Charles B. Gillespie, Jr.

SUMMARY

DRILLING, CASING AND CEMENTING PROGRAM

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- 1. Drill 17 1/2" hole to $\frac{+}{4}$ 400'. Will be in the Red Beds at this depth.
- 2. Cement 13 3/8" 54.50#, J-55 casing with 440 sx Class "C" containing 2% CaCl₂. Run Texas Pattern Guide Shoe with an insert float valve in top of shoe joint. Centralizers will be run on every other joint. Use plug to displace cement. Cement will be circulated to surface.
- 3. Release pressure, nipple up, and install BOP's. Test casing to 600 psi after 18 hours and drill out cement.
- 4. Drill 11" hole to + 4750'. Will be in the San Andres at this depth.
- 5. Cement 8 5/8" 32#, J-55 and S-80 casing with 1200 sx Class "C" 35/65 Poz containing 3#/sx salt and 1#/Gilsonite. Tail in with 200 sx Class "C" containing 1% CaCl₂. Run guide shoe and insert float on bottom joint, and 8-10 centralizers. Use plug to displace cement. Cement will be brought back to surface.
- 6. Release pressure, nipple up, and install BOP's. Test casing to 1500 psi for 30 minutes after WOC 18 hours and drill out cement.
- 7. Drill 7 7/8" hole to TD at ⁺ 11,850'. A fresh water, cut brine mud system will be used. Pit levelers and flowline sensors will be utilized on the pits prior to drilling into the Wolfcamp formation. A mudlogging unit will be on location at 10,000' to assist in evaluating samples and shows. Run Spectral Density Dual Spaced Neutron Gamma Ray Log, Dual Laterolog Microguard Log, Long Spaced Sonic Log, High Density Dipmeter.
- 8. Run 5 1/2" 17#, N-80 and S-95 casing, use 10-12 centralizers to centralize all prospective pay zones. Cement 5 1/2" casing with 800 sx Class "H" containing 3% KCl and .7% FL-20. Cement volume will be adjusted according to calipered hole volume obtained from electric log.
- 9. Perforations, acid job and additional stimulation to be determined after completion.

EXHIBIT F-1 Charles B. Gillespie, Jr. Hamilton Federal No. 3 1880' FSL and 2080' FWL Section 33, T-15-S, R-35-E Lea County, New Mexico