Cameco

CAMECO RESOURCES
Smith Ranch-Highland Operation
Mail:
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82637 USA

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www.cameco.com

September 14, 2011

Mr. Doug Mandeville
U.S. Nuclear Regulatory Commission
11545 Rockville Pike
Two White Flint North, Mailstop T8 F5
Rockville MD 20852-2738

CERTIFIED MAIL #7010 0780 0001 6001 9961 RETURN RECEIPT REQUESTED

RE: Copies of 2011 Documents, Smith Ranch-Highland Uranium Project, License SUA-1548

Dear Mr. Mandeville:

Power Resources, Inc. d/b/a/ Cameco Resources (Cameco) is herein providing copies of 2011 documents submitted to the Wyoming Department of Environmental Quality - Land Quality Division (WDEQ-LQD) that should have also been provided to the NRC. An NRC inspection of Smith Ranch-Highland operations was conducted on August 29 through September 1, 2011. During the inspection it came to our attention that some notifications and correspondence sent to the WDEQ-LQD had not been received by the NRC. Cameco reviewed 2011 documents placed in the Web-based ADAMS public access database to confirm which documents may not have been received by the NRC.

Attached are 2011 documents that were not verifiable in the ADAMS database. A second set of copies is being mailed directly to the NRC Document Control Desk.

To correct this oversight, Cameco will mail future copies of documents to your attention (2 copies) and to the Document Control Desk (1 copy) by certified mail so confirmation can be maintained. If you have any inquiries, please contact John McCarthy at 307-358-6541, ext. 446 or mailto:John_McCarthy@cameco.com.

Respectfully,

Brent Berg
General Manager

FSME21

BB/kg

Attachments: 2011 copies of Documents to NRC

Cc: File SR 4.6.4.1
Document Control Desk, NRC Certified Mail #7010 0780 0001 6001 9978

Ec: Cameco-Cheyenne

Cameco

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January 28, 2011

Mr. Lowell Spackman, District I Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
122 W. 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL #7010 1060 0000 2139 2257 RETURN RECEIPT REQUESTED

RE: Excursion Report Summary Update, Cameco Resources, Smith Ranch-Highland Uranium Project, Permit 603 and 633

Dear Mr. Spackman:

Power Resources, Inc. d/b/a/ Cameco Resources (CR) is herein providing the monthly Excursion Report Summary for the Smith Ranch-Highland Uranium Project. The summary report shows that monitor wells CM-32 and DM-3 remain on excursion. Monitor well BM-42 was plugged and abandoned on January 14, 2011, after failure of a Mechanical Integrity Test (MIT) on this well. Well BM-42 was subsequently replaced with Well BM-42A and follow-up monitoring confirms that BM-42A is no longer on excursion status. There were no other new excursion events to report during the month.

Please contact Joe Brister at 307-358-6541, ext. 462 or Joe_Brister@cameco.com if you have any questions.

Respectfully,

Tom Cannon
General Manager of Operations

LTC/kss

Attachment: Cameco Resources Excursion Report

cc: File SR 4.3.3.1
ec: CR-Cheyenne

Cameco Resources Excursion Report
Permit Nos. 603 & 633
(January 2011)

Well Identification	Initial Sample Date	Confirmation Sample Date	Excursion Status (on/off)	Parameters Exceeded	Verbal Notification Date	Written Notification Date	Excursion Resolution Date	LQD Concurrence Notification Date
BM-42/A*	11/5/2002	11/6/2002	Off	Bicarb Conductivity	11/8/2002	11/13/2002	12/28/2010	
CM-14	9/4/2008		Off	Alkalinity Conductivity		11/26/2008	11/10/2008	
CM-15	11/18/2008	11/19/2008	Off	Chloride Alkalinity Conductivity	11/20/2008	11/24/2008	9/29/2009	
	9/9/2010	9/10/2010	Off	Alkalinity Conductivity	9/10/2010	9/13/2010	9/14/2010	
CM-32	7/3/2007	7/4/2007	ON	Chloride Alkalinity Conductivity	7/11/2007	7/11/2007		
CM-33	2/22/2008	2/25/2008	Off	Chloride Alkalinity	2/27/2008	3/4/2008	6/3/2008	
CM-38	6/7/2010	6/8/2010	Off	Chloride Alkalinity	6/9/2010	6/14/2010	8/3/2010	11/8/2010
DM-3	11/19/2009	11/20/2009	ON	Chloride Alkalinity	11/23/2009	11/25/2009		
FM-8	7/7/2009		Off	Alkalinity Conductivity	7/22/2009	7/27/2009	well abandoned - 8/4/2009	
HM-20	1/12/2010	1/13/2010	Off	Chloride Alkalinity	1/14/2010	1/18/2010	3/9/2010	
IM-8	11/12/2008	11/14/2008	Off	Chloride Alkalinity	11/14/2008	11/19/2008	12/15/2008	
	4/14/2009	4/15/2009	Off	Chloride Alkalinity	4/16/2009	4/21/2009	5/12/2009	
	5/20/2009	5/21/2009	Off	Chloride Alkalinity	5/22/2009	5/26/2009	7/21/2009	
	7/30/2009	7/31/2009	Off	Chloride Alkalinity	7/31/2009	8/5/2009	9/1/2009	
IM-10	2/11/2009	2/13/2009	Off	Chloride Alkalinity	2/17/2009	2/18/2009	3/3/2009	
IM-14	3/27/2009	3/30/2009	Off	Chloride Alkalinity	3/30/2009	4/3/2009	4/13/2009	

Notes: *, BM-42 plugged and abandoned on 1/14/11 following failure of MIT. Replacement well BM-42A confirmed no longer on excursion status 12/28/10.

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February 3, 2011

Mr. Lowell Spackman, District 1 Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
Herschler Building
122 West 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL #70101060000021392271 RETURN RECEIPT REQUESTED

RE: **Response to LQD comments, Wellfield Release MU-15, September 22, 2010, Permit 633, Cameco Resources (CR)**

Dear Mr. Spackman:

Power Resources, Inc. d/b/a Cameco Resources (CR) is herein providing responses to WDEQ/LQD comments received in correspondence dated January 5, 2011 regarding a wellfield release in Mine Unit 15 on September 22, 2010. Please find CR responses to LQD comments enclosed.

Please contact Joe Brister at 307-358-6541, ext 462 or Joe_Brister@cameco.com if you have questions.

Respectfully,

Tom Cannon
General Manager of Operations

LTC/kg

Attachments: Response to LQD review comments
Corrected report of December 6, 2010 without attachments

cc: File SR 4.3.3.1
ec: CR-Cheyenne

Wellfield Release MU-15, Header House 12

Permit 633, Cameco Resources (CR)

CR gave written notification (Release of Solutions Report) to WDEQ/LQD regarding a 960 gallon wellfield release near Header House 12 in Mine Unit -15 in a letter dated September 24, 2010. LQD subsequently conducted an inspection of the area of the release on October 22, 2010 and Gamma survey results were provided to LQD. Soil samples taken on September 28, 2010 were sent to Energy Labs for analysis. The Laboratory Analytical Report of the soil samples received in November was submitted to LQD in correspondence dated December 6, 2010 discussing the results. The following provides the comments from LQD and responses from CR.

Comments

1. *Page 2 of the letter/report received December 9, 2010 references the "trigger level value" for uranium described in the Memorandum of Understanding between EPA and NRC. The trigger value does not apply to protective health and safety levels. The trigger value is used to determine if CERCLA involvement is necessary. Please remove the reference and discussion of the trigger value.* ***(SI)***

CR Response: The attached corrected report of the correspondence from CR dated December 6, 2010 has the trigger reference and discussion removed on page 2 as requested.

2. *Page 2 of the letter/report states that the radium 226 values are in mg/kg. The correct units are pCi/g. Please correct this sentence.* ***(SI)***

CR Response: The correct units for radium 226 values have been changed and are bolded. See corrected December 6, 2010 report attached.

3. *To determine if Soil Sample #3 represents background or contamination from the spill, the sample value should be compared to the 2007 baseline radiologic survey results for the spill area. Please compare the soil Sample #3 results to the 2007 baseline radiologic survey results and provide the comparison for LQD review.* ***(SI)***

CR Response: A comparison to the 2007 baseline radiologic survey has been provided in the December 6, 2010 corrected report. Text relating to the comparison is bolded.

4. *CR reported to Mr. Steve Ingle (LQD) on September 10, 2010 that a spill occurred in MU15 at HH-12, with a spill volume of approximately 1200 gallons. The spill was reported to have resulted from a split O-ring on a well completion cap. Subsequently, CR reported to Pam Rothwell (LQD) on September 14, 2010 that the volume reported on September 10, 2010 was incorrect. The volume was miscalculated and should have been approximately 350 gallons and therefore not a reportable spill. No further reporting information was received from CR regarding this non-reportable spill.*

   CR Clarification: CR acknowledges the confusion described by LQD over the two releases that took place in September, 2010 in Mine Unit 15. A non-reportable spill of approximately 350 gallons did take place on September 10, 2010 resulting from a split O-ring with injection well 15I-430. A miscalculation associated with the dimensions of the

spill on September 10 gave an erroneous value that led CR to believe a reportable release took place. Three days after notifying regulatory agencies, the correct release volume estimate was discovered. All regulatory agencies were then contacted on September 14, 2010 about the corrected volume released on September 10, 2010 including the WDEQ/LQD. This event was a non reportable spill; hence, no further information was provided.

On September 22, 2010, CR notified Pam Rothwell that a spill had occurred at header house 12 of MU-15, releasing approximately 960 gallons of injection fluid. It was reported that a pipeline fuse had failed and that no fluid was recovered. CR submitted the formal report on September 24, 2010, however, the report references September 10, 2010 as the date of the spill.

CR Clarification: The formal report submitted on September 24, 2010 does stipulate the wrong date of the spill. It is in error and should have identified the date of release as September 22, 2010 in the first paragraph. The field map attached does call-out the date of the spill as 09/22/2010. The cause of the release was correctly described in the September 24, 2010 notification as a failure of a fuse between pipe joints. This release is a reportable spill, notifications to regulatory agencies were made and sampling results were provided.

A spill investigation request for the incident reported on September 22, 2010 was received by LQD on September 30, 2010 from the DEQ Emergency Response Coordinator, Joe Hunter. Subsequently, Steve Ingle requested CR show the spill area to him during the October 2010 site inspection. However, CR's explanation of the spill was not the same as stated in the September 24, 2010 report (i.e., failed pipeline fuse). There is significant confusion regarding the spills that occurred so close in proximity and in time. There is a question of the actual date of the reportable spill (September 10 or 22), the cause of the spill, the actual affected area, etc. LQD will need to re-investigate the spill to determine the facts surrounding the spill. Corrections to the report may be necessary. ***(PCR)***

CR Clarification: The October 2010 LQD site inspection with Mr. Ingle did include the September 22, 2010 reportable spill location. The field map attached to the September 24, 2010 notification was used and the release area involved was investigated. When Mr. Shawn DeGaugh arrived, he mistakenly described the release incident of September 10, 2010. He may have forgotten or was not fully aware of the September 22, 2010 release. The hydromulched area was related to the digging, discovery, and repairs to the failed fuse between pipe joints of the reportable release of September 22, 2010; it was not related to the September 10, 2010 non reportable release of which he was describing.

Clarification Summary: CR had two releases in September 2010 in Mine Unit 15. The first release on September 10, 2010 resulted as a non reportable release of approximately 350 gallons; the cause was a split O-ring at the injection well 15I-430. The second release on September 22, 2010 was a reportable release of approximately 960 gallons; the cause was a failed fuse between pipe joints near injection well 15I-424.

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February 3, 2011

Mr. Lowell Spackman, District 1 Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
Herschler Building
122 West 25th Street
Cheyenne, WY 82002

RE: **Corrected Report of December 6, 2010 (without attachments), Soil Sample Results from Wellfield Release, Cameco Resources, Permit 633**

Dear Mr. Spackman:

On September **24**, 2010 Power Resources, Inc. d/b/a Cameco Resources (CR) provided written notification, pursuant to Permit 633, regarding a wellfield release in Mine Unit 15, near header house 12 **on September 22, 2010.** In accordance with Permit 633, soil samples were collected from the release site and submitted to an off-site laboratory for analysis. CR has included a copy of the Laboratory Analytical Report for inclusion into the originally submitted spill report.

A total of three soil samples were collected (from 0-6 inches) within the release area, and one background sample was obtained. A map of the collection sample sites is attached. The analytes tested for include arsenic, selenium, uranium, and radium-226. The results are summarized in the table below.

Summary of Analytical Report

	Background Sample	Sample 1	Sample 2	Sample 3	2007 baseline Radiological Survey: Study Area B (MU-15)15cm depth
Selenium (mg/kg)	0.07	0.425	0.24	0.12	-
Arsenic (mg/kg)	6.0	4.9	5.8	4.7	-
Uranium (mg/kg)	2.5	2.8	3.1	5.9	**0.93 to 3.12**
Radium (pCi/g)	2.1	3.3	2.4	2.5	**0.3 to 8.5**

CR assessed the laboratory results and compared them to background results and **the 2007 baseline Radiological Survey.** The arsenic background sample was 6.0 mg/kg and the 3 samples collected ranged from 4.7-5.8 mg/kg indicating indistinguishable results from background. The selenium background result was 0.07 mg/kg and the 3 samples ranged from 0.12 – 0.425 mg/kg which appear to be slightly above background but within normal concentration levels. The uranium background was 2.5 mg/kg and the 3 samples ranged from 2.8 – 5.9 mg/kg. The radium 226 background results was 2.1 **pCi/g** and the 3 samples ranged from 2.4-3.3 **pCi/g** indicating indistinguishable results from background. **Comparing the soil sample results to the 2007 baseline survey, sample point #3 appears to have an elevated concentration of uranium. The radium 226 results fall within the 2007 baseline range.**

Please contact Joe Brister at 307-358-6541, ext 462 or Joe_Brister@cameco.com if you have questions.

Respectfully,

Tom Cannon
General Manager of Operations

LTC/kg

Attachments: Energy Laboratory Analytical Report
Map

cc: File SR 4.3.3.1
ec: CR-Cheyenne

Cameco

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February 25, 2011

Mr. Lowell Spackman, District I Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
122 W. 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL #7009 2820 0001 4046 0498 RETURN RECEIPT REQUESTED

RE: Excursion Report Summary Update, Cameco Resources, Smith Ranch-Highland Uranium Project, Permit 603 and 633

Dear Mr. Spackman:

Power Resources, Inc. d/b/a/ Cameco Resources (CR) is herein providing the monthly Excursion Report Summary for the Smith Ranch-Highland Uranium Project. The summary report shows that monitor wells CM-32 and DM-3 remain on excursion. There were no other new excursion events to report during the month.

Please contact Joe Brister at 307-358-6541, ext. 462 or Joe_Brister@cameco.com if you have any questions.

Respectfully,

Tom Cannon
General Manager of Operations

LTC/kss

Attachment: Cameco Resources Excursion Report

cc: File SR 4.3.3.1
ec: CR-Cheyenne

Cameco Resources Excursion Report
Permit Nos. 603 & 633
(February 2011)

Well Identification	Initial Sample Date	Confirmation Sample Date	Excursion Status (on/off)	Parameters Exceeded	Verbal Notification Date	Written Notification Date	Excursion Resolution Date	LQD Concurrence Notification Date
BM-42/A*	11/5/2002	11/6/2002	Off	Bicarb Conductivity	11/8/2002	11/13/2002	12/28/2010	
CM-14	9/4/2008		Off	Alkalinity Conductivity		11/26/2008	11/10/2008	
CM-15	11/18/2008	11/19/2008	Off	Chloride Alkalinity Conductivity	11/20/2008	11/24/2008	9/29/2009	
	9/9/2010	9/10/2010	Off	Alkalinity Conductivity	9/10/2010	9/13/2010	9/14/2010	
CM-32	7/3/2007	7/4/2007	ON	Chloride Alkalinity Conductivity	7/11/2007	7/11/2007		
CM-33	2/22/2008	2/25/2008	Off	Chloride Alkalinity	2/27/2008	3/4/2008	6/3/2008	
CM-38	6/7/2010	6/8/2010	Off	Chloride Alkalinity	6/9/2010	6/14/2010	8/3/2010	11/8/2010
DM-3	11/19/2009	11/20/2009	ON	Chloride Alkalinity	11/23/2009	11/25/2009		
FM-8	7/7/2009		Off	Alkalinity Conductivity	7/22/2009	7/27/2009	well abandoned - 8/4/2009	
HM-20	1/12/2010	1/13/2010	Off	Chloride Alkalinity	1/14/2010	1/18/2010	3/9/2010	
IM-8	11/12/2008	11/14/2008	Off	Chloride Alkalinity	11/14/2008	11/19/2008	12/15/2008	
	4/14/2009	4/15/2009	Off	Chloride Alkalinity	4/16/2009	4/21/2009	5/12/2009	
	5/20/2009	5/21/2009	Off	Chloride Alkalinity	5/22/2009	5/26/2009	7/21/2009	
	7/30/2009	7/31/2009	Off	Chloride Alkalinity	7/31/2009	8/5/2009	9/1/2009	
IM-10	2/11/2009	2/13/2009	Off	Chloride Alkalinity	2/17/2009	2/18/2009	3/3/2009	
IM-14	3/27/2009	3/30/2009	Off	Chloride Alkalinity	3/30/2009	4/3/2009	4/13/2009	

Notes: *, BM-42 plugged and abandoned on 1/14/11 following failure of MIT. Replacement well BM-42A confirmed no longer on excursion status 12/28/10.

Cameco

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March 14, 2011

Mr. Lowell Spackman, District I Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
122 W. 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL #7010 1060 0000 2139 2110 RETURN RECEIPT REQUESTED

RE: Excursion at Monitor Well JM-005, Cameco Resources Highland Uranium Project, Permit to Mine No. 603

Dear Mr. Spackman:

In accordance WDEQ/LQD Chapter 11 regulations, Section 8.4 of the Operations Plan for Permit 603 and NRC License Condition No. 11.5 for the Highland Uranium Project, Power Resources, Inc. d/b/a/ Cameco Resources (CR) is herein providing written notification that Monitor Well JM-005 monitoring results, received March 9, 2011 showed it to be on excursion status on March 8, 2011. Ms. Pam Rothwell from WDEQ/LQD, and Mr. Doug Mandeville from the NRC were notified by telephone on March 10, 2011.

Analytical results of March 9, 2011 for the routine sample taken on March 8, 2011 indicated a potential exceedance in two of the three parameters (chloride and alkalinity). CR collected a confirmation sample from the well and analyzed it with a quality assurance duplicate on March 9, 2011. Results of the laboratory analyses confirmed the exceedance of Upper Control Limit (UCL) parameters as shown below.

Sample Date	**Chloride (mg/L)**	**Alkalinity (mg/L $CaCO_3$)**	**Conductivity (µMhos/cm)**
	UCL 18	**UCL 230**	**UCL 769**
3/9/2011	20	238	719
3/8/2011	21	244	691

Monitor Well JM-005 is located in Mine Unit-J as depicted on the attached map. CR is working to control the wellfield through adjustments using pumping wells in the area. The initial sample taken on 3/8/2011 was taken after pumping only the approved amount of 1 casing volume, which isn't common practice for this particular well. The confirmation sample collected on 3/9/2011 was taken after pumping approximately 3 casing volumes as per normal for well JM-005. CR will restore pumping 3 casing volumes before sampling this particular well. Weekly samples will be collected to monitor the UCL constituents until the well is off excursion. The excursion at monitor well JM-005 has been added to the monthly Excursion Report Summary and will be identified on the Cameco Resources site map.

Pursuant to WDEQ/LQD Chapter 11, Section 2 a duly authorized representative certification is attached.

Please contact Joe Brister at (307)358-6541 ext. 462 or Joe_Brister@cameco.com if you have any questions.

Sincerely,

Tom Cannon
General Manager of Operations

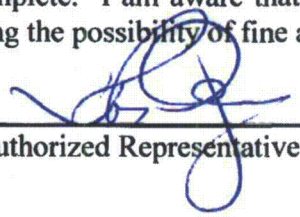
TC/TS

Attachment: 1) Map
2) Duly Authorized Representative Certification

cc: D. Mandeville, USNRC (2 copies) File HUP 4.6.4.1
ec: CR-Cheyenne

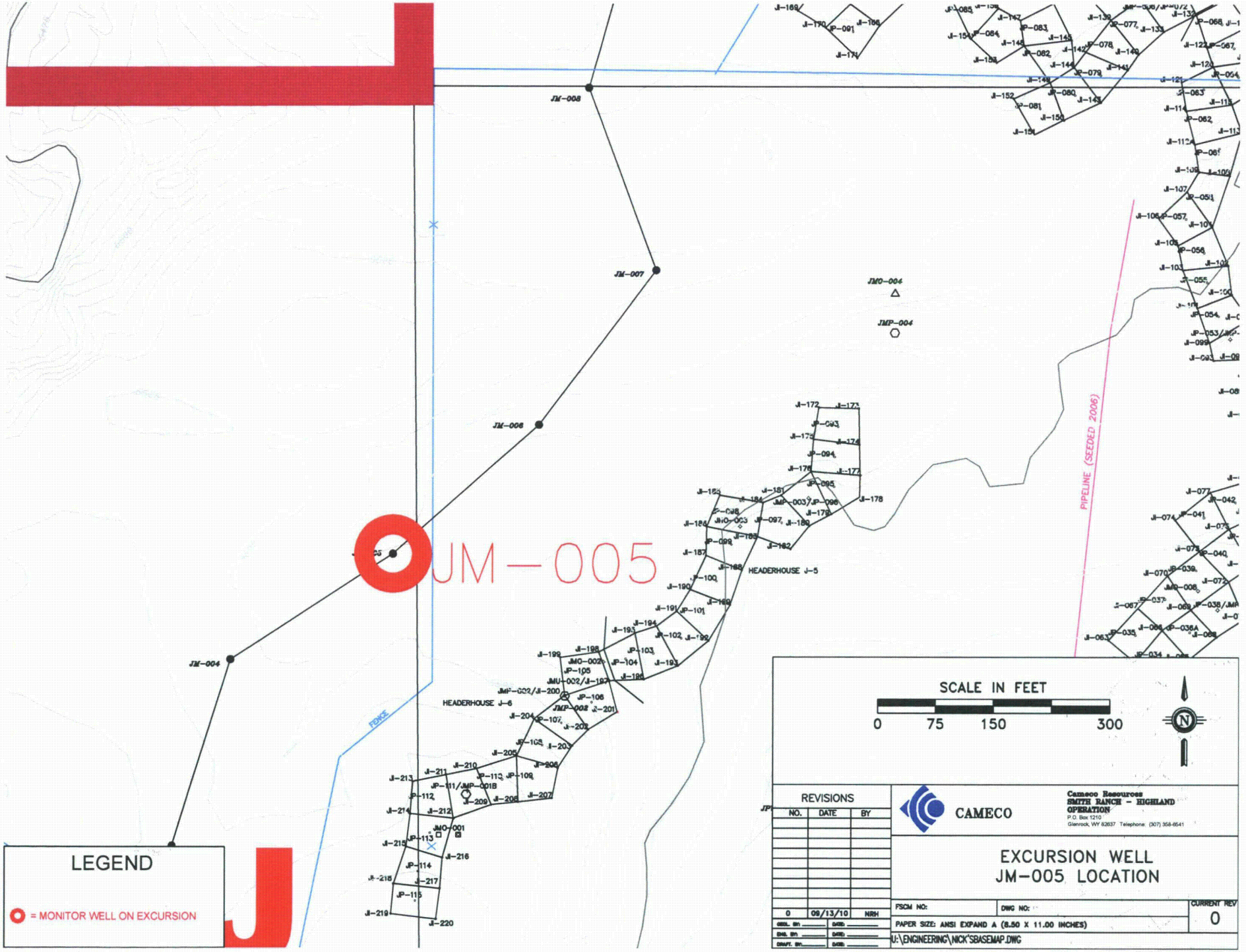
Duly Authorized Representative Certification

I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for known violations.



3.14.11

Duly Authorized Representative: Tom Cannon Date: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CAMECO
Cameco Resources
SMITH RANCH - HIGHLAND
OPERATION
P.O. Box 1210
Glenrock, WY 82637 Telephone: (307) 358-6541
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March 30, 2011

Mr. Lowell Spackman, District I Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
122 W. 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL #7010 1060 0000 2139 2158 RETURN RECEIPT REQUESTED

RE: Excursion Report Summary Update, Cameco Resources, Smith Ranch-Highland Uranium Project, Permit 603 and 633

Dear Mr. Spackman:

Power Resources, Inc. d/b/a/ Cameco Resources (CR) is herein providing the monthly Excursion Report Summary for the Smith Ranch-Highland Uranium Project. During the month of March CR reported one well on excursion and provided plans to WDEQ/LQD regarding excursion resolution at Monitor Wells CM-32 and DM-3.

On March 10, 2011 CR reported that sampling from Monitor Well JM-005 indicated Chloride and Alkalinity exceeded Upper Control Limits (UCLs). CR made minor adjustments in the wellfield and weekly sampling performed March 22, 2011 showed that the excursion had been resolved. Excursion resolution for Monitor Well JM-005 was verbally reported to LQD during their March 23, 2011 inspection. A copy of the sample analysis is attached for Monitor Well JM-005

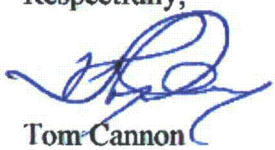
The summary report also shows that Monitor Wells CM-32 and DM-3 remain on excursion; however, March 2011 sampling indicates declining trends in both wells. A sampling analysis sheet has been included for each Monitor Well CM-32 and DM-3. CR provided plans to bring both these monitor wells off excursion by the end of 2011 in correspondence dated March 10, 2011, Responses to Third Quarter Excursion Monitoring Report Review, and committed to providing updates regarding these plans in this monthly Excursion Report Summary Update as discussed with LQD during their March 23, 2011 inspection. CR will provide the first status update on DM-3 in the April 2011 Monthly Excursion Report

Summary Update, and will provide the first status report on CM-32 in the May 2011 Monthly Excursion Report Summary Update.

There were no other new excursion events to report during the month.

Please contact Dawn Kolkman at 307-358-6541, ext. 435 or Dawn_Kolkman@cameco.com if you have any questions.

Respectfully,



Tom Cannon
General Manager of Operations

LTC/dk

Attachment: Cameco Resources Excursion Report, Sample Analysis Sheet DM-3 and CM-32, JM-005

cc: File SR 4.3.3.1
ec: CR-Cheyenne

Cameco Resources Excursion Report
Permit Nos. 603 & 633
(March 2011)

Well Identification	Initial Sample Date	Confirmation Sample Date	Excursion Status (on/off)	Parameters Exceeded	Verbal Notification Date	Written Notification Date	Excursion Resolution Date	LQD Concurrence Notification Date
BM-42/A*	11/5/2002	11/6/2002	Off	Bicarb Conductivity	11/8/2002	11/13/2002	12/28/2010	
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CM-15	11/18/2008	11/19/2008	Off	Chloride Alkalinity Conductivity	11/20/2008	11/24/2008	9/29/2009	
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CM-38	6/7/2010	6/8/2010	Off	Chloride Alkalinity	6/9/2010	6/14/2010	8/3/2010	11/8/2010
DM-3	11/19/2009	11/20/2009	ON	Chloride Alkalinity	11/23/2009	11/25/2009		
FM-8	7/7/2009		Off	Alkalinity Conductivity	7/22/2009	7/27/2009	well abandoned - 8/4/2009	
HM-20	1/12/2010	1/13/2010	Off	Chloride Alkalinity	1/14/2010	1/18/2010	3/9/2010	
IM-8	11/12/2008	11/14/2008	Off	Chloride Alkalinity	11/14/2008	11/19/2008	12/15/2008	
	4/14/2009	4/15/2009	Off	Chloride Alkalinity	4/16/2009	4/21/2009	5/12/2009	
	5/20/2009	5/21/2009	Off	Chloride Alkalinity	5/22/2009	5/26/2009	7/21/2009	
	7/30/2009	7/31/2009	Off	Chloride Alkalinity	7/31/2009	8/5/2009	9/1/2009	
IM-10	2/11/2009	2/13/2009	Off	Chloride Alkalinity	2/17/2009	2/18/2009	3/3/2009	
IM-14	3/27/2009	3/30/2009	Off	Chloride Alkalinity	3/30/2009	4/3/2009	4/13/2009	
JM-005	3/8/2011	3/9/2011	Off	Chloride Alkalinity	3/10/2011	3/14/2011	3/22/2011	

Notes: *, BM-42 plugged and abandoned on 1/14/11 following failure of MIT. Replacement well BM-42A confirmed no longer on excursion status 12/28/10.

Cameco Resources

Monitor Well Report

Well ID: DM-003

	Chloride (mg/L)	*Alkalinity (mg/L $CaCO_3$)*	*Conductivity (µMhos/cm)*	*U_3O_8 (mg/L)*	*Water Elevation*	*Comment*
NRC/WDEQ UCL	18	188	962			
03/22/2011	20	228	826	0	5112.4	Uranium Below Detection Limit
03/15/2011	21	231	824		5114.3	Uranium Below Detection Limit
03/08/2011	22	236	832	0	5115.2	Uranium Below Detection Limit
03/01/2011	22	233	863	0	5115.8	Uranium Below Detection Limit
02/22/2011	22	235	863	0	5116.5	Uranium Below Detection Limit
02/15/2011	23	240	846		5118.0	Uranium Below Detection Limit
02/08/2011	22	236	871	0	5115.8	Uranium Below Detection Limit
02/01/2011	23	237	838	0	5115.4	Uranium Below Detection Limit
01/25/2011	22	237	829	0	5115.2	Uranium Below Detection Limit
01/18/2011	23	237	826		5115.8	Uranium Below Detection Limit
01/11/2011	22	239	853		5115.6	Uranium below detection limit
01/04/2011	23	238	855		5117.0	Uranium below detection limit

Cameco Resources

Monitor Well Report

Well ID: CM-032

	Chloride (mg/L)	*Alkalinity (mg/L $CaCO_3$)*	*Conductivity (µMhos/cm)*	*U_3O_8 (mg/L)*	*Water Elevation*	*Comment*
NRC/WDEQ UCL	18	202	852			
03/22/2011	20	239	855	0	5110.7	Uranium Below Detection Limit
03/15/2011	21	237	841		5111.6	Uranium Below Detection Limit
03/08/2011	22	244	850	0	5115.5	Uranium Below Detection Limit
03/01/2011	23	248	899	0	5115.3	Uranium Below Detection Limit
02/22/2011	22	245	902	0	5113.3	Uranium Below Detection Limit
02/15/2011	23	252	844		5116.2	Uranium Below Detection Limit
02/08/2011	22	244	911	0	5112.8	Uranium Below Detection Limit
02/01/2011	20	237	876	0	5113.5	Uranium Below Detection Limit
01/25/2011	26	260	941	0	5114.3	Uranium Below Detection Limit
01/18/2011	28	265	971		5114.5	Uranium Below Detection Limit
01/11/2011	28	271	931		5114.5	Uranium below detection limit
01/04/2011	30	275	958		5115.5	Uranium below detection limit

Cameco Resources

Monitor Well Report

Well ID: JM-005

	Chloride (mg/L)	*Alkalinity (mg/L $CaCO_3$)*	*Conductivity (µMhos/cm)*	*U_3O_8 (mg/L)*	*Water Elevation*	*Comment*
NRC/WDEQ UCL	18	230	769			
03/22/2011	18	231	684	0	5232.8	Uranium below detection limit
03/15/2011	20	240	666	0	5246.3	Uranium below detection limit
03/09/2011	20	238	719	0	5251.6	Uranium below detection limit
03/08/2011	21	244	691		5252.0	

Cameco

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April 29, 2011

Mr. Lowell Spackman, District I Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
122 W. 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL #7009 2820 0001 4046 2768 RETURN RECEIPT REQUESTED

RE: Excursion Report Summary Update, Cameco Resources, Smith Ranch-Highland Uranium Project, Permit 603 and 633

Dear Mr. Spackman:

Power Resources, Inc. d/b/a/ Cameco Resources (CR) is herein providing the monthly Excursion Report Summary for the Smith Ranch-Highland Uranium Project. During the month of April no new excursions were reported and the Cameco Resources Excursion Report is attached. As CR reported, in the March Excursion Report Summary Update, a status update on activities in Mine Unit D relative to monitor well DM-3 would be provided. Additionally, CR has provided an update on recent sampling results for monitor well CM-32.

CR has aggressively pursued resolution to the excursion at monitor well DM-3, located in Mine Unit D, by re-configuring pumping wells to influence flow direction and maximize results. To that effect, pumping well DP-21 was initially turned on at the beginning April but results over the first few weeks showed insufficient response and therefore DP-21 was turned off and in exchange well DP-108 was started on April 20th. Pumping well DP-108 was chosen to refocus pumping such that fluids would be pulled in a southwest direction (parallel to the underground drift). These recent activities were discussed with LQD during the April 20, 2011 onsite inspection during which a map of the area was furnished.

With the recent pumping well reconfiguration, it may take another few weeks to determine any possible effectiveness as not much change in water quality has yet been noted. A copy of the monitor well report is attached and shows that overall, alkalinity and chloride levels remained relatively stable, conductivity rose slightly over the month and the water level

dropped approximately four feet. Weekly water sampling is ongoing and CR will continue to evaluate the excursion and adjust pumping in the wellfield as necessary to attempt to abate the excursion at monitor well DM-3. CR will provide a status update in May.

Beginning April 14, 2011, two wells in two different header houses were operating to provide additional flow in the field to enhance excursion abatement at well CM-32. As indicated during LQD's April 20, 2011 inspection, pumping wells CP-175, and CP-169 are operational and pumping collectively at approximately 33 gpm. As a result both chloride and conductivity have trended below the UCLs and the well is off excursion. CR verbally notified LQD via voicemail on April 28, 2011 of the resolved excursion. CR will continue to perform weekly sampling for the next few weeks to ensure that the excursion remains resolved. A courtesy follow-up will be provided as in May's report regarding CM-32.

Guideline 8 sample results were received back from the outside laboratory and a copy was transmitted to LQD personnel during the April on-site inspection.

Please contact Dawn Kolkman at 307-358-6541, ext. 435 or Dawn_Kolkman@cameco.com if you have any questions.

Respectfully,

Tom Cannon by

Tom Cannon
General Manager of Operations

LTC/dk

Attachment: Cameco Resources Excursion Report,
Monitor Well Reports for DM-3 and CM-32

cc: File SR 4.3.3.1
ec: CR-Cheyenne

Cameco Resources Excursion Report
Permit Nos. 603 & 633
(April 2011)

Well Identification	Initial Sample Date	Confirmation Sample Date	Excursion Status (on/off)	Parameters Exceeded	Verbal Notification Date	Written Notification Date	Excursion Resolution Date	LQD Concurrence Notification Date
CM-32	7/3/2007	7/4/2007	ON	Chloride Alkalinity Conductivity	7/11/2007	7/11/2007		
DM-3	11/19/2009	11/20/2009	ON	Chloride Alkalinity	11/23/2009	11/25/2009		

Cameco Resources

Monitor Well Report

Well ID: CM-032

	Chloride (mg/L)	*Alkalinity (mg/L $CaCO_3$)*	*Conductivity (µMhos/cm)*	*U_3O_8 (mg/L)*	*Water Elevation*	*Comment*
NRC/WDEQ UCL	18	202	852			
04/26/2011	17	217	839	0	5102.5	
04/19/2011	19	227	870	0	5109.3	
04/12/2011	19	230	833	0	5103.7	
04/05/2011	19	233	847	0	5108.1	
03/29/2011	20	233	876	0	5107.7	
03/22/2011	20	239	855	0	5110.7	Uranium Below Detection Limit
03/15/2011	21	237	841		5111.6	Uranium Below Detection Limit
03/08/2011	22	244	850	0	5115.5	Uranium Below Detection Limit
03/01/2011	23	248	899	0	5115.3	Uranium Below Detection Limit
02/22/2011	22	245	902	0	5113.3	Uranium Below Detection Limit
02/15/2011	23	252	844		5116.2	Uranium Below Detection Limit
02/08/2011	22	244	911	0	5112.8	Uranium Below Detection Limit
02/01/2011	20	237	876	0	5113.5	Uranium Below Detection Limit
01/25/2011	26	260	941	0	5114.3	Uranium Below Detection Limit
01/18/2011	28	265	971		5114.5	Uranium Below Detection Limit
01/11/2011	28	271	931		5114.5	Uranium below detection limit
01/04/2011	30	275	958		5115.5	Uranium below detection limit

Cameco Resources

Monitor Well Report

Well ID: DM-003

	Chloride (mg/L)	*Alkalinity (mg/L $CaCO_3$)*	*Conductivity (µMhos/cm)*	*U_3O_8 (mg/L)*	*Water Elevation*	*Comment*
NRC/WDEQ UCL	18	188	962			
04/26/2011	21	235	888	0	5104.0	
04/19/2011	21	232	874	0	5107.2	Uranium below detection limit
04/12/2011	22	232	844	0	5107.6	Uranium below detection limit
04/05/2011	21	229	845	0	5108.8	Uranium below detection limit
03/29/2011	21	228	860	0	5110.0	Uranium below detection limit
03/22/2011	20	228	826	0	5112.4	Uranium Below Detection Limit
03/15/2011	21	231	824		5114.3	Uranium Below Detection Limit
03/08/2011	22	236	832	0	5115.2	Uranium Below Detection Limit
03/01/2011	22	233	863	0	5115.8	Uranium Below Detection Limit
02/22/2011	22	235	863	0	5116.5	Uranium Below Detection Limit
02/15/2011	23	240	846		5118.0	Uranium Below Detection Limit
02/08/2011	22	236	871	0	5115.8	Uranium Below Detection Limit
02/01/2011	23	237	838	0	5115.4	Uranium Below Detection Limit
01/25/2011	22	237	829	0	5115.2	Uranium Below Detection Limit
01/18/2011	23	237	826		5115.8	Uranium Below Detection Limit
01/11/2011	22	239	853		5115.6	Uranium below detection limit
01/04/2011	23	238	855		5117.0	Uranium below detection limit

Cameco

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May 9, 2011

Mr. Lowell Spackman, District 1 Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
Herschler Building
122 West 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL # 70100780000160019749 RETURN RECEIPT REQUESTED

RE: **Release of Solutions Report, Cameco Resources, Smith Ranch Highland Uranium Project, Permit 633**

Dear Mr. Spackman:

In accordance with WDEQ regulation and the NRC License SUA 1548, Power Resources, Inc. d/b/a Cameco Resources (Cameco) verbally notified via telephone Ms. Pam Rothwell of Wyoming Department of Environmental Quality, Land Quality Division (WDEQ-LQD), Mr. Doug Mandeville, Nuclear Regulatory Commission (NRC), and Mr. Joe Hunter, WDEQ, Water Quality Division (WDEQ-WQD), on May 4, 2011 that a release had occurred at Smith Ranch-Highland Uranium Project in Converse County, Wyoming on May 3, 2011. The release was also recorded on the WDEQ-WQD Report A Spill, Release, Complaint database.

Approximately 1500 gallons were released from production wells located in Mine Unit 15, in the area of header house 15-20. The release resulted from a blown fuse on a transformer causing an isolated power outage at header house 15-20. The Cla-Val valve at the header house failed to close for reasons yet unknown. The purpose of the Cla-Val valve is to shut down the injection of fluid into the formation when a significant pressure drop is detected across the valve. The open Cla-Val valve allowed the injection wells to continue to inject fluid into the formation at a presumed rate of approximately 400 gpm over 8 hours. Eight production wells closest to the header house eventually began to overflow. The corrective action taken for this condition was to isolate the header house 15-20 manually to stop the overflow which was done immediately upon discovery on May 3, 2011. A vacuum truck was dispatched to the site and approximately 200 gallons of the estimated 1500 gallons released was recovered. The Cla-Val valve was replaced, power restored, and as of result of these corrective actions, the header house was back in operation by 2:30 pm May 3, 2011. The release is located in the NESW of Section 11, T.35N, R.74W, of Converse County, Wyoming. A field map is attached. The release will be updated into the site base map for inclusion in the Annual Report.

A solution sample was collected and resulting analysis indicated 99 ppm U3O8 (84 ppm U-nat). A gamma survey of the release area has been conducted using a MicroR meter. Soil samples (0-6 inches) have been collected and sent in to Energy Labs for analysis. The field map attached shows the point locations of the soil samples taken in accordance to NRC guidelines and Cameco's SOP on spills.

Cameco discussed with WDEQ-LQD on May 6, 2011 if there was a potential for an excursion involving the continued injection of fluids into the formation. Cameco has taken water level readings and sampled from monitor wells M-1545 through M-1548 and M-1550 through M-1555 on May 5, 2011 or May 6, 2011. Comparing the monitor well analyses from sampling two weeks prior, the monitor wells show no appreciable changes in chloride, alkalinity, and conductivity concentrations. Water levels dropped 2 feet to 14 feet in the monitor wells.

Cameco will provide a follow-up letter to WDEQ-LQD with the soil sample analyses, monitor well analyses, and any further investigation results.

Please contact Dawn Kolkman @ 307-358-6541, ext 435 or at Dawn_Kolkman@cameco.com if you have questions.

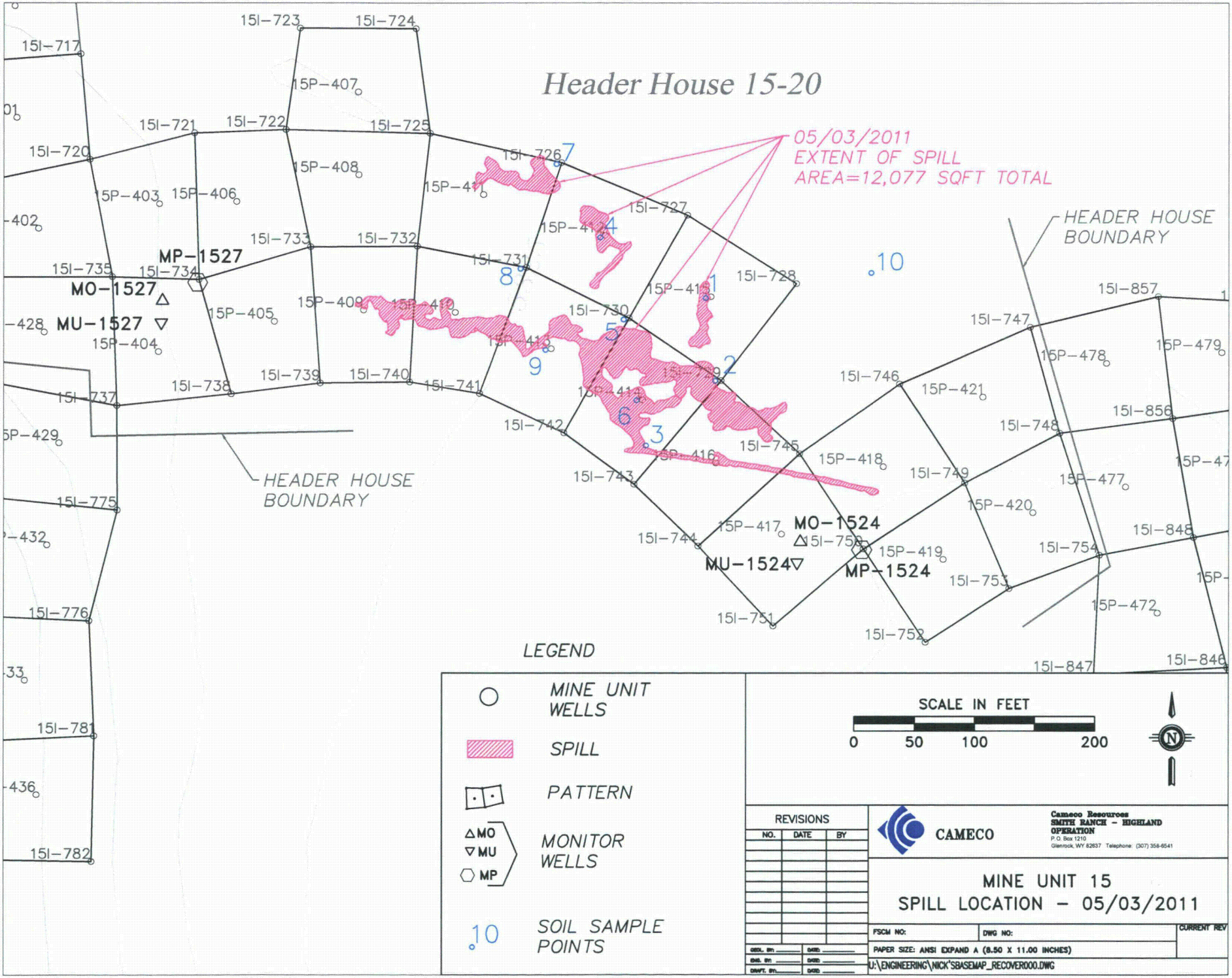
Respectfully,

Tom Cannon
General Manager of Operations

LTC/kg

Attachments: Map

cc: Mr. Doug Mandeville – NRC Project Manager (2-copies)
Mr. Joe Hunter – Water Quality Division
File SR 4.3.3.1
ec: Cameco Resources-Cheyenne


Header House 15-20
05/03/2011
EXTENT OF SPILL
AREA=12,077 SQFT TOTAL
HEADER HOUSE BOUNDARY
HEADER HOUSE BOUNDARY
MP-1527
MO-1527
MU-1527
MO-1524
MU-1524
MP-1524
151-723
151-724
151-717
15P-407
151-721
151-722
151-725
151-720
15P-408
15P-403
15P-406
151-726
15P-411
151-727
15P-412
151-733
151-732
151-731
151-735
151-734
15P-405
15P-409
15P-410
151-730
151-728
15P-413
15P-404
151-737
151-738
151-739
151-740
151-741
151-742
15P-414
151-729
15P-416
151-743
151-745
15P-418
151-744
15P-417
151-751
151-752
151-753
151-754
151-746
15P-421
151-747
151-857
15P-478
15P-479
151-748
151-856
151-749
15P-477
15P-420
151-848
15P-472
151-847
151-846
151-775
151-776
151-781
151-782
15P-429
15P-432
15P-436
LEGEND
MINE UNIT WELLS
SPILL
PATTERN
MONITOR WELLS
SOIL SAMPLE POINTS
SCALE IN FEET
0 50 100 200
N
REVISIONS
NO. DATE BY
CAMECO
Cameco Resources
SMITH RANCH - HIGHLAND OPERATION
P.O. Box 1210
Glenrock, WY 82637 Telephone: (307) 358-6541
MINE UNIT 15
SPILL LOCATION - 05/03/2011
FSCM NO:
DWG NO:
CURRENT REV
PAPER SIZE: ANSI EXPAND A (8.50 X 11.00 INCHES)
U:\ENGINEERING\NICK'SBASEMAP_RECOVER000.DWG

Cameco

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May 9, 2011

Mr. Lowell Spackman, District 1 Supervisor
Wyoming Department of Environmental Quality
Land Quality Division
Herschler Building, 3 Fl-West
122 West 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL #70101060000021392196 RETURN RECEIPT REQUESTED

RE: Partial response to the LQD March 2011 Inspection Report dated April 28, 2011 regarding the accidental release of pump test water from MU-K North, Comment #6 and Permit # 603.

Dear Mr. Spackman:

In the above referenced letter, the LQD inspector states in the Compliance and Assessment section, comment #6 that *"The surface spill at MU-K-North which resulted from the accident of the modu-tank during the wellfield pump test is considered a reportable spill and should be reported (WDEQ/WQD Chapter 4, Section 3 and 4). Please provide the spill report to the appropriate agencies including LQD"*. As a point of clarification and in response to this specific line item, Power Resources Inc. Smith Ranch-Highland Uranium Operation, d/b/a/ Cameco Resources (Cameco) communicated to LQD and WQD the details of this incident and it was concluded that this was clearly a *non-reportable spill*. The details of these discussions are included the following paragraphs for your review.

On March 16, 2011, Mr. Joe Brister (Director, SHEQ-Cameco Resources) called Ms. Pam Rothwell at 12:05 pm and left a voice mail providing a courtesy notification that a release of groundwater occurred from MU-K North, *"even though the quantity of 420 gallons was exceeded"*. Detailed records indicated that on the same date at 2:50 pm, Ms. Rothwell returned Mr. Brister's call and again the incident was discussed. Mr. Brister states in his telephone log that a courtesy notification was provided of a release of clean groundwater from the MU-KN pump test and that it exceeded the 420 gallon limit, but a sample for verification of the water quality was taken and results were pending. Mrs. Rothwell recommended that a courtesy call to WQD should also be done and thanked him for the notice. She also stated that SRH (Cameco)

probably didn't need a WYPDES permit to discharge or a even a holding tank for that matter as the initial sample results from the Mine Unit were relatively clean, i.e. the radium results were far below the 60 pCi/l limit.

On March 23, 2011 LQD (Mrs. Pam Rothwell) was on-site for a periodic inspection and the area where the water was released was reviewed. Mrs. Dawn Kolkman accompanied her during the inspection and she was informed that an additional sample of groundwater was taken for analyses for internal verification, which pleased the inspector. No indication that the release required any further correspondence was provided.

Subsequent to the above discussions and notifications to LQD, Cameco contacted Mr. Dan Clark, Ombudsman WDEQ and Mr. Joe Hunter, WQD, Emergency Response Coordinator. Details of the incident were provided including results of the sample analysis. The sample analysis did not exceed the radium limit and met the water quality standards for well water (actual was 9.6 pCi/l Radium 226). Both Mr. Clark and Mr. Hunter concurred that the release was non-reportable.

Please contact Dawn Kolkman at (307) 358-6541 ext. 435 if you have any questions.

Sincerely,

Tom Cannon
General Manager of Operations

Attachment: Analytical Report # C11030460-001

LTC/JJB/dk

cc: File HUP 4.3.3.1
CR-Cheyenne

Cameco

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May 26, 2011

Mr. Lowell Spackman, District 1 Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
Herschler Building
122 West 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL #70100780000160019763 RETURN RECEIPT REQUESTED

RE: **Release of Solutions Report, Cameco Resources, Smith Ranch Highland Uranium Project, Permit 633**

Dear Mr. Spackman:

In accordance with WDEQ regulation and the NRC License SUA 1548, Power Resources, Inc. d/b/a Cameco Resources (Cameco) verbally notified via telephone Ms. Pam Rothwell of Wyoming Department of Environmental Quality, Land Quality Division (WDEQ-LQD), Mr. Doug Mandeville, Nuclear Regulatory Commission (NRC), and Mr. Joe Hunter, WDEQ, Water Quality Division (WDEQ-WQD), on May 20, 2011 that a release had occurred at Smith Ranch-Highland Uranium Project in Converse County, Wyoming on May 19, 2011. The release was also recorded on the WDEQ-WQD Report A Spill, Release, Complaint database.

Approximately 790 gallons were released from bell hole #1 located near satellite SR2 on May 19, 2011. The release resulted from restarting the wellfield and booster pumps after a power outage at SR2 Satellite and discovering an 18" gasket on a blind flange failed. The corrective action taken for this condition was to shutdown the wellfield and satellite plant, then isolate the main trunk line valves to stop the flow. A vacuum truck was dispatched and recovered approximately 200 gallons of the estimated 790 gallons released. The gasket was replaced, power restored, and following these corrective actions, the wellfield was put back into operation. The release is located in the NWNE of Section 17, T.35N, R.74W, of Converse County, Wyoming. A field map is attached. The release will be updated into the site base map for inclusion in the Annual Report.

A solution sample was collected and resulting analysis indicated 17 ppm U-nat. A gamma survey of the release area has been conducted using a MicroR meter. Soil samples (0-6 inches) have been collected and sent in to Energy Labs for analysis. The field map attached shows the point locations of the soil samples taken in accordance to NRC guidelines and Cameco's SOP on spills.

Cameco will provide a follow-up letter to WDEQ-LQD with the soil sample analyses.

Please contact Dawn Kolkman @ 307-358-6541, ext 435 or at Dawn_Kolkman@cameco.com if you have questions.

Respectfully,

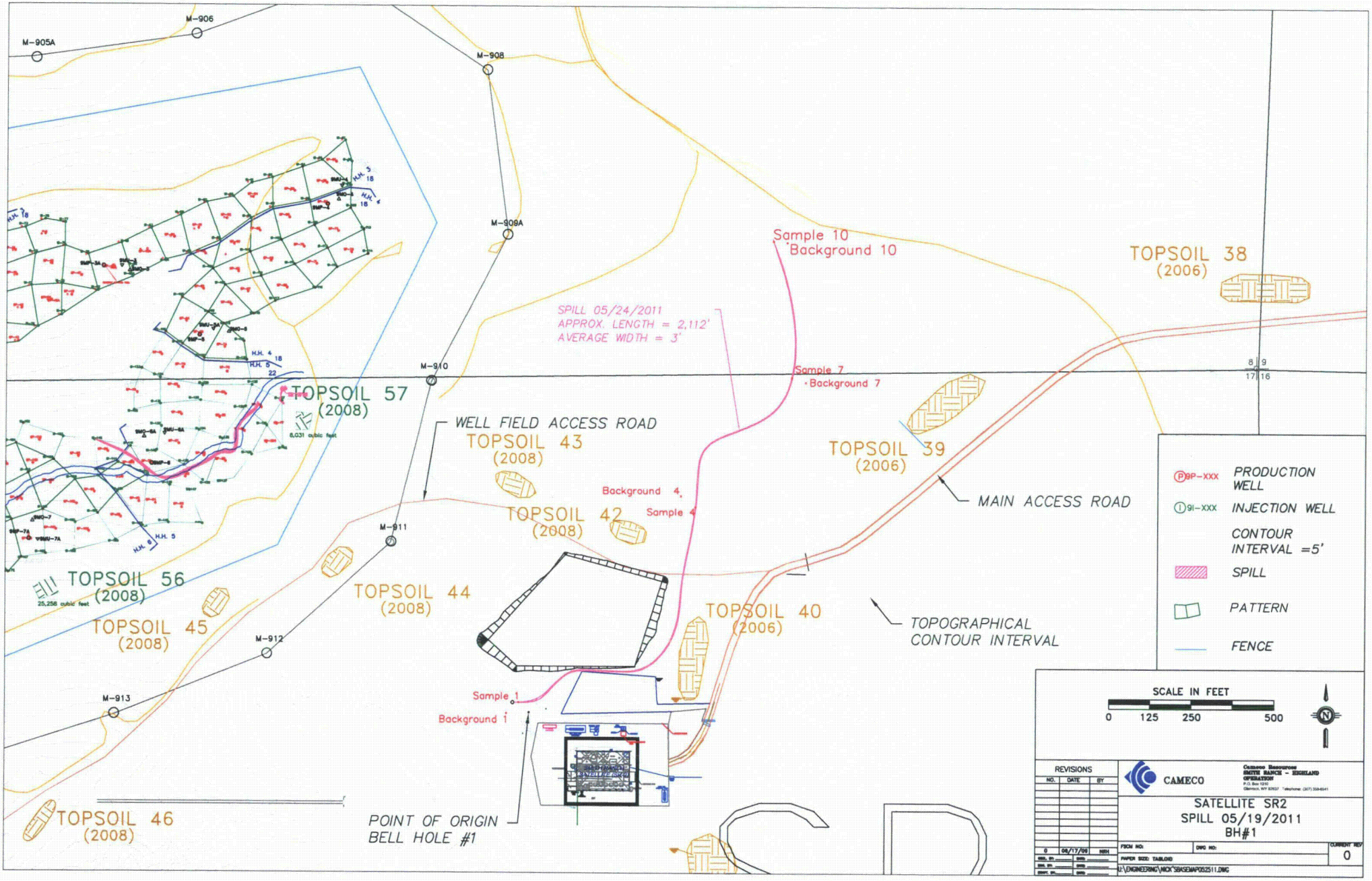
Dave Mosby for Tom Cannon

Tom Cannon
General Manager of Operations

LTC/kg

Attachments: Map

cc: Mr. Doug Mandeville – NRC Project Manager (2-copies)
Mr. Joe Hunter – Water Quality Division
File SR 4.3.3.1
ec: Cameco Resources-Cheyenne


M-905A
M-906
M-908
M-908A
M-910
M-911
M-912
M-913
Sample 10
Background 10
SPILL 05/24/2011
APPROX. LENGTH = 2,112'
AVERAGE WIDTH = 3'
Sample 7
Background 7
TOPSOIL 38
(2006)
TOPSOIL 57
(2008)
8,031 cubic feet
WELL FIELD ACCESS ROAD
TOPSOIL 43
(2008)
TOPSOIL 39
(2006)
Background 4
Sample 4
TOPSOIL 42
(2008)
MAIN ACCESS ROAD
TOPSOIL 56
(2008)
25,258 cubic feet
TOPSOIL 44
(2008)
TOPSOIL 45
(2008)
TOPSOIL 40
(2006)
TOPOGRAPHICAL
CONTOUR INTERVAL
Sample 1
Background 1
TOPSOIL 46
(2008)
POINT OF ORIGIN
BELL HOLE #1
PP-XXX PRODUCTION WELL
IP-XXX INJECTION WELL
CONTOUR INTERVAL =5'
SPILL
PATTERN
FENCE
SCALE IN FEET
0 125 250 500
N
REVISIONS
NO. DATE BY
0 06/17/08 MRH
CAMECO
Cameco Resources
SMITH RANCH - HIGHLAND
OPERATION
SATELLITE SR2
SPILL 05/19/2011
BH#1
FSCM NO:
DWG NO:
CURRENT REV
0
PAPER SIZE: TABLOID
I:\ENGINEERING\MICK'S\BASEMAP052511.DWG

Cameco

May 26, 2011

CAMECO RESOURCES
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Mr. Lowell Spackman, District 1 Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
Herschler Building
122 West 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL #70100780000160019770 RETURN RECEIPT REQUESTED

RE: **Response to WDEQ/LQD Letter of Conference and Conciliation, Excursion at CM-32, Permit 603, Cameco Resources.**

Dear Mr. Spackman:

Power Resources, Inc. d/b/a Cameco Resources (Cameco) is herein responding to the Letter of Conference and Conciliation (LCC), Excursion at CM-32, received from the Wyoming Department of Environmental Quality, Land Quality Division (WDEQ/LQD) on May 23, 2011. Cameco discussed with WDEQ/LQD on May 20, 2011 the installation of two monitor wells to investigate the extent of the excursion at the proximity of the permit boundary. Enclosed, Cameco is submitting a plan to install the proposed monitor wells as requested by WDEQ/LQD in the LCC.

Please contact Dawn Kolkman at (307) 358-6541, ext 435 or Dawn_Kolkman@cameco.com if any questions.

Respectfully,

Tom Cannon
General Manager of Operations

LTC/kg

Attachments: Plan to install additional monitor wells

cc: File HUP 4.3.3.1
ec: Cameco Resources-Cheyenne

Letter of Conference and Conciliation, Excursion at CM-32
Cameco Resources Permit 603

Introduction

Cameco Resources (Cameco) received the above referenced Letter of Conference & Conciliation (LCC) from Wyoming Department of Environmental Quality, Land Quality Division (WDEQ/LQD) on May 23, 2011. Monitor well CM-32 had been on excursion from July of 2007 to April 2011 and WDEQ/LQD identified violations with regard to well CM-32 in reference to Wyoming Noncoal Rules and Regulations (R&R) Chapter 11, Section 12(d) (i), (ii), and (iii).

Cameco provided WDEQ/LQD a compliance plan and schedule to bring monitor well CM-32 off excursion in a letter dated March 10, 2011 responding to WDEQ/LQD comments on the 3rd quarter, 2010, Excursion Monitoring Report. Actions taken by Cameco in April, 2011 resulted in the well CM-32 coming off excursion. WDEQ/LQD was verbally notified on April 28, 2011 that CM-32 was off excursion and further details were given in the monthly Excursion Report Summary sent to WDEQ/LQD dated April 29, 2011.

WDEQ/LQD acknowledged the actions taken by Cameco and bringing the well off excursion in the LCC; however, under the provisions of the LCC, WDEQ/LQD requires additional corrective actions to investigate the extent of the excursion beyond the monitor well ring specifically at the proximity of the exempted aquifer and permit boundaries. Cameco is formally providing WDEQ/LQD the requested plan to install additional wells to investigate the extent of the excursion.

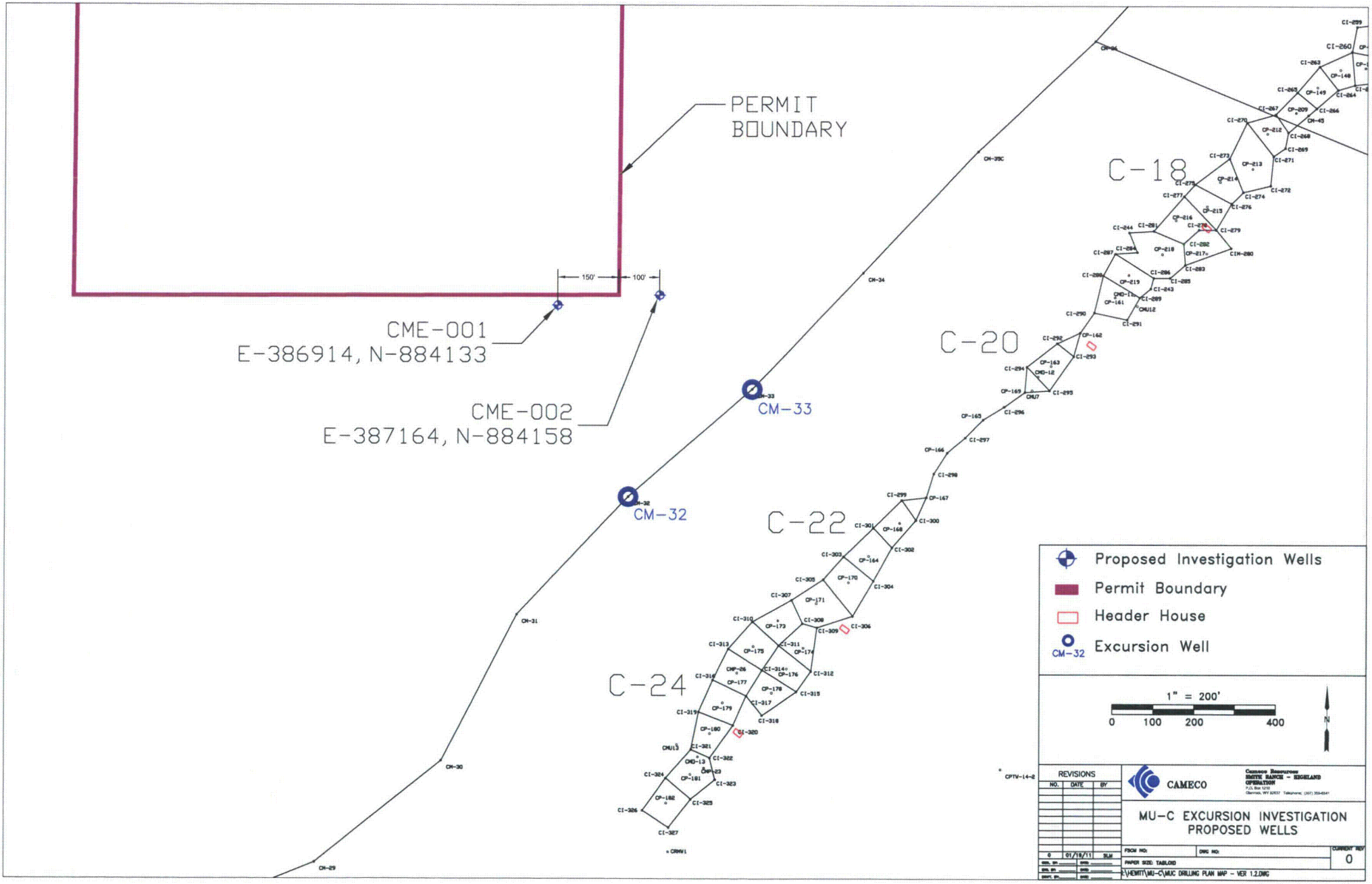
Corrective Actions Required by WDEQ/LQD

A minimum of two monitor wells to investigate the extent of the excursion will be required. CR must consult with the LQD hydrogeologist on the locations of the proposed monitor wells prior to installation and ensure they are covered under the permit surety. ***CR must submit a plan for additional wells within 15 days of receipt of this letter.***

Cameco's Response:

Cameco discussed the proposed monitor well locations with WDEQ/LQD, Pam Rothwell and Steve Ingle, by telephone on May 20, 2011. A determination was made that only two wells would be needed and the wells would be located about 25 feet inside the permit boundary approximately 250 feet apart. (See attached map, *MU-C Excursion Investigation Proposed Wells*) The proposed wells CME-001 and CME-002 would be installed, sampled, and analyzed for the parameters outlined in the Wyoming Noncoal Rules and Regulations (R&R) Chapter 11, Section 12 (d), (i).

Cameco proposes that the 25% contingency cost added to the Highland Uranium Project surety estimate for 603 would be sufficient to provide coverage in the surety for these two wells as an activity not scheduled in the Annual Report. Cameco will update the surety to include the two wells in the next Annual Report submittal.


PERMIT BOUNDARY
150'
100'
CME-001
E-386914, N-884133
CME-002
E-387164, N-884158
CM-33
CM-32
C-18
C-20
C-22
C-24
Proposed Investigation Wells
Permit Boundary
Header House
CM-32 Excursion Well
1" = 200'
0 100 200 400
N
REVISIONS
NO. DATE BY
0 01/19/11 SLM
CAMECO
MU-C EXCURSION INVESTIGATION
PROPOSED WELLS
PAPER SIZE: TABLOID
CURRENT REV 0
J:\HEWITT\MU-C\MUC DRILLING PLAN MAP - VER 1.2.DWG

Cameco

CAMECO RESOURCES
Smith Ranch-Highland Operation
Mail:
P.O. Box 1210
Glenrock, WY
82637 USA

Tel: (307) 358-6541
Fax: (307) 358-4533
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May 31, 2011

Mr. Lowell Spackman, District I Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
122 W. 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL #7010 0780 0001 6002 3197 RETURN RECEIPT REQUESTED

RE: Excursion Report Summary Update, Cameco Resources, Smith Ranch-Highland Uranium Project, Permit 603 and 633

Dear Mr. Spackman:

Power Resources, Inc. d/b/a/ Cameco Resources (Cameco) is herein providing the monthly Excursion Report Summary for the Smith Ranch-Highland Uranium Project. During the month of May no new excursions were reported. The Cameco Resources Excursion Report is attached. Cameco committed in the March Excursion Report Summary Update, dated March 30, 2011, to provide updates on monitor wells CM-32 and DM-3 per reported in accordance with Cameco's responses to LQD regarding 3rd Quarter 2010 Excursion Monitoring dated March 11, 2011

Monitor well CM-32 was reported off excursion in April and sampling of the well continued until the week of May 10th at which time a Guideline 8 sample was collected and submitted to an off-site laboratory for analysis. The sampling schedule was returned to once every two months as noted in the Bi-weekly Bioremediation Report for Mine Unit C dated May 20, 2011. Cameco received a Letter of Conference and Conciliation (LCC), Excursion at CM-32 on May 23, 2011 from the LQD to investigate the extent of the excursion beyond the monitor well ring and proximity to the aquifer exemption boundary and the permit boundary. Response to the LCC will be submitted under separate cover.

Subsequent to April 20, 2011 and an initial favorable response in water quality for monitor well DM-3, the downward trend of conductivity ceased on May 3, 2011 and again started to increase. A rise in water level was noted on May 17, 2011 resulting from a temporary outage at Satellite 2 which occurred at the time monitoring was performed. As a result of the increasing trends of conductivity, Cameco is evaluating the benefit of increasing

pumping of the drift area working proximal to Mine Unit D. Pumping would entail potentially utilizing wells completed into and near the underground workings. Cameco will be capable of achieving this additional flow in the 3rd Quarter 2011 once the new RO has been installed to increase capacity. Cameco will continue the bleed in Mine Units C and E which is needed to maintain stability in these mine units.

Please contact Dawn Kolkman at 307-358-6541, ext. 435 or Dawn_Kolkman@cameco.com if you have any questions.

Respectfully,

Tom Cannon
General Manager of Operations

LTC/dk

Attachment: Cameco Resources Excursion Report,
Monitor Well Reports for DM-3 and CM-32

cc: File SR 4.3.3.1
ec: CR-Cheyenne

Cameco Resources Excursion Report
Permit Nos. 603 & 633
(May 2011)

Well Identification	Initial Sample Date	Confirmation Sample Date	Excursion Status (on/off)	Parameters Exceeded	Verbal Notification Date	Written Notification Date	Excursion Resolution Date	LQD Concurrence Notification Date
DM-3	11/19/2009	11/20/2009	ON	Chloride Alkalinity	11/23/2009	11/25/2009		

Cameco

CAMECO RESOURCES
Smith Ranch-Highland
Operation
Mail:
P.O. Box 1210
Glenrock, WY
82637 USA

Tel: (307) 358-6541
Fax: (307) 358-4533
www.cameco.com

June 10, 2011

Mr. Lowell Spackman, District 1 Supervisor
Wyoming Department of Environmental Quality
Land Quality Division
Herschler Building, 3 Fl-West
122 West 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL #70100780000160019800 RETURN RECEIPT REQUESTED

RE: March 2011 Inspection, Response to Letter of Conference and Conciliation, Release of Pump Test Water in MU-K North, Permit 633, Cameco Resources

Dear Mr. Spackman:

Power Resources, Inc d/b/a Cameco Resources (Cameco) is responding to the Letter of Conference and Conciliation (LCC) received on June 1, 2011 from Wyoming Department of Environmental Quality/Land Quality Division (WDEQ-LQD). The pump test water release in Mine Unit K-North on March 10, 2011 has been documented and the cause was investigated within a week of the occurrence. Cameco has discussed the context of reportable releases regulated by the Water Quality Division (WQD) of WDEQ and with the Nuclear Regulatory Commission (NRC). Enclosed are the accounts of contacting appropriate agencies and a written report providing details of the investigation as required in the LCC.

Please contact Dawn Kolkman at (307) 358-6541, ext 435 or @ Dawn_Kolkman@cameco.com if any questions.

Respectfully,

Tom Cannon
General Manager of Operations

LTC/kg

Attachments: Letter of Response to LCC

cc: File SR 4.3.3.1
ec: Cameco Resources-Cheyenne

Letter of Conference and Conciliation, Release of Pump Test Water in Mine Unit K-North
Cameco Resources Permit 633

Introduction

Cameco Resources (Cameco) received the above referenced Letter of Conference & Conciliation (LCC) from Wyoming Department of Environmental Quality-Land Quality Division (WDEQ-LQD) on June 1, 2011. A release of pump test water in Mine Unit K-North occurred on March 10, 2011 when a modular tank collapsed containing a possible 35,000 gallons of water. LQD states in the LCC that all spills greater than 420 gallons that enter or threaten to enter a water of the state require an operator to report the spill to regulatory agencies. LQD then cites WDEQ-WQD regulation, Chapter 4, Section 4 (a) (ii) which specifies only oil or hazardous substances released requires immediate notification to the Water Quality Division. LQD additionally cites Cameco's Permit 633, Chapter 5, Section 5.5.3 which specifies any spill in excess of 420 gallons comprised of lixiviant, pregnant liquor, acid, solvent, process waste water, or similar stream shall be reported to WQD and LQD within 24 hours followed by a written report within 7 days. LQD has concluded Cameco is in violation of WWQRR Chapter 4 and Permit 633 requiring additional corrective actions. Below are the required corrective actions from LQD and Cameco's actions of compliance to the LCC.

CORRECTIVE ACTION REQUIRED

- *Officially report to the appropriate agencies, the spill in MU-K-North including the date of the spill, amount of release, location of the release, and whether or not a sample was obtained of the spill release fluid.*

Cameco's Actions of Compliance:

WQD — On June 8, 2011, Kevin Wells of WQD was contacted by Dawn Kolkman of Cameco. The release of the pump test water in Mine Unit K-North on March 10, 2011, was discussed including the possible amount of release, location, and that a water sample of the release was obtained.

NRC — On June 7, 2011, Doug Mandeville of the NRC was contacted by Dawn Kolkman of Cameco. The release of pump test water in Mine Unit K-North on March 10, 2011 was discussed including the possible amount of the release, location, and that a water sample of the release was obtained. Doug discussed when reportable spills are determined Cameco's NRC License SUA 1548, Chapter 5, Section 5.3.12 requires 24 hour verbal notification followed up by a written notification within 7 days.

CORRECTIVE ACTION REQUIRED

- *Submit a written report including a map of the spill and explanation of the events leading to the spill. Provide details of the apparent cause investigation conducted by CR's internal review.*

Cameco's Compliance Action:

See attached written report.

CORRECTIVE ACTION REQUIRED

- *Compliance of the above items must occur* ***within 10 days of receipt of this Letter of Conference and Conciliation*** *to avoid further enforcement action.*

Cameco's Compliance Action:

Cameco has met the provisions of the Conference and Conciliation with this submittal.

Smith Ranch–Highland Operation Incident Report: Modular Tank Failure
Release of Pump Test Water, K-North Wellfield
Cameco Resources Permit 633

Power Resources, Inc. d/b/a Cameco Resources (Cameco) had a modular tank fail on March 10, 2011, leading to a release of pump test water at the Smith Ranch Highland Uranium Project, Permit 633, K-North Wellfield. A Letter of Conference and Conciliation (LCC) was received on June 1, 2011 from Wyoming Department of Environmental Quality, Land Quality Division (WDEQ-LQD) requiring Cameco to submit a written account of the incident and details of the internal investigation conducted. Verbal notification via telephone of the event was initially given to Ms. Pam Rothwell of LQD on March 16, 2011, to Mr. Doug Mandeville, Nuclear Regulatory Commission (NRC) on June 7, 2011, and Mr. Joe Hunter & Mr. Dan Clark of WDEQ, Water Quality Division (WDEQ-WQD) on May 3, 2011 that a release of pump test water had occurred at Smith Ranch-Highland Uranium Project in Converse County, Wyoming on March 10, 2011. Kevin Wells of WQD was contacted subsequently on June 8, 2011 to again report that a release of pump test water had occurred and to acknowledge notification as required by the LCC.

On March 10, 2011, an undetermined amount of pump test water over 420 gallons, possible 35000 gallons mixed with snow melt, was released from a modular tank installed to collect the water during the K-North Wellfield Hydrologic Pump Test. Strong winds upward in excess of 50 mph blew down the west wall of the tank, the wall collapsed which pulled the 2" x 8" double run of stringers secured to the ground free, and subsequently the southwest corner out of alignment. This allowed an air channel under the pond liner causing a 20 foot high air bubble to develop. There was not enough water in the tank to secure the liner. The bubble pulled the remaining three walls out of alignment. Corrective action taken to mitigate the incident was to disassemble the southwest corner and cut the liner on the west side of the tank to remove the bubble. Eye witness accounts did not see water flowing from the tank during the upset. A significant amount of snow melt during the day flowed into and comingled with the water still contained in the tank liner. The water surface froze later that night and with freeze/thaw events over the next few days water seeped/leaked onto adjacent surfaces around the tank which eventually evaporated. The result of the corrective actions taken was that the modular tank was disassembled and determined not be used to collect pump test water for the K-North Wellfield Hydrologic Pump Test. Cameco employed the use of portable liquid storage (FRAC) tanks to collect pump test water.

The release is located in the NWSW of Section 19, T.36N, R.73W, of Converse County, Wyoming. A field map is attached showing the location of the installed modular tank in K-North wellfield. Water flow from this event could not be determined because of the snow melt and refreezing of the area.

A sample of the water was collected from the liner after the event and resulting analysis indicated 0.017 ppm U-nat and 9.6 pCi/l radium 226. (See water analysis attached)

The release was not considered a reportable event to LQD, WQD, or NRC as defined in Permit 633, page 5-15, Section 5.5.3 of Chapter 5 *Operational/Environmental Monitoring* and

Cameco's NRC License SUA 1548, Chapter 5, Section 5.3.12. The pump test water is not comprised of lixiviant, pregnant liquor, acid, solvent, or process waste water.

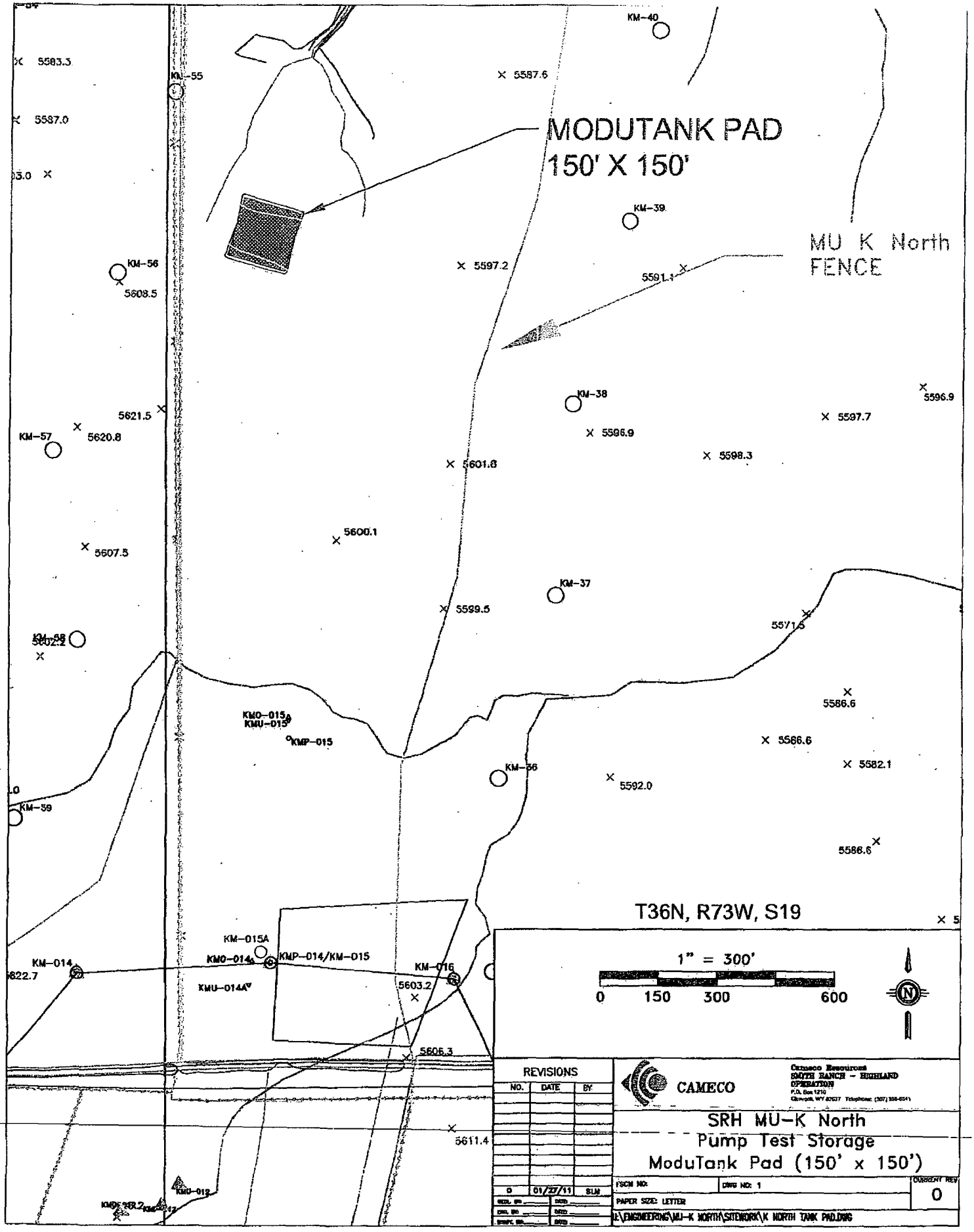
Under Wyoming Water Quality Rules & Regulations (WWQRR), Chapter IV, Section 4, releases of oil or hazardous substances into waters of the state or that threaten to enter waters of the state must be reported immediately by phone followed by a written report within seven (7) days. Chapter IV of the WWQRR, Section 3, defines hazardous substances as any substance or waste which constitutes a threat to public health and welfare, aquatic life, or wildlife. The pump test water is not considered processed waste or a threat to wildlife. An analysis of the pump well water taken November 9, 2010 (0.012 ppm U-nat and 6.3 pCi/l radium 226) demonstrated the water quality does not exceed radium limits and would be acceptable for discharge or irrigation. This was endorsed by LQD in a letter of approval for the K-North Hydrologic Pump Test plan dated February 10, 2011 prior to performing the pump test. The water released did not reach any surface waters of the State. Cameco had concluded the release of pump test water was not reportable.

In LQD's March Site Inspection Report received on May 2, 2011, LQD considers the pump test water release as a reportable incident. Subsequently, Cameco contacted the WQD as follows:

May 3, 2011: Dan Clark of the WQD was contacted by Stephen Shire of Cameco. The Mine Unit K-North release of pump test water was discussed including the date, location, possible amount of the release, and that a sample was obtained of the water remaining in the tank. Analysis of water samples taken in November 2010 and remaining water sampled in the tank was recognized as not exceeding the limits of radium and was acceptable for discharge or irrigation. It was Mr. Clark's opinion that the water in the tank release did not require notification to WDEQ. Mr. Clark teleconferenced in the Emergency Response Coordinator, Joe Hunter, and explained the incident circumstances. Mr. Hunter concurred with Mr. Clark that the incident was not reportable since the water was not produced; we had just watered the grass. There was no violation.

June 8, 2011: Kevin Wells of WQD was contacted by Dawn Kolkman of Cameco. Joe Hunter was out of the office. The incident at Mine Unit K-North was discussed regarding the release of pump test water that occurred on March 10, 2011 and LQD's requirement to officially report the release as stated in the LCC. The chronology of the event was reviewed. Kevin iterated the release was not reportable as defined by WQD regulations. He then spoke with Leah Craft and Brian Lovitt and called back. Kevin stated that Leah and Brian concurred the release was not a reportable spill and no violation had been committed; furthermore, Cameco is not expected provide a report to WQD. Kevin said to consider the WQD officially contacted as required by the LQD in their Letter of Conference and Conciliation (LCC) received June 1, 2011.

The above written report has provided an explanation of the events leading to the release of pump test water in the K-North wellfield and the details of Cameco's investigation and internal review as required in LQD's LCC.



REVISIONS		
NO.	DATE	BY
0	01/27/11	SLM

CAMECO

Cameco Resources
SMITH RANCH – HIGHLAND
OPERATIONS
P.O. Box 1210
Glenrock, WY 82637 Telephone: (307) 358-6541

SRH MU-K North
Pump Test Storage
ModuTank Pad (150' x 150')

FSCN NO:	DWG NO: 1	CURRENT REV
PAPER SIZE: LETTER		0

L:\ENGINEERING\MU-K NORTH\SITEWORK\K NORTH TANK PAD.DWG

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client:	Power Resources dba Cameco Resources	**Report Date:**	04/15/11
Project:	Mine Unit K North	**Collection Date:**	03/15/11 12:00
Lab ID:	C11030460-001	**DateReceived:**	03/15/11
Client Sample ID:	Mu K North Pump Test Holding Tank	**Matrix:**	Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Carbonate as CO3	ND	mg/L		5		A2320 B	03/16/11 19:59 / jba
Bicarbonate as HCO3	168	mg/L		5		A2320 B	03/16/11 19:59 / jba
Calcium	126	mg/L		1		E200.7	03/18/11 15:56 / rdw
Chloride	3	mg/L		1		E300.0	03/17/11 21:17 / ljl
Fluoride	0.3	mg/L		0.1		A4500-F C	03/17/11 11:43 / jba
Magnesium	33	mg/L		1		E200.7	03/23/11 10:52 / cp
Nitrogen, Ammonia as N	0.30	mg/L		0.05		A4500-NH3 G	03/18/11 15:09 / dc
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	03/16/11 16:16 / dc
Potassium	16	mg/L		1		E200.7	03/18/11 15:56 / rdw
Silica	25.8	mg/L		0.2		E200.7	03/18/11 15:56 / rdw
Sodium	37	mg/L		1		E200.7	03/18/11 15:56 / rdw
Sulfate	375	mg/L	D	2		E300.0	03/17/11 21:17 / ljl
PHYSICAL PROPERTIES							
Conductivity @ 25 C	943	umhos/cm		1		A2510 B	03/16/11 13:37 / lmc
pH	8.13	s.u.		0.01		A4500-H B	03/16/11 13:37 / lmc
Solids, Total Dissolved TDS @ 180 C	677	mg/L		10		A2540 C	03/17/11 13:33 / lmc
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.7	03/23/11 10:52 / cp
Arsenic	0.001	mg/L		0.001		E200.8	03/22/11 06:37 / sml
Barium	ND	mg/L		0.1		E200.7	03/18/11 15:56 / rdw
Boron	ND	mg/L		0.1		E200.7	03/18/11 15:56 / rdw
Cadmium	ND	mg/L		0.005		E200.8	03/22/11 06:37 / sml
Chromium	ND	mg/L		0.05		E200.8	03/22/11 06:37 / sml
Copper	ND	mg/L		0.01		E200.8	03/22/11 06:37 / sml
Iron	ND	mg/L		0.03		E200.7	03/18/11 15:56 / rdw
Lead	ND	mg/L		0.001		E200.8	03/22/11 06:37 / sml
Manganese	0.03	mg/L		0.01		E200.7	03/23/11 10:52 / cp
Mercury	ND	mg/L		0.001		E200.8	03/22/11 06:37 / sml
Molybdenum	ND	mg/L		0.1		E200.8	03/22/11 06:37 / sml
Nickel	ND	mg/L		0.05		E200.8	03/22/11 06:37 / sml
Selenium	ND	mg/L		0.001		E200.8	03/22/11 06:37 / sml
Uranium	0.0173	mg/L		0.0003		E200.8	03/22/11 06:37 / sml
Vanadium	ND	mg/L		0.1		E200.8	03/22/11 06:37 / sml
Zinc	ND	mg/L		0.01		E200.7	03/18/11 15:56 / rdw
METALS - TOTAL							
Iron	1.16	mg/L		0.03		E200.7	03/30/11 14:44 / cp
Manganese	0.06	mg/L		0.01		E200.7	03/30/11 14:44 / cp

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level.
QCL - Quality control limit. ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client:	Power Resources dba Cameco Resources	**Report Date:**	04/15/11
Project:	Mine Unit K North	**Collection Date:**	03/15/11 12:00
Lab ID:	C11030460-001	**DateReceived:**	03/15/11
Client Sample ID:	Mu K North Pump Test Holding Tank	**Matrix:**	Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - DISSOLVED							
Gross Alpha	58.1	pCi/L				E900.0	03/22/11 01:38 / ep
Gross Alpha precision (±)	4.6	pCi/L				E900.0	03/22/11 01:38 / ep
Gross Alpha MDC	3.3	pCi/L				E900.0	03/22/11 01:38 / ep
Gross Beta	31.0	pCi/L				E900.0	03/22/11 01:38 / ep
Gross Beta precision (±)	2.5	pCi/L				E900.0	03/22/11 01:38 / ep
Gross Beta MDC	3.4	pCi/L				E900.0	03/22/11 01:38 / ep
Radium 226	9.6	pCi/L				E903.0	04/04/11 14:45 / plj
Radium 226 precision (±)	0.57	pCi/L				E903.0	04/04/11 14:45 / plj
Radium 226 MDC	0.10	pCi/L				E903.0	04/04/11 14:45 / plj
Radium 228	0.7	pCi/L	U			RA-05	03/28/11 13:43 / plj
Radium 228 precision (±)	0.8	pCi/L				RA-05	03/28/11 13:43 / plj
Radium 228 MDC	1.3	pCi/L				RA-05	03/28/11 13:43 / plj
DATA QUALITY							
A/C Balance (± 5)	1.92	%				Calculation	04/07/11 10:20 / kbh
Anions	10.6	meq/L				Calculation	04/07/11 10:20 / kbh
Cations	11.1	meq/L				Calculation	04/07/11 10:20 / kbh
Solids, Total Dissolved Calculated	705	mg/L				Calculation	04/07/11 10:20 / kbh
TDS Balance (0.80 - 1.20)	0.960					Calculation	04/07/11 10:20 / kbh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

Cameco

CAMECO RESOURCES
Smith Ranch-Highland Operation
Mail:
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Glenrock, WY
82637 USA

Tel: (307) 358-6541
Fax: (307) 358-4533
www.cameco.com

June 10, 2011

Mr. Lowell Spackman, District I Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
122 W. 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL #7010 0780 0001 6002 3227 RETURN RECEIPT REQUESTED

RE: Excursion at Monitor Well DM-10, Cameco Resources Highland Uranium Project, Permit to Mine No. 603

Dear Mr. Spackman:

In accordance WDEQ/LQD Chapter 11 regulations, Section 8.4 of the Operations Plan for Permit 603 and NRC License Condition No. 11.5 for the Highland Uranium Project, Power Resources, Inc. d/b/a/ Cameco Resources (Cameco) is providing written notification that Monitor Well DM-10 monitoring results, received June 7, 2011 showed it to be on excursion status on June 6, 2011. Ms. Pam Rothwell from WDEQ/LQD, and Mr. Doug Mandeville from the NRC were notified by telephone and email on June 7, 2011.

Analytical results of Monday June 6, 2011 for the routine sample taken on Friday June 3, 2011 indicated a potential exceedance in two of the three parameters (chloride and alkalinity). Cameco collected a confirmation sample from the monitor well and analyzed it with a quality assurance duplicate on June 6, 2011. Results of the laboratory analyses confirmed the exceedance of Upper Control Limit (UCL) parameters as shown below.

Sample Date	**Chloride (mg/L)**	**Alkalinity (mg/L $CaCO_3$)**	**Conductivity (µMhos/cm)**
	UCL 18	**UCL 188**	**UCL 962**
6/6/2011	30	243	947
6/3/2011	29	231	968

Monitor Well DM-10 is located in Mine Unit D as illustrated on the attached map. Cameco is investigating the excursion and working with hydrological consultants to mitigate the excursion for resolution. Weekly samples will be collected to monitor the UCL constituents until the excursion is resolved. The excursion at monitor well DM-10 has been added to the monthly Excursion Report Summary and will be identified on the Cameco Resources site map.

Pursuant to WDEQ/LQD Chapter 11, Section 2 a duly authorized representative certification is attached.

Please contact Dawn Kolkman at (307)358-6541 ext. 435 or Dawn_Kolkman@cameco.com if you have any questions.

Sincerely,

Tom Cannon
General Manager of Operations

LTC/dk

Attachment: 1) Map
2) Duly Authorized Representative Certification

cc: D. Mandeville, USNRC (2 copies) File HUP 4.6.4.1
ec: CR-Cheyenne

Cameco

CAMECO RESOURCES
Smith Ranch-Highland Operation
Mail:
P.O. Box 1210
Glenrock, WY
82637 USA

Tel: (307) 358-6541
Fax: (307) 358-4533
www.cameco.com

June 20, 2010

Mr. Lowell Spackman, District 1 Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
Herschler Building
122 West 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL #70092820000140462614 RETURN RECEIPT REQUESTED

RE: East Storage Pond Leak, Cameco Resources, Smith Ranch-Highland Uranium Project, Permit to Mine No. 633

Dear Mr. Spackman:

Pursuant to Permit to Mine No. 633 requirements and the NRC License SUA 1548, Power Resources, Inc. d/b/a Cameco Resources (CR) is providing written notification of a leak in the East Storage Pond at the Smith Ranch Facility. Following confirmation results, received June 15, 2011, the leak was reported via telephone, to Ms. Pam Rothwell of the Land Quality Division, Wyoming Department of Environmental Quality and Mr. Doug Mandeville, Nuclear Regulatory Commission Project Manager.

During a routine inspection on June 13, 2011, water was discovered in the East Evaporation Pond Sump. The level of the water was found to be five inches deep, not exceeding the six inch depth approved in the permit and license; however, Cameco began to pump the water out of the sump. The sump water was analyzed for chloride and specific conductance to confirm that the source of the water was from the pond. The results are shown in the table below.

Confirming Sample Results

Sample E. Sump	Chloride (mg/L)	Conductivity (mS/cm)
6/15/2011	257	3194

The water level in the pond was 4 ft. freeboard at the time of the discovery. The pond fluid level is being lowered in order to stop the leak and locate the liner breach. The liner will then be repaired. Cameco will continue to monitor the pond and sump and take appropriate actions, as necessary.

Please contact Dawn Kolkman at (307) 358-6541 ext. 435 or at Dawn_Kolkman@cameco.com if you have questions.

Sincerely,

Tom Cannon
General Manager of Operations

LTC/dk

cc: Mr. Doug Mandeville – NRC Project Manager (2-copies)
File SR 4.3.3.1 File SR 4.3.3.4

ec: CR-Cheyenne

Cameco

CAMECO RESOURCES
Smith Ranch-Highland Operation
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June 21, 2011

Mr. Lowell Spackman, District I Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
122 W. 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL #70092820000140462638 RETURN RECEIPT REQUESTED

RE: Excursion at Monitor Well ~~DM-10~~ KM-31, Cameco Resources Highland Uranium Project, Permit to Mine No. 603

Dear Mr. Spackman:

In accordance with WDEQ/LQD Chapter 11 regulations, Section 8.4 of the Operations Plan for Permit 603 and NRC License Condition No. 11.5 for the Highland Uranium Project, Power Resources, Inc. d/b/a/ Cameco Resources (Cameco) is providing written notification that Monitor Well KM-031 confirmation monitoring results, received June 16, 2011 showed it to be on excursion status on June 15, 2011. Ms. Pam Rothwell from WDEQ/LQD, and Mr. Doug Mandeville from the NRC were notified by telephone and email on June 16, 2011.

Analytical results of June 15, 2011 for the routine sample taken on June 14, 2011 indicated a potential exceedance in two of the three parameters (alkalinity and conductivity). Cameco collected a confirmation sample from the monitor well and analyzed it with a quality assurance duplicate on June 15, 2011. Results of the laboratory analyses confirmed the exceedance of Upper Control Limit (UCL) parameters as shown below.

Sample Date	Chloride (mg/L)	Alkalinity (mg/L $CaCO_3$)	Conductivity (µMhos/cm)
	UCL 16	UCL 149	UCL769
6/15/2011	8	151	770
6/14/2011	8	150	772

Monitor Well KM-031 is located in Mine Unit K as illustrated on the attached map and belongs to monitor wells installed for monitoring the lower portion of Mine Unit K. Cameco is investigating the cause of the excursion to identify and apply the appropriate corrective actions to resolve the excursion. Sampling of monitor wells adjacent to KM-031 does not show any water quality concerns. Cameco is therefore reviewing the baseline sampling and approved upper control limit (UCL) parameters for comparison of adjacent monitoring wells KM-030 and KM-032. Additionally, Cameco will be sampling Monitor Wells KM-002 and KM-003. These two monitoring wells are located in the original monitor well ring, which are no longer part of the production sampling for Mine Unit K. The monitor wells are illustrated on the attached map. The water samples for these wells will be collected and analyzed to compare quality analysis with Monitor Well KM-031. Weekly samples will be collected to monitor the UCL constituents until the excursion is resolved. The excursion at Monitor Well KM-031 has been added to the monthly Excursion Report Summary and will be identified on the Cameco Resources site map.

Pursuant to WDEQ/LQD Chapter 11, Section 2 a duly authorized representative certification is attached.

Please contact Dawn Kolkman at (307)358-6541 ext. 435 or Dawn_Kolkman@cameco.com if you have any questions.

Sincerely,

Tom Cannon
General Manager of Operations

LTC/dk

Attachment: 1) Map
2) Duly Authorized Representative Certification

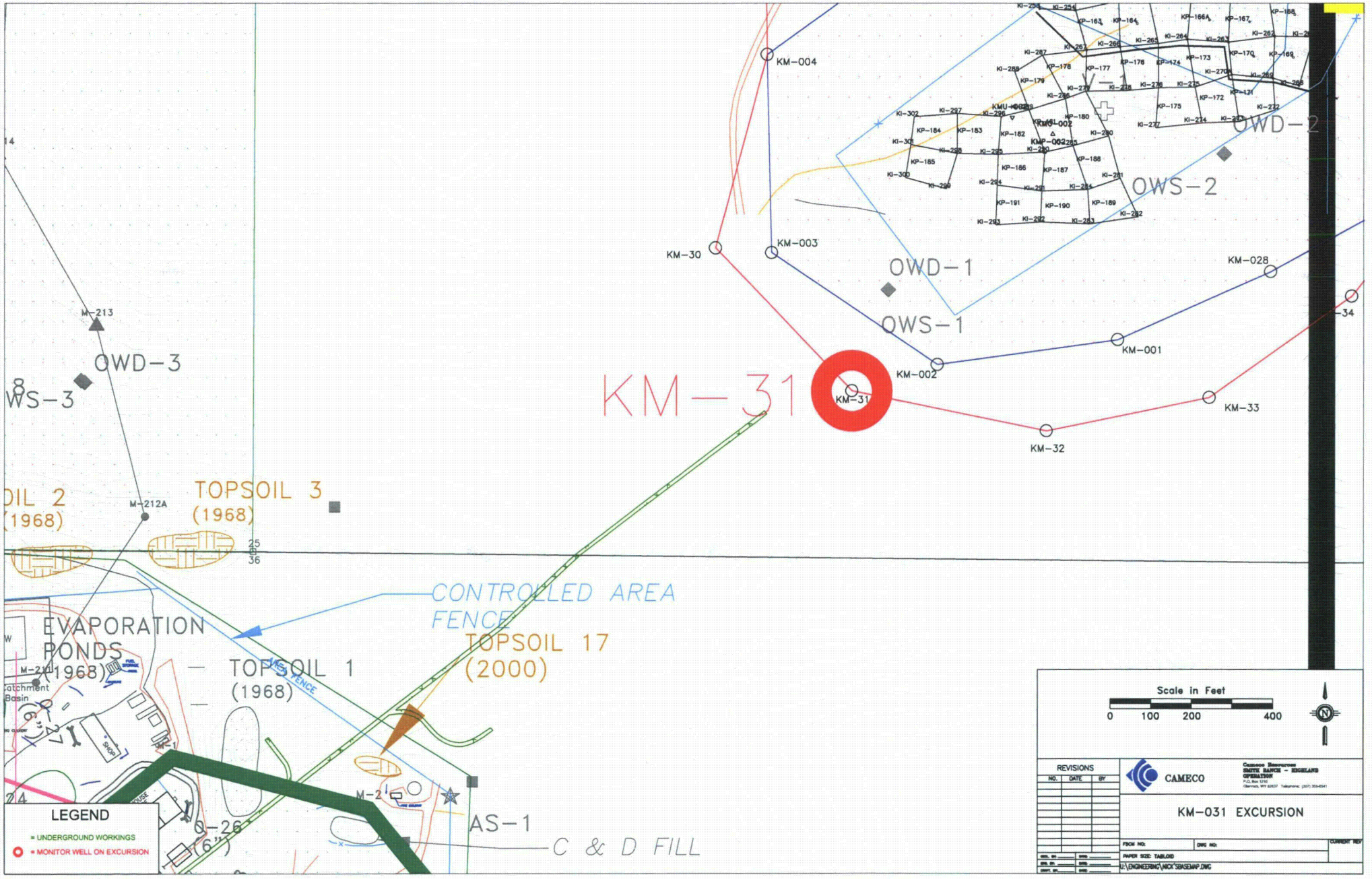
cc: D. Mandeville, USNRC (2 copies) File HUP 4.6.4.1
ec: CR-Cheyenne

Duly Authorized Representative Certification

I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for known violations.

6.21.11

Duly Authorized Representative: Tom Cannon Date:


KM-004
KM-30
KM-003
KM-028
KM-001
KM-002
KM-31
KM-32
KM-33
KM-34
OWD-1
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OWD-3
OWS-1
OWS-2
OWS-3
KM-31
M-213
M-212A
TOPSOIL 3
(1968)
TOPSOIL 2
(1968)
CONTROLLED AREA
FENCE
TOPSOIL 17
(2000)
TOPSOIL 1
(1968)
EVAPORATION
PONDS
(1968)
AS-1
C & D FILL
LEGEND
= UNDERGROUND WORKINGS
= MONITOR WELL ON EXCURSION
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CAMECO
KM-031 EXCURSION
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Cameco

CAMECO RESOURCES
Smith Ranch-Highland Operation
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P.O. Box 1210
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www.cameco.com

June 30, 2011

Mr. Lowell Spackman, District 1 Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
Herschler Building
122 West 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL #70092820000140462652 RETURN RECEIPT REQUESTED

RE: Monthly Report East Storage Pond Leak, Cameco Resources, Smith Ranch-Highland Uranium Project, Permit to Mine No. 633

Dear Mr. Spackman:

On June 20, 2011, Power Resources, Inc. d/b/a Cameco Resources (Cameco) provided written notification to Wyoming Department of Environmental Land Quality Division and the Nuclear Regulatory Commission regarding a leak discovered on June 13, 2011 in the East Evaporation Pond Sump.

Cameco lowered the pond level to investigate the leak and has identified a potential tear in the liner. The breach will be verified and repair scheduled. Weekly samples and a monthly sample were collected from the sump in June. Sampling results are provided in the tables below. A monthly report will continue to be submitted until the repairs are complete.

Weekly Sample Results

Sample Date	Chloride (mg/L)	Conductivity (mS/cm)
06/15/2011	257	3194
6/20/2011	413	3645

Monthly Sample Results

Sample Date	Chloride (mg/L)	Conductivity (mS/cm)	Bicarbonate (mg/L)	Uranium (mg/L)	Sulfate (ppm)
6/20/2011	413	3645	925	248	905

Please contact Dawn Kolkman at (307) 358-6541 ext. 435 if you have questions.

Sincerely,

Tom Cannon
General Manager of Operations

LTC/dk

cc: Mr. Doug Mandeville – NRC Project Manager (2-copies)
File SR 4.3.3.1 File SR 4.3.3.4

ec: CR-Cheyenne

Cameco

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June 30, 2011

Mr. Lowell Spackman, District I Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
122 W. 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL #7009 2820 0001 4046 2645 RETURN RECEIPT REQUESTED

RE: Excursion Report Summary Update, Cameco Resources, Smith Ranch-Highland Uranium Project, Permit 603 and 633

Dear Mr. Spackman:

Power Resources, Inc. d/b/a/ Cameco Resources (Cameco) is submitting the monthly Excursion Report Summary for the Smith Ranch-Highland Uranium Project. During the month of June two excursions were reported to WDEQ-LQD. The excursions occurred in Mine Unit D and K. Monitor Well DM-10, in Mine Unit D was verbally reported to WDEQ-LQD on excursion on June 7, 2011 and Monitor Well KM-031, in Mine Unit K, was reported on June 16, 2011. Written notifications were sent to WDEQ-LQD pursuant to Chapter 11 Section 12 (c)(ii). The excursion at Monitor Well KM-031 was resolved as reported to WDEQ-LQD on June 22, 2011. The monitor wells have been added to the Excursion Well Summary Table, a copy has been attached. Monitor Well DM-3 remains on excursion.

Constituent levels in Monitor Well DM-3 stayed relatively stable throughout the month of June despite the steady decrease in water level since May 17, 2011. A copy of the monitor well report for Monitor Well DM-3 is attached. Pumping Well DP-007 was turned off June 20, 2011 and Pumping Well DP-022 was turned on in its place for excursion control. Pumping Well DP-022 was chosen because it had the highest water elevation in the immediate area and it is centrally located between excursion wells DM-3 and DM-10. Utilizing this well may potentially relieve some hydraulic pressure created by the height difference between the monitor wells causing a change in fluid direction back into the mine unit, thereby lowering the levels of the constituents exceeding the excursion parameters. Cameco will continue to evaluate the benefit of increasing pumping of the drift area working proximal to Mine Unit D. As stated in previous reports, pumping would entail potentially

utilizing wells completed into and near the underground workings and Cameco will be capable of achieving this additional flow in the 3rd Quarter 2011 once the new RO has been installed to increase capacity. Cameco will continue the bleed in Mine Units C and E which is needed to maintain stability in these mine units.

Please contact Dawn Kolkman at 307-358-6541, ext. 435 or Dawn_Kolkman@cameco.com if you have any questions.

Respectfully,

Tom Cannon
General Manager of Operations

LTC/dk

Attachment: Cameco Resources Excursion Report,
Monitor Well Reports for DM-3

cc: File SR 4.3.3.1
ec: CR-Cheyenne

Cameco Resources Excursion Report
Permit Nos. 603 & 633
(June 2011)

Well Identification	Initial Sample Date	Confirmation Sample Date	Excursion Status (on/off)	Parameters Exceeded	Verbal Notification Date	Written Notification Date	Excursion Resolution Date	LQD Concurrence Notification Date
DM-3	11/19/2009	11/20/2009	ON	Chloride Alkalinity	11/23/2009	11/25/2009		
DM-10	6/3/2011	6/6//2011	ON	Chloride Alkalinity	6/7/2011	6/10/2011		
KM-031	6/14/2011	6/15/2011	Off	Alkalinity Cond	6/16/2011	6/21/2011	6/22/2011	

Cameco Resources

Monitor Well Report

Well ID: DM-003

	Chloride (mg/L)	*Alkalinity (mg/L $CaCO_3$)*	*Conductivity (µMhos/cm)*	*U_3O_8 (mg/L)*	*Water Elevation*	*Comment*
NRC/WDEQ UCL	18	188	962			
06/20/2011	23	245	926	0	5093.9	Uranium below detection limit
06/14/2011	22	238	913	0	5095.4	Uranium below detection limit
06/07/2011	23	238	929	0	5099.1	Uranium below detection limit
05/31/2011	22	237	907	0	5099.7	Uranium below detection limit
05/24/2011	23	239	938	0	5103.9	Uranium below detection limit
05/17/2011	22	239	910	0	5107.2	Uranium below detection limit
05/10/2011	22	241	888	0	5099.6	Uranium below detection limit
05/03/2011	22	234	843	0	5100.5	Uranium below detection limit
04/26/2011	21	235	888	0	5104.0	Uranium below detection limit
04/19/2011	21	232	874	0	5107.2	Uranium below detection limit
04/12/2011	22	232	844	0	5107.6	Uranium below detection limit
04/05/2011	21	229	845	0	5108.8	Uranium below detection limit
03/29/2011	21	228	860	0	5110.0	Uranium below detection limit
03/22/2011	20	228	826	0	5112.4	Uranium Below Detection Limit
03/15/2011	21	231	824	0	5114.3	Uranium Below Detection Limit
03/08/2011	22	236	832	0	5115.2	Uranium Below Detection Limit

Cameco

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July 29, 2011

Mr. Lowell Spackman, District I Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
122 W. 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL #70100780000160019831 RETURN RECEIPT REQUESTED

RE: Excursion Report Summary Update, Cameco Resources, Smith Ranch-Highland Uranium Project, Permit 603 and 633

Dear Mr. Spackman:

Power Resources, Inc. d/b/a/ Cameco Resources (Cameco) is submitting the monthly Excursion Report Summary for the Smith Ranch-Highland Uranium Project. During the month of July no new excursions were reported and the Cameco Excursion Report table is attached. Monitor well DM-003 and DM-010 remain on excursion.

Constituent levels in Monitor Well DM-003 and DM-010 stayed relatively stable throughout the month of July, 2011. A copy of the monitor well report for well DM-003 and DM-010 is attached. Additionally, attached are graphs for each well tracking alkalinity, chloride, and conductivity trends. *Cameco invites LQD to evaluate the graphs and comment if they are of value*. Pumping Well DP-007 was turned off June 20, 2011 and Pumping Well DP-022 was turned on in its place for excursion control. Pumping Well DP-022 was chosen because it had the highest water elevation in the immediate area and it is centrally located between excursion wells DM-003 and DM-010. Cameco will continue to evaluate the benefit of increasing pumping of the drift area working proximal to Mine Unit D. As stated in previous reports, pumping would entail potentially utilizing wells completed into and near the underground workings and Cameco will be capable of achieving this additional flow in the 3rd Quarter 2011 once the new RO has been installed to increase capacity. Cameco will continue the bleed in Mine Units C and E which is needed to maintain stability in these mine units.

Please contact Larry Teahon @ 307-358-6541, ext 435 or Larry_Teahon@cameco.com if you have questions.

Respectfully,

Dave Moody
Wellfield Operations Manager

DM/kg

Attachments: Cameco Resources Excursion Report,
Monitor Well Report and Trend Graphs for DM-003
Monitor Well Report and Trend Graphs for DM-010

cc: File SR 4.3.3.1
ec: CR-Cheyenne

Cameco Resources Excursion Report
Permit Nos. 603 & 633
(July 2011)

Well Identification	Initial Sample Date	Confirmation Sample Date	Excursion Status (on/off)	Parameters Exceeded	Verbal Notification Date	Written Notification Date	Excursion Resolution Date	LQD Concurrence Notification Date
DM-3	11/19/2009	11/20/2009	ON	Chloride Alkalinity	11/23/2009	11/25/2009		
DM-10	6/3/2011	6/6//2011	ON	Chloride Alkalinity	6/7/2011	6/10/2011		

Cameco Resources

Monitor Well Report

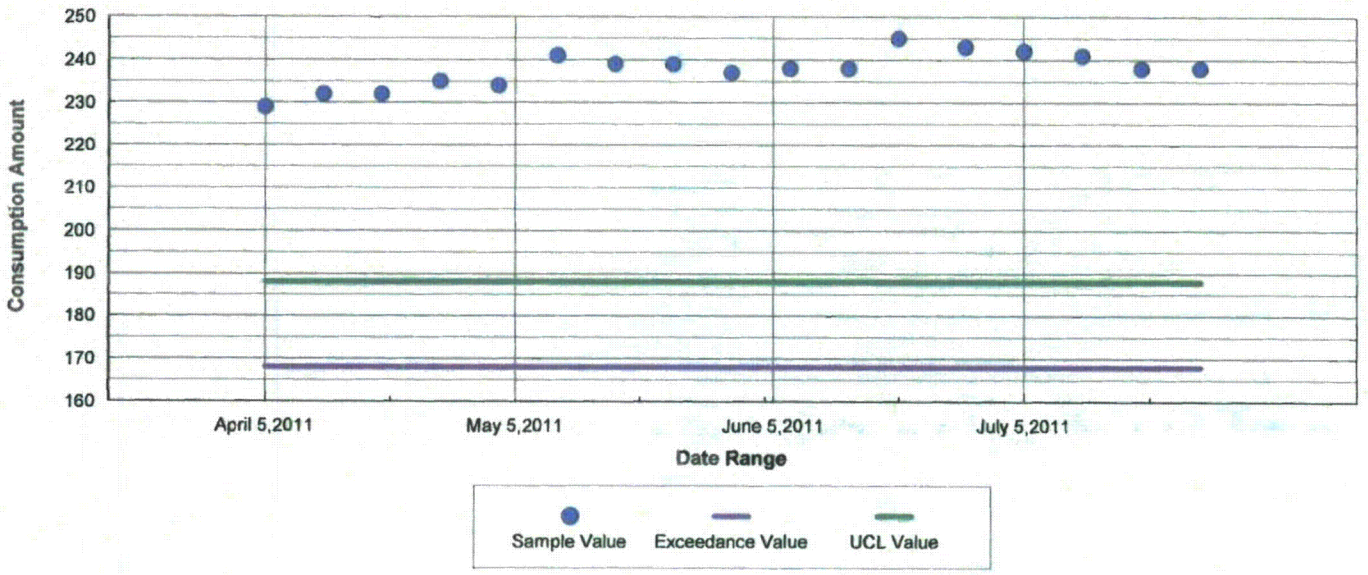
Well ID: DM-003

	Chloride (mg/L)	*Alkalinity (mg/L $CaCO_3$)*	*Conductivity (µMhos/cm)*	*U_3O_8 (mg/L)*	*Water Elevation*	*Comment*
NRC/WDEQ UCL	18	188	962			
07/26/2011	22	238	897	0	5107.9	Uranium below detection limit
07/19/2011	23	238	937	0	5112.6	Uranium below detection limit
07/12/2011	23	241	948	0	5110.3	Uranium below detection limit
07/05/2011	23	242	911	0	5106.8	Uranium below detection limit
06/28/2011	23	243	883	0	5102.6	Uranium below detection limit
06/20/2011	23	245	926	0	5093.9	Uranium below detection limit
06/14/2011	22	238	913	0	5095.4	Uranium below detection limit
06/07/2011	23	238	929	0	5099.1	Uranium below detection limit
05/31/2011	22	237	907	0	5099.7	Uranium below detection limit
05/24/2011	23	239	938	0	5103.9	Uranium below detection limit
05/17/2011	22	239	910	0	5107.2	Uranium below detection limit
05/10/2011	22	241	888	0	5099.6	Uranium below detection limit
05/03/2011	22	234	843	0	5100.5	Uranium below detection limit
04/26/2011	21	235	888	0	5104.0	Uranium below detection limit
04/19/2011	21	232	874	0	5107.2	Uranium below detection limit
04/12/2011	22	232	844	0	5107.6	Uranium below detection limit
04/05/2011	21	229	845	0	5108.8	Uranium below detection limit

Cameco

Cameco Resources
Smith Ranch - Highland

Alkalinity
Trending Analysis
Well : DM-003

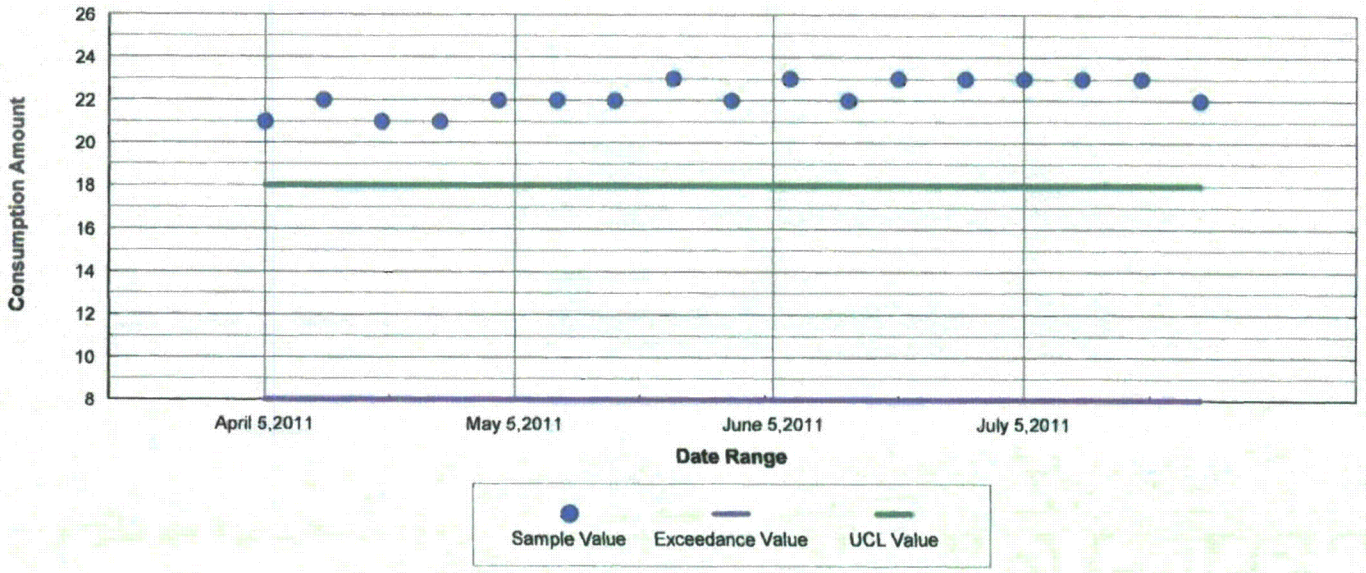


Report Generation Date : July 28, 2011

Cameco

Cameco Resources
Smith Ranch - Highland

Chloride
Trending Analysis
Well : DM-003

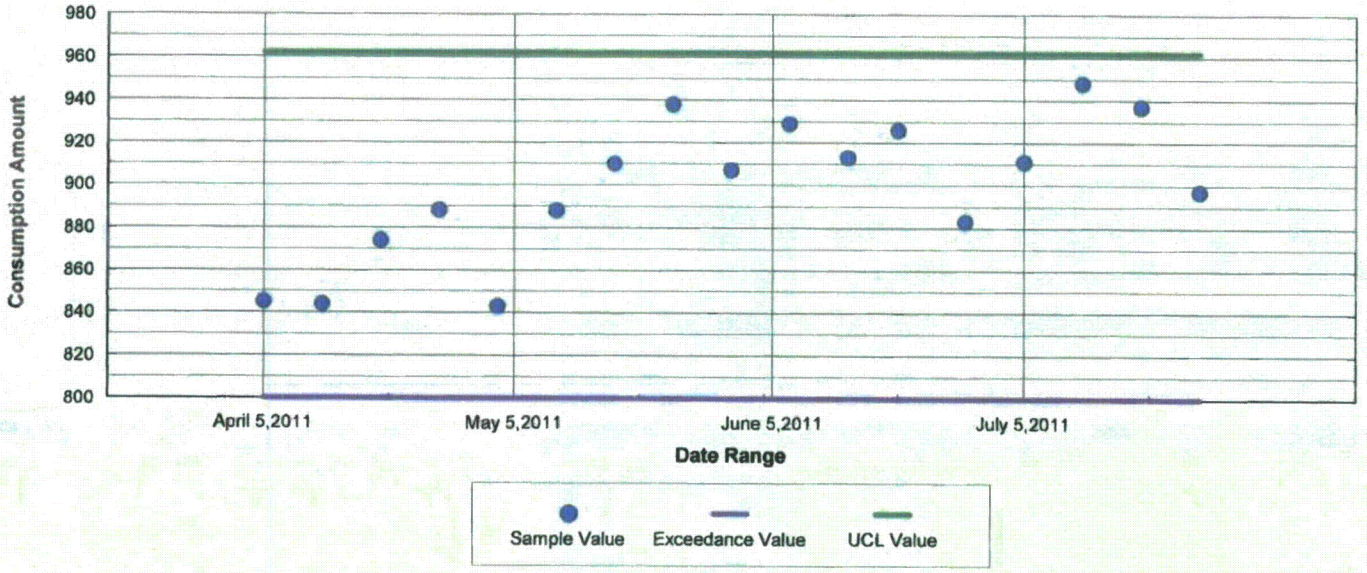


Report Generation Date : July 28, 2011

Cameco

Cameco Resources
Smith Ranch - Highland

Conductivity
Trending Analysis
Well : DM-003



Cameco Resources

Monitor Well Report

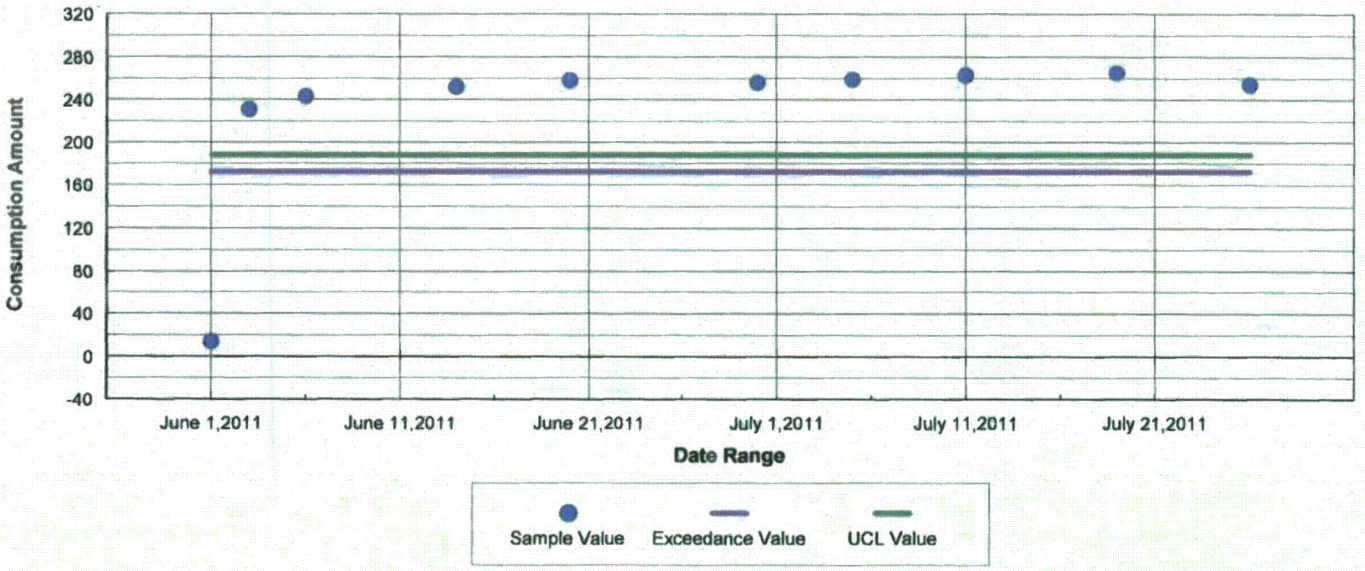
Well ID: DM-010

	Chloride (mg/L)	*Alkalinity (mg/L $CaCO_3$)*	*Conductivity (µMhos/cm)*	*U_3O_8 (mg/L)*	*Water Elevation*	*Comment*
NRC/WDEQ UCL	18	188	962			
07/26/2011	32	254	1025	0	5055.6	Uranium below detection limit
07/19/2011	35	265	1052	0	5115.4	Uranium below detection limit
07/11/2011	35	263	1002	0	5112.5	Uranium below detection limit
07/05/2011	34	259	1045	0	5109.2	Uranium below detection limit
06/30/2011	32	256	1040	0	5080.3	Uranium below detection limit
06/20/2011	33	258	990	0	5078.4	Uranium below detection limit
06/14/2011	31	252	1002	0	5067.8	Uranium below detection limit
06/06/2011	30	243	947	0	5067.9	Uranium below detection limit
06/03/2011	29	231	968		5061.4	
06/01/2011	19	14	537		5060.7	Bad Sample - Retest

Cameco

Cameco Resources
Smith Ranch - Highland

Alkalinity
Trending Analysis
Well : DM-010

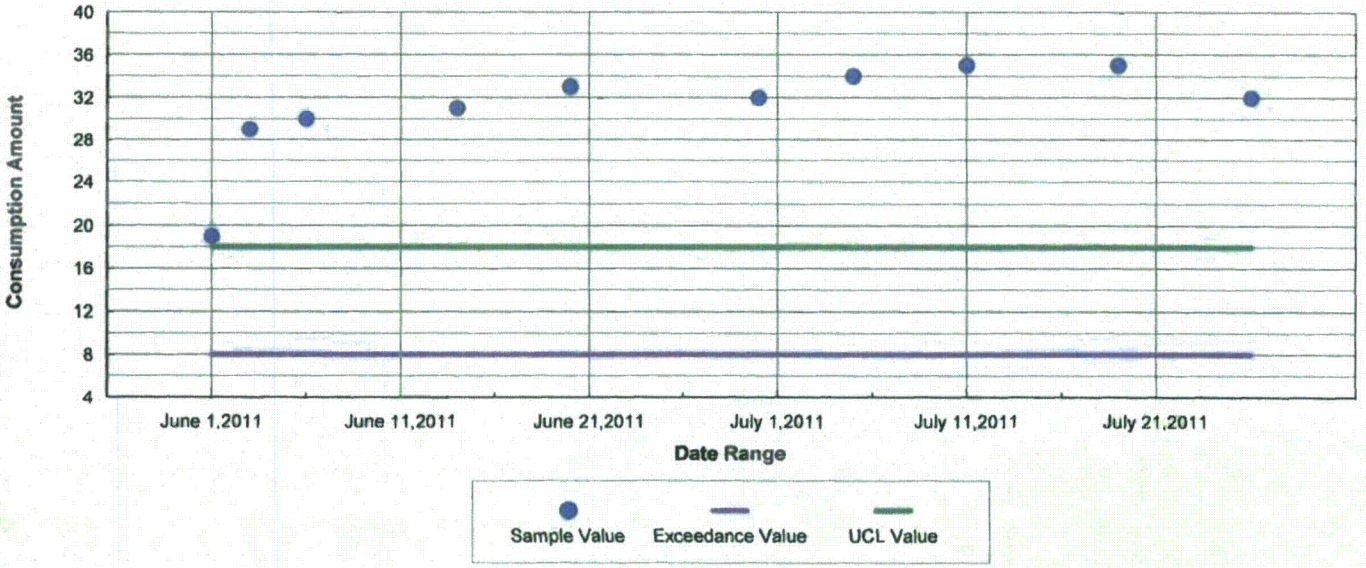


Report Generation Date : July 28, 2011

Cameco

Cameco Resources
Smith Ranch - Highland

Chloride
Trending Analysis
Well : DM-010

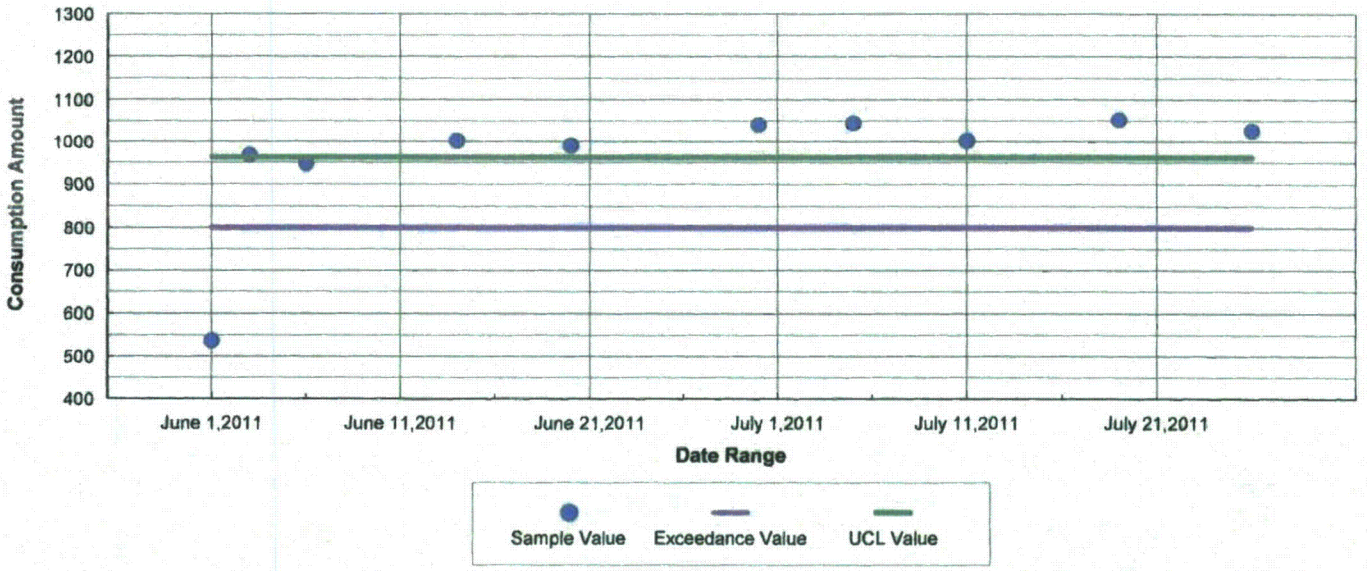


Report Generation Date : July 28, 2011

Cameco

Cameco Resources
Smith Ranch - Highland

Conductivity
Trending Analysis
Well : DM-010



Cameco

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August 3, 2011

Mr. Lowell Spackman, District 1 Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
Herschler Building
122 West 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL #7009 2820 0001 4046 2355 RETURN RECEIPT REQUESTED

Re: Monthly Report East Storage Pond Leak, Cameco Resources, Smith Ranch-Highland Uranium Project, Permit to Mine No. 633

Dear Mr. Spackman:

On June 30, 2011, Power Resources, Inc., d/b/a Cameco Resources (Cameco) provided written notification to Wyoming Department of Environmental Land Quality Division and the Nuclear Regulatory Commission regarding a leak into secondary containment discovered on June 13, 2011 in the East Evaporation Pond Sump. Weekly samples and a monthly sample were collected and results provided in the June 30, 2011 monthly report.

Cameco drained the pond to investigate the leak into secondary containment and repaired a tear in the primary liner. Following repairs, water was returned to the pond. To date, the level has not risen above the area of repair. Weekly and monthly samples were not collected in the month of July, 2011 as the sump has remained dry, and the primary liner is no longer leaking. Routine monitoring will continue to ensure no leakage occurs as the water levels rise above the area of repair. If water is detected in the sump, sampling will be performed at that time.

Please contact Larry Teahon at (307) 358-6541 Ext. 435 if you have questions.

Sincerely,

Dave Moody
Wellfield Operations Manager

DM/bj

cc: Mr. Doug Mandeville – NRC Project Manager (2 copies)
File SR 4.3.3.1 File SR 4.3.3.4

ec: CR-Cheyenne

Cameco

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August 12, 2011

Ms. Pam Rothwell, District 1 Assistant Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
Herschler Building
122 West 25th Street
Cheyenne, WY 82002

EMAIL

RE: Soil Sample Results from Mine Unit 15, HH 15-20 Wellfield Release, Cameco Resources, Smith Ranch Highland Uranium Project, Permit 633

Dear Ms. Rothwell,

On May 9, 2011, Power Resources, Inc. d/b/a Cameco Resources (Cameco) provided written notification, pursuant to Permit 633, regarding a wellfield release in Mine Unit 15, near header house 15-20 on May 3, 2011. In accordance with Permit 633, soil samples were collected from the release site and submitted to an off-site laboratory for analysis. Cameco has included a copy of the Laboratory Analytical Report for inclusion into the originally submitted spill report.

A total of nine soil samples were collected (from 0-6 inches) within the release area, and one background sample was obtained. A map of the collection sample sites was attached to the written notification date May 9, 2011. The analytes tested for include arsenic, selenium, uranium, and radium-226.

Please contact Ken Garoutte @ 307-358-6541, ext 476 or Kenneth_Garoutte@cameco.com if you have any questions.

Respectfully,

Dave Moody
Wellfield Operations Manager (acting General Manager)

DM/kg

ec: Cameco Resources – Cheyenne
cc: File SR 4.3.3.1

ANALYTICAL SUMMARY REPORT

June 08, 2011

Power Resources dba Cameco Resources
762 Ross Rd (Douglas, WY 82633)
Glenrock, WY 82637

Workorder No.: C11050209

Project Name: MU 15 HH 15-20 Release

Energy Laboratories, Inc. Casper WY received the following 10 samples for Power Resources dba Cameco Resources on 5/5/2011 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C11050209-001	#1	05/04/11 14:30	05/05/11	Soil	ABDPTA extractable metals Metals by ICP/ICPMS, Total Digestion For RadioChemistry ABDTPA Soil Extraction Digestion, Total Metals for Core Samples Radium 226
C11050209-002	#2	05/04/11 14:30	05/05/11	Soil	Same As Above
C11050209-003	#3	05/04/11 14:30	05/05/11	Soil	Same As Above
C11050209-004	#4	05/04/11 14:30	05/05/11	Soil	Same As Above
C11050209-005	#5	05/04/11 14:30	05/05/11	Soil	Same As Above
C11050209-006	#6	05/04/11 14:30	05/05/11	Soil	Same As Above
C11050209-007	#7	05/04/11 14:30	05/05/11	Soil	Same As Above
C11050209-008	#8	05/04/11 14:30	05/05/11	Soil	Same As Above
C11050209-009	#9	05/04/11 14:30	05/05/11	Soil	Same As Above
C11050209-010	#10 Bkg	05/04/11 14:30	05/05/11	Soil	Same As Above

This report was prepared by Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Power Resources dba Cameco Resources
Project: MU 15 HH 15-20 Release
Lab ID: C11050209-001
Client Sample ID: #1

Report Date: 06/08/11
Collection Date: 05/04/11 14:30
DateReceived: 05/05/11
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ABDTPA EXTRACTABLE METALS							
Selenium	0.32	mg/kg-dry	D	0.01		SW6020	05/11/11 14:53 / sml
METALS - TOTAL							
Arsenic	4.5	mg/kg-dry		0.5		SW6020	05/16/11 17:30 / sml
Uranium	204	mg/kg-dry		0.5		SW6020	05/16/11 17:30 / sml
RADIONUCLIDES - TOTAL							
Radium 226	27.7	pCi/g-dry				E903.0	05/24/11 12:04 / trs
Radium 226 precision (±)	0.6	pCi/g-dry				E903.0	05/24/11 12:04 / trs
Radium 226 MDC	0.04	pCi/g-dry				E903.0	05/24/11 12:04 / trs

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Power Resources dba Cameco Resources
Project: MU 15 HH 15-20 Release
Lab ID: C11050209-002
Client Sample ID: #2

Report Date: 06/08/11
Collection Date: 05/04/11 14:30
DateReceived: 05/05/11
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ABDTPA EXTRACTABLE METALS							
Selenium	1.18	mg/kg-dry	D	0.01		SW6020	05/11/11 15:25 / sml
METALS - TOTAL							
Arsenic	4.6	mg/kg-dry		0.5		SW6020	05/16/11 17:35 / sml
Uranium	86.0	mg/kg-dry		0.5		SW6020	05/16/11 17:35 / sml
RADIONUCLIDES - TOTAL							
Radium 226	3.3	pCi/g-dry				E903.0	05/24/11 12:04 / trs
Radium 226 precision (±)	0.2	pCi/g-dry				E903.0	05/24/11 12:04 / trs
Radium 226 MDC	0.03	pCi/g-dry				E903.0	05/24/11 12:04 / trs

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Power Resources dba Cameco Resources
Project: MU 15 HH 15-20 Release
Lab ID: C11050209-003
Client Sample ID: #3

Report Date: 06/08/11
Collection Date: 05/04/11 14:30
DateReceived: 05/05/11
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ABDTPA EXTRACTABLE METALS							
Selenium	0.38	mg/kg-dry	D	0.01		SW6020	05/11/11 15:30 / sml
METALS - TOTAL							
Arsenic	5.4	mg/kg-dry		0.5		SW6020	05/16/11 17:40 / sml
Uranium	21.5	mg/kg-dry		0.5		SW6020	05/16/11 17:40 / sml
RADIONUCLIDES - TOTAL							
Radium 226	2.6	pCi/g-dry				E903.0	05/24/11 12:04 / trs
Radium 226 precision (±)	0.2	pCi/g-dry				E903.0	05/24/11 12:04 / trs
Radium 226 MDC	0.03	pCi/g-dry				E903.0	05/24/11 12:04 / trs

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Power Resources dba Cameco Resources
Project: MU 15 HH 15-20 Release
Lab ID: C11050209-004
Client Sample ID: #4

Report Date: 06/08/11
Collection Date: 05/04/11 14:30
DateReceived: 05/05/11
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ABDTPA EXTRACTABLE METALS							
Selenium	0.27	mg/kg-dry	D	0.01		SW6020	05/11/11 15:35 / sml
METALS - TOTAL							
Arsenic	5.0	mg/kg-dry		0.5		SW6020	05/16/11 17:46 / sml
Uranium	47.7	mg/kg-dry		0.5		SW6020	05/16/11 17:46 / sml
RADIONUCLIDES - TOTAL							
Radium 226	3.5	pCi/g-dry				E903.0	05/24/11 12:04 / trs
Radium 226 precision (±)	0.2	pCi/g-dry				E903.0	05/24/11 12:04 / trs
Radium 226 MDC	0.03	pCi/g-dry				E903.0	05/24/11 12:04 / trs

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Power Resources dba Cameco Resources
Project: MU 15 HH 15-20 Release
Lab ID: C11050209-005
Client Sample ID: #5

Report Date: 06/08/11
Collection Date: 05/04/11 14:30
DateReceived: 05/05/11
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ABDTPA EXTRACTABLE METALS							
Selenium	0.57	mg/kg-dry	D	0.01		SW6020	05/11/11 15:41 / sml
METALS - TOTAL							
Arsenic	5.3	mg/kg-dry		0.5		SW6020	05/16/11 17:51 / sml
Uranium	31.7	mg/kg-dry		0.5		SW6020	05/16/11 17:51 / sml
RADIONUCLIDES - TOTAL							
Radium 226	1.6	pCi/g-dry				E903.0	05/24/11 12:04 / trs
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	05/24/11 12:04 / trs
Radium 226 MDC	0.03	pCi/g-dry				E903.0	05/24/11 12:04 / trs

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Power Resources dba Cameco Resources
Project: MU 15 HH 15-20 Release
Lab ID: C11050209-006
Client Sample ID: #6

Report Date: 06/08/11
Collection Date: 05/04/11 14:30
DateReceived: 05/05/11
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ABDTPA EXTRACTABLE METALS							
Selenium	1.63	mg/kg-dry	D	0.01		SW6020	05/11/11 15:46 / sml
METALS - TOTAL							
Arsenic	6.7	mg/kg-dry		0.5		SW6020	05/16/11 17:56 / sml
Uranium	204	mg/kg-dry		0.5		SW6020	05/16/11 17:56 / sml
RADIONUCLIDES - TOTAL							
Radium 226	38.5	pCi/g-dry				E903.0	05/24/11 12:04 / trs
Radium 226 precision (±)	0.7	pCi/g-dry				E903.0	05/24/11 12:04 / trs
Radium 226 MDC	0.03	pCi/g-dry				E903.0	05/24/11 12:04 / trs

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Power Resources dba Cameco Resources
Project: MU 15 HH 15-20 Release
Lab ID: C11050209-007
Client Sample ID: #7

Report Date: 06/08/11
Collection Date: 05/04/11 14:30
DateReceived: 05/05/11
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ABDTPA EXTRACTABLE METALS							
Selenium	0.98	mg/kg-dry	D	0.01		SW6020	05/11/11 15:51 / sml
METALS - TOTAL							
Arsenic	6.2	mg/kg-dry		0.5		SW6020	05/16/11 18:02 / sml
Uranium	13.1	mg/kg-dry		0.5		SW6020	05/16/11 18:02 / sml
RADIONUCLIDES - TOTAL							
Radium 226	1.9	pCi/g-dry				E903.0	05/24/11 12:04 / trs
Radium 226 precision (±)	0.2	pCi/g-dry				E903.0	05/24/11 12:04 / trs
Radium 226 MDC	0.04	pCi/g-dry				E903.0	05/24/11 12:04 / trs

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Power Resources dba Cameco Resources
Project: MU 15 HH 15-20 Release
Lab ID: C11050209-008
Client Sample ID: #8

Report Date: 06/08/11
Collection Date: 05/04/11 14:30
DateReceived: 05/05/11
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ABDTPA EXTRACTABLE METALS							
Selenium	1.45	mg/kg-dry	D	0.01		SW6020	05/11/11 15:56 / sml
METALS - TOTAL							
Arsenic	3.9	mg/kg-dry		0.5		SW6020	05/16/11 18:07 / sml
Uranium	72.6	mg/kg-dry		0.5		SW6020	05/16/11 18:07 / sml
RADIONUCLIDES - TOTAL							
Radium 226	3.7	pCi/g-dry				E903.0	05/24/11 13:57 / trs
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	05/24/11 13:57 / trs
Radium 226 MDC	0.02	pCi/g-dry				E903.0	05/24/11 13:57 / trs

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Power Resources dba Cameco Resources
Project: MU 15 HH 15-20 Release
Lab ID: C11050209-009
Client Sample ID: #9

Report Date: 06/08/11
Collection Date: 05/04/11 14:30
DateReceived: 05/05/11
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ABDTPA EXTRACTABLE METALS							
Selenium	2.15	mg/kg-dry	D	0.01		SW6020	05/11/11 16:02 / sml
METALS - TOTAL							
Arsenic	4.9	mg/kg-dry		0.5		SW6020	05/16/11 18:12 / sml
Uranium	109	mg/kg-dry		0.5		SW6020	05/16/11 18:12 / sml
RADIONUCLIDES - TOTAL							
Radium 226	12.8	pCi/g-dry				E903.0	05/24/11 13:57 / trs
Radium 226 precision (±)	0.2	pCi/g-dry				E903.0	05/24/11 13:57 / trs
Radium 226 MDC	0.02	pCi/g-dry				E903.0	05/24/11 13:57 / trs

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Power Resources dba Cameco Resources
Project: MU 15 HH 15-20 Release
Lab ID: C11050209-010
Client Sample ID: #10 Bkg

Report Date: 06/08/11
Collection Date: 05/04/11 14:30
DateReceived: 05/05/11
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ABDTPA EXTRACTABLE METALS							
Selenium	0.11	mg/kg-dry	D	0.01		SW6020	05/11/11 16:07 / sml
METALS - TOTAL							
Arsenic	3.3	mg/kg-dry		0.5		SW6020	05/16/11 18:39 / sml
Uranium	3.5	mg/kg-dry		0.5		SW6020	05/16/11 18:39 / sml
RADIONUCLIDES - TOTAL							
Radium 226	1.1	pCi/g-dry				E903.0	05/24/11 13:57 / trs
Radium 226 precision (±)	0.08	pCi/g-dry				E903.0	05/24/11 13:57 / trs
Radium 226 MDC	0.02	pCi/g-dry				E903.0	05/24/11 13:57 / trs

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

Cameco

CAMECO RESOURCES
Smith Ranch-Highland Operation
Mail:
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Glenrock, WY
82637 USA

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August 12, 2011

Ms. Pam Rothwell, District 1 Assistant Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
Herschler Building
122 West 25th Street
Cheyenne, WY 82002

EMAIL

RE: Investigation Monitor Well Sample Results, Excursion at CM-32, Cameco Resources, Smith Ranch Highland Uranium Project, Permit 633

Dear Ms. Rothwell,

On June 23, 2011, Power Resources, Inc. d/b/a Cameco Resources (Cameco) conducted a joint sampling with WDEQ/LQD of the investigation monitor wells (CME-001 & CME-002) to assess the extent of the Excursion at CM-32. Attached are the results of Cameco's sampling of the two wells. Cameco awaits the results of LQD's sampling for comparison.

Please contact Ken Garoutte @ 307-358-6541, ext 476 or Kenneth_Garoutte@cameco.com if you have any questions.

Respectfully,

Dave Moody
Wellfield Operations Manager (acting General Manager)

DM/kg

ec: Cameco Resources – Cheyenne
cc: File HUP 4.3.3.1

ANALYTICAL SUMMARY REPORT

July 27, 2011

Power Resources dba Cameco Resources
762 Ross Rd (Douglas, WY 82633)
Glenrock, WY 82637

Workorder No.: C11060961

Project Name: SR-HUP

Energy Laboratories, Inc. Casper WY received the following 2 samples for Power Resources dba Cameco Resources on 6/23/2011 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C11060961-001	CME-002	06/23/11 00:00	06/23/11	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Total Alkalinity QA Calculations Conductivity Sample Filtering Fluoride E300.0 Anions Nitrogen, Ammonia Nitrogen, Nitrate + Nitrite pH Metals Preparation by EPA 200.2 Gross Alpha, Gross Beta Radium 226, Dissolved Radium 228, Dissolved Solids, Total Dissolved
C11060961-002	CME-001	06/23/11 00:00	06/23/11	Aqueous	Same As Above

This report was prepared by Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing. All samples are reported on an as received basis unless otherwise indicated. Samples corrected for dry weight indicate units that have -dry appended.

If you have any questions regarding these test results, please call.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Power Resources dba Cameco Resources
Project: SR-HUP
Lab ID: C11060961-001
Client Sample ID: CME-002

Report Date: 07/27/11
Collection Date: 06/23/11
DateReceived: 06/23/11
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Carbonate as CO3	13	mg/L		5		A2320 B	06/24/11 13:57 / jba
Bicarbonate as HCO3	172	mg/L		5		A2320 B	06/24/11 13:57 / jba
Calcium	79	mg/L		1		E200.7	06/27/11 21:04 / cp
Chloride	3	mg/L		1		E300.0	06/27/11 18:57 / ljl
Fluoride	0.2	mg/L		0.1		A4500-F C	06/26/11 13:28 / jba
Magnesium	10	mg/L		1		E200.7	06/27/11 21:04 / cp
Nitrogen, Ammonia as N	0.25	mg/L		0.05		A4500-NH3 G	06/27/11 15:27 / dc
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	06/24/11 15:06 / dc
Potassium	13	mg/L		1		E200.7	06/27/11 21:04 / cp
Silica	18.4	mg/L		0.2		E200.7	06/27/11 21:04 / cp
Sodium	51	mg/L		1		E200.7	06/27/11 21:04 / cp
Sulfate	197	mg/L	D	2		E300.0	06/27/11 18:57 / ljl
PHYSICAL PROPERTIES							
Conductivity @ 25 C	664	umhos/cm		1		A2510 B	06/24/11 15:04 / wc
pH	8.71	s.u.		0.01		A4500-H B	06/24/11 15:04 / wc
Solids, Total Dissolved TDS @ 180 C	445	mg/L		10		A2540 C	06/24/11 16:23 / wc
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.7	06/27/11 21:04 / cp
Arsenic	0.001	mg/L		0.001		E200.8	07/01/11 10:37 / sml
Barium	ND	mg/L		0.1		E200.7	06/27/11 21:04 / cp
Boron	ND	mg/L		0.1		E200.7	06/27/11 21:04 / cp
Cadmium	ND	mg/L		0.005		E200.7	06/27/11 21:04 / cp
Chromium	ND	mg/L		0.05		E200.7	06/27/11 21:04 / cp
Copper	ND	mg/L		0.01		E200.8	07/01/11 10:37 / sml
Iron	ND	mg/L		0.03		E200.7	06/27/11 21:04 / cp
Lead	ND	mg/L		0.001		E200.8	07/01/11 10:37 / sml
Manganese	ND	mg/L		0.01		E200.8	07/01/11 10:37 / sml
Mercury	ND	mg/L		0.001		E200.8	07/06/11 11:15 / sml
Molybdenum	ND	mg/L		0.1		E200.7	06/27/11 21:04 / cp
Nickel	ND	mg/L		0.05		E200.7	06/27/11 21:04 / cp
Selenium	ND	mg/L		0.001		E200.8	07/01/11 10:37 / sml
Uranium	0.0030	mg/L		0.0003		E200.8	07/01/11 10:37 / sml
Vanadium	ND	mg/L		0.1		E200.7	06/27/11 21:04 / cp
Zinc	ND	mg/L		0.01		E200.7	06/27/11 21:04 / cp
METALS - TOTAL							
Iron	0.03	mg/L		0.03		E200.8	06/28/11 03:58 / sml
Manganese	ND	mg/L		0.01		E200.8	06/28/11 03:58 / sml

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Power Resources dba Cameco Resources
Project: SR-HUP
Lab ID: C11060961-001
Client Sample ID: CME-002

Report Date: 07/27/11
Collection Date: 06/23/11
DateReceived: 06/23/11
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - DISSOLVED							
Gross Alpha	10.1	pCi/L				E900.0	07/16/11 02:51 / ep
Gross Alpha precision (±)	2.7	pCi/L				E900.0	07/16/11 02:51 / ep
Gross Alpha MDC	3.6	pCi/L				E900.0	07/16/11 02:51 / ep
Gross Beta	18.4	pCi/L				E900.0	07/16/11 02:51 / ep
Gross Beta precision (±)	2.0	pCi/L				E900.0	07/16/11 02:51 / ep
Gross Beta MDC	2.8	pCi/L				E900.0	07/16/11 02:51 / ep
Radium 226	2.9	pCi/L				E903.0	07/25/11 12:30 / trs
Radium 226 precision (±)	0.34	pCi/L				E903.0	07/25/11 12:30 / trs
Radium 226 MDC	0.17	pCi/L				E903.0	07/25/11 12:30 / trs
Radium 228	3.2	pCi/L				RA-05	07/20/11 09:03 / plj
Radium 228 precision (±)	0.7	pCi/L				RA-05	07/20/11 09:03 / plj
Radium 228 MDC	0.9	pCi/L				RA-05	07/20/11 09:03 / plj
DATA QUALITY							
A/C Balance (± 5)	-0.636	%				Calculation	07/07/11 10:12 / kbh
Anions	7.45	meq/L				Calculation	07/07/11 10:12 / kbh
Cations	7.35	meq/L				Calculation	07/07/11 10:12 / kbh
Solids, Total Dissolved Calculated	474	mg/L				Calculation	07/07/11 10:12 / kbh
TDS Balance (0.80 - 1.20)	0.940					Calculation	07/07/11 10:12 / kbh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Power Resources dba Cameco Resources
Project: SR-HUP
Lab ID: C11060961-002
Client Sample ID: CME-001

Report Date: 07/27/11
Collection Date: 06/23/11
DateReceived: 06/23/11
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Carbonate as CO3	11	mg/L		5		A2320 B	06/24/11 14:07 / jba
Bicarbonate as HCO3	171	mg/L		5		A2320 B	06/24/11 14:07 / jba
Calcium	80	mg/L		1		E200.7	06/27/11 21:16 / cp
Chloride	3	mg/L		1		E300.0	06/27/11 19:13 / ljl
Fluoride	0.2	mg/L		0.1		A4500-F C	06/26/11 13:32 / jba
Magnesium	9	mg/L		1		E200.7	06/27/11 21:16 / cp
Nitrogen, Ammonia as N	0.23	mg/L		0.05		A4500-NH3 G	06/27/11 15:29 / dc
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	06/24/11 15:08 / dc
Potassium	18	mg/L		1		E200.7	06/27/11 21:16 / cp
Silica	18.3	mg/L		0.2		E200.7	06/27/11 21:16 / cp
Sodium	53	mg/L		1		E200.7	06/27/11 21:16 / cp
Sulfate	212	mg/L	D	2		E300.0	06/27/11 19:13 / ljl
PHYSICAL PROPERTIES							
Conductivity @ 25 C	693	umhos/cm		1		A2510 B	06/24/11 15:06 / wc
pH	8.68	s.u.		0.01		A4500-H B	06/24/11 15:06 / wc
Solids, Total Dissolved TDS @ 180 C	477	mg/L		10		A2540 C	06/24/11 16:23 / wc
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.7	06/27/11 21:16 / cp
Arsenic	0.002	mg/L		0.001		E200.8	07/01/11 10:40 / sml
Barium	ND	mg/L		0.1		E200.7	06/27/11 21:16 / cp
Boron	ND	mg/L		0.1		E200.7	06/27/11 21:16 / cp
Cadmium	ND	mg/L		0.005		E200.7	06/27/11 21:16 / cp
Chromium	ND	mg/L		0.05		E200.7	06/27/11 21:16 / cp
Copper	ND	mg/L		0.01		E200.8	07/01/11 10:40 / sml
Iron	ND	mg/L		0.03		E200.7	06/27/11 21:16 / cp
Lead	ND	mg/L		0.001		E200.8	07/01/11 10:40 / sml
Manganese	ND	mg/L		0.01		E200.7	06/27/11 21:16 / cp
Mercury	ND	mg/L		0.001		E200.8	07/06/11 11:18 / sml
Molybdenum	ND	mg/L		0.1		E200.7	06/27/11 21:16 / cp
Nickel	ND	mg/L		0.05		E200.7	06/27/11 21:16 / cp
Selenium	ND	mg/L		0.001		E200.8	07/01/11 10:40 / sml
Uranium	0.0011	mg/L		0.0003		E200.8	07/01/11 10:40 / sml
Vanadium	ND	mg/L		0.1		E200.7	06/27/11 21:16 / cp
Zinc	ND	mg/L		0.01		E200.7	06/27/11 21:16 / cp
METALS - TOTAL							
Iron	0.04	mg/L		0.03		E200.8	06/28/11 04:05 / sml
Manganese	ND	mg/L		0.01		E200.8	06/28/11 04:05 / sml

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Power Resources dba Cameco Resources
Project: SR-HUP
Lab ID: C11060961-002
Client Sample ID: CME-001

Report Date: 07/27/11
Collection Date: 06/23/11
DateReceived: 06/23/11
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - DISSOLVED							
Gross Alpha	5.0	pCi/L				E900.0	07/16/11 02:51 / ep
Gross Alpha precision (±)	2.5	pCi/L				E900.0	07/16/11 02:51 / ep
Gross Alpha MDC	3.7	pCi/L				E900.0	07/16/11 02:51 / ep
Gross Beta	17.5	pCi/L				E900.0	07/16/11 02:51 / ep
Gross Beta precision (±)	2.0	pCi/L				E900.0	07/16/11 02:51 / ep
Gross Beta MDC	2.8	pCi/L				E900.0	07/16/11 02:51 / ep
Radium 226	1.2	pCi/L				E903.0	07/25/11 12:30 / trs
Radium 226 precision (±)	0.23	pCi/L				E903.0	07/25/11 12:30 / trs
Radium 226 MDC	0.17	pCi/L				E903.0	07/25/11 12:30 / trs
Radium 228	1.9	pCi/L				RA-05	07/20/11 09:03 / plj
Radium 228 precision (±)	0.6	pCi/L				RA-05	07/20/11 09:03 / plj
Radium 228 MDC	0.9	pCi/L				RA-05	07/20/11 09:03 / plj
DATA QUALITY							
A/C Balance (± 5)	-1.00	%				Calculation	07/07/11 10:13 / kbh
Anions	7.66	meq/L				Calculation	07/07/11 10:13 / kbh
Cations	7.51	meq/L				Calculation	07/07/11 10:13 / kbh
Solids, Total Dissolved Calculated	493	mg/L				Calculation	07/07/11 10:13 / kbh
TDS Balance (0.80 - 1.20)	0.970					Calculation	07/07/11 10:13 / kbh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

SR 4.3.3.4

Cameco

CAMECO RESOURCES
Smith Ranch-Highland Operation
Mail:
P.O. Box 1210
Glenrock, WY
82637 USA

Tel: (307) 358-6541
Fax: (307) 358-4533
www.cameco.com

August 31, 2011

Mr. Lowell Spackman, District 1 Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
Herschler Building
122 West 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL # 7010 0780 0001 6001 9886 RETURN RECEIPT REQUESTED

RE: East Storage Pond Leak, Cameco Resources, Smith Ranch-Highland Uranium Project, Permit to Mine No. 633

Dear Mr. Spackman:

On August 3, 2011, Power Resources, Inc. d/b/a Cameco Resources (Cameco) provided written notification to Wyoming Department of Environmental Quality, Land Quality Division and the Nuclear Regulatory Commission regarding a leak into secondary containment discovered on June 13, 2011 at the East Evaporation Pond.

Cameco drained the pond to investigate the leak into secondary containment and repaired a tear in the primary liner on July 7, 2011. Following repairs, water was returned to the pond. On August 15, 2011 water was again discovered in the East Evaporation Pond Sump. Verbal notification was made to Ms. Pam Rothwell of the Land Quality Division, Wyoming Department of Environmental Quality and Mr. Doug Mandeville, Project Manager of the Nuclear Regulatory Commission on August 16, 2011.

The pond level was lowered for the second time to reexamine the primary liner. Another tear was discovered and repairs were made August 29, 2011. Following repairs, water is being returned to the pond. Routine monitoring will continue to ensure no leakage occurs as the water level rises above the area of repair. At this time the water level has not risen above the area of repair.

Samples were collected from the sump on August 16, 2011 and analyzed for chloride, specific conductance, uranium, bicarbonate and sulfate. Results are provided in the table below along with the results of the samples taken in June. Weekly samples were not collected in the month of July or August 2011 due to the sump remaining dry. A monthly sample was not collected in the month of July 2011 due to the sump remaining dry. A monthly report will continue to be submitted until the repairs are complete.

Weekly Sample Results

Sample Date	Chloride (mg/L)	Conductivity (mS/cm)
06/15/2011	257	3194
06/20/2011	413	3645
08/15/2011	464	3647
08/16/2011	435	3924

Monthly Sample Results

Sample Date	Chloride (mg/L)	Conductivity (mS/cm)	Bicarbonate (mg/L)	Uranium (mg/L)	Sulfate (ppm)
06/20/2011	413	3645	925	248	905
08/16/2011	435	3924	811	158	947

A monthly report will continue to be submitted until the repairs are complete. Please contact Larry Teahon at (307) 358-6541 ext. 435 if you have questions.

Sincerely,

Brent Berg
General Manager

BB/vg

8/31-2011 – 7009-2820-0001-4046-2843

cc: Mr. Doug Mandeville – NRC Project Manager (2-copies)
File SR 4.3.3.1 File SR 4.3.3.4
ec: CR-Cheyenne

Cameco

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August 26, 2011

Mr. Lowell Spackman, District 1Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
Herschler Building
122 West 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL #7010 0780 0001 6001 9855 RETURN RECEIPT REQUESTED

RE: HH 15-20 Wellfield Release, Remediation Plan-DRAFT, Cameco Resources, Smith Ranch Highland Uranium Project, Permit 633

Dear Mr. Spackman,

Power Resources, Inc. d/b/a Cameco Resources (Cameco) is providing a DRAFT remediation plan for the header house 15-20 wellfield release that occurred May 3, 2011. Cameco provided the soil sample analyses to Wyoming Department of Environmental Quality-Land Quality Division (WDEQ-LQD) in an Email dated August 12, 2011. Cameco has committed to the cleanup of the impacted soil under criteria established by the NRC. The attached plan describes the proposed remediation and disposal of the impacted soil in four phases. The submittal is for LQD to review and comment pursuant to the discussions LQD held with Cameco on August 9, 2011 referencing a potential NOV.

Please contact Larry Teahon @ 307-358-6541, ext 435 or Larry_Teahon@cameco.com if you have any questions.

Respectfully

Brent Berg
General Manager

BB/kg

Attachment: Remediation Plan for Mine Unit 15A Wellfield Release

ec: Cameco Resources – Cheyenne
cc: File SR 4.3.3.1

Mine Unit 15A Wellfield Release, Header House 15-20 Area
Soil Remediation Plan DRAFT
Cameco Resources Permit 633

INTRODUCTION

Cameco provided LQD a written notification in a letter dated May 9, 2011 of a release of solutions that occurred in wellfield 15A, header house 15-20 on May 3, 2011. Verbal notification of the release was provided to LQD on May 4, 2011. The written report estimated 1500 gallons of production fluid was released impacting an area of approximately 12,077 square feet.

The release involved eight (8) production wells (15P-409 through 15P-416). The impacted area was mapped using a Trimble GPS unit with the results transferred to the Smith Ranch-Highland Site Map for archiving. The impacted area was gamma surveyed using an unshielded Ludlum Model 19 MicroR meter and soil sampled at ten (10) locations including a background sample. See Table 1. The sample results indicated nine (9) sample locations were above the 5 pCi/g decommissioning criteria established by the NRC. A map showing the areas of impacted soil is attached for your review.

SOIL SAMPLING RESULTS

The sample results for uranium are reported in mg/Kg and require conversion to pCi/g, while the results for radium226 are reported in pCi/g. After conversion, uranium and radium results are summed and compared to the 5 pCi/g criteria using the NRC's unity rule. After subtracting background, all nine (9) soil samples were above the 5 pCi/g unity rule.

Conversion formula:

mg/Kg • Kg/1E6mg • 6.77E-7Ci/g • pCi/1E-12 Ci = pCi/g

The specific activity of uranium is 6.77E-7 Ci/g as per 10 CFR PART 20, appendix B.

Converting the uranium reported in mg/Kg to pCi/g is accomplished using the above formula.

TABLE 1

Sample ID	U mg/kg	Radium pCi/g	Uranium pCi/g	Unity pCi/g	Unity-Bkg pCi/g	MR/hr
1	204	27.7	138	165.7	162.2	22
2	86	3.3	58	61.3	57.8	14
3	21.5	2.6	14	16.6	13.1	16
4	47.7	3.5	32.3	35.8	32.3	18
5	31.7	1.6	21.5	23.1	19.6	14
6	204	38.5	138	176.5	173	16
7	13.1	1.9	8.9	10.8	7.3	16
8	72.6	3.7	49.2	52.9	49.4	14
9	109	12.8	13.8	86.6	83.1	17
10 (Bkg)	3.5	1.1	2.4	3.5		17

REMEDIATION PLAN

A Ludlum Model 2221 Scaler/Ratemeter with a 2" sodium iodine probe has been procured for environmental assessments for radionuclides. The meter will respond to gamma radiation in counts per second and the probe will be contained within a hand held portable lead shield. The probe will be positioned approximately 3-4" above the surveyed surface and exposed through an opening in the bottom of the shield. The counts per second will be correlated with known pCi/g concentrations to arrive at pCi conversion to be used during the walk over.

The area affected will be fenced off to prevent access as requested by WDEQ until remediation activities commence. The remediation will consist of four phases described below.

Phase I: Soil Surveying

A Health Physics Technician will walk over the impacted area while holding the shielded gamma meter. The walk over survey will be conducted following a grid pattern of parallel lines approximately 10 feet apart over the impacted area. The Technician will begin at a point 2-3 feet outside the delineated release area and position the Ratemeter 3-4" over the surface and determine the pCi concentration. Then the Technician will take one step (2-3 feet) along a straight line, position the Ratemeter 3-4" over the surface, and again determine the pCi concentration. The Technician will then take another step and determine the next reading. This process will continue in a straight line until a reading is taken beyond the delineated release area as depicted on the map. The Technician will then repeat the process on a parallel line approximately 10 feet away. The walk over survey will be completed once all impacted areas have been surveyed. See attached map demonstrating 10 foot parallel grid lines over the entire impacted area as an example. Actual survey lines used will vary to match up with the separate delineated areas.

The background Unity value will be subtracted from the reading displayed by the Ratemeter to determine the net pCi at a given point. Values over the 5 pCi conversion will be flagged for removal.

Phase II: Soil Removal

Header house 15-20 will be shut down during the removal operation. A 770CH-John Deere small profile grader and/or a backhoe frontend loader will remove top soil adjacent to the impacted area and will be temporally stockpiled at a location away from the remediation activity with topsoil protection methods applied. The newly cleared area will be a staging area for stockpiling of soil removed that is not directly loaded to an approved DOT IP-1 11(e) 2 byproduct container.

Areas flagged around the well heads will require hand shovel removal and will be placed onto nearby flagged areas. A grader will lay over 2-5" of flagged soil depending on the irregularity of the surface for removal by a loader. The freshly cut area is ready to re-survey to determine if more depth of soil is to be removed. A loader will remove laid over soil to an approved DOT IP-1 11(e) 2 byproduct container or the prepared staging area. The staged stockpile of removed soil will have protection measures deployed to prevent contamination into nearby areas until all soil is loaded to disposal containers. Once containers are loaded they will be shipped using site

procedures complying with DOT regulations to an NRC approved 11 (e) 2 by-product disposal site.

Phase III: Re-surveying

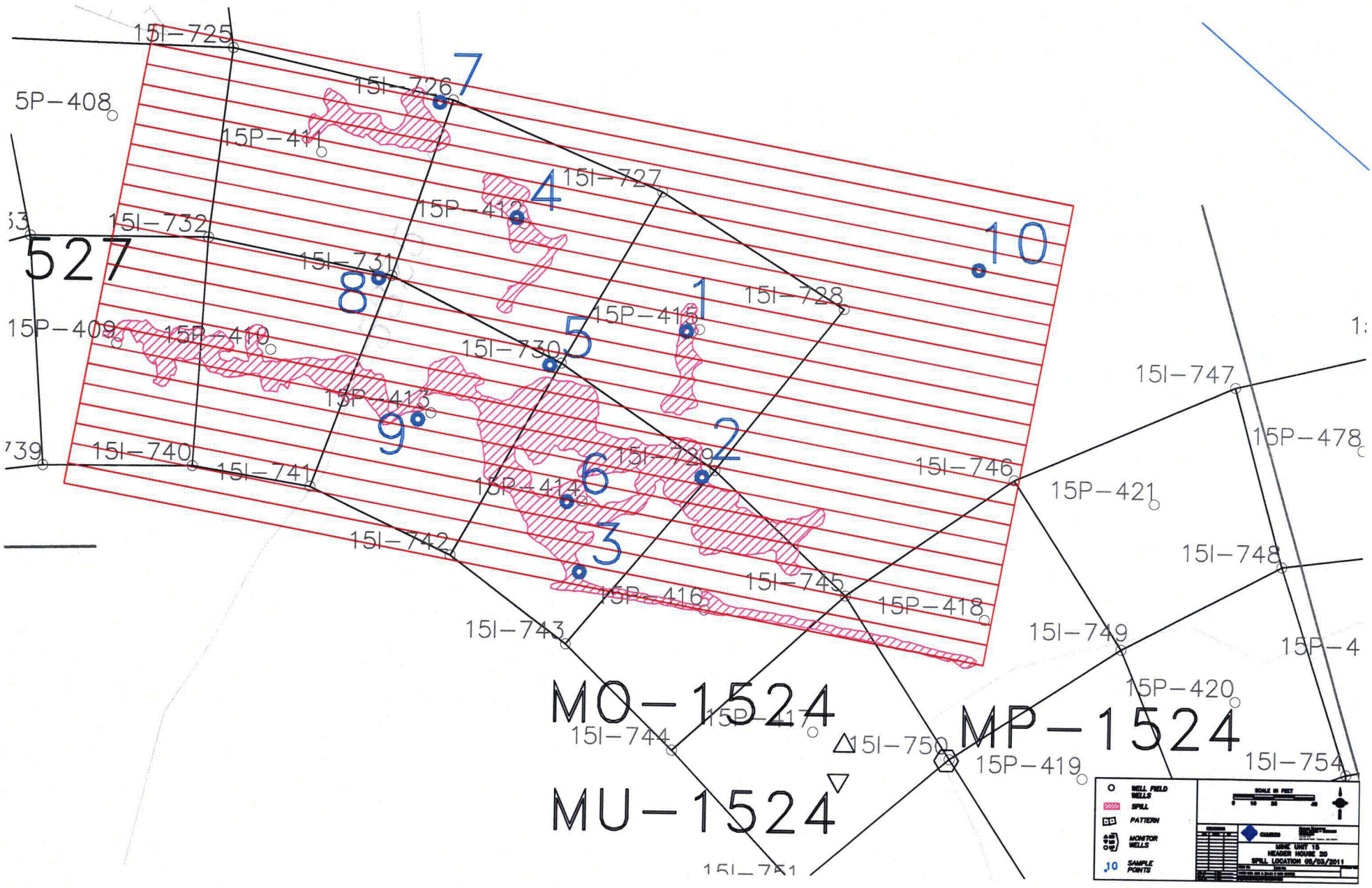
The above procedures described in Phase I and II will be repeated in the areas that had soil removed until the walkover gamma readings are within acceptable range.

Phase IV: Surface reclamation

Once the stockpile of removed soil is all loaded to containers, the staging area will be surveyed to verify gamma readings are acceptable. The top soil will then be replaced on the stripped area and will be mulched and drill seeded; likewise, the areas that had soil removed will be mulched and drill seeded. The perimeter of the disturbed area of soil removal will have erosion and sedimentation controls installed until vegetation is established.

PLAN CONTINGENCIES

The remediation plan is contingent upon WDEQ/LQD approval according to the draft 'Tracking Sheets for Commitments & Deadlines for Compliance' provided to Cameco on August 24, 2011. The estimated time frame to complete the remediation once Phase I begins will depend on issues of weather, how equipment/personnel may be needed elsehwhere , and arrangements to bring in approved DOT IP-1 11(e) 2 byproduct containers in a timely manner. A staging area for removed soil may not be necessary. Cameco's expectation is that WDEQ/LQD approval can be obtained expeditiously so that Phase IV of the remediation may be completed before November 15, 2011.


15I–725
5P–408
15P–411
15I–726
7
4
15I–727
15P–412
10
15I–732
527
15I–731
8
1
15I–728
15P–409
15P–410
15P–415
15I–730
5
15P–413
9
2
15I–729
6
15I–740
15I–741
15P–414
15I–746
15P–421
3
15I–742
15I–745
15P–416
15P–418
15I–743
15I–749
15P–420
MO–1524
15P–417
15I–744
15I–750
MP–1524
15P–419
15I–754
MU–1524
15I–751
15I–747
15P–478
15I–748
WELL FIELD WELLS
SPILL
PATTERN
MONITOR WELLS
SAMPLE POINTS
SCALE IN FEET
MINE UNIT 15
HEADER HOUSE 20
SPILL LOCATION 08/28/2011

Cameco

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August 31, 2011

Mr. Lowell Spackman, District I Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
122 W. 25th Street
Cheyenne, WY 82002

CERTIFIED MAIL #7010 0780 0001 6001 9879 RETURN RECEIPT REQUESTED

RE: Excursion Report Summary Update, Cameco Resources, Smith Ranch-Highland Uranium Project, Permit 603 and 633

Dear Mr. Spackman:

Power Resources, Inc. d/b/a/ Cameco Resources (Cameco) is submitting the monthly Excursion Report Summary for the Smith Ranch-Highland Uranium Project. During the month of August no new excursions were reported and the Cameco Excursion Report table is attached. Monitor well DM-003 and DM-010 remain on excursion.

Guideline 8 analyses sampling for well DM-010 were taken July 11, 2011 pursuant to Non Coal Rules in Chapter 11, Section 12 (d) (i) as the well had been on excursion for 30 days. The results have been received and are attached. Constituent levels in Monitor Well DM-003 stayed relatively stable throughout the month of August, 2011. Monitor Well DM-010 levels improved slightly through the month. A copy of the monitor well report for well DM-003 and DM-010 is attached. Additionally, graphs are attached for each well tracking alkalinity, chloride, and conductivity trends. A plan and compliance schedule for well DM-003 was submitted to LQD in a letter dated March 10, 2011 responding to 3rd Qtr. 2010 Excursion Monitoring Report comments from LQD. Accordingly, Cameco will commit to a third party review if the excursion at DM-003 has not been resolved by September 2011. Cameco has met with a hydrologic consultant from AQUI-VER on August 16, 2011 who is been retained to model the excursion events and develop recommendations. Cameco will continue to evaluate the benefit of pumping the underground drift area working proximal to Mine Unit D and continue the bleed in Mine Units C and E to maintain stability.

Please contact Larry Teahon @ 307-358-6541, ext 435 or Larry_Teahon@cameco.com if you have questions.

Respectfully,

Brent Berg
General Manager

BB/kg

Attachments: Cameco Resources Excursion Report,
Guideline 8 Sample Results for DM-010
Monitor Well Report and Trend Graphs for DM-003
Monitor Well Report and Trend Graphs for DM-010

cc: File HUP 4.3.3.1 Mr. Doug Mandeville – NRC Project Manager
ec: CR-Cheyenne

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PS Form 3800, August 2006 See Reverse for Instructions

Cameco Resources Excursion Report
Permit Nos. 603 & 633
(July 2011)

Well Identification	Initial Sample Date	Confirmation Sample Date	Excursion Status (on/off)	Parameters Exceeded	Verbal Notification Date	Written Notification Date	Excursion Resolution Date	LQD Concurrence Notification Date
DM-3	11/19/2009	11/20/2009	ON	Chloride Alkalinity	11/23/2009	11/25/2009		
DM-10	6/3/2011	6/6//2011	ON	Chloride Alkalinity	6/7/2011	6/10/2011		

Cameco Resources

Monitor Well Report

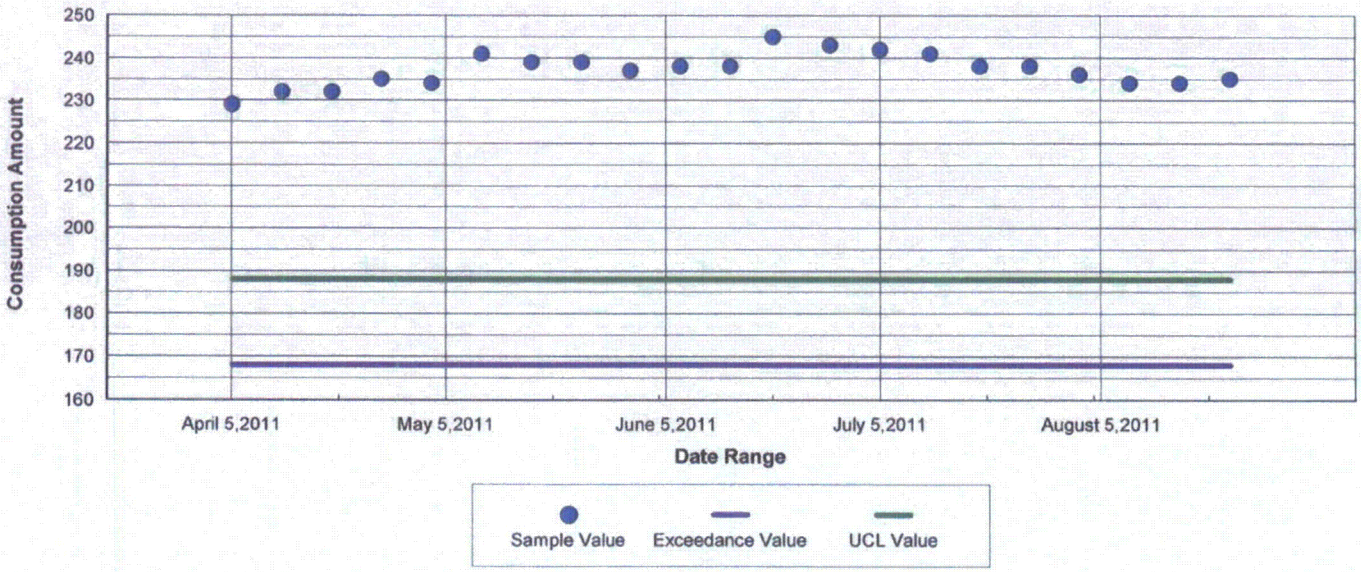
Well ID: DM-003

	Chloride (mg/L)	*Alkalinity (mg/L $CaCO_3$)*	*Conductivity (µMhos/cm)*	*U_3O_8 (mg/L)*	*Water Elevation*	*Comment*
NRC/WDEQ UCL	18	188	962			
08/23/2011	22	235	922	0	5099.6	Uranium below detection limit
08/16/2011	22	234	855	0	5099.6	Uranium below detection limit
08/09/2011	22	234	934	0	5103.4	Uranium below detection limit
08/02/2011	22	236	942	0	5104.4	Uranium below detection limit
07/26/2011	22	238	897	0	5107.9	Uranium below detection limit
07/19/2011	23	238	937	0	5112.6	Uranium below detection limit
07/12/2011	23	241	948	0	5110.3	Uranium below detection limit
07/05/2011	23	242	911	0	5106.8	Uranium below detection limit
06/28/2011	23	243	883	0	5102.6	Uranium below detection limit
06/20/2011	23	245	926	0	5093.9	Uranium below detection limit
06/14/2011	22	238	913	0	5095.4	Uranium below detection limit
06/07/2011	23	238	929	0	5099.1	Uranium below detection limit
05/31/2011	22	237	907	0	5099.7	Uranium below detection limit
05/24/2011	23	239	938	0	5103.9	Uranium below detection limit
05/17/2011	22	239	910	0	5107.2	Uranium below detection limit
05/10/2011	22	241	888	0	5099.6	Uranium below detection limit
05/03/2011	22	234	843	0	5100.5	Uranium below detection limit
04/26/2011	21	235	888	0	5104.0	Uranium below detection limit
04/19/2011	21	232	874	0	5107.2	Uranium below detection limit
04/12/2011	22	232	844	0	5107.6	Uranium below detection limit
04/05/2011	21	229	845	0	5108.8	Uranium below detection limit

Cameco

Cameco Resources
Smith Ranch - Highland

Alkalinity
Trending Analysis
Well : DM-003



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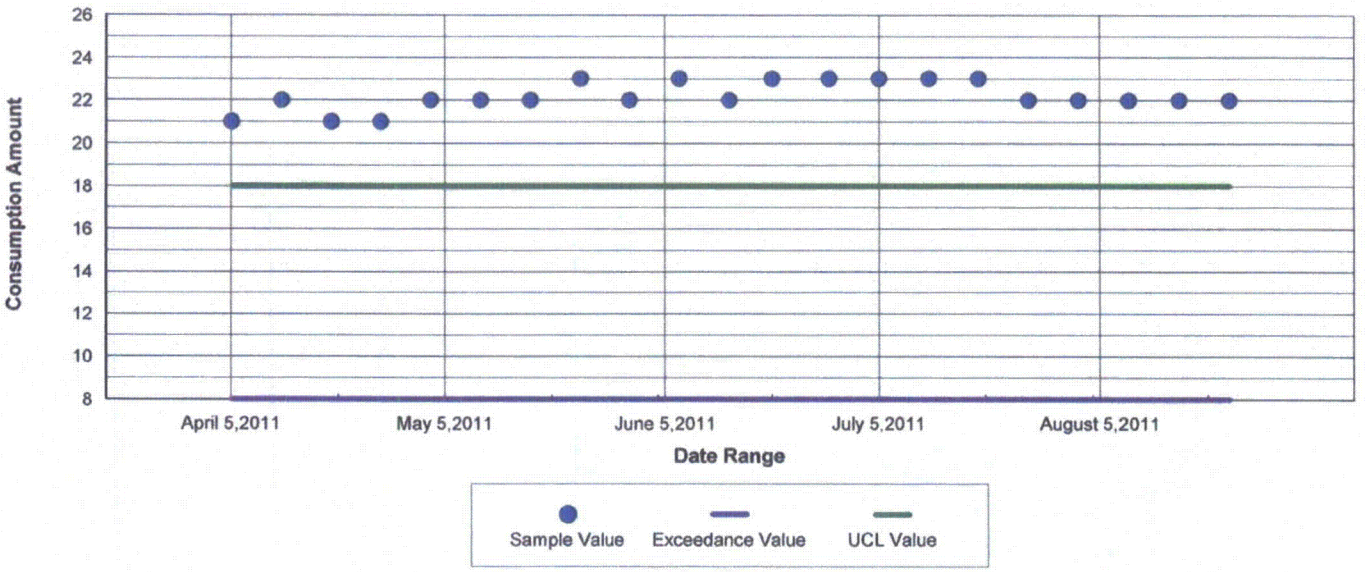
Cameco Resources
Smith Ranch - Highland

Chloride
Trending Analysis
Well : DM-003



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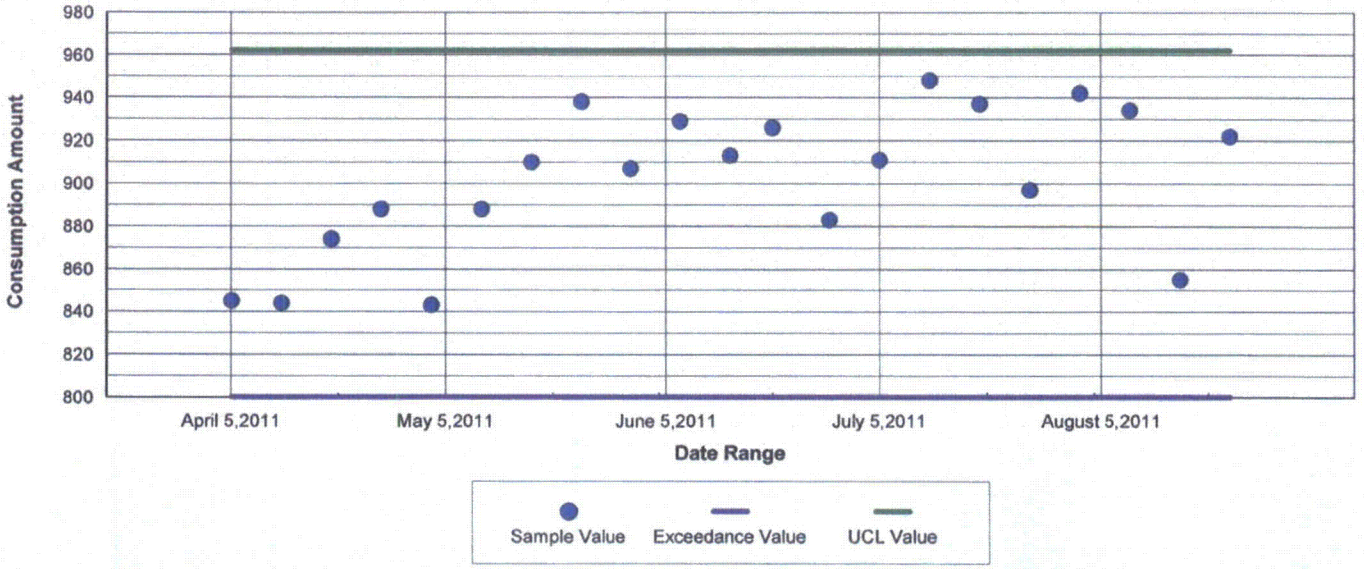
Cameco Resources
Smith Ranch - Highland

Conductivity
Trending Analysis
Well : DM-003



Cameco Resources

Monitor Well Report

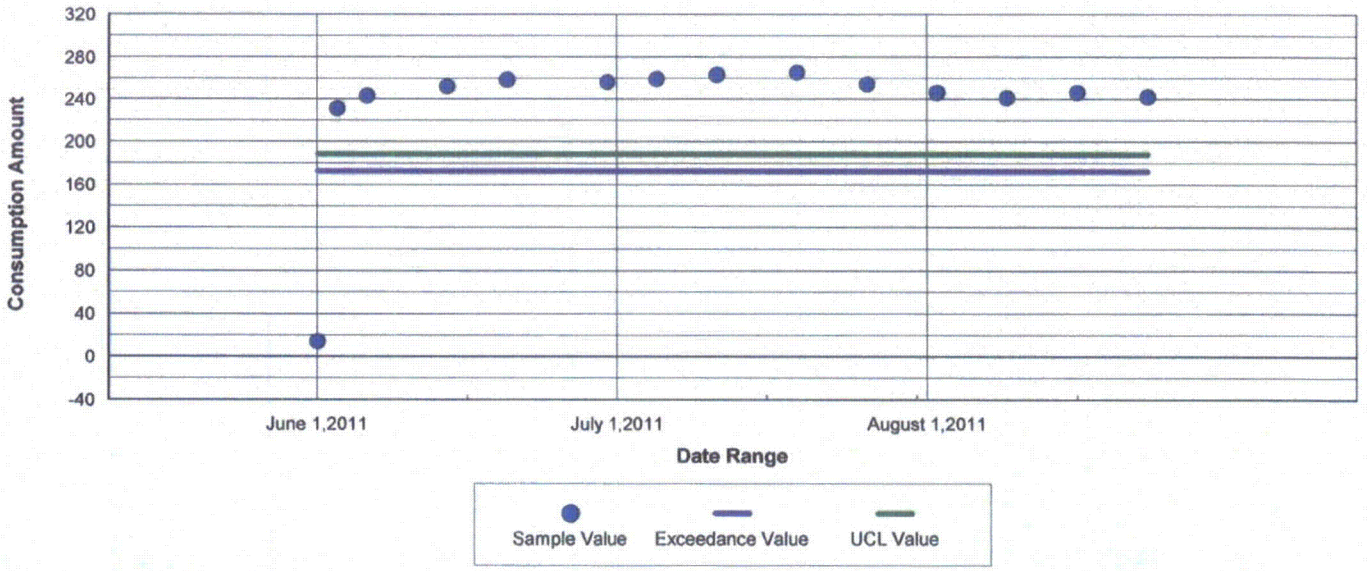
Well ID: DM-010

	Chloride (mg/L)	*Alkalinity (mg/L $CaCO_3$)*	*Conductivity (µMhos/cm)*	*U_3O_8 (mg/L)*	*Water Elevation*	*Comment*
NRC/WDEQ UCL	18	188	962			
08/23/2011	27	242	979	0	5067.7	Uranium below detection limit
08/16/2011	27	246	920	0	5074.4	Uranium below detection limit
08/09/2011	26	241	988	0	5064.0	Uranium below detection limit
08/02/2011	30	246	1016	0	5058.2	Uranium below detection limit
07/26/2011	32	254	1025	0	5055.6	Uranium below detection limit
07/19/2011	35	265	1052	0	5115.4	Uranium below detection limit
07/11/2011	35	263	1002	0	5112.5	Uranium below detection limit
07/05/2011	34	259	1045	0	5109.2	Uranium below detection limit
06/30/2011	32	256	1040	0	5080.3	Uranium below detection limit
06/20/2011	33	258	990	0	5078.4	Uranium below detection limit
06/14/2011	31	252	1002	0	5067.8	Uranium below detection limit
06/06/2011	30	243	947	0	5067.9	Uranium below detection limit
06/03/2011	29	231	968		5061.4	
06/01/2011	19	14	537		5060.7	Resample & Retest
04/05/2011	8	139	654		5089.5	

Cameco

Cameco Resources
Smith Ranch - Highland

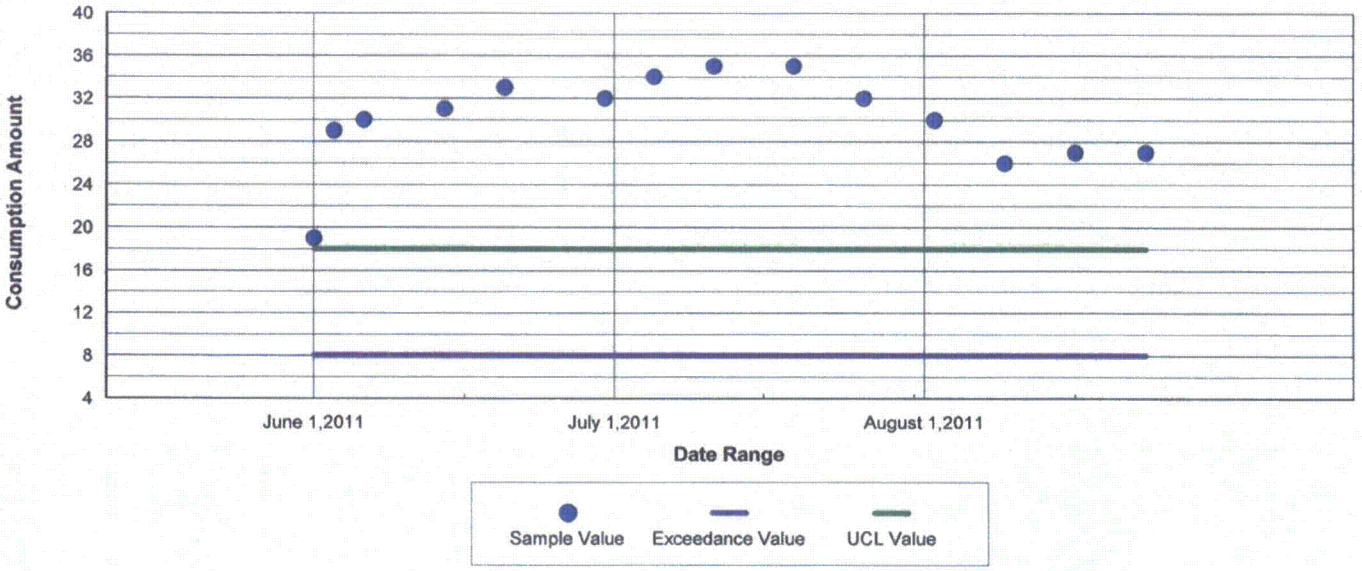
Alkalinity
Trending Analysis
Well : DM-010



Cameco

Cameco Resources
Smith Ranch - Highland

Chloride
Trending Analysis
Well : DM-010

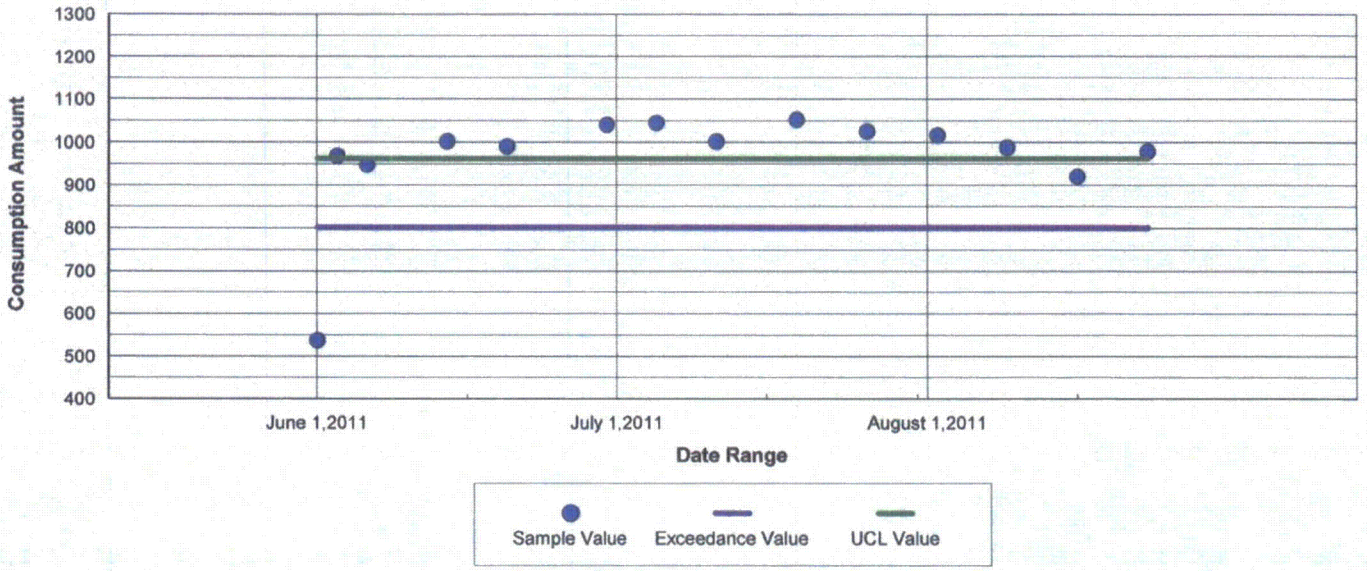


Report Generation Date : August 27, 2011

Cameco

Cameco Resources
Smith Ranch - Highland

Conductivity
Trending Analysis
Well : DM-010



ANALYTICAL SUMMARY REPORT

August 18, 2011

Power Resources dba Cameco Resources
762 Ross Rd (Douglas, WY 82633)
Glenrock, WY 82637

Workorder No.: C11070341

Project Name: SR-HUP

Energy Laboratories, Inc. Casper WY received the following 1 sample for Power Resources dba Cameco Resources on 7/11/2011 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C11070341-001	DM-10	07/11/11 12:52	07/11/11	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Total Alkalinity QA Calculations Conductivity Sample Filtering Fluoride E300.0 Anions Nitrogen, Ammonia Nitrogen, Nitrate + Nitrite pH Metals Preparation by EPA 200.2 Gross Alpha, Gross Beta Radium 226, Dissolved Radium 228, Dissolved Solids, Total Dissolved

This report was prepared by Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing. All samples are reported on an as received basis unless otherwise indicated. Samples corrected for dry weight indicate units that have -dry appended.

If you have any questions regarding these test results, please call.

Report Approved By:

Stephanie D Waldrop
Reporting Supervisor

Digitally signed by
Stephanie Waldrop
Date: 2011.08.18 16:11:58 -06:00

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Power Resources dba Cameco Resources
Project: SR-HUP
Lab ID: C11070341-001
Client Sample ID: DM-10

Report Date: 08/18/11
Collection Date: 07/11/11 12:52
DateReceived: 07/11/11
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Carbonate as CO3	ND	mg/L		5		A2320 B	07/12/11 15:41 / jba
Bicarbonate as HCO3	324	mg/L		5		A2320 B	07/12/11 15:41 / jba
Calcium	137	mg/L		1		E200.7	07/13/11 23:46 / cp
Chloride	33	mg/L		1		E300.0	07/13/11 19:05 / ljl
Fluoride	0.2	mg/L		0.1		A4500-F C	07/18/11 12:08 / jba
Magnesium	29	mg/L		1		E200.7	07/13/11 23:46 / cp
Nitrogen, Ammonia as N	0.16	mg/L		0.05		A4500-NH3 G	07/13/11 13:38 / dc
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	07/12/11 15:09 / dc
Potassium	11	mg/L		1		E200.7	07/13/11 23:46 / cp
Silica	23.3	mg/L		0.2		E200.7	07/13/11 23:46 / cp
Sodium	45	mg/L		1		E200.7	07/13/11 23:46 / cp
Sulfate	255	mg/L	D	4		E300.0	07/13/11 19:05 / ljl
PHYSICAL PROPERTIES							
Conductivity @ 25 C	1020	umhos/cm		1		A2510 B	07/12/11 14:37 / lmc
pH	7.83	s.u.		0.01		A4500-H B	07/12/11 14:37 / lmc
Solids, Total Dissolved TDS @ 180 C	687	mg/L		10		A2540 C	07/13/11 14:48 / lmc
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.7	07/13/11 23:46 / cp
Arsenic	ND	mg/L		0.001		E200.8	07/15/11 11:02 / sml
Barium	ND	mg/L		0.1		E200.7	07/13/11 23:46 / cp
Boron	ND	mg/L		0.1		E200.7	07/13/11 23:46 / cp
Cadmium	ND	mg/L		0.005		E200.7	07/13/11 23:46 / cp
Chromium	ND	mg/L		0.05		E200.7	07/13/11 23:46 / cp
Copper	ND	mg/L		0.01		E200.8	07/15/11 11:02 / sml
Iron	0.11	mg/L		0.03		E200.7	07/13/11 23:46 / cp
Lead	ND	mg/L		0.001		E200.8	07/15/11 11:02 / sml
Manganese	0.05	mg/L		0.01		E200.7	07/13/11 23:46 / cp
Mercury	ND	mg/L		0.001		E200.8	07/15/11 11:02 / sml
Molybdenum	ND	mg/L		0.1		E200.7	07/13/11 23:46 / cp
Nickel	ND	mg/L		0.05		E200.7	07/13/11 23:46 / cp
Selenium	ND	mg/L		0.001		E200.8	07/15/11 11:02 / sml
Uranium	0.0474	mg/L		0.0003		E200.8	07/15/11 11:02 / sml
Vanadium	ND	mg/L		0.1		E200.7	07/13/11 23:46 / cp
Zinc	ND	mg/L		0.01		E200.8	07/15/11 11:02 / sml
METALS - TOTAL							
Iron	0.32	mg/L		0.03		E200.7	07/14/11 21:32 / cp
Manganese	0.05	mg/L		0.01		E200.7	07/14/11 21:32 / cp

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Power Resources dba Cameco Resources
Project: SR-HUP
Lab ID: C11070341-001
Client Sample ID: DM-10

Report Date: 08/18/11
Collection Date: 07/11/11 12:52
DateReceived: 07/11/11
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - DISSOLVED							
Gross Alpha	130	pCi/L				E900.0	08/17/11 11:29 / ep
Gross Alpha precision (±)	9.0	pCi/L				E900.0	08/17/11 11:29 / ep
Gross Alpha MDC	7.0	pCi/L				E900.0	08/17/11 11:29 / ep
Gross Beta	35.0	pCi/L				E900.0	08/17/11 11:29 / ep
Gross Beta precision (±)	4.0	pCi/L				E900.0	08/17/11 11:29 / ep
Gross Beta MDC	5.6	pCi/L				E900.0	08/17/11 11:29 / ep
Radium 226	7.2	pCi/L				E903.0	08/01/11 12:15 / trs
Radium 226 precision (±)	0.51	pCi/L				E903.0	08/01/11 12:15 / trs
Radium 226 MDC	0.14	pCi/L				E903.0	08/01/11 12:15 / trs
Radium 228	2.1	pCi/L				RA-05	07/26/11 09:24 / plj
Radium 228 precision (±)	0.7	pCi/L				RA-05	07/26/11 09:24 / plj
Radium 228 MDC	1	pCi/L				RA-05	07/26/11 09:24 / plj
DATA QUALITY							
A/C Balance (± 5)	-0.420	%				Calculation	07/15/11 15:01 / kbh
Anions	11.6	meq/L				Calculation	07/15/11 15:01 / kbh
Cations	11.5	meq/L				Calculation	07/15/11 15:01 / kbh
Solids, Total Dissolved Calculated	699	mg/L				Calculation	07/15/11 15:01 / kbh
TDS Balance (0.80 - 1.20)	0.980					Calculation	07/15/11 15:01 / kbh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.