



June 2, 2015

CERTIFIED MAIL # 7013 2250 0000 4174 6110

Mr. Mark Rogaczewski, District 3 Supervisor  
Land Quality Division  
Wyoming Department of Environmental Quality  
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Sheridan, WY 82801

**CAMECO RESOURCES**

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**May 2015 Excursion Report Summary, Cameco Resources, Smith Ranch-Highland Uranium Project, Permit 633**

Dear Mr. Rogaczewski:

Power Resources, Inc. d/b/a/ Cameco Resources (Cameco) is submitting the May monthly Excursion Report Summary for the Smith Ranch-Highland Uranium Project. The Cameco Excursion Report table is attached. Monitor Well DM-003A remained on excursion with no new excursion reported during the report period, May 2015.

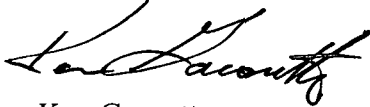
Concentrations at Monitor Well DM-003A decreased slightly during the report period. The reductions may be related to extraction of impacted groundwater from the Mine Unit D patterns, specifically from DMP-008. Cameco continues to characterize the success of the treatment through steps provided to the LQD in a letter dated January 28, 2015. Step 1, conducting Guideline 8 samples from various monitoring and pumping wells in the vicinity of Monitor Well DM-003A has been completed. During the report period Cameco continued to work on Step 2 of the characterization, evaluating the movement of groundwater and the potential of aquifer interconnectivity between Mine Unit D, the pre-existing underground workings, as well as vertically and laterally adjacent mine units. This effort is an attempt to determine the source of impacted groundwater identified in samples collected from DM-003A. Cameco is developing a strategy in communication with the LQD and the Nuclear Regulatory Commission (NRC), which may aid in understanding groundwater flow pathways in the area of DM-003A and rectify the excursion classification of the monitoring well.

Cameco plans to conduct a pump test in the DM-003A area where groundwater will be extracted and processed through the restoration circuit, and water levels in area of DM-003A will be monitored. The purpose of the pump test is to define connections in the aquifer host, and possibly define the source of impacted groundwater seen in DM-003A samples. Weekly

groundwater samples will continue to be collected from DM-003A for routine excursion monitoring and used to evaluate effects of the pump test on groundwater quality.

Please contact me at 307-358-6541, ext. 476 or [Kenneth\\_Garoutte@cameco.com](mailto:Kenneth_Garoutte@cameco.com) if you have questions.

Respectfully,



Ken Garoutte  
Safety, Health, Environment, Quality (SHEQ) Manager

KG/vg

Attachments: Cameco Resources Excursion Report Table  
Monitor Well Reports for DM-003A

cc: File SR 4.3.3.1  
Special Volume: Monthly Excursion Reports Summary Updates Permit 633  
Mr. Doug Mandeville, NRC - CERTIFIED MAIL # 7013 2250 0000 4174 6127  
Document Control Desk, NRC - CERTIFIED MAIL # 7013 2250 0000 4174 6134

ec: Cameco-Casper

xc: Cheyenne LQD Files

**Cameco Resources Excursion Report**  
**Permit Nos. 603 & 633**  
**(May 2015)**

<b>Well Identification</b>	<b>Initial Sample Date</b>	<b>Confirmation Sample Date</b>	<b>Excursion Status (on/off)</b>	<b>Parameters Exceeded</b>	<b>Verbal Notification Date</b>	<b>Written Notification Date</b>	<b>Excursion Resolution Date</b>	<b>LQD Concurrence Notification Date</b>
DM-003A (Replacement well for DM-003)	8/26/2014	N/A	ON	Chloride Alkalinity				



**Cameco Resources**  
**Smith Ranch - Highland Operation**  
**Monitor Well Report**

Well ID: DM-003A

	<i>Chloride</i> <i>(mg/L)</i>	<i>Alkalinity</i> <i>(mg/L CaCO<sub>3</sub>)</i>	<i>Conductivity</i> <i>(µMhos/cm)</i>	<i>U<sub>3</sub>O<sub>8</sub></i> <i>(mg/L)</i>	<i>Water</i> <i>Elevation</i>	<i>Comment</i>
<b>NRC/WDEQ</b> <b>UCL</b>	18	188	962			
05/26/2015	42	306	1090	0	837.3	
05/19/2015	34	311	1131	0	836.8	
05/12/2015	46	314	1165	0	839.2	
05/05/2015	47	315	1201	0	841.4	
04/28/2015	49	331	1158	0	837.3	
04/21/2015	48	331	1166	0	838.2	
04/15/2015	48	337	1168	0	838.8	
04/07/2015	49	322	1201	0	827.0	
04/01/2015	49	311	1201	0	826.7	
03/24/2015	49	323	1195	0	827.4	
03/17/2015	49	324	1149		825.0	
03/10/2015	46	326	1223	0	824.8	
03/04/2015	42	324	1164	0	827.5	
02/24/2015	50	326	1128	0	826.2	
02/17/2015	50	327	1160	0	825.8	
02/10/2015	48	324	1128	0	827.0	
02/03/2015	50	329	1168	0	826.3	
01/27/2015	50	324	1202	0	827.0	
01/20/2015	49	317	1122	0	826.8	
01/13/2015	49	318	1132	0	826.7	
01/06/2015	52	344	1148	0	829.8	
12/31/2014	51	325	1176	0	834.8	
12/23/2014	48	343	1171	0	832.2	

06/01/2015



**Cameco Resources**  
**Smith Ranch - Highland Operation**  
**Monitor Well Report**

*Well ID:* DM-003A

<i>NRC/WDEQ UCL</i>	<i>Chloride (mg/L)</i>	<i>Alkalinity (mg/L CaCO<sub>3</sub>)</i>	<i>Conductivity (µMhos/cm)</i>	<i>U<sub>3</sub>O<sub>8</sub> (mg/L)</i>	<i>Water Elevation</i>	<i>Comment</i>
	18	188	962			
12/16/2014	50	321	1162	0	826.2	
12/09/2014	50	319	1155	0	826.6	
12/02/2014	51	326	1145	0	829.9	
11/25/2014	51	331	1178	0	833.9	
11/18/2014	51	330	1166	0	834.2	
11/11/2014	51	327	1253	0	834.1	
11/04/2014	52	315	1180	0	848.3	
10/28/2014	55	336	1144	0	842.0	
10/21/2014	55	330	1166	0	829.6	
10/14/2014	53	321	1165	0	817.0	
10/07/2014	52	315	1120	0	816.4	
09/30/2014	46	306	1105	0	816.2	
09/23/2014	48	321	1149	0	817.8	
09/16/2014	49	322	1224	0	814.8	
09/09/2014	49	313	1143	0	813.6	
09/02/2014	50	321	1210	0	817.6	
08/26/2014	50	314	1107	0	808.9	
08/19/2014	47	308	1174	0	808.0	
08/12/2014	45	309	1083	0	807.0	
08/05/2014	45	321	1120	0	809.2	
07/29/2014	46	314	1094	0	811.4	
07/22/2014	44	299	1117	0	810.7	
07/15/2014	41	307	1136	0	809.8	

**06/01/2015**



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Well ID: DM-003A

<i>NRC/WDEQ UCL</i>	<i>Chloride (mg/L)</i>	<i>Alkalinity (mg/L CaCO<sub>3</sub>)</i>	<i>Conductivity (µMhos/cm)</i>	<i>U<sub>3</sub>O<sub>8</sub> (mg/L)</i>	<i>Water Elevation</i>	<i>Comment</i>
	18	188	962			
07/08/2014	40	293	1092	0	809.6	
07/01/2014	40	295	1108	0	807.2	
06/24/2014	38	294	1112	0	809.5	
06/17/2014	34	266	1012	0	809.7	
06/03/2014	32	264	954	0	813.5	
05/27/2014	39	328	1077	0	816.6	
05/20/2014	33	273	1039	0	816.1	
05/13/2014	32	272	1003	0	814.6	
04/29/2014	30	252	883	0	812.7	
04/22/2014	26	211	871	0	813.0	
04/15/2014	29	228	906	0	811.6	
04/07/2014	27	121	764		811.4	
04/01/2014	34	210	902	0	802.0	
03/25/2014	34	144	828	0	829.6	

06/01/2015