



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. 25th Street
Cheyenne, WY 82002

Tel: (307) 358-6541
Fax: (307) 358-4533
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 ₃)	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,

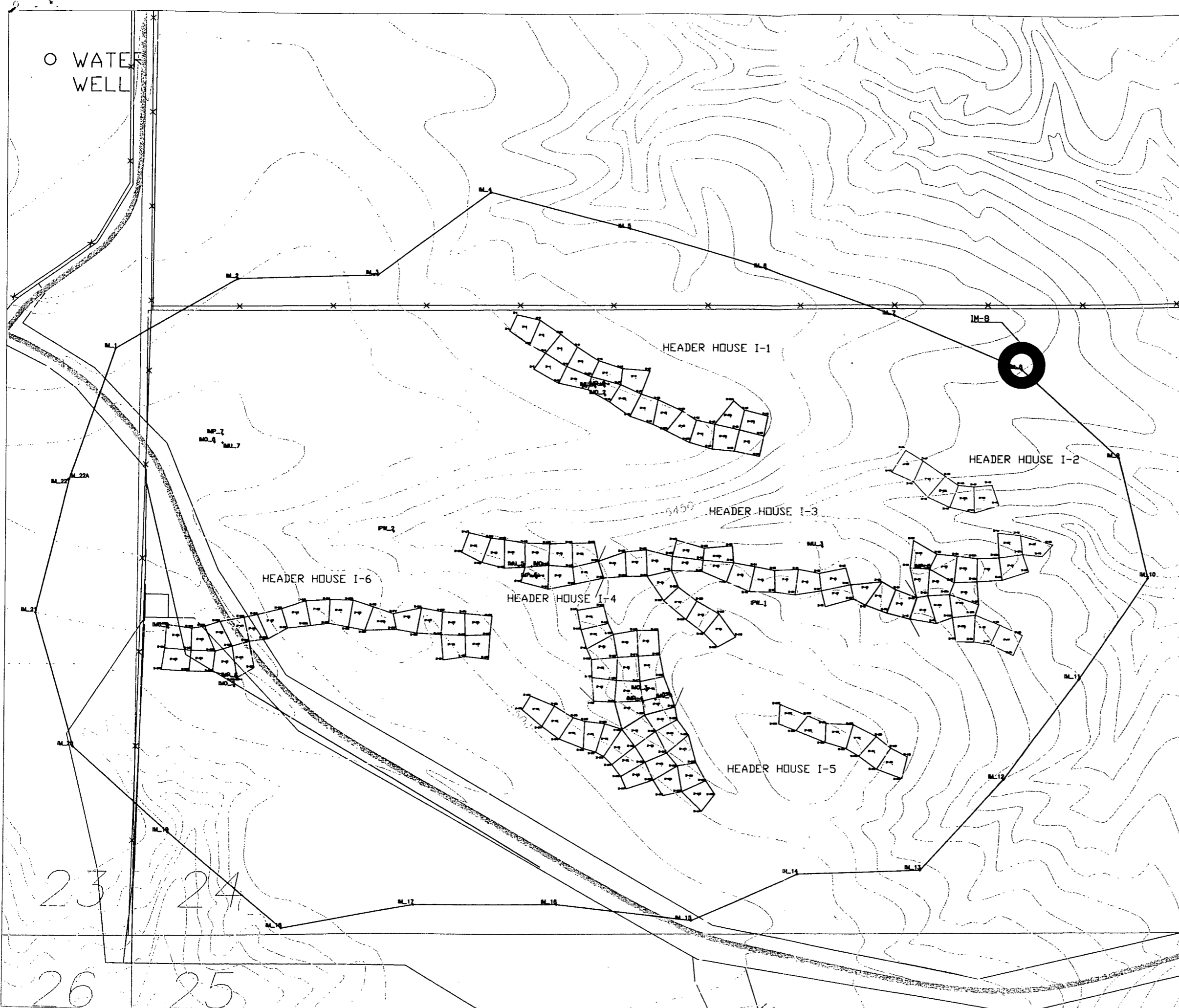


Krista Wenzel
Manager, Environment, Health and Safety

Attachment: Map

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

○ WATER WELL



LEGEND

- 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

Scale in Feet

0 200 400 800

N

REVISIONS		
NO.	DATE	BY

CAMECO

Cameco Resources
SUTHE BASIN - HIGHLAND
OPERATION
P. O. Box 1210
Glendon, WY 82837 Telephone (307) 358-0541

MINE UNIT I

FCOM NO: _____ DWG NO: _____

PAPER SIZE: 11X17
Y:\RING_BASE IM-8.DWG

DES. BY: _____ DATE: _____
 DWG. BY: _____ DATE: _____
 DWG. NO: _____ DATE: _____

CURRENT REV: _____