Aerojet Nuclear Company

Interoffice Correspondence

GL07318-1

February 18, 1976

L. G. Miller
UPD

RRGE WELL #1 PUMP TEST 105 RESULTS - PROJECT NO. 82801-008,552 - Sand 5 - 76

Reference: RDSanders Ltr to LGMiller, RRGE Well #1 Pump Test Outline Sand-4-76, January 27, 1976

Pump test 105 was conducted the first week of February as outlined in the above reference. The pump was operated from 1135 hrs 2/2/76 until 1315 hrs 2/6/76. As planned, flow was controlled until discharge pressure was established at 155 psig and the flow rate was 943 pgm. No further adjustments were made for the remainder of the test. As shown on the attached curve and data sheets, flow, discharge pressure and drawdown appeared to stabilize several times but after eight or nine hours would decrease again to a lower level. When the test was terminated the flow rate had been at 879 gpm for 43 hours and discharge pressure had held at 148 psig for 26 hours. Level above the pump inlet was constant at ~~102~~ 194 feet for the last eight hours of the test. As noted on the data sheet we had to change the ΔP gage and the calibration of the second gage is questionable. When we have the calibration checked the flow rate may be corrected.

W. C. Kettenacker feels that there is now sufficient data to determine the flow rate at which the well can be pumped. His work on this is being delayed because of computer problems but he expects an answer within a week.

When the test was terminated the pump motor leads were checked phase-to-ground and showed a low resistance to ground of 2.6K ohms. Five days later the resistance had dropped to 1.5K ohms. The REDA engineer believes the problem is a damaged cable or water leaking into the motor. A difference in resistance between phases will indicate the problem is in a lead but to date we have not been able to detect a difference. Further checks will be made this week.

Ray Sanders

R. D. Sanders
Design Engineering

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Attachments

cc: WCKettenacker
LSMasson
RSMcPherson RDSM
DHSuckling
JFWhitbeck