

# WESTERN NUCLEAR, INC.



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December 15, 200<sup>4</sup><sub>3</sub>

United States Nuclear Regulatory Commission  
Fuel Cycle Facilities Branch  
Division of Fuel Cycle Safety and Safeguards  
Office of Nuclear Material Safety and Safeguards  
Attn: Gary Janosko, Chief  
Mail Stop T8A33  
Washington, DC 20555-0001

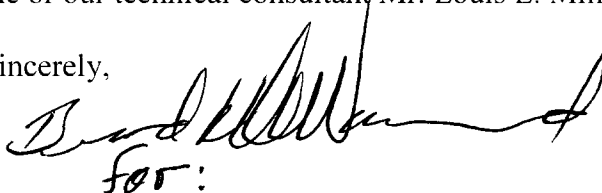
**Re:** Western Nuclear, Inc. Split Rock Mill 2004 Groundwater Corrective  
Action Program Report; Operational Data required per License Condition  
74d, License SUA-56.

Dear Sirs:

Attached please find the operational data for the Western Nuclear, Inc. Split Rock Mill Groundwater Corrective Action Program (CAP). As indicated in this report, the CAP extraction well used in the SW Valley was well C rather than well B as used in the past. Well B pumping rates declined to zero at the beginning of the season. We believe that precipitates have occluded the well case screen completely. Well C was installed as an extraction well for the CAP and groundwater from it contains greater concentrations of both chemical and radiological constituents. Thus, a greater total mass of tailing derived constituents are removed from this portion of the contaminant plume.

Should you have any questions regarding the data contained in this report, please contact me or our technical consultant Mr. Louis L. Miller, P.E. at your convenience.

Sincerely,



for:  
Lawrence J. Corte, President  
Western Nuclear, Inc.

cc: B. K. DeWaard, WNI – Wyoming  
L. L. Miller, MFG, Inc.  
H. W. Shaver, Esq.  
WNI Central File - Golden

NM5501

# WESTERN NUCLEAR, INC.

## SPLIT ROCK MILL SITE

### MEMORANDUM

TO: Brad DeWaard  
 FROM: Trinidad Herrera  
 DATE: December 08, 2004  
 SUBJECT: 2004 CAP Operational Data

The extraction well pumps in wells 4E in the North West Valley and C in the South West Valley were started on April 20, 2004. The pumps were shut down on June 29, 2004. Combined average flow from the wells was 70.37 gallons per minute. Total volume extracted for the 2004 pumping season was 7.19 million gallons. Net evaporation for the season was 7.26 million gallons.

The ponds side slope enhanced evaporation system was started on June 6, 2004. The system was operated 24 hours per day except for periodic cleaning of the spray nozzles and when lightning strikes shut the system down. Both pumps were shut down for the winter on September 1, 2004 when the water level was on the first bowl of the pumps.

The 2004 data for the CAP systems follows:

<u>Extraction Well</u>	<u>Start Up</u>	<u>Shutdown</u>	<u>Gallons pumped</u>	<u>Pumping Rate</u>
SW Valley C	4/20/2004	6/29/2004	2,516,327	24.6 gpm
NW Valley 4E	4/20/2004	6/29/2004	4,500,265	45.8 gpm
		Total	7,194,737	70.37 gpm

#### Evaporation Ponds Water Balance

<u>Date</u>	<u>Combined Volume (M Gallons)</u>	<u>Change (M Gallons)</u>	<u>Description</u>
9/11/03	2.59		Ending 2003 Volume
4/20/2004	Approx 3.73	+1.14	Spring precipitation Well C & 4E pumps started
4/20/2004 - 6/27/2004	7.25	+ 7.19	C and 4E pump volume
4/20/2004 - 9/01/2004		8.71	Net evaporation
9/01/04	2.27		Dead storage volume at shutdown

The aquifer response to the pumping is taken from the static water levels of monitor wells 4R, 30, 1, and 28 located near the extraction wells. The measurements are as follows:

SWL

<u>Well No</u>	<u>8/11/2003</u>	<u>6/07/2004</u>	<u>Δ</u>	<u>2/10/90</u>	<u>8/16/2004</u>	<u>Δ</u>
4R	6287.47	6784.82	-2.65	6294.62	6285.48	-9.14
30	6284.16	6282.61	-1.55	6290.30	6284.77	-5.53
1	6396.52	6296.36	-0.16	6304.54	6296.68	-7.86
28	6296.19	6296.08	-0.11	6303.38	6297.45	-5.93