



Sample Analysis Report

Company: Cameco Resources, Crow Butte Operation
PO Box 169
Crawford, NE 69339

Date Reported 1/20/2012
Report ID: S1201090001

ProjectName: Marshland Expansion Area
Lab ID: S1201090-001
ClientSample ID: MA-1
COC: WEB

WorkOrder: S1201090
CollectionDate: 1/4/2012
DateReceived: 1/9/2012
FieldSampler: RG
Matrix: Filter

Comments Sampled 10/1/2011 - 1/4/2012 (2011 4th Qtr)

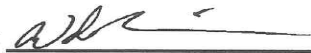
Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
Field						
Actual Volume	3850477	Liters			Field	1/4/2012
Radionuclides - Filter						
Lead 210	72.2	pCi/Filter		2	OTW01	1/19/2012 12:55:00 PM SH
Lead 210 Precision (±)	6.4	pCi/Filter			OTW01	1/19/2012 12:55:00 PM SH
Lead 210	1.9E-14	µCi/mL		2.0E-15	Calculation	2/7/2012 5:07:39 PM WN
Lead 210 Precision (±)	1.7E-15	µCi/mL			Calculation	2/7/2012 5:07:39 PM WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	1/18/2012 11:20:00 AM SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	1/18/2012 11:20:00 AM SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	2/7/2012 5:07:39 PM WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	2/7/2012 5:07:39 PM WN
Thorium 230	ND	pCi/Filter		0.3	ACW10	1/31/2012 1:59:00 PM WL
Thorium 230 Precision (±)	NA	pCi/Filter			ACW10	1/31/2012 1:59:00 PM WL
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	2/7/2012 5:07:39 PM WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	2/7/2012 5:07:39 PM WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	2/6/2012 12:15:01 PM MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	2/7/2012 5:07:39 PM WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers: * Value exceeds Maximum Contaminant Level
C Calculated Value
H Holding times for preparation or analysis exceeded
L Analyzed by a contract laboratory
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

Company: Cameco Resources, Crow Butte Operation
PO Box 169
Crawford, NE 69339

Date Reported: 1/20/2012
Report ID: S1201090001

ProjectName: Marshland Expansion Area
Lab ID: S1201090-002
ClientSample ID: MA-2
COC: WEB

WorkOrder: S1201090
CollectionDate: 1/4/2012
DateReceived: 1/9/2012
FieldSampler: RG
Matrix: Filter

Comments Sampled 10/1/2011 - 1/4/2012 (2011 4th Qtr)

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
Field						
Actual Volume	3851229	Liters			Field	1/4/2012
Radionuclides - Filter						
Lead 210	86.9	pCi/Filter		2	OTW01	1/19/2012 12:55:00 PM SH
Lead 210 Precision (±)	6.9	pCi/Filter			OTW01	1/19/2012 12:55:00 PM SH
Lead 210	2.3E-14	µCi/mL		2.0E-15	Calculation	2/7/2012 5:07:39 PM WN
Lead 210 Precision (±)	1.8E-15	µCi/mL			Calculation	2/7/2012 5:07:39 PM WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	1/18/2012 11:20:00 AM SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	1/18/2012 11:20:00 AM SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	2/7/2012 5:07:39 PM WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	2/7/2012 5:07:39 PM WN
Thorium 230	ND	pCi/Filter		0.3	ACW10	1/31/2012 1:59:00 PM WL
Thorium 230 Precision (±)	NA	pCi/Filter			ACW10	1/31/2012 1:59:00 PM WL
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	2/7/2012 5:07:39 PM WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	2/7/2012 5:07:39 PM WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	2/6/2012 2:44:12 PM MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	2/7/2012 5:07:39 PM WN

These results apply only to the samples tested.

RL - Reporting Limit

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S Spike Recovery outside accepted recovery limits

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M Value exceeds Monthly Ave or MCL
O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

Company: Cameco Resources, Crow Butte Operation
PO Box 169
Crawford, NE 69339

Date Reported: 1/20/2012
Report ID: S1201090001

ProjectName: Marshland Expansion Area
Lab ID: S1201090-003
ClientSample ID: MA-3
COC: WEB

WorkOrder: S1201090
CollectionDate: 1/4/2012
DateReceived: 1/9/2012
FieldSampler: RG
Matrix: Filter

Comments Sampled 10/1/2011 - 1/4/2012 (2011 4th Qtr)

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
Field						
Actual Volume	3852794	Liters			Field	1/4/2012
Radionuclides - Filter						
Lead 210	83.0	pCi/Filter		2	OTW01	1/19/2012 12:55:00 PM SH
Lead 210 Precision (±)	6.2	pCi/Filter			OTW01	1/19/2012 12:55:00 PM SH
Lead 210	2.2E-14	µCi/mL		2.0E-15	Calculation	2/7/2012 5:07:39 PM WN
Lead 210 Precision (±)	1.6E-15	µCi/mL			Calculation	2/7/2012 5:07:39 PM WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	1/18/2012 11:20:00 AM SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	1/18/2012 11:20:00 AM SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	2/7/2012 5:07:39 PM WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	2/7/2012 5:07:39 PM WN
Thorium 230	0.4	pCi/Filter		0.3	ACW10	1/31/2012 1:59:00 PM WL
Thorium 230 Precision (±)	0.4	pCi/Filter			ACW10	1/31/2012 1:59:00 PM WL
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	2/7/2012 5:07:39 PM WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	2/7/2012 5:07:39 PM WN
Uranium	0.3	pCi/Filter		0.3	EPA 200.8	2/6/2012 12:28:22 PM MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	2/7/2012 5:07:39 PM WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

Company: Cameco Resources, Crow Butte Operation
PO Box 169
Crawford, NE 69339

Date Reported: 1/20/2012
Report ID: S1201090001

ProjectName: Marshland Expansion Area
Lab ID: S1201090-004
ClientSample ID: MA-4
COC: WEB

WorkOrder: S1201090
CollectionDate: 1/4/2012
DateReceived: 1/9/2012
FieldSampler: RG
Matrix: Filter

Comments Sampled 10/1/2011 - 1/4/2012 (2011 4th Qtr)

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
Field						
Actual Volume	3853046	Liters			Field	1/4/2012
Radionuclides - Filter						
Lead 210	91.2	pCi/Filter		2	OTW01	1/19/2012 12:55:00 PM SH
Lead 210 Precision (±)	7.2	pCi/Filter			OTW01	1/19/2012 12:55:00 PM SH
Lead 210	2.4E-14	µCi/mL		2.0E-15	Calculation	2/7/2012 5:07:39 PM WN
Lead 210 Precision (±)	1.9E-15	µCi/mL			Calculation	2/7/2012 5:07:39 PM WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	1/18/2012 11:20:00 AM SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	1/18/2012 11:20:00 AM SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	2/7/2012 5:07:39 PM WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	2/7/2012 5:07:39 PM WN
Thorium 230	ND	pCi/Filter		0.3	ACW10	1/31/2012 2:00:00 PM WL
Thorium 230 Precision (±)	NA	pCi/Filter			ACW10	1/31/2012 2:00:00 PM WL
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	2/7/2012 5:07:39 PM WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	2/7/2012 5:07:39 PM WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	1/11/2012 10:31:39 AM MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	2/7/2012 5:07:39 PM WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: Wade Nieuwsma
Wade Nieuwsma, Assistant Laboratory Manager



Sample Analysis Report

Company: Cameco Resources, Crow Butte Operation
PO Box 169
Crawford, NE 69339

Date Reported: 1/20/2012
Report ID: S1201090001

ProjectName: Marshland Expansion Area
Lab ID: S1201090-005
ClientSample ID: MA-5
COC: WEB

WorkOrder: S1201090
CollectionDate: 1/4/2012
DateReceived: 1/9/2012
FieldSampler: RG
Matrix: Filter

Comments Sampled 10/1/2011 - 1/4/2012 (2011 4th Qtr)

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init
Field						
Actual Volume	3856136	Liters			Field	1/4/2012
Radionuclides - Filter						
Lead 210	70.5	pCi/Filter		2	OTW01	1/19/2012 12:55:00 PM SH
Lead 210 Precision (±)	6.0	pCi/Filter			OTW01	1/19/2012 12:55:00 PM SH
Lead 210	1.8E-14	µCi/mL		2.0E-15	Calculation	2/7/2012 5:07:39 PM WN
Lead 210 Precision (±)	1.6E-15	µCi/mL			Calculation	2/7/2012 5:07:39 PM WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	1/18/2012 11:20:00 AM SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	1/18/2012 11:20:00 AM SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	2/7/2012 5:07:39 PM WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	2/7/2012 5:07:39 PM WN
Thorium 230	0.4	pCi/Filter		0.3	ACW10	1/31/2012 2:00:00 PM WL
Thorium 230 Precision (±)	0.4	pCi/Filter			ACW10	1/31/2012 2:00:00 PM WL
Thorium 230	1.0E-16	µCi/mL		1.0E-16	Calculation	2/7/2012 5:07:39 PM WN
Thorium 230 Precision (±)	1.0E-16	µCi/mL			Calculation	2/7/2012 5:07:39 PM WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	1/11/2012 10:39:41 AM MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	2/7/2012 5:07:39 PM WN


These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- O Outside the Range of Dilutions

Reviewed by: 
Wade Nieuwsma, Assistant Laboratory Manager



Inter-Mountain Labs

Your Environmental Monitoring Partner

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

ANALYTICAL QC SUMMARY REPORT**CLIENT:** Cameco Resources, Crow Butte Operation**Date:** 1/20/2012**Work Order:** S1201090**Report ID:** S1201090001**Project:** Marshland Expansion Area**Uranium, Air Filter Analysis**Sample Type **MBLK** Units: pCi/Filter

Sample ID	RunNo: 78768	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
BLK	01/11/12 12:17	Uranium	ND	0.3					

Sample Type **LCS** Units: pCi/Filter

Sample ID	RunNo: 78768	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	01/11/12 10:05	Uranium	65.8	0.3	67.7		97.1	85 - 115	

Sample Type **MS** Units: pCi/Filter

Sample ID	RunNo: 78768	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
S1201090-001AS	01/11/12 10:19	Uranium	726	0.3	745	16.6	95.3	70 - 130	

Sample Type **MSD** Units: pCi/Filter

Sample ID	RunNo: 78768	Analyte	Result	RL	Conc	%RPD	%REC	% RPD Limits	Qual
S1201090-001AMSD	01/11/12 10:21	Uranium	745	0.3	726	2.68		20	

Sample Type **DUP** Units: pCi/Filter

Sample ID	RunNo: 78768	Analyte	Result	RL	Ref Samp	%RPD	%REC	% RPD Limits	Qual
S1201090-001AD	01/11/12 10:16	Uranium	ND	0.3	16.6			20	

Lead 210 in FiltersSample Type **MBLK** Units: pCi/Filter

Sample ID	RunNo: 79071	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
AMB12-011	01/19/12 10:44	Lead 210	ND	2					

Sample Type **LCS** Units: pCi/Filter

Sample ID	RunNo: 79071	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	01/19/12 0:00	Lead 210	14	2	12.8		112	70 - 130	

Radium 226 Air Filter AnalysisSample Type **MBLK** Units: pCi/Filter

Sample ID	RunNo: 79035	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-011	01/18/12 11:20	Radium 226	ND	0.3					

Sample Type **LCS** Units: pCi/Filter

Sample ID	RunNo: 79035	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS12-011	01/18/12 11:20	Radium 226	5.0	0.3	5.06		99.5	70 - 130	

Sample Type **MS** Units: pCi/Filter

Sample ID	RunNo: 79035	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
TAP WATER MS	01/18/12 13:44	Radium 226	4.8	0.3	5.06	ND	94.1	70 - 130	

Qualifiers:

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

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



Inter-Mountain Labs

Your Environmental Monitoring Partner

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

ANALYTICAL QC SUMMARY REPORT

CLIENT: Cameco Resources, Crow Butte Operation

Date: 1/20/2012

Work Order: S1201090

Report ID: S1201090001

Project: Marshland Expansion Area

Thorium Air Filter Analysis

Sample Type **MBLK** Units: pCi/Filter

Sample ID	RunNo: 79103	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
MB12-011	01/18/12 13:43	Thorium-230	ND	0.2					

Sample Type **LCS** Units: pCi/Filter

Sample ID	RunNo: 79103	Analyte	Result	RL	Spike	Ref Samp	%REC	% Rec Limits	Qual
LCS	01/18/12 0:00	Thorium-230	12.3	0.2	12.5		98.5	70 - 130	

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

**Air Filter Summary Report****Client: Cameco Resources, Crow Butte Operation****Client Sample ID: MA-1**

Lab ID: S1201090-001			Sampled 10/1/2011-1/4/2012 (2011 4th Qtr)					
			Sample Air Volume: 3850477 Liters					
Analyte	Result pCi/filter	Precision ± pCi/filter	Result µCi/ml	Precision ± µCi/ml	RL	10 CFR Pt 20 Effluent Limit	Effluent Class	% Effluent Conc.
Lead 210	72.2	6.4	2E-14	2E-15	2E-15	6 E-13	Day	3.33
Radium 226	<0.3		<1E-16		1E-16	9 E-13	Week	0.00
Thorium 230	<0.3		<1E-16		1E-16	3 E-14	Year	0.00
Uranium	<0.3		<1E-16		1E-16	9 E-14	Year	0.00

**Air Filter Summary Report****Client: Cameco Resources, Crow Butte Operation****Client Sample ID: MA-2**

Lab ID: S1201090-002								
Sampled 10/1/2011-1/4/2012 (2011 4th Qtr)					Sample Air Volume: 3851229 Liters			
Analyte	Result pCi/filter	Precision ± pCi/filter	Result µCi/ml	Precision ± µCi/ml	RL	10 CFR Pt 20 Effluent Limit	Effluent Class	% Effluent Conc.
Lead 210	86.9	6.9	2E-14	2E-15	2E-15	6 E-13	Day	3.33
Radium 226	<0.3		<1E-16		1E-16	9 E-13	Week	0.00
Thorium 230	<0.3		<1E-16		1E-16	3 E-14	Year	0.00
Uranium	<0.3		<1E-16		1E-16	9 E-14	Year	0.00

**Air Filter Summary Report****Client: Cameco Resources, Crow Butte Operation****Client Sample ID: MA-3**

Lab ID: S1201090-003 Sampled 10/1/2011-1/4/2012 (2011 4th Qtr)					Sample Air Volume: 3852794 Liters			
Analyte	Result pCi/filter	Precision ± pCi/filter	Result µCi/ml	Precision ± µCi/ml	RL	10 CFR Pt 20 Effluent Limit	Effluent Class	% Effluent Conc.
Lead 210	83.0	6.2	2E-14	2E-15	2E-15	6 E-13	Day	3.33
Radium 226	<0.3		<1E-16		1E-16	9 E-13	Week	0.00
Thorium 230	0.4	0.4	<1E-16		1E-16	3 E-14	Year	0.00
Uranium	0.3		<1E-16		1E-16	9 E-14	Year	0.00

**Air Filter Summary Report****Client: Cameco Resources, Crow Butte Operation****Client Sample ID: MA-4**

Lab ID: S1201090-004								
Sampled 10/1/2011-1/4/2012 (2011 4th Qtr)								
Sample Air Volume: 3853046 Liters								
Analyte	Result pCi/filter	Precision ± pCi/filter	Result µCi/ml	Precision ± µCi/ml	RL	10 CFR Pt 20 Effluent Limit	Effluent Class	% Effluent Conc.
Lead 210	91.2	7.2	2E-14	2E-15	2E-15	6 E-13	Day	3.33
Radium 226	<0.3		<1E-16		1E-16	9 E-13	Week	0.00
Thorium 230	<0.3		<1E-16		1E-16	3 E-14	Year	0.00
Uranium	<0.3		<1E-16		1E-16	9 E-14	Year	0.00

**Air Filter Summary Report****Client: Cameco Resources, Crow Butte Operation****Client Sample ID: MA-5**

Lab ID: S1201090-005								
Sampled 10/1/2011-1/4/2012 (2011 4th Qtr)								
Sample Air Volume: 3856136 Liters								
Analyte	Result pCi/filter	Precision ± pCi/filter	Result µCi/ml	Precision ± µCi/ml	RL	10 CFR Pt 20 Effluent Limit	Effluent Class	% Effluent Conc.
Lead 210	70.5	6.0	2E-14	2E-15	2E-15	6 E-13	Day	3.33
Radium 226	<0.3		<1E-16		1E-16	9 E-13	Week	0.00
Thorium 230	0.4	0.4	1E-16	1E-16	1E-16	3 E-14	Year	0.33
Uranium	<0.3		<1E-16		1E-16	9 E-14	Year	0.00

**Date:** 5/1/2015**CLIENT:** Cameco Resources, Crow Butte Operation**Project:** Marsland Expansion Area**Lab Order:** S1201090**CASE NARRATIVE****Report ID:** S1201090002

(Replaces S1201090001)

Samples MA-1, MA-2, MA-3, MA-4, and MA-5 were received on January 9, 2012.

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

NRC radiological air particulate filters, animal, vegetation, soil and sediment samples may be composited by date and location per client's monitoring program requirements. Highly carbonaceous samples may require ashing. Samples are subjected to a modified USEPA SW-846 Method 3050B mineral acid digestion as appropriate. Analysis of the resulting solutions and digestates is performed using approved TNI, USEPA, and industry recognized analytical techniques. Where client-provided air volumes corresponding to the air filter composites exist, aqueous digestate results are converted to radiological particulate concentrations in air (e.g. $\mu\text{Ci/mL}$). Quality control parameters acceptance criteria are defined by USEPA programs, and in USNRC Regulatory Guide 4.14 (Radiological Effluent and Environmental Monitoring at Uranium Mills), USNRC Regulatory Guide 4.15 (Quality Assurance for Radiological Monitoring Programs – Effluent Streams and the Environment), the TNI Standard EL-V1-2009, and Inter-Mountain Labs internal quality procedures.

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

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager



Inter-Mountain Labs

Sheridan, WY and Gillette, WY

- CHAIN OF CUSTODY RECORD -

Page 1 of 1

All shaded fields must be completed.

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

Client Name		Project Identification		Sampler (Signature/Attestation of Authenticity)		Telephone #		
Crow Butte Resources		Marsland Expansion Area		Rhonda Grantham		(308) 665-2215 ext 115		
Report Address		Contact Name		Rhonda Grantham				
PO Box 169		Email		Rhonda Grantham@cameco.com				
Crawford, NE 69339		Phone		(308) 665-2215 ext. 115				
Invoice Address		Purchase Order #		Quote #				
same		32258-000 OP		CR1106101				
ITEM	LAB ID (Lab Use Only)	DATE	TIME	SAMPLE IDENTIFICATION	Matrix	# of Containers	ANALYSES / PARAMETERS	REMARKS
1	51201090-001			MA-1	FT	1	Uranium-Natural Radium-226 Lead-210 Thorium-230	To be analyzed as per
2	002			MA-2	FT	1		Reg. Guide 4.14
3	003			MA-3	FT	1		
4	004			MA-4	FT	1		
5	005			MA-5	FT	1		MUST ACHIEVE
6								REG. GUIDE 4.14
7								DETECTION LIMITS
8								
9								
10				4th Quarter, 2011 Environmental				
11				Air Sampling Composites				Report Results
12								Prior To:
13								February 6, 2012
14								

LAB COMMENTS	Relinquished By (Signature/Printed)	DATE	TIME	Received By (Signature/Printed)	DATE	TIME
	Rhonda Grantham	01/06/12		Rhonda Grantham	1/9/12	12:55

SHIPPING INFO		MATRIX CODES		TURN AROUND TIMES		COMPLIANCE INFORMATION		ADDITIONAL REMARKS	
UPS	FedEx	Water	Soil	Check desired service	Compliance Monitoring ?	Program (SDWA, NPDES,...)	Sample Air Volumes Attached		
<input type="checkbox"/>	<input type="checkbox"/>	WT	SL	<input checked="" type="checkbox"/> Standard turnaround	Y / N				
<input type="checkbox"/>	<input type="checkbox"/>	Soil	SD	<input type="checkbox"/> RUSH - 5 Working Days	PWSID / Permit #				
<input type="checkbox"/>	<input type="checkbox"/>	Solid	FT	<input type="checkbox"/> URGENT - < 2 Working Days	Chlorinated?	Y / N			
<input type="checkbox"/>	<input type="checkbox"/>	Filter	OT	Rush & Urgent Surcharges will be applied	Sample Disposal: Lab X Client				
<input type="checkbox"/>	<input type="checkbox"/>	Other							

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Environmental Air Sampling

Marsland Expansion Area

Pump # 11114 Pump Location MA-1

Date	Volume (lpm) ^e
11/23/2011	854270
12/7/2011	1.00E+06
12/21/2011	1.00E+06
1/4/2012	996177

Total Volume (lpm)^e 3850447

Environmental Air Sampling

Marsland Expansion Area

Pump #	11110	Pump Location	MA-2
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Date	Volume (lpm)
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11/22/2011	854557
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12/7/2011	1.00E+06
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12/21/2011	1.00E+06
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1/4/2012	996672
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Total Volume (lpm)	3851229
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Environmental Air Sampling

Marsland Expansion Area

Pump #	11111	Pump Location	MA-3
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Date	Volume (lpm)
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11/23/2011	856793
12/7/2011	1.00E+06
12/21/2011	1.00E+06
1/4/2012	996001

Total Volume (lpm)	3852794
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Environmental Air Sampling

Marsland Expansion Area

Pump #	11115	Pump Location	MA-4
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Date	Volume (lpm)
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11/23/2011	857851
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12/7/2011	1.00E+06
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12/21/2011	1.00E+06
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1/4/2012	995195
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Total Volume (lpm)	3853046
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Environmental Air Sampling

Marsland Expansion Area

Pump #	11107	Pump Location	MA-5
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Date	Volume (lpm)
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11/23/2011	859788
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12/7/2011	1.00E+06
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12/21/2011	1.00E+06
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1/4/2012	996348
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Total Volume (lpm)	3856136
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