

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

April 21, 2009

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

Tel: (307) 358-6541  
Fax: (307) 358-4533  
[www.cameco.com](http://www.cameco.com)

RE: Highland Uranium Project, Permit to Mine No. 603, Excursion at Monitor  
Well IM-8

Dear Mr. Spackman:

In accordance with NRC License Condition No. 11.5 and Section 8.4 of the Operations Plan for the Highland Uranium Project, Power Resources, Inc. d/b/a/ Cameco Resources (CR) is providing written notification that Monitor Well IM-8 monitoring results showed it to be on excursion status on April 16, 2009. Ms. Pam Rothwell from WDEQ/LQD and Mr. Doug Mandeville from the NRC were notified by telephone on April 16, 2009.

Monitor Well IM-8 is on a semi-monthly sampling schedule. Analytical results of April 15, 2009 for the routine sample taken on April 14, 2009 indicated an exceedance in two of the three Upper Control Limits (UCLs). CR collected a confirmation sample from the well on April 15, 2009 and analyzed it with a quality assurance duplicate on April 16, 2009. Results of the laboratory analyses confirmed the well to be on excursion as shown below.

Sample Date	Chloride (mg/L)	Alkalinity (mg/L CaCO <sub>3</sub> )	Conductivity (μMhos/cm)
	UCL 17	UCL 211	UCL 928
4/15/09	23	220	818
4/14/09	23	216	803

Monitor Well IM-8 is located in Mine Unit-I and depicted on the attached map. The excursion at Well IM-8 will be added to CR's site status map and included in the annual report.

The well will be sampled weekly to monitor UCLs. Injection wells in the vicinity of the excursion that have been shut off are depicted in blue on the attached map. Pumping rates in other nearby wells have also been reduced. CR is examining the balance and flows to optimize available well resources and is continuing to develop a groundwater flow model of the mine unit. Additionally, CR plans to examine the sampling pump rate and duration to assist in determining

potential causes and corrective actions. The model can also be used to simulate optimal pumping and injection rates to prevent excursions.

If you have questions, please contact me at (307) 358-6541, Ext. 462.

Sincerely,

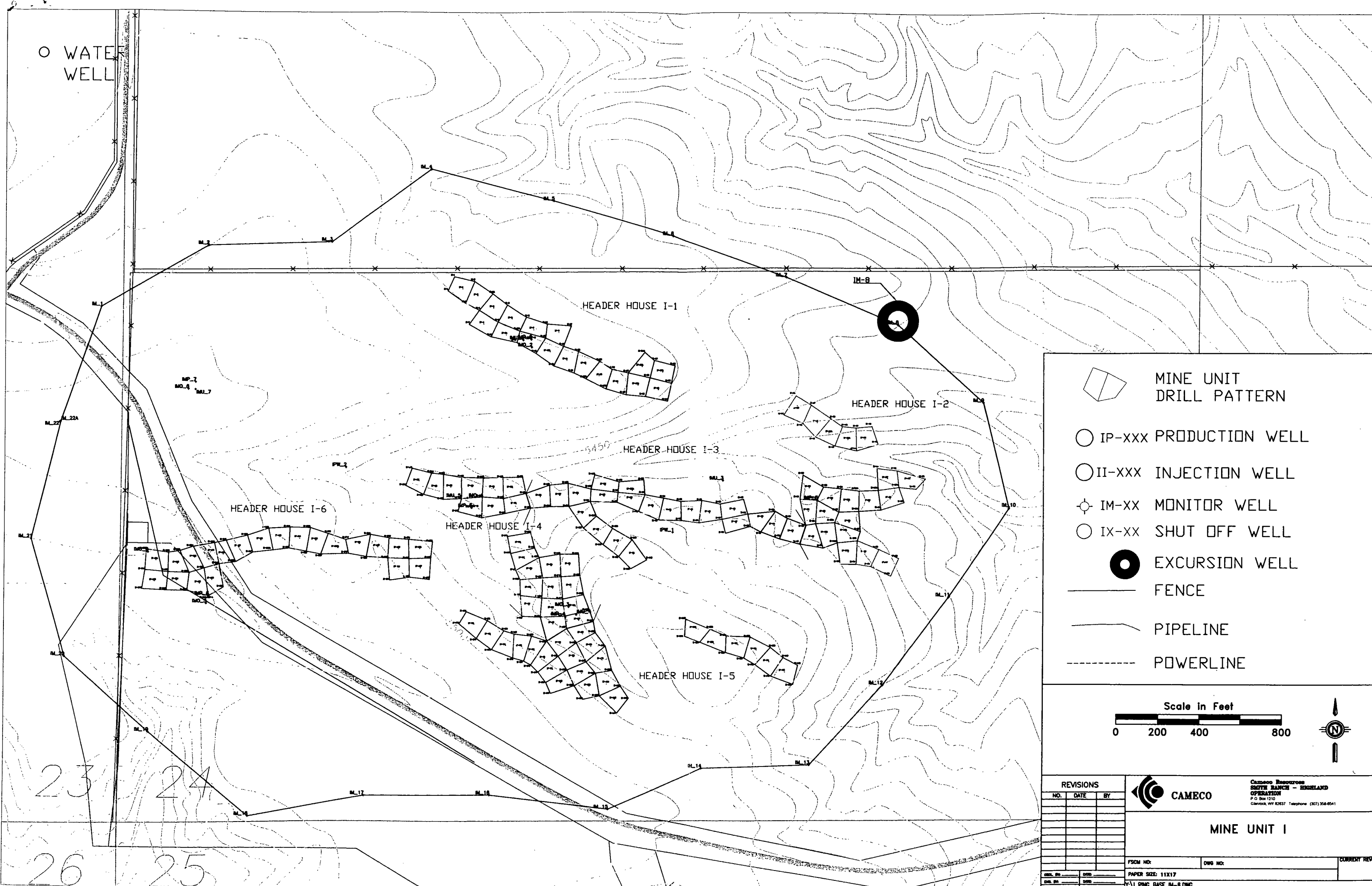


Krista Wenzel  
Manager, Environment, Health and Safety

Attachment: Map

cc: T. Cannon                      S. Bakken                      D. Kolkman                      T. Hewitt  
D. Mandeville, USNRC (2 copies)                      File HUP 4.6.4.1

○ WATER  
WELL



MINE UNIT  
DRILL PATTERN

○ IP-XXX PRODUCTION WELL

○II-XXX INJECTION WELL

IM-XX MONITOR WELL

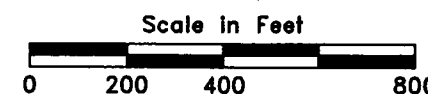
○ IX-XX SHUT OFF WELL

EXCURSION WELL

FENCE

## PIPELINE

POWERLINE

[illegible]

**CAMECO**

**Cameo Resources**  
**SMITH RANCH - HIGHLAND**  
**OPERATION**  
P O Box 1210  
Glenrock, WY 82637 Telephone (307) 356-0500

**MINE UNIT I**

FSCM NO:

CHRG	NO-
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PAPER SIZE: 11X17

Y:\1 RING BASE IM-8.DWG

CLINICAL