



# Aerojet Nuclear Company

550 SECOND STREET  
IDAHO FALLS, IDAHO 83401

6107308-3

April 1, 1975

Dr. Noel deNevers  
Dept. of Chemical Engineering  
University of Utah  
Salt Lake City, UT 84112

## RAFT RIVER WELL CHARACTERISTICS - Kun-184-75

The attached sheet is an elementary fact sheet that we made up, largely for general (public) use. However, it does describe the basic physical characteristics of the well.

Added to those are the following measured values (please appreciate that we have not been able to conduct full scale flow tests because we have no environmentally acceptable place to discharge the water.

February 2,3

First time it began to flow. Shut off 14 hours after flow began, with exit temperature at boiling for last 5 hours. Measured roughly in the reserve pond as 1,000 to 1,400 gpm peak. Bottom-hole peak logged temperature 280°F (note, hole was then cased only to 920 ft.).

February 9, 10

Logged again, with restricted outlet flow. No peak flow measurements made. Peak bottom hole temperature was measured as 292. Shut in pressures typically 70 psi hot, 30 psi after injecting cold water.

Since completing the casing and redrilling (March 18), brief flow measurements have been run, giving 650 gpm before boiling with 14 psi back pressure on exit 6-inch line (head to exit about 6 ft line length 30 ft). Once flashing begins, mass flow drops 20 to 30%. Shut in pressures are typically 150 to 165 psi hot, 100 psi when filled with cold water.

## Reinjection - Recent reinjection tests

### Cold Water Head:

#### Well-Head Pressure

105 ± 5%  
125 ± 5%  
150 ± 10%  
175 ± 10%  
275 - 310

#### Flow-injected (±3%)

0  
171 gpm  
323  
437  
817

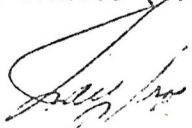
Dr. Noel deNevers  
Kun-184-75  
April 1, 1975  
Page 2

Well-Head Pressure

Flow-injected ( $\pm 3\%$ )

315 to 400 (over 8 minute period)	1605 gpm
250 to 210	541
190 to 130 to 100 eventually after	161
95 to 100 shut in	0

We just finished drilling through very hard rock to 5,000 ft (took 5 days from 4,650 ft). Maximum flow prior to boiling is approximately 565 gallons per minute ( $\pm 15\%$  accuracy). Shut-in pressure was  $\sim 150$  psi hot, and 30 psi cold.



Dr. J. F. Kunze, Manager  
Geothermal Projects

rp

Attachment

cc: Dr. Taylor Abegg  
Dr. Gary Sandquist