



Inter-Mountain Labs  
Sheridan, WY and Gillette, WY

**- CHAIN OF CUSTODY RECORD -**

Page **1** of **1**

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

# **158987**

Client Name <b>Comeco Resources</b>		Project Identification <b>MU 1 Stability Monitoring</b>		Sampler (Signature/Attestation of Authenticity) <i>Gwen Trammell</i>		Telephone # <b>307-358-6541</b>	
Report Address <b>PO Box 120 Glenrock WY 82137</b>		Contact Name <b>Larry Wilbanks</b>		ANALYSES / PARAMETERS <i>Filtered + Preserved in Field</i>			
Invoice Address <b>Same</b>		Email <b>Larry.Wilbanks@comeco.com</b>					
		Phone <b>307 358 6541 x 427</b>		Purchase Order #		Quote #	

ITEM	LAB ID (Lab Use Only)	DATE	TIME	SAMPLE IDENTIFICATION	Matrix	# of Containers	Dissolved Calcium	Chloride	Dissolved Iron	Total Alkalinity	Dissolved Magnesium	Sulfate	Total Dissolved Solids	Dissolved Uranium	REMARKS
1	<b>SL612237-001</b>	<b>12-14-16</b>	<b>1:10</b>	<b>B-005</b>	<b>WT</b>	<b>2</b>	<b>X</b>			<b>X</b>		<b>X</b>			
2	<b>002</b>	<b>12-14-16</b>	<b>3:16</b>	<b>B-007</b>		<b>1</b>				<b>X</b>					
3	<b>003</b>	<b>12-15-16</b>	<b>2:53</b>	<b>B-010</b>		<b>2</b>		<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>			
4	<b>004</b>	<b>12-15-16</b>	<b>9:18</b>	<b>B-011</b>		<b>2</b>	<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>		
5	<b>005</b>	<b>12-15-16</b>	<b>10:30</b>	<b>B-012</b>		<b>1</b>						<b>X</b>			
6	<b>006</b>	<b>12-15-16</b>	<b>11:46</b>	<b>B-014</b>		<b>1</b>			<b>X</b>						
7	<b>007</b>	<b>12-15-16</b>	<b>1:31</b>	<b>B-017</b>		<b>2</b>	<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>		
8	<b>008</b>	<b>12-14-16</b>	<b>11:52</b>	<b>B-019</b>		<b>2</b>	<b>X</b>			<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>	

LAB COMMENTS	Relinquished By (Signature/Printed)	DATE	TIME	Received By (Signature/Printed)	DATE	TIME
<b>2.5°C</b>	<i>Gwen Trammell</i>	<b>12-19-16</b>	<b>7:00</b>	<i>Ken Garrett</i>	<b>12/19/16</b>	<b>12:33</b>
	<i>Ken Garrett</i>	<b>12/19/16</b>	<b>16:35</b>	<i>Kathy Boyd</i>	<b>12.20.16</b>	<b>13:00</b>

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



**Date:** 1/6/2017

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**CLIENT:** Power Resources (Cameco)  
**Project:** MU1 Stability Monitoring  
**Lab Order:** S1612237

**CASE NARRATIVE**  
**Report ID:** S1612237001

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Samples B-005, B-007, B-010, B-011, B-012, B-014, B-017, and B-019 were received on December 20, 2016.

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.

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Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



### Sample Analysis Report

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

**Date Reported:** 1/6/2017  
**Report ID:** S1612237001

**Project:** MU1 Stability Monitoring  
**Lab ID:** S1612237-001  
**Client Sample ID:** B-005

**Work Order:** S1612237  
**Collection Date:** 12/14/2016 1:10:00 PM  
**Date Received:** 12/20/2016 1:00:00 PM  
**Sampler:** GT  
**Matrix:** Water  
**COC:** 158987

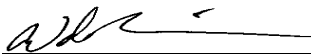
Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
<b>General Parameters</b>						
Alkalinity, Total (As CaCO3)	132	5		mg/L	12/21/2016 1541 IBS	SM 2320B
<b>Anions</b>						
Sulfate	58	1		mg/L	12/21/2016 1809 AB	EPA 300.0
<b>Cations</b>						
Calcium	48	1		mg/L	12/21/2016 1215 DG	EPA 200.7

**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 another 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

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

**Date Reported:** 1/6/2017  
**Report ID:** S1612237001

**Project:** MU1 Stability Monitoring  
**Lab ID:** S1612237-002  
**Client Sample ID:** B-007

**Work Order:** S1612237  
**Collection Date:** 12/14/2016 3:16:00 PM  
**Date Received:** 12/20/2016 1:00:00 PM  
**Sampler:** GT  
**Matrix:** Water  
**COC:** 158987

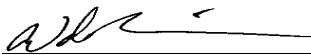
Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
<b>General Parameters</b>						
Alkalinity, Total (As CaCO3)	152	5		mg/L	12/21/2016 1550 IBS	SM 2320B

**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 another 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

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

**Date Reported:** 1/6/2017  
**Report ID:** S1612237001

**Project:** MU1 Stability Monitoring  
**Lab ID:** S1612237-003  
**Client Sample ID:** B-010

**Work Order:** S1612237  
**Collection Date:** 12/15/2016 2:53:00 PM  
**Date Received:** 12/20/2016 1:00:00 PM  
**Sampler:** GT  
**Matrix:** Water  
**COC:** 158987

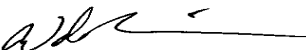
Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
<b>General Parameters</b>						
Alkalinity, Total (As CaCO3)	234	5		mg/L	12/21/2016 1559 IBS	SM 2320B
<b>Anions</b>						
Chloride	25	1		mg/L	12/21/2016 1822 AB	EPA 300.0
Sulfate	134	1		mg/L	12/21/2016 1822 AB	EPA 300.0
<b>Dissolved Metals</b>						
Manganese	0.11	0.01		mg/L	12/21/2016 1218 DG	EPA 200.7

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

**RL - Reporting Limit**

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- 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
  - O Outside the Range of Dilutions
  - X Matrix Effect

- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by another 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

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

**Date Reported:** 1/6/2017  
**Report ID:** S1612237001

**Project:** MU1 Stability Monitoring  
**Lab ID:** S1612237-004  
**Client Sample ID:** B-011

**Work Order:** S1612237  
**Collection Date:** 12/15/2016 9:18:00 AM  
**Date Received:** 12/20/2016 1:00:00 PM  
**Sampler:** GT  
**Matrix:** Water  
**COC:** 158987

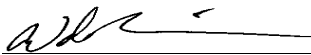
Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
<b>General Parameters</b>						
Total Dissolved Solids (180)	510	10		mg/L	12/20/2016 1510 NLG	SM 2540
Alkalinity, Total (As CaCO3)	259	5		mg/L	12/21/2016 1608 IBS	SM 2320B
<b>Anions</b>						
Chloride	21	1		mg/L	12/21/2016 1835 AB	EPA 300.0
Sulfate	116	1		mg/L	12/21/2016 1835 AB	EPA 300.0
<b>Cations</b>						
Calcium	94	1		mg/L	12/21/2016 1220 DG	EPA 200.7
<b>Dissolved Metals</b>						
Manganese	0.08	0.01		mg/L	12/21/2016 1220 DG	EPA 200.7

**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 another 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

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

**Date Reported:** 1/6/2017  
**Report ID:** S1612237001

**Project:** MU1 Stability Monitoring  
**Lab ID:** S1612237-005  
**Client Sample ID:** B-012

**Work Order:** S1612237  
**Collection Date:** 12/15/2016 10:30:00 AM  
**Date Received:** 12/20/2016 1:00:00 PM  
**Sampler:** GT  
**Matrix:** Water  
**COC:** 158987

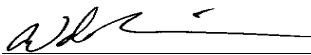
Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
<b>Anions</b>						
Sulfate	131	1		mg/L	12/21/2016 1848 AB	EPA 300.0

**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 another 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

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

**Date Reported:** 1/6/2017  
**Report ID:** S1612237001

**Project:** MU1 Stability Monitoring  
**Lab ID:** S1612237-006  
**Client Sample ID:** B-014

**Work Order:** S1612237  
**Collection Date:** 12/15/2016 11:46:00 AM  
**Date Received:** 12/20/2016 1:00:00 PM  
**Sampler:** GT  
**Matrix:** Water  
**COC:** 158987

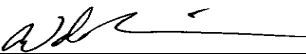
Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
<b>Dissolved Metals</b>						
Iron	1.47	0.05		mg/L	12/21/2016 1229 DG	EPA 200.7

**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 another 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

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

**Date Reported:** 1/6/2017  
**Report ID:** S1612237001

**Project:** MU1 Stability Monitoring  
**Lab ID:** S1612237-007  
**Client Sample ID:** B-017

**Work Order:** S1612237  
**Collection Date:** 12/15/2016 1:31:00 PM  
**Date Received:** 12/20/2016 1:00:00 PM  
**Sampler:** GT  
**Matrix:** Water  
**COC:** 158987

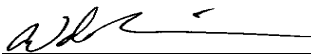
Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
<b>General Parameters</b>						
Total Dissolved Solids (180)	310	10		mg/L	12/20/2016 1511 NLG	SM 2540
Alkalinity, Total (As CaCO3)	133	5		mg/L	12/21/2016 1617 IBS	SM 2320B
<b>Anions</b>						
Chloride	16	1		mg/L	12/21/2016 1901 AB	EPA 300.0
Sulfate	86	1		mg/L	12/21/2016 1901 AB	EPA 300.0
<b>Cations</b>						
Calcium	56	1		mg/L	12/21/2016 1231 DG	EPA 200.7
<b>Dissolved Metals</b>						
Manganese	0.06	0.01		mg/L	12/21/2016 1231 DG	EPA 200.7

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**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
  - O Outside the Range of Dilutions
  - X Matrix Effect

- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by another 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

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

**Date Reported:** 1/6/2017  
**Report ID:** S1612237001

**Project:** MU1 Stability Monitoring  
**Lab ID:** S1612237-008  
**Client Sample ID:** B-019

**Work Order:** S1612237  
**Collection Date:** 12/14/2016 11:52:00 AM  
**Date Received:** 12/20/2016 1:00:00 PM  
**Sampler:** GT  
**Matrix:** Water  
**COC:** 158987

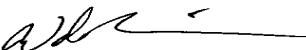
Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
<b>General Parameters</b>						
Total Dissolved Solids (180)	250	10		mg/L	12/20/2016 1512 NLG	SM 2540
Alkalinity, Total (As CaCO3)	116	5		mg/L	12/21/2016 1625 IBS	SM 2320B
<b>Cations</b>						
Calcium	46	1		mg/L	12/21/2016 1233 DG	EPA 200.7
<b>Dissolved Metals</b>						
Manganese	0.09	0.01		mg/L	12/21/2016 1233 DG	EPA 200.7
Uranium	0.788	0.0003		mg/L	12/20/2016 2057 MS	EPA 200.8

**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 another laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)  
**Work Order:** S1612237  
**Project:** MU1 Stability Monitoring

**Date:** 1/6/2017  
**Report ID:** S1612237001

Alkalinity		Sample Type	MBLK		Units: mg/L				
BLANK (12/21/16 15:20)				RunNo:	141988				
Analyte		Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Alkalinity, Total (As CaCO3)		ND	5						

Alkalinity		Sample Type	LCS		Units: mg/L				
ATQC (12/21/16 15:08)				RunNo:	141988				
Analyte		Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Alkalinity, Total (As CaCO3)		585	5	595		98.2	90 - 110		

Alkalinity		Sample Type	DUP		Units: mg/L				
S1612255-004AD (12/21/16 19:54)				RunNo:	141988				
Analyte		Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual	
Alkalinity, Total (As CaCO3)		108	5	106	1.20		20		

Dissolved Metals by ICP - EPA 200.7 - Water		Sample Type	MBLK		Units: mg/L				
MBLK DISS/CAT (12/21/16 11:15)				RunNo:	141981				
Analyte		Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Iron		ND	0.05						
Manganese		ND	0.02						

Dissolved Metals by ICP - EPA 200.7 - Water		Sample Type	LCS		Units: mg/L				
DISS LCS Q (12/21/16 11:18)				RunNo:	141981				
Analyte		Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Iron		0.97	0.05	1		96.8	85 - 115		
Manganese		1.02	0.02	1		102	85 - 115		

Dissolved Metals by ICP - EPA 200.7 - Water		Sample Type	MS		Units: mg/L				
S1612245-003CS (12/21/16 12:49)				RunNo:	141981				
Analyte		Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Iron		4.83	0.02	5.25	ND	92.1	70 - 130		
Manganese		4.98	0.005	5.25	0.032	94.3	70 - 130		

Dissolved Metals by ICP - EPA 200.7 - Water		Sample Type	MSD		Units: mg/L				
S1612245-003CSD (12/21/16 12:51)				RunNo:	141981				
Analyte		Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual	
Iron		5.13	0.02	4.83	5.96	97.7	20		
Manganese		5.27	0.005	4.98	5.52	99.7	20		

- Qualifiers:**
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  - H Holding times for preparation or analysis exceeded
  - L Analyzed by another laboratory
  - O Outside the Range of Dilutions
  - S Spike Recovery outside accepted recovery limits
  - E Value above quantitation range
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits
  - X Matrix Effect



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)  
**Work Order:** S1612237  
**Project:** MU1 Stability Monitoring

**Date:** 1/6/2017  
**Report ID:** S1612237001

**Dissolved Metals by ICPMS EPA 200.8 - Water**

Sample Type **MBLK**

Units: mg/L

MBLK (12/20/16 11:09)	RunNo: 141952							
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	

Uranium ND 0.0003

MBLK (12/20/16 20:11)	RunNo: 141952							
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	

Uranium ND 0.0003

**Dissolved Metals by ICPMS EPA 200.8 - Water**

Sample Type **LCS**

Units: mg/L

LCS (12/20/16 11:03)	RunNo: 141952							
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	

Uranium 0.101 0.0003 0.1 101 85 - 115

LCS (12/20/16 19:54)	RunNo: 141952							
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	

Uranium 0.105 0.0003 0.1 105 85 - 115

**Dissolved Metals by ICPMS EPA 200.8 - Water**

Sample Type **MS**

Units: mg/L

S1612234-001BS (12/20/16 20:29)	RunNo: 141952							
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	

Uranium 1.09 0.0003 1.1 ND 98.8 70 - 130

**Dissolved Metals by ICPMS EPA 200.8 - Water**

Sample Type **MSD**

Units: mg/L

S1612234-001BMSD (12/20/16 20:34)	RunNo: 141952							
Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual	

Uranium 1.09 0.0003 1.09 0.146 98.9 20

- Qualifiers:**
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  - L Analyzed by another laboratory
  - O Outside the Range of Dilutions
  - S Spike Recovery outside accepted recovery limits
  - E Value above quantitation range
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits
  - X Matrix Effect

**ANALYTICAL QC SUMMARY REPORT**

**CLIENT:** Power Resources (Cameco)  
**Work Order:** S1612237  
**Project:** MU1 Stability Monitoring

**Date:** 1/6/2017  
**Report ID:** S1612237001

**Anions by ION Chromatography**Sample Type **MBLK**

Units: mg/L

BLK (12/21/16 08:24)	RunNo: 141985							
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 (12/21/16 08:37)	RunNo: 141985							
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Chloride	31	1	30		103	90 - 110		
Sulfate	145	1	150		96.4	90 - 110		

**Anions by ION Chromatography**Sample Type **MS**

Units: mg/L

S1612245-003ASPK (12/21/16 20:33)	RunNo: 141985							
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Chloride	2130	1	1830	90	112	80 - 120		
Sulfate	20600	1	13700	4440	118	80 - 120		

**Anions by ION Chromatography**Sample Type **MSD**

Units: mg/L

S1612245-003ASPKD (12/21/16 20:46)	RunNo: 141985							
Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual	
Chloride	2130	1	2130	0.0235	112	20		
Sulfate	20600	1	20600	0.0368	118	20		

**Cations by ICP (Method 200.7)**Sample Type **MBLK**

Units: mg/L

MBLK DISS/CAT (12/21/16 11:15)	RunNo: 141978							
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Calcium	ND	1						

**Cations by ICP (Method 200.7)**Sample Type **LCS**

Units: mg/L

CAT LCS IML3 (12/21/16 11:20)	RunNo: 141978							
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Calcium	40	1	40		99.2	85 - 115		

**Cations by ICP (Method 200.7)**Sample Type **MS**

Units: mg/L

S1612235-002AS (12/21/16 12:09)	RunNo: 141978							
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Calcium	755	1	275	470	104	70 - 130		

**Cations by ICP (Method 200.7)**Sample Type **MSD**

Units: mg/L

S1612235-002ASD (12/21/16 12:11)	RunNo: 141978							
Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual	
Calcium	745	1	755	1.41	99.7	20		

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
L Analyzed by another laboratory  
O Outside the Range of Dilutions  
S Spike Recovery outside accepted recovery limits

E Value above quantitation range  
J Analyte detected below quantitation limits  
ND Not Detected at the Reporting Limit  
R RPD outside accepted recovery limits  
X Matrix Effect



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)  
**Work Order:** S1612237  
**Project:** MU1 Stability Monitoring

**Date:** 1/6/2017  
**Report ID:** S1612237001

**Solids By SM 2540**

Sample Type **MBLK**

Units: mg/L

DI (12/20/16 15:02)	RunNo: 142000							
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 (12/20/16 15:03)	RunNo: 142000							
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Total Dissolved Solids (180)	220	10	226		96.5	90 - 110		

**Solids By SM 2540**

Sample Type **DUP**

Units: mg/L

S1612237-008A (12/20/16 15:13)	RunNo: 142000							
Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual	
Total Dissolved Solids (180)	240	10	250	2.47		20		

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