DAVID H. ARRINGTON OIL & GAS, INC. B.V. CULP WELL #12

DRILLING PROGNOSIS

- 1. Move in and rig up rotary rig. Drill 12 1/4" hole to approximately 460' (minimum of 50' into the red bed) to accomodate 8 5/8" casing. Could be as shallow as 350' to 400'. Use geolograph from surface to TD. Take deviation survey every 500' or less than at TD.
- 2. Run 8 5/8", 24#, J-55, ST&C casing with guide shoe and insert float valve one joint up. Thread lock guide shoe and first collar. Run one centralizer 10' above shoe with lock ring and one on next two collars for a total of 3 centralizers. Hang casing in tension.
- 3. Cement 8 5/8" casing with sufficient cement to circulate to surface (approx. 300 sx). Pump cement down with wooden plug. Bump plug with approximately 500 psi over pump pressure. Check flow back, if float holds OK, leave pressure off casing.
- 4. WOC 6 hours. Cut off casing and install 8 5/8" by 5 1/2" casing head. Nippleup BOP. Test blank rams and casing to 1000 psi for 15 min. Note test on tour sheet.
- 5. Run 7 7/8" bit and tag cementing plug. Test casing and pipe rams to 1000 psi for 15 min. Note test on tour sheet. WOC a total of 12 hours and drill out plug, float, and shoe joint.
- 6. Drill 7 7/8" hole to approximately 3550'. TD will be picked by wellsite engineer. While drilling, record on tour reports any drilling problems, bridges, lost circulation or unusual hole conditions. Strap drill pipe out of hold at TD. Record results on tour reports. Install mud logging unit at 2,500'.
- 7. Circulate and condition mud an hole at TD for logs. Pull bit strapping out of hole.
- 8. Run open hole logs.
- 9. Run bit to TD and condition mud and hole for casing. Pull bit laying down DP & DC.
- Run 5 1/2", 15.5#, J-55, ST&C, 8Rd, New Production Casing. Run float shoe and float collar one
 (1) joint up. Thread lock shoe and collar. Run 8 centralizers: One 15' above shoe and one 15' above collar with lock rings. Then every other collar to centralize from 3550' to about 3000'. Ruff-cote casing across pay zones.
- 11. Reciprocate casing and circulate 1/2 hour before cementing. Cement per Halliburton recommendations. Reciprocate pipe until plug bumps or drag is excessive. Hang casing in tension 1' off bottom. Bump plug with 500 psi over pump pressure not to exceed 3000 psi. Bleed off pressure & check floats. If holds OK, leave casing open.
- 12. Nipple down BOP. Hang 5 1/2" casing in tension with hook load weight. Cut off 5 1/2" casing. Weld on 5 1/2" belled nipple. Secure wellhead with 5 1/2" casing collar with steel plate welded on collar.
- 13. Release rig. Record time on tour report.