

Smith Ranch - Highland Uranium Project P. O. Box 1210

Glenrock, Wyoming USA 82637 Casper: 307-235-1628

Douglas: 307-358-6541 Fax: 307-358-4533

September 23, 2004

Gary S. Janosko – Chief FCFB c/o Document Control Desk Division of Fuel Cycle Safety and Safeguards Office of Nuclear Material Safety and Safeguards US Nuclear Regulatory Commission 11545 Rockville Pike Two White Flint Rockville, MD 20852-2738

RE: Smith Ranch-Highland Uranium Project

NRC License SUA-1548, Docket No. 40-8964

Excursion at Well M-428

Dear Mr. Janosko:

In accordance with License Conditions 9.2 and 12.1, Power Resources, Inc. (PRI) is required to notify the NRC within 48 hours of a confirmed "Wellfield Excursion" and follow up this notification with a written report within 30 days. On September 8, 2004 PRI confirmed an excursion at Well M-428 at Mine Unit 4 at the Smith Ranch Facility. Accordingly, Mr. John Lusher and Mr. Rick Weller of NRC Headquarters Staff and Mr. Steve Ingle of the WDEQ-LQD were notified of this occurrence via e-mail the same day.

In accordance with License Condition 12.1, please consider this correspondence the required "30-Day Report". Well M-428 is a perimeter (Monitor Ring) well that monitors the Production Zone along the southern portion of Mine Unit 4 (see Figure 1). A review of the ground water quality data in the attached monitor well report shows that chloride and alkalinity exceeded their respective UCL's on September 8, 2004. Although the conductivity UCL was not exceeded, an "excursion" exists when two of the three UCL's are exceeded. Therefore, Well M-428 met excursion criteria on September 8, 2004. No uranium was detected at the well.

An investigation was immediately begun on September 8, 2004 to determine the reason for the excursion at Well M-428. It was determined that the wellfield balance in this area of the wellfield (Headerhouse 4-4) was out of balance, which led to over-injection of this area. Changes were immediately made to the injection/production balance and an "over-production" of 20 gpm was begun in order that the injection fluids could be retrieved.



NMSSOI

As can be seen on the attached monitor well report for Well M-428, the modification to the wellfield balance (over-production of 20 gpm) resulted in an approximate 25 ft decrease in the water level at the well. Therefore, it is apparent that this action reversed the direction of ground water flow back towards the production area. The success of this corrective action is further supported by the subsequent decrease in all UCL's over the next two weeks, such that Well M-428 no longer exceeds any of the three UCL's.

PRI intends to continue with the over-production in this area for at least another 30 days. Well M-428 will continue to be sampled every week. If the water quality data shows continued improvement and the well does not meet excursion criteria after that period, routine wellfield operations and monitoring will resume.

If you have any questions, please call me at 307-358-6541 ext 62.

Sincerely,

W.F. Kearney

Manager-Health, Safety & Environmental Affairs

WFK/ksi

attachment

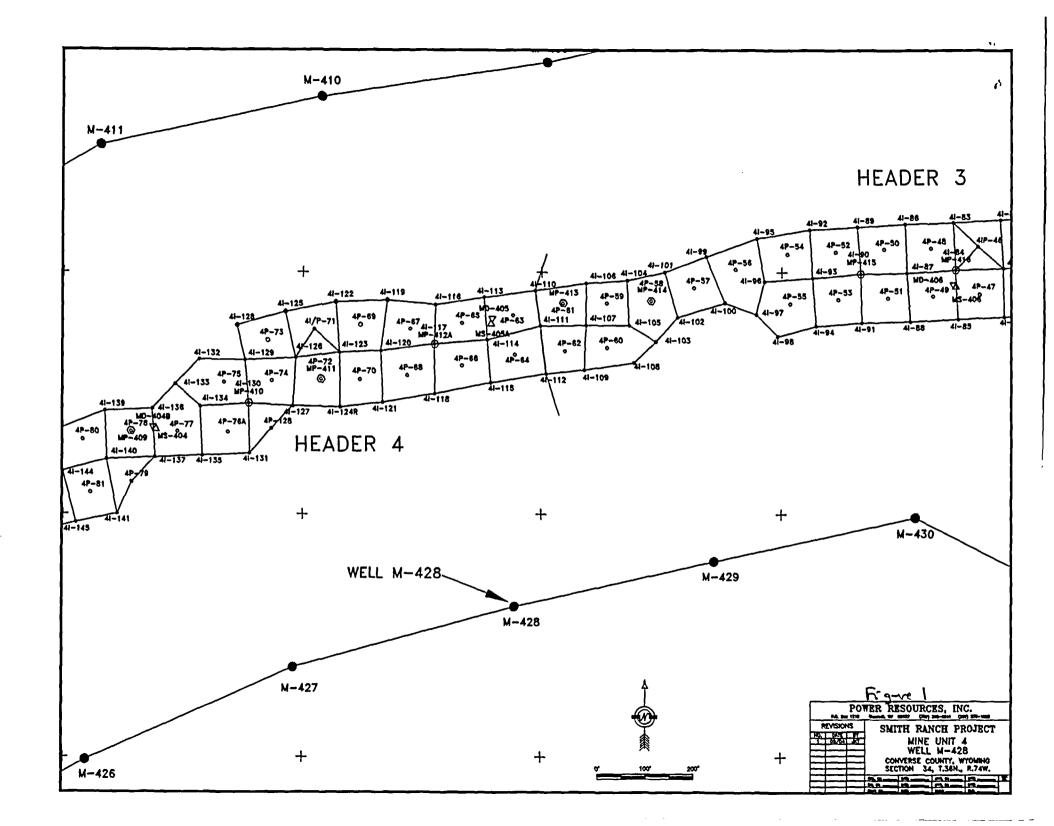
cc: File SR- 4.6.4.1

R. Knode

K. Milmine

S. Collings

M. Bryson



Power Resources Inc.

## Monitor Well Report

Well ID: M428

NRC/WDEQ	Chloride (mg/L)	Alkalinity (mg/L CaCO <sub>3</sub> )	Conductivity (µMhos/cm)	Ц Q (mg/L)	Water Level (ft. MSL)	
UCL	19	177	708			
09/21/2004	9	167	563	-0.1	5211.7	
09/14/2004	17	184	693	-0.1	5227.82	
09/08/2004	27	207	704	-0.1	5278.8	
09/08/2004	27	205	703	-0.1	5278.8	
09/03/2004	24	189	635		5279.1	
08/19/2004	14	170	560		5252.1	
08/04/2004	7	161	470		5254.1	
07/20/2004	5	155	457		5220.1	
07/13/2004	4	158	457		5255.1	
06/23/2004	4	160	498		5259.5	
06/09/2004	4	160	500		5228.1	
05/24/2004	4	157	498		5201.6	
05/11/2004	4	160	493		5220.8	
04/08/2004	4	158	489		5222.8	
03/23/2004	4	155	494		5212.2	
03/10/2004	4	161	450		5212.7	
02/24/2004	4	159	501		5224.4	
02/09/2004	4	158	503		5211.5	
01/27/2004	3	159	509		5216.7	
01/09/2004	4	159	501		5216.6	