



**Inter-Mountain Labs**  
Sheridan, WY and Gillette, WY

**- CHAIN OF CUSTODY RECORD -**

All shaded fields must be completed.

This is a legal document: any misrepresentation may be construed as fraud.

# **161843**

Client Name <b>Comoco Resources</b>		Project Identification <b>MU I Stability Monitoring</b>		Sampler (Signature/Attestation of Authenticity) <i>Kathy Amos</i>		Telephone # <b>307 351 3541</b>	
Report Address <b>PO Box 1210 Glenrock WY 82633</b>		Contact Name <b>Larry Wilbanks</b>		ANALYSES / PARAMETERS			
Invoice Address		Email <b>Larry.Wilbanks@comoco.com</b>					
		Phone <b>307 358 4647</b>		Purchase Order # <b>4500 513220</b>		Quote #	

ITEM	LAB ID (Lab Use Only)	DATE SAMPLED	TIME SAMPLED	SAMPLE IDENTIFICATION	Matrix	# of Containers	ANALYSES / PARAMETERS					REMARKS
							9.5	cooler temp				
1	91703119-001	3/7/17	853	B-001	WT	9	X	0.9				Filtered & Preserved in field
2	002		847	B-002				0.9				
3	003		940	B-003				0.4				
4	004		157	B-004				2.1				
5	005		1242	B-005				2.1				
6	006		101	B-006				2.1				
7	007	3/8/17	840	B-007				1.0				
8	008		1054	B-008				0.7				
9	009		1240	B-009				1.0				
10	010		1241	B-010				0.7				
11	011		355	B-011				0.4				
12	012		208	B-012				0.4				
13	013		508	B-013				0.2				
14	014		447	B-014				0.2				

LAB COMMENTS	Relinquished By (Signature/Printed)	DATE	TIME	Received By (Signature/Printed)	DATE	TIME
7 coolers	<i>Kathy Amos</i>	3/9/17	7:00	<i>Ken Garouste</i>	3/9/17	09:38
	<i>Ken Garouste</i>	3/9/17	17:10	<i>Kathy Boy</i>	3.10.17	11:30

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 <u>WT</u> Soil <u>SL</u> Solid <u>SD</u> Filter <u>FT</u> Other <u>OT</u>	<input type="checkbox"/> Check desired service <input checked="" type="checkbox"/> Standard turnaround <input type="checkbox"/> RUSH - 5 Working Days <input type="checkbox"/> URGENT - < 2 Working Days <i>Rush &amp; Urgent Surcharges will be applied</i>	Compliance Monitoring? <u>Y/N</u> Program (SDWA, NPDES,...) PWSID / Permit # _____ Chlorinated? <u>Y/N</u> Sample Disposal: Lab _____ Client <u>Y</u>	



Inter-Mountain Labs  
Sheridan, WY and Gillette, WY

Client Name <b>Comaco Resources</b>		Project Identification <b>MU 1 Stability Monitoring</b>		Sampler (Signature/Attestation of Authenticity) <b>Kathy Amos</b>		Telephone # <b>307 358 6541</b>	
Report Address <b>PO Box 1210 Glenrock, WY 82633</b>		Contact Name <b>Larry Wilbanks</b>		ANALYSES / PARAMETERS			
Invoice Address		Email <b>Larry Wilbanks@comaco.com</b>					
		Phone <b>307 358 3541 x427</b>					
		Purchase Order #		Quote #			

ITEM	LAB ID <i>(Lab Use Only)</i>	DATE SAMPLED	TIME	SAMPLE IDENTIFICATION	Matrix	# of Containers	ANALYSES / PARAMETERS				REMARKS
							g/L	Cooler Temp			
1	91703119-015	3/7/17	947	B-015	WT	7	X				Filtered & preserved in field
2	016	3/8/17	947	B-016	↓	↓	↓				↓
3	017	↓	1115	B-017	↓	↓	↓				↓
4	018	↓	217	B-018	↓	↓	↓				↓
5	019	3/7/17	1125	B-019	↓	↓	↓				↓
6											
7											
8											
9											
10											
11											
12											
13											
14											

LAB COMMENTS	Relinquished By (Signature/Printed)	DATE	TIME	Received By (Signature/Printed)	DATE	TIME
7. Coolers	<i>Kathy Amos</i> Kathy Amos	3/7/17	700	<i>Ken Garouste</i> Ken GAROUSTE	3/9/17	0938
	<i>Ken Garouste</i> KEN GAROUSTE	3/9/17	1700	<i>Kathy Boyd</i> Kathy Boyd	3.10.17	11:30

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 <u>WT</u> Soil SL Solid SD Filter FT Other OT	<input type="checkbox"/> Check desired service <input checked="" type="checkbox"/> Standard turnaround <input type="checkbox"/> RUSH - 5 Working Days <input type="checkbox"/> URGENT - < 2 Working Days <i>Rush &amp; Urgent Surcharges will be applied</i>	Compliance Monitoring? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Program (SDWA, NPDES,...) PWSID / Permit # _____ Chlorinated? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N Sample Disposal: Lab _____ Client _____	



**Date:** 4/10/2017

---

**CLIENT:** Power Resources (Cameco)  
**Project:** MUI Stability Monitoring  
**Lab Order:** S1703119

**CASE NARRATIVE**  
**Report ID:** S1703119001

---

Samples B-001, B-002, B-003, B-004, B-005, B-006, B-007, B-008, B-009, B-010, B-011, B-012, B-013, B-014, B-015, B-016, B-017, B-018, and B-019 were received on March 10, 2017.

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.

---

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



### Sample Analysis Report

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

**Date Reported** 4/10/2017  
**Report ID** S1703119001

**ProjectName:** MUI Stability Monitoring  
**Lab ID:** S1703119-001  
**ClientSample ID:** B-001  
**COC:** 161843

**WorkOrder:** S1703119  
**CollectionDate:** 3/7/2017 8:53:00 AM  
**DateReceived:** 3/10/2017 11:30:00 AM  
**FieldSampler:** KA  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Anions/Cations</b>							
Alkalinity, Total (As CaCO3)	98	mg/L		5	SM 2320B	03/10/2017 2230	IBS
Alkalinity, Bicarbonate as HCO3	120	mg/L		5	SM 2320B	03/10/2017 2230	IBS
Alkalinity, Carbonate as CO3	ND	mg/L		5	SM 2320B	03/10/2017 2230	IBS
Chloride	10	mg/L		1	EPA 300.0	03/13/2017 1837	AB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/10/2017 2230	IBS
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/14/2017 1531	AMB
Sulfate	73	mg/L		1	EPA 300.0	03/13/2017 1837	AB
Calcium	37	mg/L		1	EPA 200.7	03/13/2017 1321	DG
Magnesium	10	mg/L		1	EPA 200.7	03/13/2017 1321	DG
Potassium	6	mg/L		1	EPA 200.7	03/13/2017 1321	DG
Sodium	14	mg/L		1	EPA 200.7	03/13/2017 1321	DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	03/13/2017 1211	AMB
Silica as SiO2	13	mg/L		1	EPA 200.7	03/13/2017 1321	DG
<b>General Parameters</b>							
pH	7.7	s.u.		0.1	SM 4500 H B	03/10/2017 2230	IBS
Electrical Conductivity	333	µmhos/cm		5	SM 2510B	03/10/2017 2230	IBS
Total Dissolved Solids (180)	250	mg/L		10	SM 2540	03/13/2017 1043	NLG
<b>Data Quality</b>							
Cation Sum	3.43	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Anion Sum	3.77	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Cation-Anion Balance (± 5%)	4.64	%		0.01	SM 1030E	03/22/2017 958	WN
Solids, Total Dissolved (Calc)	220	mg/L		10	SM 1030E	03/22/2017 958	WN
Calculated TDS/TDS Ratio (0.80-1.20)	1.14	dec. %		0.01	Calculation	03/22/2017 1001	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
  - 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

- C Calculated Value
- G Analyzed at IML Gillette laboratory
- 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

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager



### Sample Analysis Report

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

**Date Reported** 4/10/2017  
**Report ID** S1703119001

**ProjectName:** MUI Stability Monitoring  
**Lab ID:** S1703119-001  
**ClientSample ID:** B-001  
**COC:** 161843

**WorkOrder:** S1703119  
**CollectionDate:** 3/7/2017 8:53:00 AM  
**DateReceived:** 3/10/2017 11:30:00 AM  
**FieldSampler:** KA  
**Matrix:** Water

#### Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
----------	--------	-------	------	----	--------	--------------------

#### Metals - Dissolved

Aluminum	ND	mg/L		0.1	EPA 200.7	03/13/2017 1321 DG
Arsenic	0.020	mg/L		0.001	EPA 200.8	03/13/2017 2039 MS
Barium	ND	mg/L		0.1	EPA 200.8	03/13/2017 2039 MS
Beryllium	ND	mg/L		0.001	EPA 200.7	03/13/2017 1321 DG
Boron	ND	mg/L		0.1	EPA 200.7	03/13/2017 1321 DG
Cadmium	ND	mg/L		0.001	EPA 200.8	03/13/2017 2039 MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/13/2017 1321 DG
Copper	ND	mg/L		0.01	EPA 200.8	03/13/2017 2039 MS
Iron	0.55	mg/L		0.05	EPA 200.7	03/13/2017 1321 DG
Lead	ND	mg/L		0.01	EPA 200.8	03/13/2017 2039 MS
Manganese	0.05	mg/L		0.01	EPA 200.7	03/13/2017 1321 DG
Mercury	ND	mg/L		0.001	EPA 245.1	03/14/2017 1001 AW
Molybdenum	ND	mg/L		0.01	EPA 200.8	03/13/2017 2039 MS
Nickel	ND	mg/L		0.05	EPA 200.7	03/13/2017 1321 DG
Selenium	ND	mg/L		0.001	EPA 200.8	03/13/2017 2039 MS
Uranium	0.0829	mg/L		0.0003	EPA 200.8	03/13/2017 2039 MS
Vanadium	ND	mg/L		0.1	EPA 200.8	03/13/2017 2039 MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/13/2017 1321 DG

#### Metals - Total

Iron	1.76	mg/L		0.05	EPA 200.7	03/13/2017 1534 DG
Manganese	0.05	mg/L		0.01	EPA 200.7	03/13/2017 1534 DG

#### Radionuclides - Dissolved

Gross Alpha	381	pCi/L		2	SM 7110B	03/21/2017 1102 MB
Gross Alpha Precision (±)	8.5	pCi/L			SM 7110B	03/21/2017 1102 MB
Gross Beta	163	pCi/L		3	SM 7110B	03/21/2017 1102 MB
Gross Beta Precision (±)	4.5	pCi/L			SM 7110B	03/21/2017 1102 MB
Radium 226	232	pCi/L		0.2	SM 7500 Ra-B	04/05/2017 933 MB
Radium 226 Precision (±)	1.8	pCi/L			SM 7500 Ra-B	04/05/2017 933 MB
Radium 228	ND	pCi/L		1	Ga-Tech	03/31/2017 1058 WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	03/31/2017 1058 WN

These results apply only to the samples tested.

#### RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	E	Value above quantitation range	G	Analyzed at IML Gillette laboratory
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	L	Analyzed by another 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  
Wade Nieuwsma, Assistant Laboratory Manager



### Sample Analysis Report

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

**Date Reported** 4/10/2017  
**Report ID** S1703119001

**ProjectName:** MUI Stability Monitoring  
**Lab ID:** S1703119-002  
**ClientSample ID:** B-002  
**COC:** 161843

**WorkOrder:** S1703119  
**CollectionDate:** 3/7/2017 8:47:00 AM  
**DateReceived:** 3/10/2017 11:30:00 AM  
**FieldSampler:** KA  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Anions/Cations</b>							
Alkalinity, Total (As CaCO3)	147	mg/L		5	SM 2320B	03/10/2017 2241	IBS
Alkalinity, Bicarbonate as HCO3	179	mg/L		5	SM 2320B	03/10/2017 2241	IBS
Alkalinity, Carbonate as CO3	ND	mg/L		5	SM 2320B	03/10/2017 2241	IBS
Chloride	9	mg/L		1	EPA 300.0	03/13/2017 1957	AB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/10/2017 2241	IBS
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/14/2017 1533	AMB
Sulfate	71	mg/L		1	EPA 300.0	03/13/2017 1957	AB
Calcium	50	mg/L		1	EPA 200.7	03/13/2017 1323	DG
Magnesium	12	mg/L		1	EPA 200.7	03/13/2017 1323	DG
Potassium	7	mg/L		1	EPA 200.7	03/13/2017 1323	DG
Sodium	15	mg/L		1	EPA 200.7	03/13/2017 1323	DG
Nitrogen, Ammonia (As N)	0.3	mg/L		0.1	EPA 350.1	03/13/2017 1212	AMB
Silica as SiO2	12	mg/L		1	EPA 200.7	03/13/2017 1323	DG
<b>General Parameters</b>							
pH	7.8	s.u.		0.1	SM 4500 H B	03/10/2017 2241	IBS
Electrical Conductivity	375	µmhos/cm		5	SM 2510B	03/10/2017 2241	IBS
Total Dissolved Solids (180)	300	mg/L		10	SM 2540	03/13/2017 1044	NLG
<b>Data Quality</b>							
Cation Sum	4.33	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Anion Sum	4.67	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Cation-Anion Balance (± 5%)	3.85	%		0.01	SM 1030E	03/22/2017 958	WN
Solids, Total Dissolved (Calc)	260	mg/L		10	SM 1030E	03/22/2017 958	WN
Calculated TDS/TDS Ratio (0.80-1.20)	1.15	dec. %		0.01	Calculation	03/22/2017 1001	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
  - 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

- C Calculated Value
- G Analyzed at IML Gillette laboratory
- 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

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager



### Sample Analysis Report

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

**Date Reported** 4/10/2017  
**Report ID** S1703119001

**ProjectName:** MUI Stability Monitoring  
**Lab ID:** S1703119-002  
**ClientSample ID:** B-002  
**COC:** 161843

**WorkOrder:** S1703119  
**CollectionDate:** 3/7/2017 8:47:00 AM  
**DateReceived:** 3/10/2017 11:30:00 AM  
**FieldSampler:** KA  
**Matrix:** Water

#### Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
----------	--------	-------	------	----	--------	--------------------

#### Metals - Dissolved

Aluminum	ND	mg/L		0.1	EPA 200.7	03/13/2017 1323	DG
Arsenic	0.004	mg/L		0.001	EPA 200.8	03/13/2017 2113	MS
Barium	ND	mg/L		0.1	EPA 200.8	03/13/2017 2113	MS
Beryllium	ND	mg/L		0.001	EPA 200.7	03/13/2017 1323	DG
Boron	ND	mg/L		0.1	EPA 200.7	03/13/2017 1323	DG
Cadmium	ND	mg/L		0.001	EPA 200.8	03/13/2017 2113	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/13/2017 1323	DG
Copper	ND	mg/L		0.01	EPA 200.8	03/13/2017 2113	MS
Iron	0.36	mg/L		0.05	EPA 200.7	03/13/2017 1323	DG
Lead	ND	mg/L		0.01	EPA 200.8	03/13/2017 2113	MS
Manganese	0.06	mg/L		0.01	EPA 200.7	03/13/2017 1323	DG
Mercury	ND	mg/L		0.001	EPA 245.1	03/14/2017 1002	AW
Molybdenum	ND	mg/L		0.01	EPA 200.8	03/13/2017 2113	MS
Nickel	ND	mg/L		0.05	EPA 200.7	03/13/2017 1323	DG
Selenium	0.001	mg/L		0.001	EPA 200.8	03/13/2017 2113	MS
Uranium	0.852	mg/L		0.0003	EPA 200.8	03/13/2017 2113	MS
Vanadium	ND	mg/L		0.1	EPA 200.8	03/13/2017 2113	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/13/2017 1323	DG

#### Metals - Total

Iron	0.38	mg/L		0.05	EPA 200.7	03/13/2017 1545	DG
Manganese	0.06	mg/L		0.01	EPA 200.7	03/13/2017 1545	DG

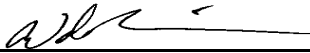
#### Radionuclides - Dissolved

Gross Alpha	838	pCi/L		2	SM 7110B	03/21/2017 1707	MB
Gross Alpha Precision (±)	13.2	pCi/L			SM 7110B	03/21/2017 1707	MB
Gross Beta	252	pCi/L		3	SM 7110B	03/21/2017 1707	MB
Gross Beta Precision (±)	5.2	pCi/L			SM 7110B	03/21/2017 1707	MB
Radium 226	296	pCi/L		0.2	SM 7500 Ra-B	04/05/2017 1140	MB
Radium 226 Precision (±)	2.0	pCi/L			SM 7500 Ra-B	04/05/2017 1140	MB
Radium 228	5.1	pCi/L		1	Ga-Tech	03/31/2017 1402	WN
Radium 228 Precision (±)	2.1	pCi/L			Ga-Tech	03/31/2017 1402	WN

These results apply only to the samples tested.

#### RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	E	Value above quantitation range	G	Analyzed at IML Gillette laboratory
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	L	Analyzed by another 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** 4/10/2017  
**Report ID** S1703119001

**ProjectName:** MUI Stability Monitoring  
**Lab ID:** S1703119-003  
**ClientSample ID:** B-003  
**COC:** 161843

**WorkOrder:** S1703119  
**CollectionDate:** 3/7/2017 9:40:00 AM  
**DateReceived:** 3/10/2017 11:30:00 AM  
**FieldSampler:** KA  
**Matrix:** Water

#### Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Anions/Cations</b>							
Alkalinity, Total (As CaCO3)	137	mg/L		5	SM 2320B	03/15/2017 1709	IBS
Alkalinity, Bicarbonate as HCO3	167	mg/L		5	SM 2320B	03/15/2017 1709	IBS
Alkalinity, Carbonate as CO3	ND	mg/L		5	SM 2320B	03/15/2017 1709	IBS
Chloride	5	mg/L		1	EPA 300.0	03/13/2017 2011	AB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/10/2017 2252	IBS
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/14/2017 1534	AMB
Sulfate	120	mg/L		1	EPA 300.0	03/13/2017 2011	AB
Calcium	63	mg/L		1	EPA 200.7	03/16/2017 1131	DG
Magnesium	15	mg/L		1	EPA 200.7	03/16/2017 1131	DG
Potassium	8	mg/L		1	EPA 200.7	03/16/2017 1131	DG
Sodium	19	mg/L		1	EPA 200.7	03/16/2017 1131	DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/13/2017 1212	AMB
Silica as SiO2	13	mg/L		1	EPA 200.7	03/13/2017 1325	DG
<b>General Parameters</b>							
pH	7.9	s.u.		0.1	SM 4500 H B	03/15/2017 1709	IBS
Electrical Conductivity	514	µmhos/cm		5	SM 2510B	03/10/2017 2252	IBS
Total Dissolved Solids (180)	360	mg/L		10	SM 2540	03/13/2017 1045	NLG
<b>Data Quality</b>							
Cation Sum	5.36	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Anion Sum	5.39	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Cation-Anion Balance (± 5%)	0.24	%		0.01	SM 1030E	03/22/2017 958	WN
Solids, Total Dissolved (Calc)	320	mg/L		10	SM 1030E	03/22/2017 958	WN
Calculated TDS/TDS Ratio (0.80-1.20)	1.12	dec. %		0.01	Calculation	03/22/2017 1001	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
  - 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

- C Calculated Value
- G Analyzed at IML Gillette laboratory
- 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

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager





### Sample Analysis Report

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

**Date Reported** 4/10/2017  
**Report ID** S1703119001

**ProjectName:** MUI Stability Monitoring  
**Lab ID:** S1703119-003  
**ClientSample ID:** B-003  
**COC:** 161843

**WorkOrder:** S1703119  
**CollectionDate:** 3/7/2017 9:40:00 AM  
**DateReceived:** 3/10/2017 11:30:00 AM  
**FieldSampler:** KA  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
----------	--------	-------	------	----	--------	--------------------

**Metals - Dissolved**

Aluminum	ND	mg/L		0.1	EPA 200.7	03/13/2017 1325	DG
Arsenic	0.007	mg/L		0.001	EPA 200.8	03/13/2017 2119	MS
Barium	ND	mg/L		0.1	EPA 200.8	03/13/2017 2119	MS
Beryllium	ND	mg/L		0.001	EPA 200.7	03/13/2017 1325	DG
Boron	ND	mg/L		0.1	EPA 200.7	03/13/2017 1325	DG
Cadmium	ND	mg/L		0.001	EPA 200.8	03/13/2017 2119	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/13/2017 1325	DG
Copper	ND	mg/L		0.01	EPA 200.8	03/13/2017 2119	MS
Iron	2.58	mg/L		0.05	EPA 200.7	03/13/2017 1325	DG
Lead	ND	mg/L		0.01	EPA 200.8	03/13/2017 2119	MS
Manganese	0.14	mg/L		0.01	EPA 200.7	03/13/2017 1325	DG
Mercury	ND	mg/L		0.001	EPA 245.1	03/14/2017 1004	AW
Molybdenum	ND	mg/L		0.01	EPA 200.8	03/13/2017 2119	MS
Nickel	ND	mg/L		0.05	EPA 200.7	03/13/2017 1325	DG
Selenium	0.009	mg/L		0.001	EPA 200.8	03/13/2017 2119	MS
Uranium	0.901	mg/L		0.0003	EPA 200.8	03/13/2017 2119	MS
Vanadium	ND	mg/L		0.1	EPA 200.8	03/13/2017 2119	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/13/2017 1325	DG

**Metals - Total**

Iron	3.06	mg/L		0.05	EPA 200.7	03/13/2017 1552	DG
Manganese	0.15	mg/L		0.01	EPA 200.7	03/13/2017 1552	DG

**Radionuclides - Dissolved**

Gross Alpha	1480	pCi/L		2	SM 7110B	03/21/2017 1707	MB
Gross Alpha Precision (±)	17.2	pCi/L			SM 7110B	03/21/2017 1707	MB
Gross Beta	575	pCi/L		3	SM 7110B	03/21/2017 1707	MB
Gross Beta Precision (±)	7.8	pCi/L			SM 7110B	03/21/2017 1707	MB
Radium 226	852	pCi/L		0.2	SM 7500 Ra-B	04/05/2017 1140	MB
Radium 226 Precision (±)	3.4	pCi/L			SM 7500 Ra-B	04/05/2017 1140	MB
Radium 228	11.2	pCi/L		1	Ga-Tech	03/31/2017 1706	WN
Radium 228 Precision (±)	3.3	pCi/L			Ga-Tech	03/31/2017 1706	WN

These results apply only to the samples tested.

**RL - Reporting Limit**

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	E	Value above quantitation range	G	Analyzed at IML Gillette laboratory
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	L	Analyzed by another 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  
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

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

Date Reported 4/10/2017
Report ID S1703119001

ProjectName: MUI Stability Monitoring
Lab ID: S1703119-004
ClientSample ID: B-004
COC: 161843

WorkOrder: S1703119
CollectionDate: 3/7/2017 1:57:00 PM
DateReceived: 3/10/2017 11:30:00 AM
FieldSampler: KA
Matrix: Water

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init. Rows include Anions/Cations (Alkalinity, Chloride, etc.), General Parameters (pH, Conductivity), and Data Quality (Cation Sum, Anion Sum, etc.).

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
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

- C Calculated Value
G Analyzed at IML Gillette laboratory
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

Reviewed by: [Signature]
Wade Nieuwsma, Assistant Laboratory Manager



### Sample Analysis Report

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

**Date Reported** 4/10/2017  
**Report ID** S1703119001

**ProjectName:** MUI Stability Monitoring  
**Lab ID:** S1703119-004  
**ClientSample ID:** B-004  
**COC:** 161843

**WorkOrder:** S1703119  
**CollectionDate:** 3/7/2017 1:57:00 PM  
**DateReceived:** 3/10/2017 11:30:00 AM  
**FieldSampler:** KA  
**Matrix:** Water

#### Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
----------	--------	-------	------	----	--------	--------------------

#### Metals - Dissolved

Aluminum	ND	mg/L		0.1	EPA 200.7	03/13/2017 1328	DG
Arsenic	0.018	mg/L		0.001	EPA 200.8	03/13/2017 2125	MS
Barium	ND	mg/L		0.1	EPA 200.8	03/13/2017 2125	MS
Beryllium	ND	mg/L		0.001	EPA 200.7	03/13/2017 1328	DG
Boron	ND	mg/L		0.1	EPA 200.7	03/13/2017 1328	DG
Cadmium	ND	mg/L		0.001	EPA 200.8	03/13/2017 2125	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/13/2017 1328	DG
Copper	ND	mg/L		0.01	EPA 200.8	03/13/2017 2125	MS
Iron	0.84	mg/L		0.05	EPA 200.7	03/13/2017 1328	DG
Lead	ND	mg/L		0.01	EPA 200.8	03/13/2017 2125	MS
Manganese	0.09	mg/L		0.01	EPA 200.7	03/13/2017 1328	DG
Mercury	ND	mg/L		0.001	EPA 245.1	03/14/2017 1006	AW
Molybdenum	ND	mg/L		0.01	EPA 200.8	03/13/2017 2125	MS
Nickel	ND	mg/L		0.05	EPA 200.7	03/13/2017 1328	DG
Selenium	0.002	mg/L		0.001	EPA 200.8	03/13/2017 2125	MS
Uranium	4.65	mg/L		0.0003	EPA 200.8	03/13/2017 2125	MS
Vanadium	ND	mg/L		0.1	EPA 200.8	03/13/2017 2125	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/13/2017 1328	DG

#### Metals - Total

Iron	0.97	mg/L		0.05	EPA 200.7	03/13/2017 1554	DG
Manganese	0.09	mg/L		0.01	EPA 200.7	03/13/2017 1554	DG

#### Radionuclides - Dissolved

Gross Alpha	3960	pCi/L		2	SM 7110B	03/21/2017 1707	MB
Gross Alpha Precision (±)	28.4	pCi/L			SM 7110B	03/21/2017 1707	MB
Gross Beta	1260	pCi/L		3	SM 7110B	03/21/2017 1707	MB
Gross Beta Precision (±)	11.6	pCi/L			SM 7110B	03/21/2017 1707	MB
Radium 226	655	pCi/L		0.2	SM 7500 Ra-B	04/05/2017 1140	MB
Radium 226 Precision (±)	3.0	pCi/L			SM 7500 Ra-B	04/05/2017 1140	MB
Radium 228	12.8	pCi/L		1	Ga-Tech	03/31/2017 2009	WN
Radium 228 Precision (±)	2.8	pCi/L			Ga-Tech	03/31/2017 2009	WN

These results apply only to the samples tested.

#### RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	E	Value above quantitation range	G	Analyzed at IML Gillette laboratory
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	L	Analyzed by another 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  
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

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

Date Reported 4/10/2017
Report ID S1703119001

ProjectName: MUI Stability Monitoring
Lab ID: S1703119-005
ClientSample ID: B-005
COC: 161843

WorkOrder: S1703119
CollectionDate: 3/7/2017 12:42:00 PM
DateReceived: 3/10/2017 11:30:00 AM
FieldSampler: KA
Matrix: Water

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init. Rows include Anions/Cations (Alkalinity, Chloride, etc.), General Parameters (pH, Conductivity), and Data Quality (Cation Sum, Anion Sum, etc.).

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
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

- C Calculated Value
G Analyzed at IML Gillette laboratory
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

Reviewed by: [Signature]
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

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

Date Reported 4/10/2017
Report ID S1703119001

ProjectName: MUI Stability Monitoring
Lab ID: S1703119-005
ClientSample ID: B-005
COC: 161843

WorkOrder: S1703119
CollectionDate: 3/7/2017 12:42:00 PM
DateReceived: 3/10/2017 11:30:00 AM
FieldSampler: KA
Matrix: Water

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init

Metals - Dissolved

Table listing various metals (Aluminum, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Uranium, Vanadium, Zinc) with their respective results, units, and reporting limits.

Metals - Total

Table listing total metals (Iron, Manganese) with their results and reporting limits.

Radionuclides - Dissolved

Table listing radionuclides (Gross Alpha, Gross Beta, Radium 226, Radium 228) with their results, units, and reporting limits.

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
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

- C Calculated Value
G Analyzed at IML Gillette laboratory
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

Reviewed by: [Signature]
Wade Nieuwsma, Assistant Laboratory Manager



### Sample Analysis Report

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

**Date Reported** 4/10/2017  
**Report ID** S1703119001

**ProjectName:** MUI Stability Monitoring  
**Lab ID:** S1703119-006  
**ClientSample ID:** B-006  
**COC:** 161843

**WorkOrder:** S1703119  
**CollectionDate:** 3/7/2017 1:01:00 PM  
**DateReceived:** 3/10/2017 11:30:00 AM  
**FieldSampler:** KA  
**Matrix:** Water

#### Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
----------	--------	-------	------	----	--------	--------------------

#### Anions/Cations

Alkalinity, Total (As CaCO3)	121	mg/L		5	SM 2320B	03/15/2017 1726	IBS
Alkalinity, Bicarbonate as HCO3	148	mg/L		5	SM 2320B	03/15/2017 1726	IBS
Alkalinity, Carbonate as CO3	ND	mg/L		5	SM 2320B	03/15/2017 1726	IBS
Chloride	8	mg/L		1	EPA 300.0	03/13/2017 2051	AB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/10/2017 2336	IBS
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/14/2017 1539	AMB
Sulfate	96	mg/L		1	EPA 300.0	03/13/2017 2051	AB
Calcium	52	mg/L		1	EPA 200.7	03/16/2017 1135	DG
Magnesium	13	mg/L		1	EPA 200.7	03/16/2017 1135	DG
Potassium	7	mg/L		1	EPA 200.7	03/16/2017 1135	DG
Sodium	16	mg/L		1	EPA 200.7	03/16/2017 1135	DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	03/13/2017 1219	AMB
Silica as SiO2	13	mg/L		1	EPA 200.7	03/13/2017 1333	DG

#### General Parameters

pH	7.9	s.u.		0.1	SM 4500 H B	03/15/2017 1726	IBS
Electrical Conductivity	366	µmhos/cm		5	SM 2510B	03/10/2017 2336	IBS
Total Dissolved Solids (180)	290	mg/L		10	SM 2540	03/13/2017 1048	NLG

#### Data Quality

Cation Sum	4.55	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Anion Sum	4.65	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Cation-Anion Balance (± 5%)	1.05	%		0.01	SM 1030E	03/22/2017 958	WN
Solids, Total Dissolved (Calc)	280	mg/L		10	SM 1030E	03/22/2017 958	WN
Calculated TDS/TDS Ratio (0.80-1.20)	1.04	dec. %		0.01	Calculation	03/22/2017 1001	WN

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

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 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

#### RL - Reporting Limit

C Calculated Value  
 G Analyzed at IML Gillette laboratory  
 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

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

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

Date Reported 4/10/2017
Report ID S1703119001

ProjectName: MUI Stability Monitoring
Lab ID: S1703119-006
ClientSample ID: B-006
COC: 161843

WorkOrder: S1703119
CollectionDate: 3/7/2017 1:01:00 PM
DateReceived: 3/10/2017 11:30:00 AM
FieldSampler: KA
Matrix: Water

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init

Metals - Dissolved

Table listing various metals (Aluminum, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Uranium, Vanadium, Zinc) with their respective results, units, and reporting limits.

Metals - Total

Table listing total metals (Iron, Manganese) with their results and reporting limits.

Radionuclides - Dissolved

Table listing radionuclides (Gross Alpha, Gross Beta, Radium 226, Radium 228) with their results, units, and reporting limits.

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
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

- C Calculated Value
G Analyzed at IML Gillette laboratory
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

Reviewed by: [Signature]
Wade Nieuwsma, Assistant Laboratory Manager



### Sample Analysis Report

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

**Date Reported** 4/10/2017  
**Report ID** S1703119001

**ProjectName:** MUI Stability Monitoring  
**Lab ID:** S1703119-007  
**ClientSample ID:** B-007  
**COC:** 161843

**WorkOrder:** S1703119  
**CollectionDate:** 3/8/2017 8:40:00 AM  
**DateReceived:** 3/10/2017 11:30:00 AM  
**FieldSampler:** KA  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Anions/Cations</b>							
Alkalinity, Total (As CaCO3)	165	mg/L		5	SM 2320B	03/10/2017 2348	IBS
Alkalinity, Bicarbonate as HCO3	201	mg/L		5	SM 2320B	03/10/2017 2348	IBS
Alkalinity, Carbonate as CO3	ND	mg/L		5	SM 2320B	03/10/2017 2348	IBS
Chloride	11	mg/L		1	EPA 300.0	03/13/2017 2104	AB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/10/2017 2348	IBS
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/14/2017 1540	AMB
Sulfate	66	mg/L		1	EPA 300.0	03/13/2017 2104	AB
Calcium	58	mg/L		1	EPA 200.7	03/13/2017 1344	DG
Magnesium	13	mg/L		1	EPA 200.7	03/13/2017 1344	DG
Potassium	7	mg/L		1	EPA 200.7	03/13/2017 1344	DG
Sodium	11	mg/L		1	EPA 200.7	03/13/2017 1344	DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/13/2017 1223	AMB
Silica as SiO2	12	mg/L		1	EPA 200.7	03/13/2017 1344	DG
<b>General Parameters</b>							
pH	7.9	s.u.		0.1	SM 4500 H B	03/10/2017 2348	IBS
Electrical Conductivity	370	µmhos/cm		5	SM 2510B	03/10/2017 2348	IBS
Total Dissolved Solids (180)	300	mg/L		10	SM 2540	03/13/2017 1049	NLG
<b>Data Quality</b>							
Cation Sum	4.62	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Anion Sum	4.99	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Cation-Anion Balance (± 5%)	3.80	%		0.01	SM 1030E	03/22/2017 958	WN
Solids, Total Dissolved (Calc)	280	mg/L		10	SM 1030E	03/22/2017 958	WN
Calculated TDS/TDS Ratio (0.80-1.20)	1.07	dec. %		0.01	Calculation	03/22/2017 1001	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
  - 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

- C Calculated Value
- G Analyzed at IML Gillette laboratory
- 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

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager





Sample Analysis Report

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

Date Reported 4/10/2017
Report ID S1703119001

ProjectName: MUI Stability Monitoring
Lab ID: S1703119-007
ClientSample ID: B-007
COC: 161843

WorkOrder: S1703119
CollectionDate: 3/8/2017 8:40:00 AM
DateReceived: 3/10/2017 11:30:00 AM
FieldSampler: KA
Matrix: Water

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init

Metals - Dissolved

Table listing various metals (Aluminum, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Uranium, Vanadium, Zinc) with their respective results, units, and reporting limits.

Metals - Total

Table listing total metals (Iron, Manganese) with their respective results and reporting limits.

Radionuclides - Dissolved

Table listing radionuclides (Gross Alpha, Gross Alpha Precision, Gross Beta, Gross Beta Precision, Radium 226, Radium 226 Precision, Radium 228, Radium 228 Precision) with their respective results, units, and reporting limits.

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
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

- C Calculated Value
G Analyzed at IML Gillette laboratory
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

Reviewed by: [Signature]
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

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

Date Reported 4/10/2017
Report ID S1703119001

ProjectName: MUI Stability Monitoring
Lab ID: S1703119-008
ClientSample ID: B-008
COC: 161843

WorkOrder: S1703119
CollectionDate: 3/8/2017 10:54:00 AM
DateReceived: 3/10/2017 11:30:00 AM
FieldSampler: KA
Matrix: Water

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init. Rows include Anions/Cations (Alkalinity, Chloride, etc.), General Parameters (pH, Conductivity), and Data Quality (Cation Sum, Anion Sum, etc.).

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
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

- C Calculated Value
G Analyzed at IML Gillette laboratory
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

Reviewed by: [Signature]
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

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

Date Reported 4/10/2017
Report ID S1703119001

ProjectName: MUI Stability Monitoring
Lab ID: S1703119-008
ClientSample ID: B-008
COC: 161843

WorkOrder: S1703119
CollectionDate: 3/8/2017 10:54:00 AM
DateReceived: 3/10/2017 11:30:00 AM
FieldSampler: KA
Matrix: Water

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init

Metals - Dissolved

Table listing various metals (Aluminum, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Uranium, Vanadium, Zinc) with their respective results, units, and reporting limits.

Metals - Total

Table listing total metals (Iron, Manganese) with their respective results and reporting limits.

Radionuclides - Dissolved

Table listing radionuclides (Gross Alpha, Gross Beta, Radium 226, Radium 228) with their respective results, units, and reporting limits.

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
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

- C Calculated Value
G Analyzed at IML Gillette laboratory
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

Reviewed by: [Signature]
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

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

Date Reported 4/10/2017
Report ID S1703119001

ProjectName: MUI Stability Monitoring
Lab ID: S1703119-009
ClientSample ID: B-009
COC: 161843

WorkOrder: S1703119
CollectionDate: 3/8/2017 12:40:00 PM
DateReceived: 3/10/2017 11:30:00 AM
FieldSampler: KA
Matrix: Water

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init. Rows include Anions/Cations (Alkalinity, Chloride, etc.), General Parameters (pH, Conductivity), and Data Quality (Cation Sum, Anion Sum, etc.).

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
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

- C Calculated Value
G Analyzed at IML Gillette laboratory
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

Reviewed by: [Signature]
Wade Nieuwsma, Assistant Laboratory Manager



### Sample Analysis Report

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

**Date Reported** 4/10/2017  
**Report ID** S1703119001

**ProjectName:** MUI Stability Monitoring  
**Lab ID:** S1703119-009  
**ClientSample ID:** B-009  
**COC:** 161843

**WorkOrder:** S1703119  
**CollectionDate:** 3/8/2017 12:40:00 PM  
**DateReceived:** 3/10/2017 11:30:00 AM  
**FieldSampler:** KA  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
----------	--------	-------	------	----	--------	--------------------

**Metals - Dissolved**

Aluminum	ND	mg/L		0.1	EPA 200.7	03/13/2017 1355	DG
Arsenic	0.009	mg/L		0.001	EPA 200.8	03/13/2017 2153	MS
Barium	ND	mg/L		0.1	EPA 200.8	03/13/2017 2153	MS
Beryllium	ND	mg/L		0.001	EPA 200.7	03/13/2017 1355	DG
Boron	ND	mg/L		0.1	EPA 200.7	03/13/2017 1355	DG
Cadmium	ND	mg/L		0.001	EPA 200.8	03/13/2017 2153	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/13/2017 1355	DG
Copper	ND	mg/L		0.01	EPA 200.8	03/13/2017 2153	MS
Iron	1.53	mg/L		0.05	EPA 200.7	03/13/2017 1355	DG
Lead	ND	mg/L		0.01	EPA 200.8	03/13/2017 2153	MS
Manganese	0.17	mg/L		0.01	EPA 200.7	03/13/2017 1355	DG
Mercury	ND	mg/L		0.001	EPA 245.1	03/14/2017 1024	AW
Molybdenum	ND	mg/L		0.01	EPA 200.8	03/13/2017 2153	MS
Nickel	ND	mg/L		0.05	EPA 200.7	03/13/2017 1355	DG
Selenium	ND	mg/L		0.001	EPA 200.8	03/13/2017 2153	MS
Uranium	0.902	mg/L		0.0003	EPA 200.8	03/13/2017 2153	MS
Vanadium	ND	mg/L		0.1	EPA 200.8	03/13/2017 2153	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/13/2017 1355	DG

**Metals - Total**

Iron	1.84	mg/L		0.05	EPA 200.7	03/13/2017 1612	DG
Manganese	0.18	mg/L		0.01	EPA 200.7	03/13/2017 1612	DG

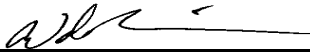
**Radionuclides - Dissolved**

Gross Alpha	985	pCi/L		2	SM 7110B	03/21/2017 1707	MB
Gross Alpha Precision (±)	16.3	pCi/L			SM 7110B	03/21/2017 1707	MB
Gross Beta	302	pCi/L		3	SM 7110B	03/21/2017 1707	MB
Gross Beta Precision (±)	6.1	pCi/L			SM 7110B	03/21/2017 1707	MB
Radium 226	303	pCi/L		0.2	SM 7500 Ra-B	04/05/2017 1140	MB
Radium 226 Precision (±)	2.0	pCi/L			SM 7500 Ra-B	04/05/2017 1140	MB
Radium 228	3.6	pCi/L		1	Ga-Tech	04/01/2017 1129	WN
Radium 228 Precision (±)	2.2	pCi/L			Ga-Tech	04/01/2017 1129	WN

These results apply only to the samples tested.

**RL - Reporting Limit**

<b>Qualifiers:</b>	B Analyte detected in the associated Method Blank	C Calculated Value
	E Value above quantitation range	G Analyzed at IML Gillette laboratory
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	L Analyzed by another 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 4/10/2017
Report ID S1703119001

ProjectName: MUI Stability Monitoring
Lab ID: S1703119-010
ClientSample ID: B-010
COC: 161843

WorkOrder: S1703119
CollectionDate: 3/8/2017 12:41:00 PM
DateReceived: 3/10/2017 11:30:00 AM
FieldSampler: KA
Matrix: Water

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init. Rows include Anions/Cations (Alkalinity, Chloride, etc.), General Parameters (pH, Conductivity), and Data Quality (Cation Sum, Anion Sum).

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
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

- C Calculated Value
G Analyzed at IML Gillette laboratory
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

Reviewed by: [Signature]
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

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

Date Reported 4/10/2017
Report ID S1703119001

ProjectName: MUI Stability Monitoring
Lab ID: S1703119-010
ClientSample ID: B-010
COC: 161843

WorkOrder: S1703119
CollectionDate: 3/8/2017 12:41:00 PM
DateReceived: 3/10/2017 11:30:00 AM
FieldSampler: KA
Matrix: Water

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init

Metals - Dissolved

Table listing various metals (Aluminum, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Uranium, Vanadium, Zinc) with their respective results, units, and reporting limits.

Metals - Total

Table listing total metals (Iron, Manganese) with their results and reporting limits.

Radionuclides - Dissolved

Table listing radionuclides (Gross Alpha, Gross Beta, Radium 226, Radium 228) with their results, units, and reporting limits.

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
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

- C Calculated Value
G Analyzed at IML Gillette laboratory
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

Reviewed by: [Signature]
Wade Nieuwsma, Assistant Laboratory Manager



### Sample Analysis Report

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

**Date Reported** 4/10/2017  
**Report ID** S1703119001

**ProjectName:** MUI Stability Monitoring  
**Lab ID:** S1703119-011  
**ClientSample ID:** B-011  
**COC:** 161843

**WorkOrder:** S1703119  
**CollectionDate:** 3/8/2017 3:55:00 PM  
**DateReceived:** 3/10/2017 11:30:00 AM  
**FieldSampler:** KA  
**Matrix:** Water

#### Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Anions/Cations</b>							
Alkalinity, Total (As CaCO3)	273	mg/L		5	SM 2320B	03/15/2017 1744	IBS
Alkalinity, Bicarbonate as HCO3	333	mg/L		5	SM 2320B	03/15/2017 1744	IBS
Alkalinity, Carbonate as CO3	ND	mg/L		5	SM 2320B	03/15/2017 1744	IBS
Chloride	26	mg/L		1	EPA 300.0	03/20/2017 1446	AB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/11/2017 034	IBS
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/14/2017 1555	AMB
Sulfate	140	mg/L		1	EPA 300.0	03/20/2017 1446	AB
Calcium	114	mg/L		1	EPA 200.7	03/16/2017 1140	DG
Magnesium	25	mg/L		1	EPA 200.7	03/16/2017 1140	DG
Potassium	10	mg/L		1	EPA 200.7	03/16/2017 1140	DG
Sodium	19	mg/L		1	EPA 200.7	03/16/2017 1140	DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/13/2017 1227	AMB
Silica as SiO2	13	mg/L		1	EPA 200.7	03/13/2017 1359	DG
<b>General Parameters</b>							
pH	8.0	s.u.		0.1	SM 4500 H B	03/15/2017 1744	IBS
Electrical Conductivity	770	µmhos/cm		5	SM 2510B	03/11/2017 034	IBS
Total Dissolved Solids (180)	540	mg/L		10	SM 2540	03/13/2017 1054	NLG
<b>Data Quality</b>							
Cation Sum	8.84	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Anion Sum	9.12	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Cation-Anion Balance (± 5%)	1.57	%		0.01	SM 1030E	03/22/2017 958	WN
Solids, Total Dissolved (Calc)	510	mg/L		10	SM 1030E	03/22/2017 958	WN
Calculated TDS/TDS Ratio (0.80-1.20)	1.06	dec. %		0.01	Calculation	03/22/2017 1001	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
- 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

- C Calculated Value
- G Analyzed at IML Gillette laboratory
- 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

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager





Sample Analysis Report

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

Date Reported 4/10/2017
Report ID S1703119001

ProjectName: MUI Stability Monitoring
Lab ID: S1703119-011
ClientSample ID: B-011
COC: 161843

WorkOrder: S1703119
CollectionDate: 3/8/2017 3:55:00 PM
DateReceived: 3/10/2017 11:30:00 AM
FieldSampler: KA
Matrix: Water

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init

Metals - Dissolved

Table listing various metals (Aluminum, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Uranium, Vanadium, Zinc) with their respective results, units, and reporting limits.

Metals - Total

Table listing total metals (Iron, Manganese) with their respective results and reporting limits.

Radionuclides - Dissolved

Table listing radionuclides (Gross Alpha, Gross Alpha Precision, Gross Beta, Gross Beta Precision, Radium 226, Radium 226 Precision, Radium 228, Radium 228 Precision) with their respective results, units, and reporting limits.

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
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

- C Calculated Value
G Analyzed at IML Gillette laboratory
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

Reviewed by: [Signature]
Wade Nieuwsma, Assistant Laboratory Manager



### Sample Analysis Report

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

**Date Reported** 4/10/2017  
**Report ID** S1703119001

**ProjectName:** MUI Stability Monitoring  
**Lab ID:** S1703119-012  
**ClientSample ID:** B-012  
**COC:** 161843

**WorkOrder:** S1703119  
**CollectionDate:** 3/8/2017 2:08:00 PM  
**DateReceived:** 3/10/2017 11:30:00 AM  
**FieldSampler:** KA  
**Matrix:** Water

#### Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
----------	--------	-------	------	----	--------	--------------------

#### Anions/Cations

Alkalinity, Total (As CaCO3)	180	mg/L		5	SM 2320B	03/15/2017 1753	IBS
Alkalinity, Bicarbonate as HCO3	219	mg/L		5	SM 2320B	03/15/2017 1753	IBS
Alkalinity, Carbonate as CO3	ND	mg/L		5	SM 2320B	03/15/2017 1753	IBS
Chloride	21	mg/L		1	EPA 300.0	03/13/2017 2331	AB
Fluoride	0.1	mg/L		0.1	SM 4500FC	03/11/2017 045	IBS
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/14/2017 1557	AMB
Sulfate	133	mg/L		1	EPA 300.0	03/13/2017 2331	AB
Calcium	85	mg/L		1	EPA 200.7	03/16/2017 1142	DG
Magnesium	21	mg/L		1	EPA 200.7	03/16/2017 1142	DG
Potassium	10	mg/L		1	EPA 200.7	03/16/2017 1142	DG
Sodium	17	mg/L		1	EPA 200.7	03/16/2017 1142	DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	03/13/2017 1228	AMB
Silica as SiO2	12	mg/L		1	EPA 200.7	03/13/2017 1401	DG

#### General Parameters

pH	7.8	s.u.		0.1	SM 4500 H B	03/15/2017 1753	IBS
Electrical Conductivity	646	µmhos/cm		5	SM 2510B	03/11/2017 045	IBS
Total Dissolved Solids (180)	450	mg/L		10	SM 2540	03/13/2017 1055	NLG

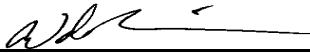
#### Data Quality

Cation Sum	6.98	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Anion Sum	6.94	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Cation-Anion Balance (± 5%)	0.32	%		0.01	SM 1030E	03/22/2017 958	WN
Solids, Total Dissolved (Calc)	410	mg/L		10	SM 1030E	03/22/2017 958	WN
Calculated TDS/TDS Ratio (0.80-1.20)	1.10	dec. %		0.01	Calculation	03/22/2017 1001	WN

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

#### RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	E	Value above quantitation range	G	Analyzed at IML Gillette laboratory
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	L	Analyzed by another 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 4/10/2017
Report ID S1703119001

ProjectName: MUI Stability Monitoring
Lab ID: S1703119-012
ClientSample ID: B-012
COC: 161843

WorkOrder: S1703119
CollectionDate: 3/8/2017 2:08:00 PM
DateReceived: 3/10/2017 11:30:00 AM
FieldSampler: KA
Matrix: Water

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init

Metals - Dissolved

Table listing various metals (Aluminum, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Uranium, Vanadium, Zinc) with their respective results, units, and reporting limits.

Metals - Total

Table listing total metals (Iron, Manganese) with their results and reporting limits.

Radionuclides - Dissolved

Table listing radionuclides (Gross Alpha, Gross Beta, Radium 226, Radium 228) with their results, units, and reporting limits.

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
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

- C Calculated Value
G Analyzed at IML Gillette laboratory
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

Reviewed by: [Signature]
Wade Nieuwsma, Assistant Laboratory Manager



### Sample Analysis Report

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

**Date Reported** 4/10/2017  
**Report ID** S1703119001

**ProjectName:** MUI Stability Monitoring  
**Lab ID:** S1703119-013  
**ClientSample ID:** B-013  
**COC:** 161843

**WorkOrder:** S1703119  
**CollectionDate:** 3/8/2017 5:08:00 PM  
**DateReceived:** 3/10/2017 11:30:00 AM  
**FieldSampler:** KA  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Anions/Cations</b>							
Alkalinity, Total (As CaCO3)	189	mg/L		5	SM 2320B	03/11/2017 056	IBS
Alkalinity, Bicarbonate as HCO3	231	mg/L		5	SM 2320B	03/11/2017 056	IBS
Alkalinity, Carbonate as CO3	ND	mg/L		5	SM 2320B	03/11/2017 056	IBS
Chloride	7	mg/L		1	EPA 300.0	03/13/2017 2344	AB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/11/2017 056	IBS
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/14/2017 1558	AMB
Sulfate	110	mg/L		1	EPA 300.0	03/13/2017 2344	AB
Calcium	70	mg/L		1	EPA 200.7	03/13/2017 1403	DG
Magnesium	17	mg/L		1	EPA 200.7	03/13/2017 1403	DG
Potassium	9	mg/L		1	EPA 200.7	03/13/2017 1403	DG
Sodium	20	mg/L		1	EPA 200.7	03/13/2017 1403	DG
Nitrogen, Ammonia (As N)	ND	mg/L		0.1	EPA 350.1	03/13/2017 1229	AMB
Silica as SiO2	11	mg/L		1	EPA 200.7	03/13/2017 1403	DG
<b>General Parameters</b>							
pH	8.1	s.u.		0.1	SM 4500 H B	03/11/2017 056	IBS
Electrical Conductivity	564	µmhos/cm		5	SM 2510B	03/11/2017 056	IBS
Total Dissolved Solids (180)	380	mg/L		10	SM 2540	03/13/2017 1056	NLG
<b>Data Quality</b>							
Cation Sum	5.89	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Anion Sum	6.28	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Cation-Anion Balance (± 5%)	3.25	%		0.01	SM 1030E	03/22/2017 958	WN
Solids, Total Dissolved (Calc)	360	mg/L		10	SM 1030E	03/22/2017 958	WN
Calculated TDS/TDS Ratio (0.80-1.20)	1.06	dec. %		0.01	Calculation	03/22/2017 1001	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
  - 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

- C Calculated Value
- G Analyzed at IML Gillette laboratory
- 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

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager



### Sample Analysis Report

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

**Date Reported** 4/10/2017  
**Report ID** S1703119001

**ProjectName:** MUI Stability Monitoring  
**Lab ID:** S1703119-013  
**ClientSample ID:** B-013  
**COC:** 161843

**WorkOrder:** S1703119  
**CollectionDate:** 3/8/2017 5:08:00 PM  
**DateReceived:** 3/10/2017 11:30:00 AM  
**FieldSampler:** KA  
**Matrix:** Water

#### Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
----------	--------	-------	------	----	--------	--------------------

#### Metals - Dissolved

Aluminum	ND	mg/L		0.1	EPA 200.7	03/13/2017 1403	DG
Arsenic	0.006	mg/L		0.001	EPA 200.8	03/13/2017 2256	MS
Barium	ND	mg/L		0.1	EPA 200.8	03/13/2017 2256	MS
Beryllium	ND	mg/L		0.001	EPA 200.7	03/13/2017 1403	DG
Boron	ND	mg/L		0.1	EPA 200.7	03/13/2017 1403	DG
Cadmium	ND	mg/L		0.001	EPA 200.8	03/13/2017 2256	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/13/2017 1403	DG
Copper	ND	mg/L		0.01	EPA 200.8	03/13/2017 2256	MS
Iron	0.71	mg/L		0.05	EPA 200.7	03/13/2017 1403	DG
Lead	ND	mg/L		0.01	EPA 200.8	03/13/2017 2256	MS
Manganese	0.21	mg/L		0.01	EPA 200.7	03/13/2017 1403	DG
Mercury	ND	mg/L		0.001	EPA 245.1	03/14/2017 1037	AW
Molybdenum	ND	mg/L		0.01	EPA 200.8	03/13/2017 2256	MS
Nickel	ND	mg/L		0.05	EPA 200.7	03/13/2017 1403	DG
Selenium	0.021	mg/L		0.001	EPA 200.8	03/13/2017 2256	MS
Uranium	0.406	mg/L		0.0003	EPA 200.8	03/13/2017 2256	MS
Vanadium	ND	mg/L		0.1	EPA 200.8	03/13/2017 2256	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/13/2017 1403	DG

#### Metals - Total

Iron	1.06	mg/L		0.05	EPA 200.7	03/15/2017 1309	DG
Manganese	0.22	mg/L		0.01	EPA 200.7	03/15/2017 1309	DG

#### Radionuclides - Dissolved

Gross Alpha	867	pCi/L		2	SM 7110B	03/22/2017 806	MB
Gross Alpha Precision (±)	13.8	pCi/L			SM 7110B	03/22/2017 806	MB
Gross Beta	327	pCi/L		3	SM 7110B	03/22/2017 806	MB
Gross Beta Precision (±)	6.1	pCi/L			SM 7110B	03/22/2017 806	MB
Radium 226	573	pCi/L		0.2	SM 7500 Ra-B	04/07/2017 901	MB
Radium 226 Precision (±)	2.7	pCi/L			SM 7500 Ra-B	04/07/2017 901	MB
Radium 228	3.5	pCi/L		1	Ga-Tech	04/01/2017 2344	WN
Radium 228 Precision (±)	2.8	pCi/L			Ga-Tech	04/01/2017 2344	WN

These results apply only to the samples tested.

#### RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	E	Value above quantitation range	G	Analyzed at IML Gillette laboratory
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	L	Analyzed by another 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  
Wade Nieuwsma, Assistant Laboratory Manager



### Sample Analysis Report

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

**Date Reported** 4/10/2017  
**Report ID** S1703119001

**ProjectName:** MUI Stability Monitoring  
**Lab ID:** S1703119-014  
**ClientSample ID:** B-014  
**COC:** 161843

**WorkOrder:** S1703119  
**CollectionDate:** 3/8/2017 4:47:00 PM  
**DateReceived:** 3/10/2017 11:30:00 AM  
**FieldSampler:** KA  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Anions/Cations</b>							
Alkalinity, Total (As CaCO3)	191	mg/L		5	SM 2320B	03/14/2017 1617	IBS
Alkalinity, Bicarbonate as HCO3	233	mg/L		5	SM 2320B	03/14/2017 1617	IBS
Alkalinity, Carbonate as CO3	ND	mg/L		5	SM 2320B	03/14/2017 1617	IBS
Chloride	9	mg/L		1	EPA 300.0	03/13/2017 2358	AB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/14/2017 1617	IBS
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/14/2017 1600	AMB
Sulfate	111	mg/L		1	EPA 300.0	03/13/2017 2358	AB
Calcium	74	mg/L		1	EPA 200.7	03/16/2017 1144	DG
Magnesium	18	mg/L		1	EPA 200.7	03/16/2017 1144	DG
Potassium	9	mg/L		1	EPA 200.7	03/16/2017 1144	DG
Sodium	19	mg/L		1	EPA 200.7	03/16/2017 1144	DG
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	03/13/2017 1232	AMB
Silica as SiO2	12	mg/L		1	EPA 200.7	03/13/2017 1406	DG
<b>General Parameters</b>							
pH	7.8	s.u.		0.1	SM 4500 H B	03/14/2017 1617	IBS
Electrical Conductivity	589	µmhos/cm		5	SM 2510B	03/14/2017 1617	IBS
Total Dissolved Solids (180)	390	mg/L		10	SM 2540	03/13/2017 1057	NLG
<b>Data Quality</b>							
Cation Sum	6.21	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Anion Sum	6.37	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Cation-Anion Balance (± 5%)	1.23	%		0.01	SM 1030E	03/22/2017 958	WN
Solids, Total Dissolved (Calc)	370	mg/L		10	SM 1030E	03/22/2017 958	WN
Calculated TDS/TDS Ratio (0.80-1.20)	1.05	dec. %		0.01	Calculation	03/22/2017 1001	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
  - 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

- C Calculated Value
- G Analyzed at IML Gillette laboratory
- 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

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager



### Sample Analysis Report

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

**Date Reported** 4/10/2017  
**Report ID** S1703119001

**ProjectName:** MUI Stability Monitoring  
**Lab ID:** S1703119-014  
**ClientSample ID:** B-014  
**COC:** 161843

**WorkOrder:** S1703119  
**CollectionDate:** 3/8/2017 4:47:00 PM  
**DateReceived:** 3/10/2017 11:30:00 AM  
**FieldSampler:** KA  
**Matrix:** Water

#### Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
----------	--------	-------	------	----	--------	--------------------

#### Metals - Dissolved

Aluminum	ND	mg/L		0.1	EPA 200.7	03/13/2017 1406	DG
Arsenic	0.003	mg/L		0.001	EPA 200.8	03/13/2017 2302	MS
Barium	ND	mg/L		0.1	EPA 200.8	03/13/2017 2302	MS
Beryllium	ND	mg/L		0.001	EPA 200.7	03/13/2017 1406	DG
Boron	ND	mg/L		0.1	EPA 200.7	03/13/2017 1406	DG
Cadmium	ND	mg/L		0.001	EPA 200.8	03/13/2017 2302	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/13/2017 1406	DG
Copper	ND	mg/L		0.01	EPA 200.8	03/13/2017 2302	MS
Iron	1.35	mg/L		0.05	EPA 200.7	03/13/2017 1406	DG
Lead	ND	mg/L		0.01	EPA 200.8	03/13/2017 2302	MS
Manganese	0.08	mg/L		0.01	EPA 200.7	03/13/2017 1406	DG
Mercury	ND	mg/L		0.001	EPA 245.1	03/14/2017 1039	AW
Molybdenum	ND	mg/L		0.01	EPA 200.8	03/13/2017 2302	MS
Nickel	ND	mg/L		0.05	EPA 200.7	03/13/2017 1406	DG
Selenium	0.001	mg/L		0.001	EPA 200.8	03/13/2017 2302	MS
Uranium	0.663	mg/L		0.0003	EPA 200.8	03/13/2017 2302	MS
Vanadium	ND	mg/L		0.1	EPA 200.8	03/13/2017 2302	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/13/2017 1406	DG

#### Metals - Total

Iron	1.83	mg/L		0.05	EPA 200.7	03/15/2017 1311	DG
Manganese	0.09	mg/L		0.01	EPA 200.7	03/15/2017 1311	DG

#### Radionuclides - Dissolved

Gross Alpha	1380	pCi/L		2	SM 7110B	03/22/2017 806	MB
Gross Alpha Precision (±)	18.4	pCi/L			SM 7110B	03/22/2017 806	MB
Gross Beta	454	pCi/L		3	SM 7110B	03/22/2017 806	MB
Gross Beta Precision (±)	7.3	pCi/L			SM 7110B	03/22/2017 806	MB
Radium 226	746	pCi/L		0.2	SM 7500 Ra-B	04/07/2017 901	MB
Radium 226 Precision (±)	3.1	pCi/L			SM 7500 Ra-B	04/07/2017 901	MB
Radium 228	2.6	pCi/L		1	Ga-Tech	04/02/2017 248	WN
Radium 228 Precision (±)	3.2	pCi/L			Ga-Tech	04/02/2017 248	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  
 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

C Calculated Value  
 G Analyzed at IML Gillette laboratory  
 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

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager



### Sample Analysis Report

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

**Date Reported** 4/10/2017  
**Report ID** S1703119001

**ProjectName:** MUI Stability Monitoring  
**Lab ID:** S1703119-015  
**ClientSample ID:** B-015  
**COC:** 161841

**WorkOrder:** S1703119  
**CollectionDate:** 3/7/2017 9:47:00 AM  
**DateReceived:** 3/10/2017 11:30:00 AM  
**FieldSampler:** KA  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Anions/Cations</b>							
Alkalinity, Total (As CaCO3)	83	mg/L		5	SM 2320B	03/14/2017 1628	IBS
Alkalinity, Bicarbonate as HCO3	101	mg/L		5	SM 2320B	03/14/2017 1628	IBS
Alkalinity, Carbonate as CO3	ND	mg/L		5	SM 2320B	03/14/2017 1628	IBS
Chloride	3	mg/L		1	EPA 300.0	03/14/2017 011	AB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/14/2017 1628	IBS
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/14/2017 1601	AMB
Sulfate	33	mg/L		1	EPA 300.0	03/14/2017 011	AB
Calcium	26	mg/L		1	EPA 200.7	03/13/2017 1414	DG
Magnesium	6	mg/L		1	EPA 200.7	03/13/2017 1414	DG
Potassium	5	mg/L		1	EPA 200.7	03/13/2017 1414	DG
Sodium	9	mg/L		1	EPA 200.7	03/13/2017 1414	DG
Nitrogen, Ammonia (As N)	0.1	mg/L		0.1	EPA 350.1	03/13/2017 1236	AMB
Silica as SiO2	14	mg/L		1	EPA 200.7	03/13/2017 1414	DG
<b>General Parameters</b>							
pH	7.8	s.u.		0.1	SM 4500 H B	03/14/2017 1628	IBS
Electrical Conductivity	230	µmhos/cm		5	SM 2510B	03/14/2017 1628	IBS
Total Dissolved Solids (180)	160	mg/L		10	SM 2540	03/13/2017 1058	NLG
<b>Data Quality</b>							
Cation Sum	2.27	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Anion Sum	2.45	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Cation-Anion Balance (± 5%)	3.81	%		0.01	SM 1030E	03/22/2017 958	WN
Solids, Total Dissolved (Calc)	150	mg/L		10	SM 1030E	03/22/2017 958	WN
Calculated TDS/TDS Ratio (0.80-1.20)	1.07	dec. %		0.01	Calculation	03/22/2017 1001	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
  - 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

- C Calculated Value
- G Analyzed at IML Gillette laboratory
- 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

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager





### Sample Analysis Report

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

**Date Reported** 4/10/2017  
**Report ID** S1703119001

**ProjectName:** MUI Stability Monitoring  
**Lab ID:** S1703119-015  
**ClientSample ID:** B-015  
**COC:** 161841

**WorkOrder:** S1703119  
**CollectionDate:** 3/7/2017 9:47:00 AM  
**DateReceived:** 3/10/2017 11:30:00 AM  
**FieldSampler:** KA  
**Matrix:** Water

#### Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
----------	--------	-------	------	----	--------	--------------------

#### Metals - Dissolved

Aluminum	ND	mg/L		0.1	EPA 200.7	03/13/2017 1414	DG
Arsenic	0.022	mg/L		0.001	EPA 200.8	03/13/2017 2307	MS
Barium	ND	mg/L		0.1	EPA 200.8	03/13/2017 2307	MS
Beryllium	ND	mg/L		0.001	EPA 200.7	03/13/2017 1414	DG
Boron	ND	mg/L		0.1	EPA 200.7	03/13/2017 1414	DG
Cadmium	ND	mg/L		0.001	EPA 200.8	03/13/2017 2307	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/13/2017 1414	DG
Copper	ND	mg/L		0.01	EPA 200.8	03/13/2017 2307	MS
Iron	1.32	mg/L		0.05	EPA 200.7	03/13/2017 1414	DG
Lead	ND	mg/L		0.01	EPA 200.8	03/13/2017 2307	MS
Manganese	0.05	mg/L		0.01	EPA 200.7	03/13/2017 1414	DG
Mercury	ND	mg/L		0.001	EPA 245.1	03/14/2017 1041	AW
Molybdenum	ND	mg/L		0.01	EPA 200.8	03/13/2017 2307	MS
Nickel	ND	mg/L		0.05	EPA 200.7	03/13/2017 1414	DG
Selenium	ND	mg/L		0.001	EPA 200.8	03/13/2017 2307	MS
Uranium	0.108	mg/L		0.0003	EPA 200.8	03/13/2017 2307	MS
Vanadium	ND	mg/L		0.1	EPA 200.8	03/13/2017 2307	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/13/2017 1414	DG

#### Metals - Total

Iron	1.40	mg/L		0.05	EPA 200.7	03/15/2017 1313	DG
Manganese	0.05	mg/L		0.01	EPA 200.7	03/15/2017 1313	DG

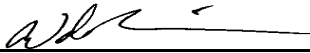
#### Radionuclides - Dissolved

Gross Alpha	772	pCi/L		2	SM 7110B	03/22/2017 806	MB
Gross Alpha Precision (±)	12.0	pCi/L			SM 7110B	03/22/2017 806	MB
Gross Beta	317	pCi/L		3	SM 7110B	03/22/2017 806	MB
Gross Beta Precision (±)	6.0	pCi/L			SM 7110B	03/22/2017 806	MB
Radium 226	410	pCi/L		0.2	SM 7500 Ra-B	04/07/2017 901	MB
Radium 226 Precision (±)	2.3	pCi/L			SM 7500 Ra-B	04/07/2017 901	MB
Radium 228	5.2	pCi/L		1	Ga-Tech	04/02/2017 552	WN
Radium 228 Precision (±)	2.4	pCi/L			Ga-Tech	04/02/2017 552	WN

These results apply only to the samples tested.

#### RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	E	Value above quantitation range	G	Analyzed at IML Gillette laboratory
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	L	Analyzed by another 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 4/10/2017
Report ID S1703119001

ProjectName: MUI Stability Monitoring
Lab ID: S1703119-016
ClientSample ID: B-016
COC: 161841

WorkOrder: S1703119
CollectionDate: 3/8/2017 9:47:00 AM
DateReceived: 3/10/2017 11:30:00 AM
FieldSampler: KA
Matrix: Water

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init. Rows include Anions/Cations (Alkalinity, Chloride, etc.), General Parameters (pH, Conductivity), and Data Quality (Cation Sum, Anion Sum, etc.).

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
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

- C Calculated Value
G Analyzed at IML Gillette laboratory
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

Reviewed by: [Signature]
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

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

Date Reported 4/10/2017
Report ID S1703119001

ProjectName: MUI Stability Monitoring
Lab ID: S1703119-016
ClientSample ID: B-016
COC: 161841

WorkOrder: S1703119
CollectionDate: 3/8/2017 9:47:00 AM
DateReceived: 3/10/2017 11:30:00 AM
FieldSampler: KA
Matrix: Water

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init

Metals - Dissolved

Table listing various metals (Aluminum, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Uranium, Vanadium, Zinc) with their respective results, units, and reporting limits.

Metals - Total

Table listing total metals (Iron, Manganese) with their results and reporting limits.

Radionuclides - Dissolved

Table listing radionuclides (Gross Alpha, Gross Beta, Radium 226, Radium 228) with their results, units, and reporting limits.

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
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

- C Calculated Value
G Analyzed at IML Gillette laboratory
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

Reviewed by: [Signature]
Wade Nieuwsma, Assistant Laboratory Manager



### Sample Analysis Report

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

**Date Reported** 4/10/2017  
**Report ID** S1703119001

**ProjectName:** MUI Stability Monitoring  
**Lab ID:** S1703119-017  
**ClientSample ID:** B-017  
**COC:** 161841

**WorkOrder:** S1703119  
**CollectionDate:** 3/8/2017 11:15:00 AM  
**DateReceived:** 3/10/2017 11:30:00 AM  
**FieldSampler:** KA  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
<b>Anions/Cations</b>							
Alkalinity, Total (As CaCO3)	139	mg/L		5	SM 2320B	03/14/2017 1655	IBS
Alkalinity, Bicarbonate as HCO3	170	mg/L		5	SM 2320B	03/14/2017 1655	IBS
Alkalinity, Carbonate as CO3	ND	mg/L		5	SM 2320B	03/14/2017 1655	IBS
Chloride	16	mg/L		1	EPA 300.0	03/14/2017 038	AB
Fluoride	0.2	mg/L		0.1	SM 4500FC	03/14/2017 1655	IBS
Nitrogen, Nitrate+Nitrite (as N)	ND	mg/L		0.1	EPA 353.2	03/14/2017 1604	AMB
Sulfate	89	mg/L		1	EPA 300.0	03/14/2017 038	AB
Calcium	56	mg/L		1	EPA 200.7	03/13/2017 1421	DG
Magnesium	14	mg/L		1	EPA 200.7	03/13/2017 1421	DG
Potassium	7	mg/L		1	EPA 200.7	03/13/2017 1421	DG
Sodium	14	mg/L		1	EPA 200.7	03/13/2017 1421	DG
Nitrogen, Ammonia (As N)	0.2	mg/L		0.1	EPA 350.1	03/13/2017 1237	AMB
Silica as SiO2	12	mg/L		1	EPA 200.7	03/13/2017 1421	DG
<b>General Parameters</b>							
pH	7.9	s.u.		0.1	SM 4500 H B	03/14/2017 1655	IBS
Electrical Conductivity	487	µmhos/cm		5	SM 2510B	03/14/2017 1655	IBS
Total Dissolved Solids (180)	310	mg/L		10	SM 2540	03/13/2017 1100	NLG
<b>Data Quality</b>							
Cation Sum	4.72	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Anion Sum	5.09	meq/L		0.01	SM 1030E	03/22/2017 958	WN
Cation-Anion Balance (± 5%)	3.77	%		0.01	SM 1030E	03/22/2017 958	WN
Solids, Total Dissolved (Calc)	290	mg/L		10	SM 1030E	03/22/2017 958	WN
Calculated TDS/TDS Ratio (0.80-1.20)	1.07	dec. %		0.01	Calculation	03/22/2017 1001	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
  - 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

- C Calculated Value
- G Analyzed at IML Gillette laboratory
- 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

Reviewed by: Wade Nieuwsma  
Wade Nieuwsma, Assistant Laboratory Manager



### Sample Analysis Report

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

**Date Reported** 4/10/2017  
**Report ID** S1703119001

**ProjectName:** MUI Stability Monitoring  
**Lab ID:** S1703119-017  
**ClientSample ID:** B-017  
**COC:** 161841

**WorkOrder:** S1703119  
**CollectionDate:** 3/8/2017 11:15:00 AM  
**DateReceived:** 3/10/2017 11:30:00 AM  
**FieldSampler:** KA  
**Matrix:** Water

**Comments**

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
----------	--------	-------	------	----	--------	--------------------

**Metals - Dissolved**

Aluminum	ND	mg/L		0.1	EPA 200.7	03/13/2017 1421 DG
Arsenic	0.027	mg/L		0.001	EPA 200.8	03/13/2017 2330 MS
Barium	ND	mg/L		0.1	EPA 200.8	03/13/2017 2330 MS
Beryllium	ND	mg/L		0.001	EPA 200.7	03/13/2017 1421 DG
Boron	ND	mg/L		0.1	EPA 200.7	03/13/2017 1421 DG
Cadmium	ND	mg/L		0.001	EPA 200.8	03/13/2017 2330 MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/13/2017 1421 DG
Copper	ND	mg/L		0.01	EPA 200.8	03/13/2017 2330 MS
Iron	1.43	mg/L		0.05	EPA 200.7	03/13/2017 1421 DG
Lead	ND	mg/L		0.01	EPA 200.8	03/13/2017 2330 MS
Manganese	0.06	mg/L		0.01	EPA 200.7	03/13/2017 1421 DG
Mercury	ND	mg/L		0.001	EPA 245.1	03/14/2017 1049 AW
Molybdenum	ND	mg/L		0.01	EPA 200.8	03/13/2017 2330 MS
Nickel	ND	mg/L		0.05	EPA 200.7	03/13/2017 1421 DG
Selenium	ND	mg/L		0.001	EPA 200.8	03/13/2017 2330 MS
Uranium	0.413	mg/L		0.0003	EPA 200.8	03/13/2017 2330 MS
Vanadium	ND	mg/L		0.1	EPA 200.8	03/13/2017 2330 MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/13/2017 1421 DG

**Metals - Total**

Iron	1.72	mg/L		0.05	EPA 200.7	03/15/2017 1317 DG
Manganese	0.06	mg/L		0.01	EPA 200.7	03/15/2017 1317 DG

**Radionuclides - Dissolved**

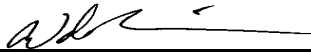
Gross Alpha	510	pCi/L		2	SM 7110B	03/22/2017 806 MB
Gross Alpha Precision (±)	10.5	pCi/L			SM 7110B	03/22/2017 806 MB
Gross Beta	178	pCi/L		3	SM 7110B	03/22/2017 806 MB
Gross Beta Precision (±)	4.7	pCi/L			SM 7110B	03/22/2017 806 MB
Radium 226	193	pCi/L		0.2	SM 7500 Ra-B	04/07/2017 901 MB
Radium 226 Precision (±)	1.6	pCi/L			SM 7500 Ra-B	04/07/2017 901 MB
Radium 228	ND	pCi/L		1	Ga-Tech	04/02/2017 1200 WN
Radium 228 Precision (±)	NA	pCi/L			Ga-Tech	04/02/2017 1200 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
  - 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

- C Calculated Value
- G Analyzed at IML Gillette laboratory
- 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

Reviewed by:   
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

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

Date Reported 4/10/2017
Report ID S1703119001

ProjectName: MUI Stability Monitoring
Lab ID: S1703119-018
ClientSample ID: B-018
COC: 161841

WorkOrder: S1703119
CollectionDate: 3/8/2017 2:17:00 PM
DateReceived: 3/10/2017 11:30:00 AM
FieldSampler: KA
Matrix: Water

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init. Rows include Anions/Cations (Alkalinity, Chloride, etc.), General Parameters (pH, Conductivity), and Data Quality (Cation Sum, Anion Sum, etc.).

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
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

- C Calculated Value
G Analyzed at IML Gillette laboratory
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

Reviewed by: [Signature]
Wade Nieuwsma, Assistant Laboratory Manager



### Sample Analysis Report

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

**Date Reported** 4/10/2017  
**Report ID** S1703119001

**ProjectName:** MUI Stability Monitoring  
**Lab ID:** S1703119-018  
**ClientSample ID:** B-018  
**COC:** 161841

**WorkOrder:** S1703119  
**CollectionDate:** 3/8/2017 2:17:00 PM  
**DateReceived:** 3/10/2017 11:30:00 AM  
**FieldSampler:** KA  
**Matrix:** Water

#### Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
----------	--------	-------	------	----	--------	--------------------

#### Metals - Dissolved

Aluminum	ND	mg/L		0.1	EPA 200.7	03/13/2017 1428	DG
Arsenic	0.006	mg/L		0.001	EPA 200.8	03/13/2017 2336	MS
Barium	ND	mg/L		0.1	EPA 200.8	03/13/2017 2336	MS
Beryllium	ND	mg/L		0.001	EPA 200.7	03/13/2017 1428	DG
Boron	ND	mg/L		0.1	EPA 200.7	03/13/2017 1428	DG
Cadmium	ND	mg/L		0.001	EPA 200.8	03/13/2017 2336	MS
Chromium	ND	mg/L		0.01	EPA 200.7	03/13/2017 1428	DG
Copper	ND	mg/L		0.01	EPA 200.8	03/13/2017 2336	MS
Iron	0.88	mg/L		0.05	EPA 200.7	03/13/2017 1428	DG
Lead	ND	mg/L		0.01	EPA 200.8	03/13/2017 2336	MS
Manganese	0.11	mg/L		0.01	EPA 200.7	03/13/2017 1428	DG
Mercury	ND	mg/L		0.001	EPA 245.1	03/14/2017 1057	AW
Molybdenum	ND	mg/L		0.01	EPA 200.8	03/13/2017 2336	MS
Nickel	ND	mg/L		0.05	EPA 200.7	03/13/2017 1428	DG
Selenium	ND	mg/L		0.001	EPA 200.8	03/13/2017 2336	MS
Uranium	0.0742	mg/L		0.0003	EPA 200.8	03/13/2017 2336	MS
Vanadium	ND	mg/L		0.1	EPA 200.8	03/13/2017 2336	MS
Zinc	ND	mg/L		0.01	EPA 200.7	03/13/2017 1428	DG

#### Metals - Total

Iron	1.08	mg/L		0.05	EPA 200.7	03/15/2017 1320	DG
Manganese	0.12	mg/L		0.01	EPA 200.7	03/15/2017 1320	DG

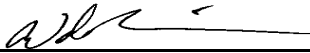
#### Radionuclides - Dissolved

Gross Alpha	245	pCi/L		2	SM 7110B	03/27/2017 1032	MB
Gross Alpha Precision (±)	7.0	pCi/L			SM 7110B	03/27/2017 1032	MB
Gross Beta	81.7	pCi/L		3	SM 7110B	03/27/2017 1032	MB
Gross Beta Precision (±)	3.3	pCi/L			SM 7110B	03/27/2017 1032	MB
Radium 226	179	pCi/L		0.2	SM 7500 Ra-B	04/07/2017 901	MB
Radium 226 Precision (±)	1.5	pCi/L			SM 7500 Ra-B	04/07/2017 901	MB
Radium 228	2.2	pCi/L		1	Ga-Tech	04/02/2017 1503	WN
Radium 228 Precision (±)	1.9	pCi/L			Ga-Tech	04/02/2017 1503	WN

These results apply only to the samples tested.

#### RL - Reporting Limit

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	C	Calculated Value
	E	Value above quantitation range	G	Analyzed at IML Gillette laboratory
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	L	Analyzed by another 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 4/10/2017
Report ID S1703119001

ProjectName: MUI Stability Monitoring
Lab ID: S1703119-019
ClientSample ID: B-019
COC: 161841

WorkOrder: S1703119
CollectionDate: 3/7/2017 11:25:00 AM
DateReceived: 3/10/2017 11:30:00 AM
FieldSampler: KA
Matrix: Water

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init. Rows include Anions/Cations (Alkalinity, Chloride, etc.), General Parameters (pH, Conductivity), and Data Quality (Cation Sum, Anion Sum, etc.).

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
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

- C Calculated Value
G Analyzed at IML Gillette laboratory
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

Reviewed by: [Signature]
Wade Nieuwsma, Assistant Laboratory Manager





Sample Analysis Report

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

Date Reported 4/10/2017
Report ID S1703119001

ProjectName: MUI Stability Monitoring
Lab ID: S1703119-019
ClientSample ID: B-019
COC: 161841

WorkOrder: S1703119
CollectionDate: 3/7/2017 11:25:00 AM
DateReceived: 3/10/2017 11:30:00 AM
FieldSampler: KA
Matrix: Water

Comments

Table with 7 columns: Analyses, Result, Units, Qual, RL, Method, Date Analyzed/Init

Metals - Dissolved

Table listing various metals (Aluminum, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Uranium, Vanadium, Zinc) with their respective results, units, and reporting limits.

Metals - Total

Table listing total metals (Iron, Manganese) with their results and reporting limits.

Radionuclides - Dissolved

Table listing radionuclides (Gross Alpha, Gross Beta, Radium 226, Radium 228) with their results, units, and reporting limits.

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
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

- C Calculated Value
G Analyzed at IML Gillette laboratory
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

Reviewed by: [Signature]
Wade Nieuwsma, Assistant Laboratory Manager



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)  
**Work Order:** S1703119  
**Project:** MUI Stability Monitoring

**Date:** 4/10/2017  
**Report ID:** S1703119001

Alkalinity		Sample Type	MBLK		Units: mg/L				
BLANK (03/15/17 16:39)	Analyte		RunNo: 143889						
	Alkalinity, Total (As CaCO3)		ND	5					

Alkalinity		Sample Type	LCS		Units: mg/L				
ATQC (03/14/17 15:41)	Analyte		RunNo: 143835						
	Alkalinity, Total (As CaCO3)		588	5	595		98.7	90 - 110	

Alkalinity		Sample Type	DUP		Units: mg/L				
S1703119-003AD (03/10/17 23:03)	Analyte		RunNo: 143807						
	Alkalinity, Bicarbonate as HCO3		174	5	174	0.352		20	
	Alkalinity, Carbonate as CO3		ND	5	ND			20	
	Alkalinity, Total (As CaCO3)		143	5	142	0.352		20	

S1703119-013AD (03/11/17 01:08)	Analyte		RunNo: 143807						
	Alkalinity, Bicarbonate as HCO3		233	5	231	0.676		20	
	Alkalinity, Carbonate as CO3		ND	5	ND			20	
	Alkalinity, Total (As CaCO3)		191	5	189	0.676		20	

Conductivity by SM2510B		Sample Type	MBLK		Units: µmhos/cm				
BLANK (03/10/17 16:46)	Analyte		RunNo: 143807						
	Electrical Conductivity		ND	5					

Conductivity by SM2510B		Sample Type	LCS		Units: µmhos/cm				
ATQC (03/14/17 15:41)	Analyte		RunNo: 143835						
	Electrical Conductivity		1050	5	1060		99.3	90 - 110	

Conductivity by SM2510B		Sample Type	DUP		Units: µmhos/cm				
S1703119-003AD (03/10/17 23:03)	Analyte		RunNo: 143807						
	Electrical Conductivity		514	5	514	0		20	

S1703119-013AD (03/11/17 01:08)	Analyte		RunNo: 143807						
	Electrical Conductivity		568	5	564	0.707		20	

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - G Analyzed at IML Gillette laboratory
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits
  - X Matrix Effect
  - E Value above quantitation range
  - 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



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)  
**Work Order:** S1703119  
**Project:** MUI Stability Monitoring

**Date:** 4/10/2017  
**Report ID:** S1703119001

**Dissolved Mercury by EPA 245.1 - Water**

Sample Type **MBLK**

Units: mg/L

LRB (03/14/17 08:31)	RunNo: 143804							
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 (03/14/17 08:29)	RunNo: 143804							
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Mercury	0.002	0.001	0.00197		90.1	85 - 115		

**Dissolved Mercury by EPA 245.1 - Water**

Sample Type **MS**

Units: mg/L

S1703119-009D (03/14/17 10:28)	RunNo: 143804							
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Mercury	0.002	0.001	0.00197	ND	96.9	70 - 130		

S1703119-017D (03/14/17 10:53)	RunNo: 143804							
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Mercury	0.002	0.001	0.00197	ND	92.5	70 - 130		

**Dissolved Mercury by EPA 245.1 - Water**

Sample Type **MSD**

Units: mg/L

S1703119-009D (03/14/17 10:30)	RunNo: 143804							
Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual	
Mercury	0.002	0.001	0.002	2.47	94.6	20		

S1703119-017D (03/14/17 10:55)	RunNo: 143804							
Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual	
Mercury	0.002	0.001	0.002	0.644	91.9	20		

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - G Analyzed at IML Gillette laboratory
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits
  - X Matrix Effect
  - E Value above quantitation range
  - 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



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)  
**Work Order:** S1703119  
**Project:** MUI Stability Monitoring

**Date:** 4/10/2017  
**Report ID:** S1703119001

**Dissolved Metals by ICP - EPA 200.7 - Water**

Sample Type **MBLK**

Units: mg/L

MBLK DISS/CAT (03/13/17 10:48)		RunNo: 143774						
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Aluminum	ND	0.05						
Beryllium	ND	0.001						
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 (03/13/17 10:50)		RunNo: 143774						
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Aluminum	0.96	0.05	1		95.9	85 - 115		
Beryllium	1.06	0.001	1		106	85 - 115		
Boron	1.0	0.1	1		96.1	85 - 115		
Chromium	0.95	0.01	1		95.1	85 - 115		
Iron	0.96	0.05	1		96.0	85 - 115		
Manganese	1.00	0.02	1		99.8	85 - 115		
Nickel	0.96	0.01	1		95.4	85 - 115		
Zinc	0.96	0.01	1		96.4	85 - 115		

**Dissolved Metals by ICP - EPA 200.7 - Water**

Sample Type **MS**

Units: mg/L

S1703101-002DS (03/13/17 11:53)		RunNo: 143774						
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Aluminum	0.24	0.02	0.25	ND	92.8	70 - 130		
Beryllium	0.270	0.002	0.25	ND	108	70 - 130		
Boron	0.31	0.03	0.25	0.08	93.1	70 - 130		
Chromium	0.24	0.01	0.25	ND	94.7	70 - 130		
Iron	0.23	0.02	0.25	ND	93.3	70 - 130		
Manganese	0.24	0.01	0.25	ND	96.2	70 - 130		
Nickel	0.23	0.01	0.25	ND	92.4	70 - 130		
Zinc	0.25	0.01	0.25	0.01	93.4	70 - 130		

**Dissolved Metals by ICP - EPA 200.7 - Water**

Sample Type **MSD**

Units: mg/L

S1703101-002DSD (03/13/17 11:55)		RunNo: 143774					
Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
Aluminum	0.24	0.02	0.24	0.461	92.4	20	
Beryllium	0.264	0.002	0.270	2.23	106	20	
Boron	0.31	0.03	0.31	0.842	94.2	20	
Chromium	0.24	0.01	0.24	0.951	95.6	20	
Iron	0.24	0.02	0.23	0.785	94.0	20	
Manganese	0.24	0.01	0.24	0.0359	96.2	20	
Nickel	0.23	0.01	0.23	0.567	93.0	20	

**Qualifiers:** B Analyte detected in the associated Method Blank  
 G Analyzed at IML Gillette laboratory  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 R RPD outside accepted recovery limits  
 X Matrix Effect

E Value above quantitation range  
 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



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)  
**Work Order:** S1703119  
**Project:** MUI Stability Monitoring

**Date:** 4/10/2017  
**Report ID:** S1703119001

**Dissolved Metals by ICP - EPA 200.7 - Water**

Sample Type **MSD**

Units: mg/L

S1703101-002DSD (03/13/17 11:55)		RunNo: 143774					
Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
Zinc	0.25	0.01	0.25	0.562	93.9	20	

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

Sample Type **MBLK**

Units: mg/L

MBLK (03/13/17 22:22)		RunNo: 143795					
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	0.001					
Molybdenum	ND	0.02					
Selenium	ND	0.005					
Uranium	ND	0.0003					
Vanadium	ND	0.02					

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

Sample Type **LCS**

Units: mg/L

LCS (03/14/17 00:44)		RunNo: 143795					
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
Arsenic	0.100	0.005	0.1		100	85 - 115	
Barium	ND	0.1	0.1		92.5	85 - 115	
Cadmium	0.098	0.001	0.1		98.3	85 - 115	
Copper	0.10	0.01	0.1		99.9	85 - 115	
Lead	0.100	0.001	0.1		99.5	85 - 115	
Molybdenum	0.10	0.02	0.1		100	85 - 115	
Selenium	0.100	0.005	0.1		100	85 - 115	
Uranium	0.0981	0.0003	0.1		98.1	85 - 115	
Vanadium	0.10	0.02	0.1		99.1	85 - 115	

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

Sample Type **MS**

Units: mg/L

S1703119-001DS (03/13/17 20:51)		RunNo: 143795					
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
Arsenic	1.09	0.001	1.1	0.020	97.4	70 - 130	
Barium	1.0	0.1	1.1	ND	90.9	70 - 130	
Cadmium	1.07	0.001	1.1	ND	97.7	70 - 130	
Copper	1.07	0.01	1.1	ND	97.6	70 - 130	
Lead	1.07	0.01	1.1	ND	97.2	70 - 130	
Molybdenum	1.08	0.01	1.1	ND	98.2	70 - 130	
Selenium	1.08	0.001	1.1	ND	97.9	70 - 130	
Uranium	1.13	0.0003	1.1	0.0829	95.5	70 - 130	
Vanadium	1.1	0.1	1.1	ND	98.1	70 - 130	

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- G Analyzed at IML Gillette laboratory
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- X Matrix Effect

- E Value above quantitation range
- 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



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)  
**Work Order:** S1703119  
**Project:** MUI Stability Monitoring

**Date:** 4/10/2017  
**Report ID:** S1703119001

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

Sample Type **MS**

Units: mg/L

S1703119-011DS (03/13/17 22:39)		RunNo: 143795					
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
Arsenic	1.09	0.001	1.1	0.002	99.1	70 - 130	
Barium	1.0	0.1	1.1	ND	90.2	70 - 130	
Cadmium	1.07	0.001	1.1	ND	97.4	70 - 130	
Copper	1.07	0.01	1.1	ND	97.2	70 - 130	
Lead	1.06	0.01	1.1	ND	96.2	70 - 130	
Molybdenum	1.09	0.01	1.1	ND	99.4	70 - 130	
Selenium	1.10	0.001	1.1	0.006	99.2	70 - 130	
Uranium	3.67	0.0003	1.1	2.66	90.9	70 - 130	
Vanadium	1.1	0.1	1.1	ND	99.0	70 - 130	

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

Sample Type **MSD**

Units: mg/L

S1703119-001DMSD (03/13/17 21:08)		RunNo: 143795					
Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
Arsenic	1.13	0.001	1.09	3.28	101	20	
Barium	1.0	0.1	1.0	1.33	92.2	20	
Cadmium	1.11	0.001	1.07	2.84	101	20	
Copper	1.09	0.01	1.07	1.77	99.3	20	
Lead	1.09	0.01	1.07	1.68	98.9	20	
Molybdenum	1.11	0.01	1.08	2.79	101	20	
Selenium	1.11	0.001	1.08	2.78	101	20	
Uranium	1.17	0.0003	1.13	2.90	98.5	20	
Vanadium	1.1	0.1	1.1	1.83	99.9	20	

S1703119-011DMSD (03/13/17 22:45)		RunNo: 143795					
Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
Arsenic	1.09	0.001	1.09	0.128	99.2	20	
Barium	1.0	0.1	1.0	0.163	90.1	20	
Cadmium	1.08	0.001	1.07	0.594	98.0	20	
Copper	1.07	0.01	1.07	0.0566	97.3	20	
Lead	1.06	0.01	1.06	0.328	96.5	20	
Molybdenum	1.10	0.01	1.09	0.641	100	20	
Selenium	1.11	0.001	1.10	1.60	101	20	
Uranium	3.66	0.0003	3.67	0.0419	90.8	20	
Vanadium	1.1	0.1	1.1	0.246	99.2	20	

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - G Analyzed at IML Gillette laboratory
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits
  - X Matrix Effect
  - E Value above quantitation range
  - 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



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)  
**Work Order:** S1703119  
**Project:** MUI Stability Monitoring

**Date:** 4/10/2017  
**Report ID:** S1703119001

Fluoride by SM 4500		Sample Type	MBLK		Units: mg/L				
BLANK (03/10/17 21:34)	Analyte	RunNo:	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
	Fluoride	143807	ND	0.1					

Fluoride by SM 4500		Sample Type	LCS		Units: mg/L				
ATQC (03/15/17 16:28)	Analyte	RunNo:	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
	Fluoride	143889	2.9	0.1	3		97.8	85 - 115	

Fluoride by SM 4500		Sample Type	MS		Units: mg/L				
S1703117-005ASPK MS (03/10/17 21:38)	Analyte	RunNo:	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
	Fluoride	143807	2.9	0.1	2.5	0.4	103	80 - 120	

Fluoride by SM 4500		Sample Type	MSD		Units: mg/L				
S1703117-005ASPK MSD (03/10/17 21:41)	Analyte	RunNo:	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
	Fluoride	143807	2.9	0.1	2.9	0.479	103	20	

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - G Analyzed at IML Gillette laboratory
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits
  - X Matrix Effect
  - E Value above quantitation range
  - 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

**ANALYTICAL QC SUMMARY REPORT**

**CLIENT:** Power Resources (Cameco)  
**Work Order:** S1703119  
**Project:** MUI Stability Monitoring

**Date:** 4/10/2017  
**Report ID:** S1703119001

**Gross Alpha, Beta by SM 7110B**Sample Type **MBLK**

Units: pCi/L

MB-441 (03/21/17 11:02)	RunNo: 144152	PrepDate: 03/16/17 0:00	BatchID R144152				Qual
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
Gross Alpha (Dissolved)	ND	2					
Gross Beta (Dissolved)	ND	3					

MB-442 (03/27/17 10:32)	RunNo: 144154	PrepDate: 03/20/17 0:00	BatchID R144154				Qual
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-441 (03/21/17 11:02)	RunNo: 144152	PrepDate: 03/16/17 0:00	BatchID R144152				Qual
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
Gross Alpha (Dissolved)	68	2	74		92.1	77.4 - 130	
Gross Beta (Dissolved)	141	3	122		116	80 - 131	

LCS-442 (03/27/17 10:32)	RunNo: 144154	PrepDate: 03/20/17 0:00	BatchID R144154				Qual
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
Gross Alpha (Dissolved)	83	2	74		112	77.4 - 130	
Gross Beta (Dissolved)	144	3	122		118	80 - 131	

**Gross Alpha, Beta by SM 7110B**Sample Type **MS**

Units: pCi/L

S1703118-001F MS (03/21/17 11:02)	RunNo: 144152	PrepDate: 03/16/17 0:00	BatchID R144152				Qual
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
Gross Alpha (Dissolved)	115	2	74	32	112	52.4 - 124	
Gross Beta (Dissolved)	174	3	122	17	129	80 - 145	

S1703119-007F MS (03/21/17 17:07)	RunNo: 144152	PrepDate: 03/16/17 0:00	BatchID R144152				Qual
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
Gross Beta (Dissolved)	380	3	122	205	143	80 - 145	

**Gross Alpha, Beta by SM 7110B**Sample Type **DUP**

Units: pCi/L

S1703119-008F DUP (03/21/17 17:07)	RunNo: 144152	PrepDate: 03/16/17 0:00	BatchID R144152				Qual
Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
Gross Alpha (Dissolved)	1220	2	1240	1.69		20	
Gross Beta (Dissolved)	372	3	368	0.971		20	

S1703119-009F DUP (03/21/17 17:07)	RunNo: 144152	PrepDate: 03/16/17 0:00	BatchID R144152				Qual
Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
Gross Alpha (Dissolved)	949	2	985	3.80		20	
Gross Beta (Dissolved)	302	3	302	0.0190		20	

**Qualifiers:** B Analyte detected in the associated Method Blank  
 G Analyzed at IML Gillette laboratory  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 R RPD outside accepted recovery limits  
 X Matrix Effect

E Value above quantitation range  
 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





### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)  
**Work Order:** S1703119  
**Project:** MUI Stability Monitoring

**Date:** 4/10/2017  
**Report ID:** S1703119001

**Anions by ION Chromatography**

Sample Type **MBLK**

Units: mg/L

BLK (03/20/17 09:04)		RunNo: 143962						
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 (03/13/17 08:36)		RunNo: 143781						
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Chloride	31	1	30		102	90 - 110		
Sulfate	143	1	150		95.6	90 - 110		

**Anions by ION Chromatography**

Sample Type **MS**

Units: mg/L

S1703119-001ASPK (03/13/17 19:04)		RunNo: 143781						
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Chloride	40	1	27.3	10	110	80 - 120		
Sulfate	295	1	205	73	109	80 - 120		

S1703119-006ASPK (03/20/17 13:17)		RunNo: 143962						
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Chloride	28	1	18.2	8	107	80 - 120		
Sulfate	253	1	136	102	111	80 - 120		

**Anions by ION Chromatography**

Sample Type **MSD**

Units: mg/L

S1703119-001ASPKD (03/13/17 19:17)		RunNo: 143781						
Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual	
Chloride	40	1	40	0.242	110	20		
Sulfate	296	1	295	0.157	109	20		

S1703119-006ASPKD (03/20/17 13:32)		RunNo: 143962						
Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual	
Chloride	28	1	28	0.503	106	20		
Sulfate	252	1	253	0.707	109	20		

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - G Analyzed at IML Gillette laboratory
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits
  - X Matrix Effect
  - E Value above quantitation range
  - 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



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)  
**Work Order:** S1703119  
**Project:** MUI Stability Monitoring

**Date:** 4/10/2017  
**Report ID:** S1703119001

**Cations by ICP (Method 200.7)**

Sample Type **MBLK**

Units: mg/L

MBLK DISS/CAT (03/16/17 10:40)		RunNo: 143901						
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 (03/13/17 10:53)		RunNo: 143772						
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Calcium	40	1	40		99.4	85 - 115		
Magnesium	39	1	40		96.8	85 - 115		
Potassium	41	1	40		102	85 - 115		
Sodium	39	1	40		96.2	85 - 115		

**Cations by ICP (Method 200.7)**

Sample Type **MS**

Units: mg/L

S1703119-007AS (03/13/17 13:48)		RunNo: 143772						
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Calcium	79	1	25	58	84.9	70 - 130		
Magnesium	36	1	25	13	89.2	70 - 130		
Potassium	32	1	25	7	97.9	70 - 130		
Sodium	34	1	25	11	93.0	70 - 130		

S1703119-017AS (03/13/17 14:23)		RunNo: 143772						
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
Calcium	77	1	25	56	84.9	70 - 130		
Magnesium	37	1	25	14	92.1	70 - 130		
Potassium	32	1	25	7	99.4	70 - 130		
Sodium	37	1	25	14	90.8	70 - 130		

**Cations by ICP (Method 200.7)**

Sample Type **MSD**

Units: mg/L

S1703119-007ASD (03/13/17 13:50)		RunNo: 143772						
Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual	
Calcium	80	1	79	1.20	88.7	20		
Magnesium	37	1	36	2.87	93.3	20		
Potassium	32	1	32	2.37	101	20		
Sodium	35	1	34	3.19	97.4	20		

S1703119-017ASD (03/13/17 14:26)		RunNo: 143772						
Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual	
Calcium	77	1	77	0.206	84.2	20		
Magnesium	36	1	37	0.719	91.1	20		
Potassium	32	1	32	0.845	98.3	20		
Sodium	37	1	37	0.145	90.6	20		

**Qualifiers:** B Analyte detected in the associated Method Blank  
 G Analyzed at IML Gillette laboratory  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 R RPD outside accepted recovery limits  
 X Matrix Effect

E Value above quantitation range  
 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



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)  
**Work Order:** S1703119  
**Project:** MUI Stability Monitoring

**Date:** 4/10/2017  
**Report ID:** S1703119001

Nitrogen, Ammonia (as N)		Sample Type	MBLK		Units: mg/L				
Analyte	RunNo: 143777	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
WCB (03/13/17 11:54)									
Nitrogen, Ammonia (As N)		ND	0.1						

Nitrogen, Ammonia (as N)		Sample Type	LCS		Units: mg/L				
Analyte	RunNo: 143777	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
ICV1 (03/13/17 13:20)									
Nitrogen, Ammonia (As N)		2.6	0.1	2.5		104	90 - 110		

Nitrogen, Ammonia (as N)		Sample Type	MS		Units: mg/L				
Analyte	RunNo: 143777	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
S1703119-006C (03/13/17 12:16)									
Nitrogen, Ammonia (As N)		2.8	0.1	2.5	0.2	102	90 - 110		

Analyte	RunNo: 143777	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1703119-014C (03/13/17 12:29)								
Nitrogen, Ammonia (As N)		2.7	0.1	2.5	0.1	102	90 - 110	

Nitrogen, Ammonia (as N)		Sample Type	MSD		Units: mg/L				
Analyte	RunNo: 143777	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual	
S1703119-006C (03/13/17 12:16)									
Nitrogen, Ammonia (As N)		2.7	0.1	2.8	2.90	98.8	20		

Analyte	RunNo: 143777	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1703119-014C (03/13/17 12:32)								
Nitrogen, Ammonia (As N)		2.7	0.1	2.7	0.692	103	20	

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - G Analyzed at IML Gillette laboratory
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits
  - X Matrix Effect
  - E Value above quantitation range
  - 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



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)  
**Work Order:** S1703119  
**Project:** MUI Stability Monitoring

**Date:** 4/10/2017  
**Report ID:** S1703119001

Nitrogen, Nitrate-Nitrite (as N)		Sample Type	MBLK		Units: mg/L				
BLANK (03/14/17 14:04)			RunNo:	143823					
Analyte			Result		RL	Spike	Ref Samp	%REC	% Rec Limits
	Nitrogen, Nitrate-Nitrite (as N)			ND	0.1				

Nitrogen, Nitrate-Nitrite (as N)		Sample Type	LCS		Units: mg/L				
QC (03/14/17 14:07)			RunNo:	143823					
Analyte			Result		RL	Spike	Ref Samp	%REC	% Rec Limits
	Nitrogen, Nitrate-Nitrite (as N)			8.5	0.1	8.57		99.4	90 - 110

Nitrogen, Nitrate-Nitrite (as N)		Sample Type	MS		Units: mg/L				
S1703119-007C (03/14/17 15:43)			RunNo:	143823					
Analyte			Result		RL	Spike	Ref Samp	%REC	% Rec Limits
	Nitrogen, Nitrate-Nitrite (as N)			2.4	0.1	2.5	ND	96.6	90 - 110

S1703119-017C (03/14/17 16:07)			RunNo:	143823					
Analyte			Result		RL	Spike	Ref Samp	%REC	% Rec Limits
	Nitrogen, Nitrate-Nitrite (as N)			2.4	0.1	2.5	ND	97.8	90 - 110

Nitrogen, Nitrate-Nitrite (as N)		Sample Type	MSD		Units: mg/L				
S1703119-007C (03/14/17 15:45)			RunNo:	143823					
Analyte			Result		RL	Conc	%RPD	%REC	% RPD Limits
	Nitrogen, Nitrate-Nitrite (as N)			2.4	0.1	2.4	0.457	96.2	20

S1703119-017C (03/14/17 16:09)			RunNo:	143823					
Analyte			Result		RL	Conc	%RPD	%REC	% RPD Limits
	Nitrogen, Nitrate-Nitrite (as N)			2.4	0.1	2.4	0.164	97.6	20

Radium 228 by Ga/Tech		Sample Type	MBLK		Units: pCi/L				
MB-425 (03/30/17 16:35)			RunNo:	144450	PrepDate:	03/20/17 12:00	BatchID	12995	
Analyte			Result		RL	Spike	Ref Samp	%REC	% Rec Limits
	Radium 228 (Dissolved)			ND	1				

Radium 228 by Ga/Tech		Sample Type	LCS		Units: pCi/L				
LCS-425 (03/30/17 19:39)			RunNo:	144450	PrepDate:	03/20/17 12:00	BatchID	12995	
Analyte			Result		RL	Spike	Ref Samp	%REC	% Rec Limits
	Radium 228 (Dissolved)			39	1	40.1		96.3	65.9 - 132

Radium 228 by Ga/Tech		Sample Type	MS		Units: pCi/L				
MS-425 (03/31/17 01:47)			RunNo:	144450	PrepDate:	03/20/17 12:00	BatchID	12995	
Analyte			Result		RL	Spike	Ref Samp	%REC	% Rec Limits
	Radium 228 (Dissolved)			32	1	40.1	ND	80.9	65.9 - 132

Radium 228 by Ga/Tech		Sample Type	MSD		Units: pCi/L				
MSD-425 (03/31/17 04:51)			RunNo:	144450	PrepDate:	03/20/17 12:00	BatchID	12995	
Analyte			Result		RL	Conc	%RPD	%REC	% RPD Limits
	Radium 228 (Dissolved)			34	1	32	4.45	84.5	20

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - G Analyzed at IML Gillette laboratory
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits
  - X Matrix Effect
  - E Value above quantitation range
  - 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



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)  
**Work Order:** S1703119  
**Project:** MUI Stability Monitoring

**Date:** 4/10/2017  
**Report ID:** S1703119001

**Radium 226 in Water - Dissolved**

Sample Type **MBLK**

Units: pCi/L

MB-1730 (04/05/17 09:32)	RunNo: 144493	PrepDate: 03/28/17 0:00	BatchID 13008				
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual

Radium 226 (Dissolved) ND 0.2

MB-1731 (04/07/17 09:00)	RunNo: 144548	PrepDate: 03/28/17 0:00	BatchID 13009				
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-1730 (04/05/17 09:32)	RunNo: 144493	PrepDate: 03/28/17 0:00	BatchID 13008				
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual

Radium 226 (Dissolved) 6.1 0.2 5.89 103 67.1 - 122

LCS-1731 (04/07/17 09:00)	RunNo: 144548	PrepDate: 03/28/17 0:00	BatchID 13009				
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual

Radium 226 (Dissolved) 6.4 0.2 5.89 109 67.1 - 122

**Radium 226 in Water - Dissolved**

Sample Type **MS**

Units: pCi/L

MS-1730 (04/05/17 09:32)	RunNo: 144493	PrepDate: 03/28/17 0:00	BatchID 13008				
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual

Radium 226 (Dissolved) 6.2 0.2 5.89 ND 105 65 - 131

MS-1731 (04/07/17 09:00)	RunNo: 144548	PrepDate: 03/28/17 0:00	BatchID 13009				
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual

Radium 226 (Dissolved) 6.4 0.2 5.89 ND 109 65 - 131

**Radium 226 in Water - Dissolved**

Sample Type **MSD**

Units: pCi/L

MSD-1730 (04/05/17 09:32)	RunNo: 144493	PrepDate: 03/28/17 0:00	BatchID 13008				
Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual

Radium 226 (Dissolved) 6.1 0.2 6.2 2.20 103 20

MSD-1731 (04/07/17 09:01)	RunNo: 144548	PrepDate: 03/28/17 0:00	BatchID 13009				
Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual

Radium 226 (Dissolved) 6.5 0.2 6.4 1.40 111 20

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - G Analyzed at IML Gillette laboratory
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits
  - X Matrix Effect
  - E Value above quantitation range
  - 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



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)  
**Work Order:** S1703119  
**Project:** MUI Stability Monitoring

**Date:** 4/10/2017  
**Report ID:** S1703119001

Silica as SiO2		Sample Type	MBLK		Units: mg/L			
MBLK DISS/CAT (03/13/17 10:48)		RunNo: 143775						
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 (03/13/17 10:50)		RunNo: 143775						
Analyte		Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
Silica as SiO2		2.1	0.1	2.14		97.6	85 - 115	

Silica as SiO2		Sample Type	DUP		Units: mg/L			
S1703119-006DD (03/13/17 13:35)		RunNo: 143775						
Analyte		Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
Silica as SiO2		13	1	13	0.430		20	

S1703119-016DD (03/13/17 14:19)		RunNo: 143775						
Analyte		Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
Silica as SiO2		13	1	13	1.91		20	

Solids By SM 2540		Sample Type	MBLK		Units: mg/L			
DI (03/13/17 10:18)		RunNo: 143898						
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 (03/13/17 10:19)		RunNo: 143898						
Analyte		Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
Total Dissolved Solids (180)		230	10	226		100	90 - 110	

Solids By SM 2540		Sample Type	DUP		Units: mg/L			
S1703119-009A (03/13/17 10:52)		RunNo: 143898						
Analyte		Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
Total Dissolved Solids (180)		470	10	460	0.858		20	

S1703119-019A (03/13/17 11:03)		RunNo: 143898						
Analyte		Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
Total Dissolved Solids (180)		260	10	260	1.53		20	

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - G Analyzed at IML Gillette laboratory
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits
  - X Matrix Effect
  - E Value above quantitation range
  - 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



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)  
**Work Order:** S1703119  
**Project:** MUI Stability Monitoring

**Date:** 4/10/2017  
**Report ID:** S1703119001

**Total (200.2) Metals by EPA 200.7 ICP - Water**

Sample Type **MBLK**

Units: mg/L

MB-12917 (03/13/17 14:53)	RunNo: 143779	PrepDate: 03/13/17 8:50	BatchID 12917				
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual

Iron	ND	0.05					
Manganese	ND	0.02					

MB-12919 (03/15/17 12:46)	RunNo: 143856	PrepDate: 03/14/17 8:40	BatchID 12919				
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-12917 (03/13/17 14:56)	RunNo: 143779	PrepDate: 03/13/17 8:50	BatchID 12917				
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual

Iron	0.47	0.05	0.5		92.9	85 - 115	
Manganese	0.19	0.02	0.2		92.9	85 - 115	

LCS-12919 (03/15/17 12:49)	RunNo: 143856	PrepDate: 03/14/17 8:40	BatchID 12919				
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual

Iron	0.49	0.05	0.5		96.9	85 - 115	
Manganese	0.20	0.02	0.2		100	85 - 115	

**Total (200.2) Metals by EPA 200.7 ICP - Water**

Sample Type **MS**

Units: mg/L

S1703119-002ES (03/13/17 15:47)	RunNo: 143779	PrepDate: 03/13/17 8:50	BatchID 12917				
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual

Iron	0.86	0.05	0.5	0.38	95.1	70 - 130	
Manganese	0.25	0.01	0.2	0.06	94.9	70 - 130	

S1703119-012ES (03/15/17 13:04)	RunNo: 143856	PrepDate: 03/14/17 8:40	BatchID 12919				
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual

Iron	4.15	0.05	0.5	3.67	95.4	70 - 130	
Manganese	0.31	0.01	0.2	0.12	95.4	70 - 130	

**Total (200.2) Metals by EPA 200.7 ICP - Water**

Sample Type **MSD**

Units: mg/L

S1703119-002EMSD (03/13/17 15:50)	RunNo: 143779	PrepDate: 03/13/17 8:50	BatchID 12917				
Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual

Iron	0.86	0.05	0.86	0.126	95.3	20	
Manganese	0.25	0.01	0.25	0.0454	94.8	20	

S1703119-012EMSD (03/15/17 13:06)	RunNo: 143856	PrepDate: 03/14/17 8:40	BatchID 12919				
Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual

Iron	4.12	0.05	4.15	0.566	90.7	20	
Manganese	0.31	0.01	0.31	0.141	95.7	20	

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- G Analyzed at IML Gillette laboratory
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- X Matrix Effect

- E Value above quantitation range
- 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



### ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Power Resources (Cameco)  
**Work Order:** S1703119  
**Project:** MUI Stability Monitoring

**Date:** 4/10/2017  
**Report ID:** S1703119001

**pH Water by SM 4500 H B**

Sample Type **LCS**

Units: s.u.

ATQC (03/14/17 15:41)	RunNo: 143835							
Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual	
pH	8.6	0.1	8.6		99.9	90 - 110		

**pH Water by SM 4500 H B**

Sample Type **DUP**

Units: s.u.

S1703119-003AD (03/10/17 23:03)	RunNo: 143807							
Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual	
pH	7.8	0.1	7.7	1.21		20		

S1703119-013AD (03/11/17 01:08)	RunNo: 143807							
Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual	
pH	8.1	0.1	8.1	0.108		20		

- Qualifiers:**
- B Analyte detected in the associated Method Blank
  - G Analyzed at IML Gillette laboratory
  - J Analyte detected below quantitation limits
  - ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits
  - X Matrix Effect
  - E Value above quantitation range
  - 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