

WEST ARROWHEAD BEEP UNIT NO. 1

Drill Stem Tests:

- No. 1 - Attempted DST No. 1, 11,202-11,232'. Packer seat failed.
- No. 2 - 11,070-11,232'. Tool open 3 hours. Fair blow air throughout test. No gas to surface. Recovered 300' drlg mud. IF-220 PSI, FFP-220 PSI, ISIP-missed, PSIP-340 PSI, HYD in-5220, HYD out-5220. No oil, gas or water recovered.
- No. 3 - 12,136-12,295'. Tool open 2 hours. Fair to weak blow air. Recovered 65' drlg mud, ISIP-767 PSI, IFP-140 PSI, FFP-140 PSI, PSIP-976 PSI, HYD in-5880, HYD out-5880. No oil, gas or water recovered.
- No. 4 - 12,754-12,800'. Tool open 1 hour, no blow. ISIP-1120 PSI, IFP-800 PSI, FFP-800 PSI, PSIP-940 PSI, HYD in-6080, HYD out-6080. Temp 160. Recovered 1800' water blanket & 5' drlg mud. No oil, gas or water recovered.
- No. 5 - Attempted DST No. 5, 12,800-12,894'. Packer failed, no test.
- No. 6 - 12,785-12,894'. Tool open 1 hour. Weak blow for 10 minutes, dead for 35 minutes, then weak blow for 15 minutes. Recovered 1800' water blanket (1200' gas cut) plus 60' gas cut drlg fluid. 1/2 hour ISIP-2539 PSI, IFP-840 PSI, FFP-840 PSI. 1/2 hour PSIP-1237 PSI, HYD in-6980, HYD out-6980.
- No. 7 - 12,894-13,010'. Tool open 2 hours. Fair blow throughout test. Recovered 1800' water blanket plus 5400' sulphur water and 180' gas cut drlg fluid. 1/2 hour ISIP-5369 PSI, IFP-1369 PSI, FFP-3270 PSI, PSIP-4623 PSI, HYD in & out-6210. BH Temp -238.
- No. 8 - Attempted DST No. 8, 15,374-15,468'. Packer failed.
- No. 9 - 15,350-15,468'. Tool open 1 1/2 hour. Had very weak blow for 3 minutes and died. Recovered 15' drlg mud. IF-1420 PSI, FFP-1420 PSI, FFP-1420 PSI, ISIP-failure, PSIP-1560 PSI, IFP-7420, FFP-7430.

Plugging Procedures:

Set 20 ex cement plugs at 15,837-15,832', 14,100-14,045', 12,747-12,692', 9,114-9,059', 7,580-7,525', 6,647-6,592', 6,015-5,950', 4,592-4,537', 4,237-4,182' and 10 ex cmt plug at surface. Intervals between plugs filled with 10# mud. Approval of Mr. Joe Ramey, NMOCC, obtained prior to commencement of plugging operations.