040 | MS |
| Iron | 0.88 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1257 | DG |
| Lead | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2040 | MS |
| Manganese | 0.07 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1257 | DG |
| Mercury | ND | mg/L | | 0.001 | EPA 245.1 | 06/19/2015 1258 | AW |
| Molybdenum | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2040 | MS |
| Nickel | ND | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1257 | DG |
| Selenium | 0.059 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2040 | MS |
| Uranium | 0.735 | mg/L | | 0.0003 | EPA 200.8 | 06/16/2015 2040 | MS |
| Vanadium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2040 | MS |
| Zinc | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1257 | DG |
| **Metals - Total** | | | | | | | |
| Iron | 1.03 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1755 | DG |
| Manganese | 0.07 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1755 | DG |
| **Radionuclides - Dissolved** | | | | | | | |
| Gross Alpha | 1020 | pCi/L | | 2 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Alpha Precision (±) | 14.9 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta | 425 | pCi/L | | 3 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta Precision (±) | 7.1 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Radium 226 | 438 | pCi/L | | 0.2 | SM 7500 Ra-B | 07/08/2015 1207 | WN |
| Radium 226 Precision (±) | 2.6 | pCi/L | | | SM 7500 Ra-B | 07/08/2015 1207 | WN |
| Radium 228 | 2.9 | pCi/L | | 1 | Ga-Tech | 07/02/2015 1814 | WN |
| Radium 228 Precision (±) | 2.5 | pCi/L | | | Ga-Tech | 07/02/2015 1814 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- C Calculated Value
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- L Analyzed by a contract laboratory
- M Value exceeds Monthly Ave or MCL or is less than LCL
- ND Not Detected at the Reporting Limit
- O Outside the Range of Dilutions
- S Spike Recovery outside accepted recovery limits
- X Matrix Effect

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-009
**ClientSample ID:** B-009
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 10:45:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Anions/Cations** | | | | | | | |
| Alkalinity, Total (As CaCO3) | 172 | mg/L | | 5 | SM 2320B | 06/16/2015 2209 | MRL |
| Alkalinity, Bicarbonate as HCO3 | 210 | mg/L | | 5 | SM 2320B | 06/16/2015 2209 | MRL |
| Alkalinity, Carbonate as CO3 | ND | mg/L | | 5 | SM 2320B | 06/16/2015 2209 | MRL |
| Chloride | 14 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1103 | AB |
| Fluoride | 0.2 | mg/L | | 0.1 | SM 4500FC | 06/16/2015 2209 | MRL |
| Nitrogen, Nitrate+Nitrite (as N) | ND | mg/L | | 0.1 | EPA 353.2 | 06/23/2015 1625 | AMB |
| Sulfate | 97 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1103 | AB |
| Calcium | 70 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1259 | DG |
| Magnesium | 17 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1259 | DG |
| Potassium | 8 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1259 | DG |
| Sodium | 16 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1259 | DG |
| Nitrogen, Ammonia (As N) | 0.3 | mg/L | | 0.1 | EPA 350.1 | 06/19/2015 1652 | AMB |
| Silica as SiO2 | 14 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1259 | DG |
| **General Parameters** | | | | | | | |
| pH | 7.6 | s.u. | | 0.1 | SM 4500 H B | 06/16/2015 2209 | MRL |
| Electrical Conductivity | 543 | µmhos/cm | | 5 | SM 2510B | 06/16/2015 2209 | MRL |
| Total Dissolved Solids (180) | 360 | mg/L | | 10 | SM 2540 | 06/16/2015 1406 | TS |
| **Data Quality** | | | | | | | |
| Cation Sum | 5.80 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Anion Sum | 5.86 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Cation-Anion Balance (± 5%) | 0.49 | % | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Solids, Total Dissolved (Calc) | 340 | mg/L | | 10 | SM 1030E | 06/29/2015 1623 | JJ |
| Calculated TDS/TDS Ratio (0.80-1.20) | 1.06 | dec. % | | 0.01 | Calculation | 07/08/2015 1207 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| E | Value above quantitation range |
| J | Analyte detected below quantitation limits |
| M | Value exceeds Monthly Ave or MCL or is less than LCL |
| O | Outside the Range of Dilutions |
| X | Matrix Effect |
| C | Calculated Value |
| H | Holding times for preparation or analysis exceeded |
| L | Analyzed by a contract laboratory |
| ND | Not Detected at the Reporting Limit |
| S | Spike Recovery outside accepted recovery limits |

Reviewed by:
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-009
**ClientSample ID:** B-009
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 10:45:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Metals - Dissolved** | | | | | | | |
| Aluminum | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1259 | DG |
| Arsenic | 0.016 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2045 | MS |
| Barium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2045 | MS |
| Beryllium | ND | mg/L | | 0.001 | EPA 200.7 | 06/17/2015 1259 | DG |
| Boron | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1259 | DG |
| Cadmium | ND | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2045 | MS |
| Chromium | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1259 | DG |
| Copper | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2045 | MS |
| Iron | 2.74 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1259 | DG |
| Lead | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2045 | MS |
| Manganese | 0.17 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1259 | DG |
| Mercury | ND | mg/L | | 0.001 | EPA 245.1 | 06/19/2015 1300 | AW |
| Molybdenum | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2045 | MS |
| Nickel | ND | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1259 | DG |
| Selenium | 0.003 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2045 | MS |
| Uranium | 0.927 | mg/L | | 0.0003 | EPA 200.8 | 06/16/2015 2045 | MS |
| Vanadium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2045 | MS |
| Zinc | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1259 | DG |
| **Metals - Total** | | | | | | | |
| Iron | 3.11 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1758 | DG |
| Manganese | 0.17 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1758 | DG |
| **Radionuclides - Dissolved** | | | | | | | |
| Gross Alpha | 942 | pCi/L | | 2 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Alpha Precision (±) | 15.5 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta | 288 | pCi/L | | 3 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta Precision (±) | 5.9 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Radium 226 | 251 | pCi/L | | 0.2 | SM 7500 Ra-B | 07/08/2015 1207 | WN |
| Radium 226 Precision (±) | 1.9 | pCi/L | | | SM 7500 Ra-B | 07/08/2015 1207 | WN |
| Radium 228 | 2.1 | pCi/L | | 1 | Ga-Tech | 07/02/2015 2015 | WN |
| Radium 228 Precision (±) | 2.0 | pCi/L | | | Ga-Tech | 07/02/2015 2015 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| E | Value above quantitation range |
| J | Analyte detected below quantitation limits |
| M | Value exceeds Monthly Ave or MCL or is less than LCL |
| O | Outside the Range of Dilutions |
| X | Matrix Effect |
| C | Calculated Value |
| H | Holding times for preparation or analysis exceeded |
| L | Analyzed by a contract laboratory |
| ND | Not Detected at the Reporting Limit |
| S | Spike Recovery outside accepted recovery limits |

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-010
**ClientSample ID:** B-011
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 11:50:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Anions/Cations** | | | | | | | |
| Alkalinity, Total (As CaCO3) | 224 | mg/L | | 5 | SM 2320B | 06/16/2015 2221 | MRL |
| Alkalinity, Bicarbonate as HCO3 | 273 | mg/L | | 5 | SM 2320B | 06/16/2015 2221 | MRL |
| Alkalinity, Carbonate as CO3 | ND | mg/L | | 5 | SM 2320B | 06/16/2015 2221 | MRL |
| Chloride | 14 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1508 | AB |
| Fluoride | 0.2 | mg/L | | 0.1 | SM 4500FC | 06/16/2015 2221 | MRL |
| Nitrogen, Nitrate+Nitrite (as N) | ND | mg/L | | 0.1 | EPA 353.2 | 06/23/2015 1627 | AMB |
| Sulfate | 88 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1508 | AB |
| Calcium | 80 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1302 | DG |
| Magnesium | 18 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1302 | DG |
| Potassium | 8 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1302 | DG |
| Sodium | 17 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1302 | DG |
| Nitrogen, Ammonia (As N) | ND | mg/L | | 0.1 | EPA 350.1 | 06/19/2015 1653 | AMB |
| Silica as SiO2 | 13 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1302 | DG |
| **General Parameters** | | | | | | | |
| pH | 7.9 | s.u. | | 0.1 | SM 4500 H B | 06/16/2015 2221 | MRL |
| Electrical Conductivity | 614 | µmhos/cm | | 5 | SM 2510B | 06/16/2015 2221 | MRL |
| Total Dissolved Solids (180) | 400 | mg/L | | 10 | SM 2540 | 06/16/2015 1407 | TS |
| **Data Quality** | | | | | | | |
| Cation Sum | 6.47 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Anion Sum | 6.72 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Cation-Anion Balance (± 5%) | 1.90 | % | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Solids, Total Dissolved (Calc) | 370 | mg/L | | 10 | SM 1030E | 06/29/2015 1623 | JJ |
| Calculated TDS/TDS Ratio (0.80-1.20) | 1.08 | dec. % | | 0.01 | Calculation | 07/08/2015 1207 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| E | Value above quantitation range |
| J | Analyte detected below quantitation limits |
| M | Value exceeds Monthly Ave or MCL or is less than LCL |
| O | Outside the Range of Dilutions |
| X | Matrix Effect |
| C | Calculated Value |
| H | Holding times for preparation or analysis exceeded |
| L | Analyzed by a contract laboratory |
| ND | Not Detected at the Reporting Limit |
| S | Spike Recovery outside accepted recovery limits |

Reviewed by:
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-010
**ClientSample ID:** B-011
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 11:50:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Metals - Dissolved** | | | | | | | |
| Aluminum | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1302 | DG |
| Arsenic | 0.003 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2051 | MS |
| Barium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2051 | MS |
| Beryllium | ND | mg/L | | 0.001 | EPA 200.7 | 06/17/2015 1302 | DG |
| Boron | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1302 | DG |
| Cadmium | ND | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2051 | MS |
| Chromium | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1302 | DG |
| Copper | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2051 | MS |
| Iron | 0.32 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1302 | DG |
| Lead | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2051 | MS |
| Manganese | 0.07 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1302 | DG |
| Mercury | ND | mg/L | | 0.001 | EPA 245.1 | 06/19/2015 1302 | AW |
| Molybdenum | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2051 | MS |
| Nickel | ND | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1302 | DG |
| Selenium | 0.014 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2051 | MS |
| Uranium | 1.67 | mg/L | | 0.0003 | EPA 200.8 | 06/16/2015 2051 | MS |
| Vanadium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2051 | MS |
| Zinc | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1302 | DG |
| **Metals - Total** | | | | | | | |
| Iron | 0.50 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1800 | DG |
| Manganese | 0.07 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1800 | DG |
| **Radionuclides - Dissolved** | | | | | | | |
| Gross Alpha | 1470 | pCi/L | | 2 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Alpha Precision (±) | 20.1 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta | 416 | pCi/L | | 3 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta Precision (±) | 7.1 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Radium 226 | 292 | pCi/L | | 0.2 | SM 7500 Ra-B | 07/08/2015 1207 | WN |
| Radium 226 Precision (±) | 2.0 | pCi/L | | | SM 7500 Ra-B | 07/08/2015 1207 | WN |
| Radium 228 | 3.7 | pCi/L | | 1 | Ga-Tech | 07/02/2015 2216 | WN |
| Radium 228 Precision (±) | 2.0 | pCi/L | | | Ga-Tech | 07/02/2015 2216 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- C Calculated Value
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- L Analyzed by a contract laboratory
- M Value exceeds Monthly Ave or MCL or is less than LCL
- ND Not Detected at the Reporting Limit
- O Outside the Range of Dilutions
- S Spike Recovery outside accepted recovery limits
- X Matrix Effect

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-011
**ClientSample ID:** B-012
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 12:00:00 PM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Anions/Cations** | | | | | | | |
| Alkalinity, Total (As CaCO3) | 163 | mg/L | | 5 | SM 2320B | 06/16/2015 2244 | MRL |
| Alkalinity, Bicarbonate as HCO3 | 199 | mg/L | | 5 | SM 2320B | 06/16/2015 2244 | MRL |
| Alkalinity, Carbonate as CO3 | ND | mg/L | | 5 | SM 2320B | 06/16/2015 2244 | MRL |
| Chloride | 12 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1522 | AB |
| Fluoride | 0.2 | mg/L | | 0.1 | SM 4500FC | 06/16/2015 2244 | MRL |
| Nitrogen, Nitrate+Nitrite (as N) | ND | mg/L | | 0.1 | EPA 353.2 | 06/23/2015 1628 | AMB |
| Sulfate | 87 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1522 | AB |
| Calcium | 60 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1311 | DG |
| Magnesium | 16 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1311 | DG |
| Potassium | 8 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1311 | DG |
| Sodium | 16 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1311 | DG |
| Nitrogen, Ammonia (As N) | 0.1 | mg/L | | 0.1 | EPA 350.1 | 06/19/2015 1654 | AMB |
| Silica as SiO2 | 12 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1311 | DG |
| **General Parameters** | | | | | | | |
| pH | 7.5 | s.u. | | 0.1 | SM 4500 H B | 06/16/2015 2244 | MRL |
| Electrical Conductivity | 503 | µmhos/cm | | 5 | SM 2510B | 06/16/2015 2244 | MRL |
| Total Dissolved Solids (180) | 310 | mg/L | | 10 | SM 2540 | 06/16/2015 1408 | TS |
| **Data Quality** | | | | | | | |
| Cation Sum | 5.21 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Anion Sum | 5.42 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Cation-Anion Balance (± 5%) | 1.91 | % | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Solids, Total Dissolved (Calc) | 310 | mg/L | | 10 | SM 1030E | 06/29/2015 1623 | JJ |
| Calculated TDS/TDS Ratio (0.80-1.20) | 1.00 | dec. % | | 0.01 | Calculation | 07/08/2015 1207 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
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| J | Analyte detected below quantitation limits |
| M | Value exceeds Monthly Ave or MCL or is less than LCL |
| O | Outside the Range of Dilutions |
| X | Matrix Effect |
| C | Calculated Value |
| H | Holding times for preparation or analysis exceeded |
| L | Analyzed by a contract laboratory |
| ND | Not Detected at the Reporting Limit |
| S | Spike Recovery outside accepted recovery limits |

Reviewed by:
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-011
**ClientSample ID:** B-012
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 12:00:00 PM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Metals - Dissolved** | | | | | | | |
| Aluminum | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1311 | DG |
| Arsenic | 0.006 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2056 | MS |
| Barium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2056 | MS |
| Beryllium | ND | mg/L | | 0.001 | EPA 200.7 | 06/17/2015 1311 | DG |
| Boron | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1311 | DG |
| Cadmium | ND | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2056 | MS |
| Chromium | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1311 | DG |
| Copper | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2056 | MS |
| Iron | 3.22 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1311 | DG |
| Lead | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2056 | MS |
| Manganese | 0.09 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1311 | DG |
| Mercury | ND | mg/L | | 0.001 | EPA 245.1 | 06/19/2015 1304 | AW |
| Molybdenum | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2056 | MS |
| Nickel | ND | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1311 | DG |
| Selenium | 0.014 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2056 | MS |
| Uranium | 0.314 | mg/L | | 0.0003 | EPA 200.8 | 06/16/2015 2056 | MS |
| Vanadium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2056 | MS |
| Zinc | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1311 | DG |
| **Metals - Total** | | | | | | | |
| Iron | 3.58 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1802 | DG |
| Manganese | 0.09 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1802 | DG |
| **Radionuclides - Dissolved** | | | | | | | |
| Gross Alpha | 819 | pCi/L | | 2 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Alpha Precision (±) | 13.8 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta | 373 | pCi/L | | 3 | SM 7110B | 06/26/2015 2002 | MB |
| Gross Beta Precision (±) | 6.7 | pCi/L | | | SM 7110B | 06/26/2015 2002 | MB |
| Radium 226 | 281 | pCi/L | | 0.2 | SM 7500 Ra-B | 07/13/2015 1422 | MB |
| Radium 226 Precision (±) | 1.8 | pCi/L | | | SM 7500 Ra-B | 07/13/2015 1422 | MB |
| Radium 228 | 7.6 | pCi/L | | 1 | Ga-Tech | 07/03/2015 017 | WN |
| Radium 228 Precision (±) | 2.0 | pCi/L | | | Ga-Tech | 07/03/2015 017 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

- B Analyte detected in the associated Method Blank
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- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- L Analyzed by a contract laboratory
- M Value exceeds Monthly Ave or MCL or is less than LCL
- ND Not Detected at the Reporting Limit
- O Outside the Range of Dilutions
- S Spike Recovery outside accepted recovery limits
- X Matrix Effect

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-012
**ClientSample ID:** B-013
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 12:40:00 PM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Anions/Cations** | | | | | | | |
| Alkalinity, Total (As CaCO3) | 354 | mg/L | | 5 | SM 2320B | 06/16/2015 2257 | MRL |
| Alkalinity, Bicarbonate as HCO3 | 432 | mg/L | | 5 | SM 2320B | 06/16/2015 2257 | MRL |
| Alkalinity, Carbonate as CO3 | ND | mg/L | | 5 | SM 2320B | 06/16/2015 2257 | MRL |
| Chloride | 23 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1535 | AB |
| Fluoride | 0.2 | mg/L | | 0.1 | SM 4500FC | 06/16/2015 2257 | MRL |
| Nitrogen, Nitrate+Nitrite (as N) | ND | mg/L | | 0.1 | EPA 353.2 | 06/23/2015 1630 | AMB |
| Sulfate | 213 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1535 | AB |
| Calcium | 149 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1313 | DG |
| Magnesium | 38 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1313 | DG |
| Potassium | 13 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1313 | DG |
| Sodium | 29 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1313 | DG |
| Nitrogen, Ammonia (As N) | ND | mg/L | | 0.1 | EPA 350.1 | 06/19/2015 1656 | AMB |
| Silica as SiO2 | 12 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1313 | DG |
| **General Parameters** | | | | | | | |
| pH | 7.8 | s.u. | | 0.1 | SM 4500 H B | 06/16/2015 2257 | MRL |
| Electrical Conductivity | 1020 | µmhos/cm | | 5 | SM 2510B | 06/16/2015 2257 | MRL |
| Total Dissolved Solids (180) | 740 | mg/L | | 10 | SM 2540 | 06/16/2015 1409 | TS |
| **Data Quality** | | | | | | | |
| Cation Sum | 12.14 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Anion Sum | 12.18 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Cation-Anion Balance (± 5%) | 0.13 | % | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Solids, Total Dissolved (Calc) | 690 | mg/L | | 10 | SM 1030E | 06/29/2015 1623 | JJ |
| Calculated TDS/TDS Ratio (0.80-1.20) | 1.07 | dec. % | | 0.01 | Calculation | 07/08/2015 1207 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| E | Value above quantitation range |
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| M | Value exceeds Monthly Ave or MCL or is less than LCL |
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| C | Calculated Value |
| H | Holding times for preparation or analysis exceeded |
| L | Analyzed by a contract laboratory |
| ND | Not Detected at the Reporting Limit |
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Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-012
**ClientSample ID:** B-013
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 12:40:00 PM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Metals - Dissolved** | | | | | | | |
| Aluminum | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1313 | DG |
| Arsenic | 0.009 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2117 | MS |
| Barium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2117 | MS |
| Beryllium | ND | mg/L | | 0.001 | EPA 200.7 | 06/17/2015 1313 | DG |
| Boron | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1313 | DG |
| Cadmium | ND | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2117 | MS |
| Chromium | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1313 | DG |
| Copper | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2117 | MS |
| Iron | 1.77 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1313 | DG |
| Lead | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2117 | MS |
| Manganese | 0.70 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1313 | DG |
| Mercury | ND | mg/L | | 0.001 | EPA 245.1 | 06/19/2015 1306 | AW |
| Molybdenum | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2117 | MS |
| Nickel | ND | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1313 | DG |
| Selenium | 0.003 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2117 | MS |
| Uranium | 2.43 | mg/L | | 0.0003 | EPA 200.8 | 06/16/2015 2117 | MS |
| Vanadium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2117 | MS |
| Zinc | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1313 | DG |
| **Metals - Total** | | | | | | | |
| Iron | 1.78 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1804 | DG |
| Manganese | 0.67 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1804 | DG |
| **Radionuclides - Dissolved** | | | | | | | |
| Gross Alpha | 1890 | pCi/L | | 2 | SM 7110B | 07/13/2015 1942 | MB |
| Gross Alpha Precision (±) | 38.1 | pCi/L | | | SM 7110B | 07/13/2015 1942 | MB |
| Gross Beta | 1070 | pCi/L | | 3 | SM 7110B | 07/13/2015 1942 | MB |
| Gross Beta Precision (±) | 22.4 | pCi/L | | | SM 7110B | 07/13/2015 1942 | MB |
| Radium 226 | 870 | pCi/L | | 0.2 | SM 7500 Ra-B | 07/13/2015 1422 | MB |
| Radium 226 Precision (±) | 3.3 | pCi/L | | | SM 7500 Ra-B | 07/13/2015 1422 | MB |
| Radium 228 | 7.2 | pCi/L | | 1 | Ga-Tech | 07/03/2015 218 | WN |
| Radium 228 Precision (±) | 2.9 | pCi/L | | | Ga-Tech | 07/03/2015 218 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- C Calculated Value
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- L Analyzed by a contract laboratory
- M Value exceeds Monthly Ave or MCL or is less than LCL
- ND Not Detected at the Reporting Limit
- O Outside the Range of Dilutions
- S Spike Recovery outside accepted recovery limits
- X Matrix Effect

Reviewed by:
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-013
**ClientSample ID:** B-014
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 12:50:00 PM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Anions/Cations** | | | | | | | |
| Alkalinity, Total (As CaCO3) | 137 | mg/L | | 5 | SM 2320B | 06/16/2015 2308 | MRL |
| Alkalinity, Bicarbonate as HCO3 | 168 | mg/L | | 5 | SM 2320B | 06/16/2015 2308 | MRL |
| Alkalinity, Carbonate as CO3 | ND | mg/L | | 5 | SM 2320B | 06/16/2015 2308 | MRL |
| Chloride | 6 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1819 | AB |
| Fluoride | 0.2 | mg/L | | 0.1 | SM 4500FC | 06/16/2015 2308 | MRL |
| Nitrogen, Nitrate+Nitrite (as N) | ND | mg/L | | 0.1 | EPA 353.2 | 06/23/2015 1640 | AMB |
| Sulfate | 57 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1819 | AB |
| Calcium | 45 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1315 | DG |
| Magnesium | 11 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1315 | DG |
| Potassium | 7 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1315 | DG |
| Sodium | 14 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1315 | DG |
| Nitrogen, Ammonia (As N) | ND | mg/L | | 0.1 | EPA 350.1 | 06/19/2015 1657 | AMB |
| Silica as SiO2 | 11 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1315 | DG |
| **General Parameters** | | | | | | | |
| pH | 7.6 | s.u. | | 0.1 | SM 4500 H B | 06/16/2015 2308 | MRL |
| Electrical Conductivity | 390 | µmhos/cm | | 5 | SM 2510B | 06/16/2015 2308 | MRL |
| Total Dissolved Solids (180) | 230 | mg/L | | 10 | SM 2540 | 06/16/2015 1411 | TS |
| **Data Quality** | | | | | | | |
| Cation Sum | 3.98 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Anion Sum | 4.12 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Cation-Anion Balance (± 5%) | 1.72 | % | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Solids, Total Dissolved (Calc) | 240 | mg/L | | 10 | SM 1030E | 06/29/2015 1623 | JJ |
| Calculated TDS/TDS Ratio (0.80-1.20) | 0.96 | dec. % | | 0.01 | Calculation | 07/08/2015 1207 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| E | Value above quantitation range |
| J | Analyte detected below quantitation limits |
| M | Value exceeds Monthly Ave or MCL or is less than LCL |
| O | Outside the Range of Dilutions |
| X | Matrix Effect |
| C | Calculated Value |
| H | Holding times for preparation or analysis exceeded |
| L | Analyzed by a contract laboratory |
| ND | Not Detected at the Reporting Limit |
| S | Spike Recovery outside accepted recovery limits |

Reviewed by:
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-013
**ClientSample ID:** B-014
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 12:50:00 PM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Metals - Dissolved** | | | | | | | |
| Aluminum | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1315 | DG |
| Arsenic | 0.003 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2123 | MS |
| Barium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2123 | MS |
| Beryllium | ND | mg/L | | 0.001 | EPA 200.7 | 06/17/2015 1315 | DG |
| Boron | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1315 | DG |
| Cadmium | ND | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2123 | MS |
| Chromium | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1315 | DG |
| Copper | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2123 | MS |
| Iron | 1.03 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1315 | DG |
| Lead | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2123 | MS |
| Manganese | 0.06 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1315 | DG |
| Mercury | ND | mg/L | | 0.001 | EPA 245.1 | 06/19/2015 1308 | AW |
| Molybdenum | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2123 | MS |
| Nickel | ND | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1315 | DG |
| Selenium | 0.002 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2123 | MS |
| Uranium | 0.407 | mg/L | | 0.0003 | EPA 200.8 | 06/16/2015 2123 | MS |
| Vanadium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2123 | MS |
| Zinc | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1315 | DG |
| **Metals - Total** | | | | | | | |
| Iron | 1.12 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1814 | DG |
| Manganese | 0.06 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1814 | DG |
| **Radionuclides - Dissolved** | | | | | | | |
| Gross Alpha | 715 | pCi/L | | 2 | SM 7110B | 06/30/2015 2123 | MB |
| Gross Alpha Precision (±) | 12.1 | pCi/L | | | SM 7110B | 06/30/2015 2123 | MB |
| Gross Beta | 260 | pCi/L | | 3 | SM 7110B | 06/30/2015 2123 | MB |
| Gross Beta Precision (±) | 5.6 | pCi/L | | | SM 7110B | 06/30/2015 2123 | MB |
| Radium 226 | 376 | pCi/L | | 0.2 | SM 7500 Ra-B | 07/13/2015 1422 | MB |
| Radium 226 Precision (±) | 2.1 | pCi/L | | | SM 7500 Ra-B | 07/13/2015 1422 | MB |
| Radium 228 | 2.7 | pCi/L | | 1 | Ga-Tech | 07/13/2015 413 | MB |
| Radium 228 Precision (±) | 2.5 | pCi/L | | | Ga-Tech | 07/13/2015 413 | MB |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- C Calculated Value
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- L Analyzed by a contract laboratory
- M Value exceeds Monthly Ave or MCL or is less than LCL
- ND Not Detected at the Reporting Limit
- O Outside the Range of Dilutions
- S Spike Recovery outside accepted recovery limits
- X Matrix Effect

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-014
**ClientSample ID:** B-015
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 8:20:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Anions/Cations** | | | | | | | |
| Alkalinity, Total (As CaCO3) | 78 | mg/L | | 5 | SM 2320B | 06/16/2015 2319 | MRL |
| Alkalinity, Bicarbonate as HCO3 | 95 | mg/L | | 5 | SM 2320B | 06/16/2015 2319 | MRL |
| Alkalinity, Carbonate as CO3 | ND | mg/L | | 5 | SM 2320B | 06/16/2015 2319 | MRL |
| Chloride | 5 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1832 | AB |
| Fluoride | 0.3 | mg/L | | 0.1 | SM 4500FC | 06/16/2015 2319 | MRL |
| Nitrogen, Nitrate+Nitrite (as N) | ND | mg/L | | 0.1 | EPA 353.2 | 06/23/2015 1642 | AMB |
| Sulfate | 22 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1832 | AB |
| Calcium | 23 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1319 | DG |
| Magnesium | 5 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1319 | DG |
| Potassium | 4 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1319 | DG |
| Sodium | 8 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1319 | DG |
| Nitrogen, Ammonia (As N) | 0.2 | mg/L | | 0.1 | EPA 350.1 | 06/19/2015 1658 | AMB |
| Silica as SiO2 | 13 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1319 | DG |
| **General Parameters** | | | | | | | |
| pH | 7.7 | s.u. | | 0.1 | SM 4500 H B | 06/16/2015 2319 | MRL |
| Electrical Conductivity | 209 | µmhos/cm | | 5 | SM 2510B | 06/16/2015 2319 | MRL |
| Total Dissolved Solids (180) | 120 | mg/L | | 10 | SM 2540 | 06/16/2015 1412 | TS |
| **Data Quality** | | | | | | | |
| Cation Sum | 2.02 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Anion Sum | 2.16 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Cation-Anion Balance (± 5%) | 3.32 | % | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Solids, Total Dissolved (Calc) | 130 | mg/L | | 10 | SM 1030E | 06/29/2015 1623 | JJ |
| Calculated TDS/TDS Ratio (0.80-1.20) | 0.92 | dec. % | | 0.01 | Calculation | 07/08/2015 1207 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| E | Value above quantitation range |
| J | Analyte detected below quantitation limits |
| M | Value exceeds Monthly Ave or MCL or is less than LCL |
| O | Outside the Range of Dilutions |
| X | Matrix Effect |
| C | Calculated Value |
| H | Holding times for preparation or analysis exceeded |
| L | Analyzed by a contract laboratory |
| ND | Not Detected at the Reporting Limit |
| S | Spike Recovery outside accepted recovery limits |

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-014
**ClientSample ID:** B-015
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 8:20:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Metals - Dissolved** | | | | | | | |
| Aluminum | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1319 | DG |
| Arsenic | 0.029 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2140 | MS |
| Barium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2140 | MS |
| Beryllium | ND | mg/L | | 0.001 | EPA 200.7 | 06/17/2015 1319 | DG |
| Boron | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1319 | DG |
| Cadmium | ND | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2140 | MS |
| Chromium | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1319 | DG |
| Copper | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2140 | MS |
| Iron | 1.10 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1319 | DG |
| Lead | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2140 | MS |
| Manganese | 0.04 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1319 | DG |
| Mercury | ND | mg/L | | 0.001 | EPA 245.1 | 06/19/2015 1310 | AW |
| Molybdenum | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2140 | MS |
| Nickel | ND | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1319 | DG |
| Selenium | 0.001 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2140 | MS |
| Uranium | 0.0661 | mg/L | | 0.0003 | EPA 200.8 | 06/16/2015 2140 | MS |
| Vanadium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2140 | MS |
| Zinc | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1319 | DG |
| **Metals - Total** | | | | | | | |
| Iron | 1.17 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1816 | DG |
| Manganese | 0.04 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1816 | DG |
| **Radionuclides - Dissolved** | | | | | | | |
| Gross Alpha | 726 | pCi/L | | 2 | SM 7110B | 06/30/2015 2123 | MB |
| Gross Alpha Precision (±) | 11.2 | pCi/L | | | SM 7110B | 06/30/2015 2123 | MB |
| Gross Beta | 316 | pCi/L | | 3 | SM 7110B | 06/30/2015 2123 | MB |
| Gross Beta Precision (±) | 6.1 | pCi/L | | | SM 7110B | 06/30/2015 2123 | MB |
| Radium 226 | 349 | pCi/L | | 0.2 | SM 7500 Ra-B | 07/13/2015 1422 | MB |
| Radium 226 Precision (±) | 2.1 | pCi/L | | | SM 7500 Ra-B | 07/13/2015 1422 | MB |
| Radium 228 | ND | pCi/L | | 1 | Ga-Tech | 07/13/2015 614 | MB |
| Radium 228 Precision (±) | NA | pCi/L | | | Ga-Tech | 07/13/2015 614 | MB |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- C Calculated Value
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- L Analyzed by a contract laboratory
- M Value exceeds Monthly Ave or MCL or is less than LCL
- ND Not Detected at the Reporting Limit
- O Outside the Range of Dilutions
- S Spike Recovery outside accepted recovery limits
- X Matrix Effect

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-015
**ClientSample ID:** B-016
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 9:55:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Anions/Cations** | | | | | | | |
| Alkalinity, Total (As CaCO3) | 141 | mg/L | | 5 | SM 2320B | 06/16/2015 2330 | MRL |
| Alkalinity, Bicarbonate as HCO3 | 172 | mg/L | | 5 | SM 2320B | 06/16/2015 2330 | MRL |
| Alkalinity, Carbonate as CO3 | ND | mg/L | | 5 | SM 2320B | 06/16/2015 2330 | MRL |
| Chloride | 10 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1846 | AB |
| Fluoride | 0.2 | mg/L | | 0.1 | SM 4500FC | 06/16/2015 2330 | MRL |
| Nitrogen, Nitrate+Nitrite (as N) | ND | mg/L | | 0.1 | EPA 353.2 | 06/23/2015 1643 | AMB |
| Sulfate | 81 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1846 | AB |
| Calcium | 54 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1333 | DG |
| Magnesium | 14 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1333 | DG |
| Potassium | 8 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1333 | DG |
| Sodium | 14 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1333 | DG |
| Nitrogen, Ammonia (As N) | 0.2 | mg/L | | 0.1 | EPA 350.1 | 06/19/2015 1700 | AMB |
| Silica as SiO2 | 14 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1333 | DG |
| **General Parameters** | | | | | | | |
| pH | 7.5 | s.u. | | 0.1 | SM 4500 H B | 06/16/2015 2330 | MRL |
| Electrical Conductivity | 451 | µmhos/cm | | 5 | SM 2510B | 06/16/2015 2330 | MRL |
| Total Dissolved Solids (180) | 290 | mg/L | | 10 | SM 2540 | 06/16/2015 1413 | TS |
| **Data Quality** | | | | | | | |
| Cation Sum | 4.64 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Anion Sum | 4.79 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Cation-Anion Balance (± 5%) | 1.52 | % | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Solids, Total Dissolved (Calc) | 280 | mg/L | | 10 | SM 1030E | 06/29/2015 1623 | JJ |
| Calculated TDS/TDS Ratio (0.80-1.20) | 1.04 | dec. % | | 0.01 | Calculation | 07/08/2015 1207 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| E | Value above quantitation range |
| J | Analyte detected below quantitation limits |
| M | Value exceeds Monthly Ave or MCL or is less than LCL |
| O | Outside the Range of Dilutions |
| X | Matrix Effect |
| C | Calculated Value |
| H | Holding times for preparation or analysis exceeded |
| L | Analyzed by a contract laboratory |
| ND | Not Detected at the Reporting Limit |
| S | Spike Recovery outside accepted recovery limits |

Reviewed by:
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-015
**ClientSample ID:** B-016
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 9:55:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Metals - Dissolved** | | | | | | | |
| Aluminum | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1333 | DG |
| Arsenic | 0.012 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2145 | MS |
| Barium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2145 | MS |
| Beryllium | ND | mg/L | | 0.001 | EPA 200.7 | 06/17/2015 1333 | DG |
| Boron | 0.1 | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1333 | DG |
| Cadmium | ND | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2145 | MS |
| Chromium | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1333 | DG |
| Copper | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2145 | MS |
| Iron | 6.33 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1333 | DG |
| Lead | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2145 | MS |
| Manganese | 0.11 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1333 | DG |
| Mercury | ND | mg/L | | 0.001 | EPA 245.1 | 06/19/2015 1316 | AW |
| Molybdenum | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2145 | MS |
| Nickel | ND | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1333 | DG |
| Selenium | ND | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2145 | MS |
| Uranium | 0.394 | mg/L | | 0.0003 | EPA 200.8 | 06/16/2015 2145 | MS |
| Vanadium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2145 | MS |
| Zinc | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1333 | DG |
| **Metals - Total** | | | | | | | |
| Iron | 6.55 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1825 | DG |
| Manganese | 0.11 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1825 | DG |
| **Radionuclides - Dissolved** | | | | | | | |
| Gross Alpha | 687 | pCi/L | | 2 | SM 7110B | 06/30/2015 2123 | MB |
| Gross Alpha Precision (±) | 12.3 | pCi/L | | | SM 7110B | 06/30/2015 2123 | MB |
| Gross Beta | 299 | pCi/L | | 3 | SM 7110B | 06/30/2015 2123 | MB |
| Gross Beta Precision (±) | 6.0 | pCi/L | | | SM 7110B | 06/30/2015 2123 | MB |
| Radium 226 | 265 | pCi/L | | 0.2 | SM 7500 Ra-B | 07/13/2015 1422 | MB |
| Radium 226 Precision (±) | 1.8 | pCi/L | | | SM 7500 Ra-B | 07/13/2015 1422 | MB |
| Radium 228 | 5.2 | pCi/L | | 1 | Ga-Tech | 07/13/2015 814 | MB |
| Radium 228 Precision (±) | 1.9 | pCi/L | | | Ga-Tech | 07/13/2015 814 | MB |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- C Calculated Value
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- L Analyzed by a contract laboratory
- M Value exceeds Monthly Ave or MCL or is less than LCL
- ND Not Detected at the Reporting Limit
- O Outside the Range of Dilutions
- S Spike Recovery outside accepted recovery limits
- X Matrix Effect

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-016
**ClientSample ID:** B-017
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 10:55:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Anions/Cations** | | | | | | | |
| Alkalinity, Total (As CaCO3) | 116 | mg/L | | 5 | SM 2320B | 06/16/2015 2359 | MRL |
| Alkalinity, Bicarbonate as HCO3 | 142 | mg/L | | 5 | SM 2320B | 06/16/2015 2359 | MRL |
| Alkalinity, Carbonate as CO3 | ND | mg/L | | 5 | SM 2320B | 06/16/2015 2359 | MRL |
| Chloride | 15 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1900 | AB |
| Fluoride | 0.2 | mg/L | | 0.1 | SM 4500FC | 06/16/2015 2359 | MRL |
| Nitrogen, Nitrate+Nitrite (as N) | ND | mg/L | | 0.1 | EPA 353.2 | 06/23/2015 1645 | AMB |
| Sulfate | 81 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1900 | AB |
| Calcium | 50 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1335 | DG |
| Magnesium | 12 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1335 | DG |
| Potassium | 7 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1335 | DG |
| Sodium | 15 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1335 | DG |
| Nitrogen, Ammonia (As N) | ND | mg/L | | 0.1 | EPA 350.1 | 06/19/2015 1701 | AMB |
| Silica as SiO2 | 12 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1335 | DG |
| **General Parameters** | | | | | | | |
| pH | 7.7 | s.u. | | 0.1 | SM 4500 H B | 06/16/2015 2359 | MRL |
| Electrical Conductivity | 431 | µmhos/cm | | 5 | SM 2510B | 06/16/2015 2359 | MRL |
| Total Dissolved Solids (180) | 280 | mg/L | | 10 | SM 2540 | 06/16/2015 1414 | TS |
| **Data Quality** | | | | | | | |
| Cation Sum | 4.27 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Anion Sum | 4.43 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Cation-Anion Balance (± 5%) | 1.79 | % | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Solids, Total Dissolved (Calc) | 260 | mg/L | | 10 | SM 1030E | 06/29/2015 1623 | JJ |
| Calculated TDS/TDS Ratio (0.80-1.20) | 1.08 | dec. % | | 0.01 | Calculation | 07/08/2015 1207 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| E | Value above quantitation range |
| J | Analyte detected below quantitation limits |
| M | Value exceeds Monthly Ave or MCL or is less than LCL |
| O | Outside the Range of Dilutions |
| X | Matrix Effect |
| C | Calculated Value |
| H | Holding times for preparation or analysis exceeded |
| L | Analyzed by a contract laboratory |
| ND | Not Detected at the Reporting Limit |
| S | Spike Recovery outside accepted recovery limits |

Reviewed by:
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-016
**ClientSample ID:** B-017
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 10:55:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Metals - Dissolved** | | | | | | | |
| Aluminum | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1335 | DG |
| Arsenic | 0.032 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2151 | MS |
| Barium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2151 | MS |
| Beryllium | ND | mg/L | | 0.001 | EPA 200.7 | 06/17/2015 1335 | DG |
| Boron | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1335 | DG |
| Cadmium | ND | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2151 | MS |
| Chromium | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1335 | DG |
| Copper | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2151 | MS |
| Iron | 1.58 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1335 | DG |
| Lead | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2151 | MS |
| Manganese | 0.06 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1335 | DG |
| Mercury | ND | mg/L | | 0.001 | EPA 245.1 | 06/19/2015 1324 | AW |
| Molybdenum | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2151 | MS |
| Nickel | ND | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1335 | DG |
| Selenium | ND | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2151 | MS |
| Uranium | 0.479 | mg/L | | 0.0003 | EPA 200.8 | 06/16/2015 2151 | MS |
| Vanadium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2151 | MS |
| Zinc | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1335 | DG |
| **Metals - Total** | | | | | | | |
| Iron | 3.76 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1827 | DG |
| Manganese | 0.06 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1827 | DG |
| **Radionuclides - Dissolved** | | | | | | | |
| Gross Alpha | 506 | pCi/L | | 2 | SM 7110B | 06/30/2015 2123 | MB |
| Gross Alpha Precision (±) | 10.4 | pCi/L | | | SM 7110B | 06/30/2015 2123 | MB |
| Gross Beta | 185 | pCi/L | | 3 | SM 7110B | 06/30/2015 2123 | MB |
| Gross Beta Precision (±) | 4.7 | pCi/L | | | SM 7110B | 06/30/2015 2123 | MB |
| Radium 226 | 164 | pCi/L | | 0.2 | SM 7500 Ra-B | 07/13/2015 1422 | MB |
| Radium 226 Precision (±) | 1.4 | pCi/L | | | SM 7500 Ra-B | 07/13/2015 1422 | MB |
| Radium 228 | ND | pCi/L | | 1 | Ga-Tech | 07/13/2015 1015 | MB |
| Radium 228 Precision (±) | NA | pCi/L | | | Ga-Tech | 07/13/2015 1015 | MB |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| C | Calculated Value |
| E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits |
| L | Analyzed by a contract laboratory |
| M | Value exceeds Monthly Ave or MCL or is less than LCL |
| ND | Not Detected at the Reporting Limit |
| O | Outside the Range of Dilutions |
| S | Spike Recovery outside accepted recovery limits |
| X | Matrix Effect |

Reviewed by:
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-017
**ClientSample ID:** B-018
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 12:10:00 PM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Anions/Cations** | | | | | | | |
| Alkalinity, Total (As CaCO3) | 109 | mg/L | | 5 | SM 2320B | 06/17/2015 011 | MRL |
| Alkalinity, Bicarbonate as HCO3 | 133 | mg/L | | 5 | SM 2320B | 06/17/2015 011 | MRL |
| Alkalinity, Carbonate as CO3 | ND | mg/L | | 5 | SM 2320B | 06/17/2015 011 | MRL |
| Chloride | 7 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1913 | AB |
| Fluoride | 0.2 | mg/L | | 0.1 | SM 4500FC | 06/17/2015 011 | MRL |
| Nitrogen, Nitrate+Nitrite (as N) | ND | mg/L | | 0.1 | EPA 353.2 | 06/23/2015 1646 | AMB |
| Sulfate | 37 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1913 | AB |
| Calcium | 36 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1337 | DG |
| Magnesium | 8 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1337 | DG |
| Potassium | 6 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1337 | DG |
| Sodium | 10 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1337 | DG |
| Nitrogen, Ammonia (As N) | ND | mg/L | | 0.1 | EPA 350.1 | 06/19/2015 1710 | AMB |
| Silica as SiO2 | 13 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1337 | DG |
| **General Parameters** | | | | | | | |
| pH | 8.0 | s.u. | | 0.1 | SM 4500 H B | 06/17/2015 011 | MRL |
| Electrical Conductivity | 302 | µmhos/cm | | 5 | SM 2510B | 06/17/2015 011 | MRL |
| Total Dissolved Solids (180) | 200 | mg/L | | 10 | SM 2540 | 06/16/2015 1415 | TS |
| **Data Quality** | | | | | | | |
| Cation Sum | 3.02 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Anion Sum | 3.15 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Cation-Anion Balance (± 5%) | 2.09 | % | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Solids, Total Dissolved (Calc) | 180 | mg/L | | 10 | SM 1030E | 06/29/2015 1623 | JJ |
| Calculated TDS/TDS Ratio (0.80-1.20) | 1.11 | dec. % | | 0.01 | Calculation | 07/08/2015 1207 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| E | Value above quantitation range |
| J | Analyte detected below quantitation limits |
| M | Value exceeds Monthly Ave or MCL or is less than LCL |
| O | Outside the Range of Dilutions |
| X | Matrix Effect |
| C | Calculated Value |
| H | Holding times for preparation or analysis exceeded |
| L | Analyzed by a contract laboratory |
| ND | Not Detected at the Reporting Limit |
| S | Spike Recovery outside accepted recovery limits |

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-017
**ClientSample ID:** B-018
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 12:10:00 PM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Metals - Dissolved** | | | | | | | |
| Aluminum | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1337 | DG |
| Arsenic | 0.005 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2156 | MS |
| Barium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2156 | MS |
| Beryllium | ND | mg/L | | 0.001 | EPA 200.7 | 06/17/2015 1337 | DG |
| Boron | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1337 | DG |
| Cadmium | ND | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2156 | MS |
| Chromium | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1337 | DG |
| Copper | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2156 | MS |
| Iron | 0.96 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1337 | DG |
| Lead | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2156 | MS |
| Manganese | 0.12 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1337 | DG |
| Mercury | ND | mg/L | | 0.001 | EPA 245.1 | 06/19/2015 1326 | AW |
| Molybdenum | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2156 | MS |
| Nickel | ND | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1337 | DG |
| Selenium | 0.010 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2156 | MS |
| Uranium | 0.0937 | mg/L | | 0.0003 | EPA 200.8 | 06/16/2015 2156 | MS |
| Vanadium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2156 | MS |
| Zinc | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1337 | DG |
| **Metals - Total** | | | | | | | |
| Iron | 1.15 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1830 | DG |
| Manganese | 0.12 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1830 | DG |
| **Radionuclides - Dissolved** | | | | | | | |
| Gross Alpha | 260 | pCi/L | | 2 | SM 7110B | 06/30/2015 2123 | MB |
| Gross Alpha Precision (±) | 7.1 | pCi/L | | | SM 7110B | 06/30/2015 2123 | MB |
| Gross Beta | 90.5 | pCi/L | | 3 | SM 7110B | 06/30/2015 2123 | MB |
| Gross Beta Precision (±) | 3.4 | pCi/L | | | SM 7110B | 06/30/2015 2123 | MB |
| Radium 226 | 149 | pCi/L | | 0.2 | SM 7500 Ra-B | 07/13/2015 1422 | MB |
| Radium 226 Precision (±) | 1.4 | pCi/L | | | SM 7500 Ra-B | 07/13/2015 1422 | MB |
| Radium 228 | ND | pCi/L | | 1 | Ga-Tech | 07/13/2015 1216 | MB |
| Radium 228 Precision (±) | NA | pCi/L | | | Ga-Tech | 07/13/2015 1216 | MB |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| C | Calculated Value |
| E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits |
| L | Analyzed by a contract laboratory |
| M | Value exceeds Monthly Ave or MCL or is less than LCL |
| ND | Not Detected at the Reporting Limit |
| O | Outside the Range of Dilutions |
| S | Spike Recovery outside accepted recovery limits |
| X | Matrix Effect |

Reviewed by:
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-018
**ClientSample ID:** B-019
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 8:25:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Anions/Cations** | | | | | | | |
| Alkalinity, Total (As CaCO3) | 105 | mg/L | | 5 | SM 2320B | 06/17/2015 022 | MRL |
| Alkalinity, Bicarbonate as HCO3 | 128 | mg/L | | 5 | SM 2320B | 06/17/2015 022 | MRL |
| Alkalinity, Carbonate as CO3 | ND | mg/L | | 5 | SM 2320B | 06/17/2015 022 | MRL |
| Chloride | 4 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1927 | AB |
| Fluoride | 0.2 | mg/L | | 0.1 | SM 4500FC | 06/17/2015 022 | MRL |
| Nitrogen, Nitrate+Nitrite (as N) | ND | mg/L | | 0.1 | EPA 353.2 | 06/23/2015 1648 | AMB |
| Sulfate | 34 | mg/L | | 1 | EPA 300.0 | 06/26/2015 1927 | AB |
| Calcium | 31 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1339 | DG |
| Magnesium | 7 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1339 | DG |
| Potassium | 5 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1339 | DG |
| Sodium | 11 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1339 | DG |
| Nitrogen, Ammonia (As N) | ND | mg/L | | 0.1 | EPA 350.1 | 06/19/2015 1722 | AMB |
| Silica as SiO2 | 11 | mg/L | | 1 | EPA 200.7 | 06/17/2015 1339 | DG |
| **General Parameters** | | | | | | | |
| pH | 7.8 | s.u. | | 0.1 | SM 4500 H B | 06/17/2015 022 | MRL |
| Electrical Conductivity | 278 | µmhos/cm | | 5 | SM 2510B | 06/17/2015 022 | MRL |
| Total Dissolved Solids (180) | 180 | mg/L | | 10 | SM 2540 | 06/16/2015 1416 | TS |
| **Data Quality** | | | | | | | |
| Cation Sum | 2.75 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Anion Sum | 2.92 | meq/L | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Cation-Anion Balance (± 5%) | 3.00 | % | | 0.01 | SM 1030E | 06/29/2015 1623 | JJ |
| Solids, Total Dissolved (Calc) | 170 | mg/L | | 10 | SM 1030E | 06/29/2015 1623 | JJ |
| Calculated TDS/TDS Ratio (0.80-1.20) | 1.06 | dec. % | | 0.01 | Calculation | 07/08/2015 1207 | WN |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| E | Value above quantitation range |
| J | Analyte detected below quantitation limits |
| M | Value exceeds Monthly Ave or MCL or is less than LCL |
| O | Outside the Range of Dilutions |
| X | Matrix Effect |
| C | Calculated Value |
| H | Holding times for preparation or analysis exceeded |
| L | Analyzed by a contract laboratory |
| ND | Not Detected at the Reporting Limit |
| S | Spike Recovery outside accepted recovery limits |

Reviewed by:
Wade Nieuwsma, Assistant Laboratory Manager

## Sample Analysis Report

**Company:** Power Resources (Cameco)
PO Box 1210
Glenrock, WY 82637

**Date Reported** 7/17/2015
**Report ID** S1506333001

**ProjectName:** MU1 Stability Monitoring
**Lab ID:** S1506333-018
**ClientSample ID:** B-019
**COC:** 154591 154589

**WorkOrder:** S1506333
**CollectionDate:** 6/15/2015 8:25:00 AM
**DateReceived:** 6/16/2015 11:55:00 AM
**FieldSampler:** GT
**Matrix:** Water

**Comments**

| Analyses | Result | Units | Qual | RL | Method | Date Analyzed/Init | |
|---|---|---|---|---|---|---|---|
| **Metals - Dissolved** | | | | | | | |
| Aluminum | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1339 | DG |
| Arsenic | 0.007 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2202 | MS |
| Barium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2202 | MS |
| Beryllium | ND | mg/L | | 0.001 | EPA 200.7 | 06/17/2015 1339 | DG |
| Boron | ND | mg/L | | 0.1 | EPA 200.7 | 06/17/2015 1339 | DG |
| Cadmium | ND | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2202 | MS |
| Chromium | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1339 | DG |
| Copper | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2202 | MS |
| Iron | 0.65 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1339 | DG |
| Lead | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2202 | MS |
| Manganese | 0.06 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1339 | DG |
| Mercury | ND | mg/L | | 0.001 | EPA 245.1 | 06/19/2015 1328 | AW |
| Molybdenum | ND | mg/L | | 0.01 | EPA 200.8 | 06/16/2015 2202 | MS |
| Nickel | ND | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1339 | DG |
| Selenium | 0.004 | mg/L | | 0.001 | EPA 200.8 | 06/16/2015 2202 | MS |
| Uranium | 0.257 | mg/L | | 0.0003 | EPA 200.8 | 06/16/2015 2202 | MS |
| Vanadium | ND | mg/L | | 0.1 | EPA 200.8 | 06/16/2015 2202 | MS |
| Zinc | ND | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1339 | DG |
| **Metals - Total** | | | | | | | |
| Iron | 0.66 | mg/L | | 0.05 | EPA 200.7 | 06/17/2015 1834 | DG |
| Manganese | 0.06 | mg/L | | 0.01 | EPA 200.7 | 06/17/2015 1834 | DG |
| **Radionuclides - Dissolved** | | | | | | | |
| Gross Alpha | 852 | pCi/L | | 2 | SM 7110B | 06/30/2015 2123 | MB |
| Gross Alpha Precision (±) | 12.7 | pCi/L | | | SM 7110B | 06/30/2015 2123 | MB |
| Gross Beta | 326 | pCi/L | | 3 | SM 7110B | 06/30/2015 2123 | MB |
| Gross Beta Precision (±) | 6.2 | pCi/L | | | SM 7110B | 06/30/2015 2123 | MB |
| Radium 226 | 327 | pCi/L | | 0.2 | SM 7500 Ra-B | 07/13/2015 1422 | MB |
| Radium 226 Precision (±) | 2.0 | pCi/L | | | SM 7500 Ra-B | 07/13/2015 1422 | MB |
| Radium 228 | ND | pCi/L | | 1 | Ga-Tech | 07/13/2015 1417 | MB |
| Radium 228 Precision (±) | NA | pCi/L | | | Ga-Tech | 07/13/2015 1417 | MB |

**These results apply only to the samples tested.**

**RL - Reporting Limit**

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- C Calculated Value
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- L Analyzed by a contract laboratory
- M Value exceeds Monthly Ave or MCL or is less than LCL
- ND Not Detected at the Reporting Limit
- O Outside the Range of Dilutions
- S Spike Recovery outside accepted recovery limits
- X Matrix Effect

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

Inter-Mountain Labs
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Your Environmental Monitoring Partner

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)
**Work Order:** S1506333
**Project:** MU1 Stability Monitoring

**Date:** 7/17/2015
**Report ID:** S1506333001

**Alkalinity** Sample Type **MBLK** Units: mg/L

BLANK (06/16/15 17:32) RunNo: 122277

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Alkalinity, Total (As CaCO3) | ND | 5 | | | | | |

**Alkalinity** Sample Type **LCS** Units: mg/L

ATQC (06/16/15 17:21) RunNo: 122277

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Alkalinity, Total (As CaCO3) | 609 | 5 | 595 | | 102 | 90 - 110 | |

**Alkalinity** Sample Type **DUP** Units: mg/L

S1506333-010A (06/16/15 22:32) RunNo: 122277

| Analyte | Result | RL | Ref Samp | %RPD | %REC | % RPD Limits | Qual |
|---|---|---|---|---|---|---|---|
| Alkalinity, Bicarbonate as HCO3 | 271 | 5 | 273 | 0.775 | | 20 | |
| Alkalinity, Carbonate as CO3 | ND | 5 | ND | | | 20 | |
| Alkalinity, Total (As CaCO3) | 222 | 5 | 224 | 0.775 | | 20 | |

**Conductivity** Sample Type **MBLK** Units: µmhos/cm

BLANK (06/16/15 17:32) RunNo: 122277

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Electrical Conductivity | ND | 5 | | | | | |

**Conductivity** Sample Type **LCS** Units: µmhos/cm

ATQC (06/16/15 17:21) RunNo: 122277

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Electrical Conductivity | 1040 | 5 | 1060 | | 97.7 | 90 - 110 | |

**Conductivity** Sample Type **DUP** Units: µmhos/cm

S1506333-010A (06/16/15 22:32) RunNo: 122277

| Analyte | Result | RL | Ref Samp | %RPD | %REC | % RPD Limits | Qual |
|---|---|---|---|---|---|---|---|
| Electrical Conductivity | 615 | 5 | 614 | 0.163 | | 20 | |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| L | Analyzed by a contract laboratory | ND | Not Detected at the Reporting Limit |
| O | Outside the Range of Dilutions | R | RPD outside accepted recovery limits |
| S | Spike Recovery outside accepted recovery limits | X | Matrix Effect |

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)
**Work Order:** S1506333
**Project:** MU1 Stability Monitoring

**Date:** 7/17/2015
**Report ID:** S1506333001

**Dissolved Mercury by EPA 245.1 - Water** Sample Type **MBLK** Units: mg/L

| LRB (06/19/15 09:02) | RunNo: 122469 | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
| Mercury | ND | 0.001 | | | | | |

**Dissolved Mercury by EPA 245.1 - Water** Sample Type **LCS** Units: mg/L

| LCS (06/19/15 09:00) | RunNo: 122469 | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
| Mercury | 0.002 | 0.001 | 0.002 | | 93.1 | 85 - 115 | |

**Dissolved Mercury by EPA 245.1 - Water** Sample Type **MS** Units: mg/L

| S1506333-007D (06/19/15 12:55) | RunNo: 122469 | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
| Mercury | 0.002 | 0.001 | 0.00197 | ND | 91.7 | 70 - 130 | |

| S1506333-015D (06/19/15 13:20) | RunNo: 122469 | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
| Mercury | 0.002 | 0.001 | 0.00197 | ND | 91.4 | 70 - 130 | |

**Dissolved Mercury by EPA 245.1 - Water** Sample Type **MSD** Units: mg/L

| S1506333-007D (06/19/15 12:56) | RunNo: 122469 | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Conc | %RPD | %REC | % RPD Limits | Qual |
| Mercury | 0.002 | 0.001 | 0.002 | 1.92 | 93.5 | 20 | |

| S1506333-015D (06/19/15 13:22) | RunNo: 122469 | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Conc | %RPD | %REC | % RPD Limits | Qual |
| Mercury | 0.002 | 0.001 | 0.002 | 1.22 | 90.2 | 20 | |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| L | Analyzed by a contract laboratory | ND | Not Detected at the Reporting Limit |
| O | Outside the Range of Dilutions | R | RPD outside accepted recovery limits |
| S | Spike Recovery outside accepted recovery limits | X | Matrix Effect |

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)
**Work Order:** S1506333
**Project:** MU1 Stability Monitoring

**Date:** 7/17/2015
**Report ID:** S1506333001

**Dissolved Metals by ICP - EPA 200.7 - Water** Sample Type **MBLK** Units: mg/L

MBLK DISS/CAT (06/17/15 11:41) RunNo: 122346

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Aluminum | ND | 0.1 | | | | | |
| Beryllium | ND | 0.01 | | | | | |
| Boron | ND | 0.1 | | | | | |
| Chromium | ND | 0.01 | | | | | |
| Iron | ND | 0.05 | | | | | |
| Manganese | ND | 0.02 | | | | | |
| Nickel | ND | 0.01 | | | | | |
| Zinc | ND | 0.01 | | | | | |

**Dissolved Metals by ICP - EPA 200.7 - Water** Sample Type **LCS** Units: mg/L

DISS LCS Q (06/17/15 11:44) RunNo: 122346

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Aluminum | 1.0 | 0.1 | 1 | | 97.0 | 85 - 115 | |
| Beryllium | 1.03 | 0.01 | 1 | | 103 | 85 - 115 | |
| Boron | 1.0 | 0.1 | 1 | | 95.9 | 85 - 115 | |
| Chromium | 1.00 | 0.01 | 1 | | 99.8 | 85 - 115 | |
| Iron | 0.97 | 0.05 | 1 | | 96.7 | 85 - 115 | |
| Manganese | 0.99 | 0.02 | 1 | | 99.4 | 85 - 115 | |
| Nickel | 1.01 | 0.01 | 1 | | 101 | 85 - 115 | |
| Zinc | 0.95 | 0.01 | 1 | | 95.0 | 85 - 115 | |

**Dissolved Metals by ICP - EPA 200.7 - Water** Sample Type **MS** Units: mg/L

S1506333-007DS (06/17/15 12:46) RunNo: 122346

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Aluminum | 0.3 | 0.1 | 0.25 | ND | 99.2 | 70 - 130 | |
| Beryllium | 0.276 | 0.001 | 0.25 | ND | 110 | 70 - 130 | |
| Boron | 0.3 | 0.1 | 0.25 | ND | 101 | 70 - 130 | |
| Chromium | 0.26 | 0.01 | 0.25 | ND | 102 | 70 - 130 | |
| Iron | 1.43 | 0.05 | 0.25 | 1.24 | 75.5 | 70 - 130 | |
| Manganese | 0.39 | 0.01 | 0.25 | 0.14 | 101 | 70 - 130 | |
| Nickel | 0.27 | 0.05 | 0.25 | ND | 104 | 70 - 130 | |
| Zinc | 0.25 | 0.01 | 0.25 | ND | 99.5 | 70 - 130 | |

S1506333-014DS (06/17/15 13:22) RunNo: 122346

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Aluminum | 0.3 | 0.1 | 0.25 | ND | 120 | 70 - 130 | |
| Beryllium | 0.327 | 0.001 | 0.25 | ND | 131 | 70 - 130 | S |
| Boron | 0.4 | 0.1 | 0.25 | ND | 121 | 70 - 130 | |
| Chromium | 0.32 | 0.01 | 0.25 | ND | 126 | 70 - 130 | |
| Iron | 1.34 | 0.05 | 0.25 | 1.10 | 97.6 | 70 - 130 | |
| Manganese | 0.35 | 0.01 | 0.25 | 0.04 | 123 | 70 - 130 | |
| Nickel | 0.32 | 0.05 | 0.25 | ND | 127 | 70 - 130 | |
| Zinc | 0.31 | 0.01 | 0.25 | ND | 123 | 70 - 130 | |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| L | Analyzed by a contract laboratory | ND | Not Detected at the Reporting Limit |
| O | Outside the Range of Dilutions | R | RPD outside accepted recovery limits |
| S | Spike Recovery outside accepted recovery limits | X | Matrix Effect |

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)
**Work Order:** S1506333
**Project:** MU1 Stability Monitoring

**Date:** 7/17/2015
**Report ID:** S1506333001

**Dissolved Metals by ICP - EPA 200.7 - Water** Sample Type **MSD** Units: mg/L

| S1506333-007DSD (06/17/15 12:48) | RunNo: 122346 | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Conc | %RPD | %REC | % RPD Limits | Qual |
| Aluminum | 0.3 | 0.1 | 0.3 | 0.389 | 99.6 | 20 | |
| Beryllium | 0.277 | 0.001 | 0.276 | 0.210 | 111 | 20 | |
| Boron | 0.3 | 0.1 | 0.3 | 2.30 | 104 | 20 | |
| Chromium | 0.26 | 0.01 | 0.26 | 1.05 | 103 | 20 | |
| Iron | 1.47 | 0.05 | 1.43 | 2.43 | 89.6 | 20 | |
| Manganese | 0.39 | 0.01 | 0.39 | 0.831 | 100 | 20 | |
| Nickel | 0.27 | 0.05 | 0.27 | 1.46 | 106 | 20 | |
| Zinc | 0.26 | 0.01 | 0.25 | 2.95 | 102 | 20 | |

| S1506333-014DSD (06/17/15 13:24) | RunNo: 122346 | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Conc | %RPD | %REC | % RPD Limits | Qual |
| Aluminum | 0.3 | 0.1 | 0.3 | 5.02 | 114 | 20 | |
| Beryllium | 0.308 | 0.001 | 0.327 | 6.07 | 123 | 20 | |
| Boron | 0.4 | 0.1 | 0.4 | 3.10 | 116 | 20 | |
| Chromium | 0.29 | 0.01 | 0.32 | 7.26 | 117 | 20 | |
| Iron | 1.32 | 0.05 | 1.34 | 1.36 | 90.4 | 20 | |
| Manganese | 0.33 | 0.01 | 0.35 | 5.59 | 115 | 20 | |
| Nickel | 0.31 | 0.05 | 0.32 | 5.25 | 120 | 20 | |
| Zinc | 0.29 | 0.01 | 0.31 | 5.63 | 116 | 20 | |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| L | Analyzed by a contract laboratory | ND | Not Detected at the Reporting Limit |
| O | Outside the Range of Dilutions | R | RPD outside accepted recovery limits |
| S | Spike Recovery outside accepted recovery limits | X | Matrix Effect |

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)
**Work Order:** S1506333
**Project:** MU1 Stability Monitoring

**Date:** 7/17/2015
**Report ID:** S1506333001

**Dissolved Metals by ICPMS EPA 200.8 - Water** Sample Type **MBLK** Units: mg/L

MBLK (06/16/15 14:06) RunNo: 122272

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Arsenic | ND | 0.005 | | | | | |
| Barium | ND | 0.1 | | | | | |
| Cadmium | ND | 0.001 | | | | | |
| Copper | ND | 0.01 | | | | | |
| Lead | ND | 0.02 | | | | | |
| Molybdenum | ND | 0.02 | | | | | |
| Selenium | ND | 0.001 | | | | | |
| Uranium | ND | 0.0003 | | | | | |
| Vanadium | ND | 0.02 | | | | | |

**Dissolved Metals by ICPMS EPA 200.8 - Water** Sample Type **LCS** Units: mg/L

LCS (06/16/15 14:01) RunNo: 122272

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Arsenic | 0.096 | 0.005 | 0.1 | | 95.7 | 85 - 115 | |
| Barium | 0.1 | 0.1 | 0.1 | | 106 | 85 - 115 | |
| Cadmium | 0.104 | 0.001 | 0.1 | | 104 | 85 - 115 | |
| Copper | 0.10 | 0.01 | 0.1 | | 99.4 | 85 - 115 | |
| Lead | 0.11 | 0.02 | 0.1 | | 105 | 85 - 115 | |
| Molybdenum | 0.10 | 0.02 | 0.1 | | 104 | 85 - 115 | |
| Selenium | 0.099 | 0.001 | 0.1 | | 99.0 | 85 - 115 | |
| Uranium | 0.106 | 0.0003 | 0.1 | | 106 | 85 - 115 | |
| Vanadium | 0.10 | 0.02 | 0.1 | | 104 | 85 - 115 | |

**Dissolved Metals by ICPMS EPA 200.8 - Water** Sample Type **MS** Units: mg/L

S1506333-001DS (06/16/15 19:45) RunNo: 122272

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Arsenic | 1.05 | 0.001 | 1.1 | 0.019 | 94.0 | 70 - 130 | |
| Barium | 1.1 | 0.1 | 1.1 | ND | 96.1 | 70 - 130 | |
| Cadmium | 1.09 | 0.001 | 1.1 | ND | 98.8 | 70 - 130 | |
| Copper | 1.07 | 0.01 | 1.1 | ND | 96.9 | 70 - 130 | |
| Lead | 1.04 | 0.01 | 1.1 | ND | 94.7 | 70 - 130 | |
| Molybdenum | 1.11 | 0.01 | 1.1 | ND | 101 | 70 - 130 | |
| Selenium | 1.10 | 0.001 | 1.1 | 0.006 | 99.2 | 70 - 130 | |
| Uranium | 1.12 | 0.0003 | 1.1 | 0.0305 | 98.9 | 70 - 130 | |
| Vanadium | 1.1 | 0.1 | 1.1 | ND | 101 | 70 - 130 | |

S1506333-011DS (06/16/15 21:07) RunNo: 122272

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Arsenic | 1.03 | 0.001 | 1.1 | 0.006 | 93.2 | 70 - 130 | |
| Barium | 1.1 | 0.1 | 1.1 | ND | 96.9 | 70 - 130 | |
| Cadmium | 1.12 | 0.001 | 1.1 | ND | 102 | 70 - 130 | |
| Copper | 1.05 | 0.01 | 1.1 | ND | 95.2 | 70 - 130 | |
| Lead | 1.06 | 0.01 | 1.1 | ND | 96.0 | 70 - 130 | |
| Molybdenum | 1.11 | 0.01 | 1.1 | ND | 101 | 70 - 130 | |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| L | Analyzed by a contract laboratory | ND | Not Detected at the Reporting Limit |
| O | Outside the Range of Dilutions | R | RPD outside accepted recovery limits |
| S | Spike Recovery outside accepted recovery limits | X | Matrix Effect |

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)
**Work Order:** S1506333
**Project:** MU1 Stability Monitoring

**Date:** 7/17/2015
**Report ID:** S1506333001

**Dissolved Metals by ICPMS EPA 200.8 - Water** Sample Type **MS** Units: mg/L

S1506333-011DS (06/16/15 21:07) RunNo: 122272

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Selenium | 1.11 | 0.001 | 1.1 | 0.014 | 100 | 70 - 130 | |
| Uranium | 1.43 | 0.0003 | 1.1 | 0.314 | 101 | 70 - 130 | |
| Vanadium | 1.1 | 0.1 | 1.1 | ND | 103 | 70 - 130 | |

**Dissolved Metals by ICPMS EPA 200.8 - Water** Sample Type **MSD** Units: mg/L

S1506333-001DMSD (06/16/15 19:51) RunNo: 122272

| Analyte | Result | RL | Conc | %RPD | %REC | % RPD Limits | Qual |
|---|---|---|---|---|---|---|---|
| Arsenic | 1.07 | 0.001 | 1.05 | 2.04 | 96.0 | 20 | |
| Barium | 1.1 | 0.1 | 1.1 | 0.311 | 96.4 | 20 | |
| Cadmium | 1.08 | 0.001 | 1.09 | 0.577 | 98.3 | 20 | |
| Copper | 1.08 | 0.01 | 1.07 | 1.77 | 98.6 | 20 | |
| Lead | 1.05 | 0.01 | 1.04 | 1.07 | 95.8 | 20 | |
| Molybdenum | 1.14 | 0.01 | 1.11 | 2.77 | 104 | 20 | |
| Selenium | 1.10 | 0.001 | 1.10 | 0.121 | 99.3 | 20 | |
| Uranium | 1.14 | 0.0003 | 1.12 | 1.75 | 101 | 20 | |
| Vanadium | 1.1 | 0.1 | 1.1 | 1.05 | 102 | 20 | |

S1506333-011DMSD (06/16/15 21:12) RunNo: 122272

| Analyte | Result | RL | Conc | %RPD | %REC | % RPD Limits | Qual |
|---|---|---|---|---|---|---|---|
| Arsenic | 1.04 | 0.001 | 1.03 | 1.24 | 94.4 | 20 | |
| Barium | 1.1 | 0.1 | 1.1 | 4.27 | 101 | 20 | |
| Cadmium | 1.12 | 0.001 | 1.12 | 0.00468 | 102 | 20 | |
| Copper | 1.07 | 0.01 | 1.05 | 1.70 | 96.8 | 20 | |
| Lead | 1.11 | 0.01 | 1.06 | 5.16 | 101 | 20 | |
| Molybdenum | 1.18 | 0.01 | 1.11 | 5.56 | 107 | 20 | |
| Selenium | 1.11 | 0.001 | 1.11 | 0.0804 | 100 | 20 | |
| Uranium | 1.47 | 0.0003 | 1.43 | 2.99 | 105 | 20 | |
| Vanadium | 1.1 | 0.1 | 1.1 | 0.476 | 104 | 20 | |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| L | Analyzed by a contract laboratory | ND | Not Detected at the Reporting Limit |
| O | Outside the Range of Dilutions | R | RPD outside accepted recovery limits |
| S | Spike Recovery outside accepted recovery limits | X | Matrix Effect |

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)
**Work Order:** S1506333
**Project:** MU1 Stability Monitoring

**Date:** 7/17/2015
**Report ID:** S1506333001

**Fluoride by SM 4500** Sample Type **MBLK** Units: mg/L

BLANK (06/16/15 17:32) RunNo: 122277

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Fluoride | ND | 0.1 | | | | | |

**Fluoride by SM 4500** Sample Type **LCS** Units: mg/L

ATQC (06/16/15 17:21) RunNo: 122277

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Fluoride | 2.9 | 0.1 | 3 | | 98.1 | 85 - 115 | |

**Fluoride by SM 4500** Sample Type **MS** Units: mg/L

S1506333-015A (06/16/15 23:39) RunNo: 122277

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Fluoride | 2.8 | 0.1 | 2.5 | 0.2 | 105 | 80 - 120 | |

**Fluoride by SM 4500** Sample Type **MSD** Units: mg/L

S1506333-015A (06/16/15 23:43) RunNo: 122277

| Analyte | Result | RL | Conc | %RPD | %REC | % RPD Limits | Qual |
|---|---|---|---|---|---|---|---|
| Fluoride | 2.8 | 0.1 | 2.8 | 0.931 | 104 | 20 | |

**Gross Alpha, Beta by SM 7110B** Sample Type **MBLK** Units: pCi/L

MB-332 (06/26/15 16:00) RunNo: 122920 PrepDate: 06/18/15 0:00 BatchID: R122920

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Gross Alpha (Dissolved) | ND | 2 | | | | | |
| Gross Beta (Dissolved) | ND | 3 | | | | | |

**Gross Alpha, Beta by SM 7110B** Sample Type **LCS** Units: pCi/L

LCS-332 (06/26/15 16:00) RunNo: 122920 PrepDate: 06/18/15 0:00 BatchID: R122920

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Gross Alpha (Dissolved) | 72 | 2 | 72.6 | | 99.6 | 59.5 - 130 | |
| Gross Beta (Dissolved) | 129 | 3 | 118 | | 109 | 80 - 122 | |

**Gross Alpha, Beta by SM 7110B** Sample Type **MS** Units: pCi/L

S1506333-001F MS (06/26/15 20:02) RunNo: 122920 PrepDate: 06/18/15 0:00 BatchID: R122920

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Gross Beta (Dissolved) | 383 | 3 | 118 | 240 | 121 | 61.4 - 150 | |

S1506371-001D MS (06/26/15 16:00) RunNo: 122920 PrepDate: 06/18/15 0:00 BatchID: R122920

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Gross Alpha (Dissolved) | 231 | 2 | 290 | ND | 79.5 | 50 - 150 | |

**Gross Alpha, Beta by SM 7110B** Sample Type **DUP** Units: pCi/L

S1506333-002F DUP (06/26/15 20:02) RunNo: 122920 PrepDate: 06/18/15 0:00 BatchID: R122920

| Analyte | Result | RL | Ref Samp | %RPD | %REC | % RPD Limits | Qual |
|---|---|---|---|---|---|---|---|
| Gross Alpha (Dissolved) | 1720 | 2 | 1410 | 19.8 | | 20 | |
| Gross Beta (Dissolved) | 524 | 3 | 520 | 0.764 | | 20 | |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| L | Analyzed by a contract laboratory | ND | Not Detected at the Reporting Limit |
| O | Outside the Range of Dilutions | R | RPD outside accepted recovery limits |
| S | Spike Recovery outside accepted recovery limits | X | Matrix Effect |

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)
**Work Order:** S1506333
**Project:** MU1 Stability Monitoring

**Date:** 7/17/2015
**Report ID:** S1506333001

**Anions by ION Chromatography** Sample Type **MBLK** Units: mg/L

| BLK (06/26/15 00:05) | RunNo: 122876 | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
| Chloride | ND | 1 | | | | | |
| Sulfate | ND | 1 | | | | | |

**Anions by ION Chromatography** Sample Type **LCS** Units: mg/L

| DIONEX (06/26/15 00:18) | RunNo: 122876 | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
| Chloride | 30 | 1 | 30 | | 98.3 | 90 - 110 | |
| Sulfate | 144 | 1 | 150 | | 96.1 | 90 - 110 | |

**Anions by ION Chromatography** Sample Type **MS** Units: mg/L

| S1506333-002ASPK (06/26/15 08:33) | RunNo: 122876 | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
| Chloride | 74 | 1 | 54.5 | 14 | 109 | 80 - 120 | |
| Sulfate | 546 | 1 | 409 | 96 | 110 | 80 - 120 | |

| S1506618-005ASPK (06/26/15 12:38) | RunNo: 122876 | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
| Chloride | 2660 | 1 | 918 | 1590 | 116 | 80 - 120 | |
| Sulfate | 8490 | 1 | 6890 | 1190 | 106 | 80 - 120 | |

| S1506333-012ASPK (06/26/15 16:03) | RunNo: 122876 | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
| Chloride | 129 | 1 | 100 | 23 | 107 | 80 - 120 | |
| Sulfate | 1010 | 1 | 750 | 213 | 107 | 80 - 120 | |

**Anions by ION Chromatography** Sample Type **MSD** Units: mg/L

| S1506333-002ASPK (06/26/15 08:47) | RunNo: 122876 | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Conc | %RPD | %REC | % RPD Limits | Qual |
| Chloride | 73 | 1 | 74 | 1.53 | 107 | 20 | |
| Sulfate | 531 | 1 | 546 | 2.82 | 106 | 20 | |

| S1506618-005ASPK (06/26/15 12:52) | RunNo: 122876 | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Conc | %RPD | %REC | % RPD Limits | Qual |
| Chloride | 2590 | 1 | 2660 | 2.78 | 108 | 20 | |
| Sulfate | 8290 | 1 | 8490 | 2.42 | 103 | 20 | |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| L | Analyzed by a contract laboratory | ND | Not Detected at the Reporting Limit |
| O | Outside the Range of Dilutions | R | RPD outside accepted recovery limits |
| S | Spike Recovery outside accepted recovery limits | X | Matrix Effect |

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)
**Work Order:** S1506333
**Project:** MU1 Stability Monitoring

**Date:** 7/17/2015
**Report ID:** S1506333001

**Cations by ICP (Method 200.7)** Sample Type **MBLK** Units: mg/L

MBLK DISS/CAT (06/17/15 11:41) RunNo: 122340

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Calcium | ND | 1 | | | | | |
| Magnesium | ND | 1 | | | | | |
| Potassium | ND | 1 | | | | | |
| Sodium | ND | 1 | | | | | |

**Cations by ICP (Method 200.7)** Sample Type **LCS** Units: mg/L

CAT LCS IML3 (06/17/15 11:46) RunNo: 122340

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Calcium | 38 | 1 | 40 | | 95.9 | 85 - 115 | |
| Magnesium | 39 | 1 | 40 | | 97.0 | 85 - 115 | |
| Potassium | 40 | 1 | 40 | | 101 | 85 - 115 | |
| Sodium | 39 | 1 | 40 | | 97.9 | 85 - 115 | |

**Cations by ICP (Method 200.7)** Sample Type **MS** Units: mg/L

S1506333-007AS (06/17/15 12:46) RunNo: 122340

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Calcium | 83 | 1 | 25 | 60 | 92.8 | 70 - 130 | |
| Magnesium | 39 | 1 | 25 | 15 | 93.5 | 70 - 130 | |
| Potassium | 34 | 1 | 25 | 7 | 109 | 70 - 130 | |
| Sodium | 38 | 1 | 25 | 13 | 100 | 70 - 130 | |

S1506333-014AS (06/17/15 13:22) RunNo: 122340

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Calcium | 53 | 1 | 25 | 23 | 118 | 70 - 130 | |
| Magnesium | 33 | 1 | 25 | 5 | 114 | 70 - 130 | |
| Potassium | 37 | 1 | 25 | 4 | 129 | 70 - 130 | |
| Sodium | 39 | 1 | 25 | 8 | 121 | 70 - 130 | |

**Cations by ICP (Method 200.7)** Sample Type **MSD** Units: mg/L

S1506333-007ASD (06/17/15 12:48) RunNo: 122340

| Analyte | Result | RL | Conc | %RPD | %REC | % RPD Limits | Qual |
|---|---|---|---|---|---|---|---|
| Calcium | 84 | 1 | 83 | 1.68 | 98.4 | 20 | |
| Magnesium | 39 | 1 | 39 | 1.57 | 96.0 | 20 | |
| Potassium | 35 | 1 | 34 | 1.15 | 110 | 20 | |
| Sodium | 38 | 1 | 38 | 0.00610 | 100 | 20 | |

S1506333-014ASD (06/17/15 13:24) RunNo: 122340

| Analyte | Result | RL | Conc | %RPD | %REC | % RPD Limits | Qual |
|---|---|---|---|---|---|---|---|
| Calcium | 51 | 1 | 53 | 2.63 | 113 | 20 | |
| Magnesium | 32 | 1 | 33 | 2.67 | 111 | 20 | |
| Potassium | 35 | 1 | 37 | 4.72 | 123 | 20 | |
| Sodium | 37 | 1 | 39 | 3.55 | 115 | 20 | |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| L | Analyzed by a contract laboratory | ND | Not Detected at the Reporting Limit |
| O | Outside the Range of Dilutions | R | RPD outside accepted recovery limits |
| S | Spike Recovery outside accepted recovery limits | X | Matrix Effect |

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)
**Work Order:** S1506333
**Project:** MU1 Stability Monitoring

**Date:** 7/17/2015
**Report ID:** S1506333001

**Nitrogen, Ammonia (as N)** Sample Type **MBLK** Units: mg/L

BLANK (06/19/15 15:16) RunNo: 122533

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Nitrogen, Ammonia (As N) | ND | 0.1 | | | | | |

**Nitrogen, Ammonia (as N)** Sample Type **MS** Units: mg/L

S1506333-016C (06/19/15 17:04) RunNo: 122533

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Nitrogen, Ammonia (As N) | 2.1 | 0.1 | 2.5 | ND | 82.5 | 90 - 110 | S |

S1506333-018C (06/19/15 17:25) RunNo: 122533

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Nitrogen, Ammonia (As N) | 2.2 | 0.1 | 2.5 | ND | 85.2 | 90 - 110 | S |

**Nitrogen, Ammonia (as N)** Sample Type **DUP** Units: mg/L

S1506333-006C (06/19/15 16:41) RunNo: 122533

| Analyte | Result | RL | Ref Samp | %RPD | %REC | % RPD Limits | Qual |
|---|---|---|---|---|---|---|---|
| Nitrogen, Ammonia (As N) | 0.2 | 0.1 | 0.2 | 1.42 | | 20 | |

S1506333-016C (06/19/15 17:02) RunNo: 122533

| Analyte | Result | RL | Ref Samp | %RPD | %REC | % RPD Limits | Qual |
|---|---|---|---|---|---|---|---|
| Nitrogen, Ammonia (As N) | ND | 0.1 | ND | | | 20 | |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| L | Analyzed by a contract laboratory | ND | Not Detected at the Reporting Limit |
| O | Outside the Range of Dilutions | R | RPD outside accepted recovery limits |
| S | Spike Recovery outside accepted recovery limits | X | Matrix Effect |

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)
**Work Order:** S1506333
**Project:** MU1 Stability Monitoring

**Date:** 7/17/2015
**Report ID:** S1506333001

**Nitrogen, Nitrate-Nitrite (as N)** Sample Type **MBLK** Units: mg/L

BLANK (06/23/15 13:19) RunNo: 122696

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Nitrogen, Nitrate-Nitrite (as N) | ND | 0.1 | | | | | |

**Nitrogen, Nitrate-Nitrite (as N)** Sample Type **LCS** Units: mg/L

QC (06/23/15 13:22) RunNo: 122696

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Nitrogen, Nitrate-Nitrite (as N) | 18.1 | 0.1 | 17.7 | | 103 | 90 - 110 | |

**Nitrogen, Nitrate-Nitrite (as N)** Sample Type **MS** Units: mg/L

S1506333-002C (06/17/15 18:49) RunNo: 122382

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Nitrogen, Nitrate-Nitrite (as N) | 2.5 | 0.1 | 2.5 | ND | 101 | 90 - 110 | |

S1506333-012C (06/23/15 16:33) RunNo: 122696

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Nitrogen, Nitrate-Nitrite (as N) | 2.3 | 0.1 | 2.5 | ND | 92.4 | 90 - 110 | |

**Nitrogen, Nitrate-Nitrite (as N)** Sample Type **MSD** Units: mg/L

S1506333-002C (06/17/15 18:51) RunNo: 122382

| Analyte | Result | RL | Conc | %RPD | %REC | % RPD Limits | Qual |
|---|---|---|---|---|---|---|---|
| Nitrogen, Nitrate-Nitrite (as N) | 2.5 | 0.1 | 2.5 | 0.997 | 99.8 | 20 | |

S1506333-012C (06/23/15 16:34) RunNo: 122696

| Analyte | Result | RL | Conc | %RPD | %REC | % RPD Limits | Qual |
|---|---|---|---|---|---|---|---|
| Nitrogen, Nitrate-Nitrite (as N) | 2.4 | 0.1 | 2.3 | 2.65 | 94.9 | 20 | |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| L | Analyzed by a contract laboratory | ND | Not Detected at the Reporting Limit |
| O | Outside the Range of Dilutions | R | RPD outside accepted recovery limits |
| S | Spike Recovery outside accepted recovery limits | X | Matrix Effect |

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)
**Work Order:** S1506333
**Project:** MU1 Stability Monitoring

**Date:** 7/17/2015
**Report ID:** S1506333001

**Radium 228 by Ga/Tech** Sample Type **MBLK** Units: pCi/L

| MB-10385 (07/01/15 12:01) | RunNo: 123083 | PrepDate: 06/22/15 0:00 | | | | BatchID: 10385 | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
| Radium 228 (Dissolved) | ND | 1 | | | | | |

| MB-10457 (07/12/15 18:08) | RunNo: 123711 | PrepDate: 06/23/15 9:00 | | | | BatchID: 10457 | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
| Radium 228 (Dissolved) | ND | 1 | | | | | |

**Radium 228 by Ga/Tech** Sample Type **LCS** Units: pCi/L

| LCS-10385 (07/01/15 14:02) | RunNo: 123083 | PrepDate: 06/22/15 0:00 | | | | BatchID: 10385 | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
| Radium 228 (Dissolved) | 34 | 1 | 40.3 | | 83.6 | 61.7 - 97.1 | |

| LCS-10457 (07/12/15 20:09) | RunNo: 123711 | PrepDate: 06/23/15 9:00 | | | | BatchID: 10457 | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
| Radium 228 (Dissolved) | 33 | 1 | 39.2 | | 84.9 | 60 - 120 | |

**Radium 228 by Ga/Tech** Sample Type **MS** Units: pCi/L

| MS-10385 (07/01/15 18:03) | RunNo: 123083 | PrepDate: 06/22/15 0:00 | | | | BatchID: 10385 | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
| Radium 228 (Dissolved) | 33 | 1 | 40.3 | ND | 80.5 | 52.4 - 114 | |

| MS-10457 (07/13/15 00:11) | RunNo: 123711 | PrepDate: 06/23/15 9:00 | | | | BatchID: 10457 | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
| Radium 228 (Dissolved) | 39 | 1 | 39.2 | ND | 98.7 | 66.7 - 120 | |

**Radium 228 by Ga/Tech** Sample Type **MSD** Units: pCi/L

| MSD-10385 (07/01/15 20:04) | RunNo: 123083 | PrepDate: 06/22/15 0:00 | | | | BatchID: 10385 | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Conc | %RPD | %REC | % RPD Limits | Qual |
| Radium 228 (Dissolved) | 44 | 1 | 33 | 29.6 | 108 | 30 | |

| MSD-10457 (07/13/15 02:12) | RunNo: 123711 | PrepDate: 06/23/15 9:00 | | | | BatchID: 10457 | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Conc | %RPD | %REC | % RPD Limits | Qual |
| Radium 228 (Dissolved) | 32 | 1 | 39 | 18.9 | 81.7 | 20 | |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| L | Analyzed by a contract laboratory | ND | Not Detected at the Reporting Limit |
| O | Outside the Range of Dilutions | R | RPD outside accepted recovery limits |
| S | Spike Recovery outside accepted recovery limits | X | Matrix Effect |

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)
**Work Order:** S1506333
**Project:** MU1 Stability Monitoring

**Date:** 7/17/2015
**Report ID:** S1506333001

**Radium 226 in Water - Dissolved** Sample Type **MBLK** Units: pCi/L

| MB-1474 (07/08/15 08:17) | RunNo: 123416 | PrepDate: 06/24/15 0:00 | | | BatchID: 10432 | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
| Radium 226 (Dissolved) | ND | 0.2 | | | | | |

| MB-1476 (07/13/15 14:22) | RunNo: 123714 | PrepDate: 07/01/15 0:00 | | | BatchID: 10458 | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
| Radium 226 (Dissolved) | ND | 0.2 | | | | | |

**Radium 226 in Water - Dissolved** Sample Type **LCS** Units: pCi/L

| LCS-1474 (07/08/15 08:17) | RunNo: 123416 | PrepDate: 06/24/15 0:00 | | | BatchID: 10432 | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
| Radium 226 (Dissolved) | 4.3 | 0.2 | 5 | | 85.7 | 76.4 - 122 | |

| LCS-1476 (07/13/15 14:22) | RunNo: 123714 | PrepDate: 07/01/15 0:00 | | | BatchID: 10458 | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
| Radium 226 (Dissolved) | 4.9 | 0.2 | 5 | | 97.5 | 76.4 - 122 | |

**Radium 226 in Water - Dissolved** Sample Type **MS** Units: pCi/L

| MS-1474 (07/08/15 08:17) | RunNo: 123416 | PrepDate: 06/24/15 0:00 | | | BatchID: 10432 | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
| Radium 226 (Dissolved) | 4.4 | 0.2 | 5 | ND | 86.9 | 74.5 - 133 | |

| MS-1476 (07/13/15 14:22) | RunNo: 123714 | PrepDate: 07/01/15 0:00 | | | BatchID: 10458 | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
| Radium 226 (Dissolved) | 4.3 | 0.2 | 5.03 | 0.3 | 79.2 | 69.4 - 120 | |

**Radium 226 in Water - Dissolved** Sample Type **MSD** Units: pCi/L

| MSD-1474 (07/08/15 08:17) | RunNo: 123416 | PrepDate: 06/24/15 0:00 | | | BatchID: 10432 | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Conc | %RPD | %REC | % RPD Limits | Qual |
| Radium 226 (Dissolved) | 4.6 | 0.2 | 4.4 | 4.77 | 91.2 | 20 | |

| MSD-1476 (07/13/15 14:22) | RunNo: 123714 | PrepDate: 07/01/15 0:00 | | | BatchID: 10458 | | |
|---|---|---|---|---|---|---|---|
| Analyte | Result | RL | Conc | %RPD | %REC | % RPD Limits | Qual |
| Radium 226 (Dissolved) | 4.2 | 0.2 | 4.3 | 1.31 | 78.1 | 20 | |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| L | Analyzed by a contract laboratory | ND | Not Detected at the Reporting Limit |
| O | Outside the Range of Dilutions | R | RPD outside accepted recovery limits |
| S | Spike Recovery outside accepted recovery limits | X | Matrix Effect |

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)
**Work Order:** S1506333
**Project:** MU1 Stability Monitoring
**Date:** 7/17/2015
**Report ID:** S1506333001

**Silica as SiO2** Sample Type **MBLK** Units: mg/L

MBLK DISS/CAT (06/17/15 11:41) RunNo: 122350

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Silica as SiO2 | ND | 0.1 | | | | | |

**Silica as SiO2** Sample Type **LCS** Units: mg/L

DISS LCS Q (06/17/15 11:44) RunNo: 122350

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Silica as SiO2 | 2.1 | 0.1 | 2.14 | | 98.2 | 85 - 115 | |

**Silica as SiO2** Sample Type **DUP** Units: mg/L

S1506333-006DD (06/17/15 12:42) RunNo: 122350

| Analyte | Result | RL | Ref Samp | %RPD | %REC | % RPD Limits | Qual |
|---|---|---|---|---|---|---|---|
| Silica as SiO2 | 13 | 1 | 13 | 0.701 | | 20 | |

S1506333-013DD (06/17/15 13:17) RunNo: 122350

| Analyte | Result | RL | Ref Samp | %RPD | %REC | % RPD Limits | Qual |
|---|---|---|---|---|---|---|---|
| Silica as SiO2 | 11 | 1 | 11 | 0.229 | | 20 | |

**Solids By SM 2540** Sample Type **MBLK** Units: mg/L

DI (06/16/15 13:47) RunNo: 122460

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Total Dissolved Solids (180) | ND | 10 | | | | | |

**Solids By SM 2540** Sample Type **LCS** Units: mg/L

CONTROL (06/16/15 13:48) RunNo: 122460

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Total Dissolved Solids (180) | 230 | 10 | 226 | | 101 | 90 - 110 | |

**Solids By SM 2540** Sample Type **DUP** Units: mg/L

S1506333-002A (06/16/15 13:59) RunNo: 122460

| Analyte | Result | RL | Ref Samp | %RPD | %REC | % RPD Limits | Qual |
|---|---|---|---|---|---|---|---|
| Total Dissolved Solids (180) | 390 | 10 | 390 | 0.517 | | 20 | |

S1506333-012A (06/16/15 14:10) RunNo: 122460

| Analyte | Result | RL | Ref Samp | %RPD | %REC | % RPD Limits | Qual |
|---|---|---|---|---|---|---|---|
| Total Dissolved Solids (180) | 740 | 10 | 740 | 0.271 | | 20 | |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| L | Analyzed by a contract laboratory | ND | Not Detected at the Reporting Limit |
| O | Outside the Range of Dilutions | R | RPD outside accepted recovery limits |
| S | Spike Recovery outside accepted recovery limits | X | Matrix Effect |

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)
**Work Order:** S1506333
**Project:** MU1 Stability Monitoring

**Date:** 7/17/2015
**Report ID:** S1506333001

**Total (200.2) Metals by EPA 200.7 ICP - Water** Sample Type **MBLK** Units: mg/L

MB-10279 (06/17/15 16:43) RunNo: 122353 PrepDate: 06/17/15 12:48 BatchID: 10279

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Iron | ND | 0.05 | | | | | |
| Manganese | ND | 0.02 | | | | | |

**Total (200.2) Metals by EPA 200.7 ICP - Water** Sample Type **LCS** Units: mg/L

LCS-10279 (06/17/15 18:11) RunNo: 122353 PrepDate: 06/17/15 12:48 BatchID: 10279

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Iron | 0.49 | 0.05 | 0.5 | | 98.9 | 85 - 115 | |
| Manganese | 0.20 | 0.02 | 0.2 | | 99.3 | 85 - 115 | |

**Total (200.2) Metals by EPA 200.7 ICP - Water** Sample Type **MS** Units: mg/L

S1506333-006ES (06/17/15 17:42) RunNo: 122353 PrepDate: 06/17/15 7:00 BatchID: 10279

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Iron | 8.35 | 0.05 | 0.5 | 7.85 | 99.7 | 70 - 130 | |
| Manganese | 0.30 | 0.01 | 0.2 | 0.10 | 98.1 | 70 - 130 | |

S1506333-018ES (06/17/15 18:36) RunNo: 122353 PrepDate: 06/17/15 7:00 BatchID: 10279

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| Iron | 1.16 | 0.05 | 0.5 | 0.66 | 98.6 | 70 - 130 | |
| Manganese | 0.26 | 0.01 | 0.2 | 0.06 | 99.1 | 70 - 130 | |

**Total (200.2) Metals by EPA 200.7 ICP - Water** Sample Type **MSD** Units: mg/L

S1506333-006EMSD (06/17/15 17:44) RunNo: 122353 PrepDate: 06/17/15 7:00 BatchID: 10279

| Analyte | Result | RL | Conc | %RPD | %REC | % RPD Limits | Qual |
|---|---|---|---|---|---|---|---|
| Iron | 8.26 | 0.05 | 8.35 | 1.04 | 82.4 | 20 | |
| Manganese | 0.30 | 0.01 | 0.30 | 0.0916 | 98.2 | 20 | |

S1506333-018EMSD (06/17/15 18:39) RunNo: 122353 PrepDate: 06/17/15 7:00 BatchID: 10279

| Analyte | Result | RL | Conc | %RPD | %REC | % RPD Limits | Qual |
|---|---|---|---|---|---|---|---|
| Iron | 1.16 | 0.05 | 1.16 | 0.0554 | 98.7 | 20 | |
| Manganese | 0.26 | 0.01 | 0.26 | 1.40 | 97.3 | 20 | |

**pH Water** Sample Type **LCS** Units: s.u.

ATQC (06/16/15 17:21) RunNo: 122277

| Analyte | Result | RL | Spike | Ref Samp | %REC | % Rec Limits | Qual |
|---|---|---|---|---|---|---|---|
| pH | 8.8 | 0.1 | 8.6 | | 103 | 90 - 110 | |

**pH Water** Sample Type **DUP** Units: s.u.

S1506333-010A (06/16/15 22:32) RunNo: 122277

| Analyte | Result | RL | Ref Samp | %RPD | %REC | % RPD Limits | Qual |
|---|---|---|---|---|---|---|---|
| pH | 7.9 | 0.1 | 7.9 | 0.775 | | 20 | |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| L | Analyzed by a contract laboratory | ND | Not Detected at the Reporting Limit |
| O | Outside the Range of Dilutions | R | RPD outside accepted recovery limits |
| S | Spike Recovery outside accepted recovery limits | X | Matrix Effect |