## SUMMARY

Drilling, Drill Stem Tests, Casing and Cementing Programs

- Drill 12-1/4" hole to ±350' using a Fresh Water Mud System. Will set surface in red bed. May lose circulation from 100'-300' in the red bed with the possibility of dry drilling.
- 2. Run ±350' of 8-5/8", 24#, K-55, ST&C, 8rd surface casing with a Texas Pattern (notched) Guide Shoe on the bottom of shoe joint and an insert float valve in top of shoe joint. Thread lock shoe w/Weld-A. Place a stop ring ±3' above guide shoe, then install a centralizer directly above guide shoe. Thread lock the collar at the top of the shoe joint w/Weld-A. Place a second centralizer on top of the shoe joint. The third and fourth centralizers should be spaced out on every other collar (total of four centralizers).
- 3. Circulate casing capacity plus (in order to clear casing). Cement 8-5/8" with ±230 sx Class C w/2% CaCl. Slurry weight 14.8#/gal w/a slurry volume of 1.32 cu ft/sx and a water ratio of 6.32 gal/sx. Use one wooden plug to displace cement.
- 4. Nipple up and install BOP. Test 8-5/8" casing to 600# after 18 hrs. Drill out cement.
- 5. Drill 7-7/8" hole to 2400' using a Brine Water Native Mud System with the following properties:

Mud Weight - 10.0#/gal & Viscosity - 28 sec/qt. No water loss control & using paper for seepage.

Drill 7-7/8" hole from 2400' to  $\pm$  2750' using a Brine Water Mud System with the following properties:

Mud Weight - 10.2#/gal & Viscosity - 32 sec/qt. Water loss - 10cc or less

- 6. No DSTs, no coring, no mudlogging.
  - At TD Run Litho Density Compensated Neutron/Gamma Ray log & Dual Induction Laterolog.
- 7. If production is indicated by logs, run  $4\frac{1}{2}$ " casing as follows:

From	To	Footage	Desciption
0'-	350'	( 350')	8-5/8", 24#, K-55, ST&C
0'-	2750'	(2750')	4-1/2", 11.6#, K-55, ST&C

Use of float shoe on the bottom of shoe joint. Use Weld-A to threadlock the shoe. Place a stop ring ±3' above float shoe, then install a centralizer directly above float shoe.

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