

DRILLING, CASING, AND CEMENTING PROGRAM

- 1) Drill 12 1/4" hole to approximately 1600' or to firm formation with fresh water mud, and a viscosity of 32 SPQ and no control over water loss. Maintain pump pressure less than 800 psi to prevent excessive hole enlargement.
- 2) Circulate hole clean with 2 hole volumes of mud
- 3) Run 8 5/8" casing with a centrizer on the first collar and one on each third collar from the bottom. Use a Texas pattern guide shoe with an aluminum baffle float. Land the casing with the collar eighteen inches below the surface.
- 4) Cement the casing in place with 615 sx class "c" + 4% Gel + 2% calcium chloride and 1/4 #/ sx cellophane plus 200 sx class "c" with 2% calcium chloride and 1/4# / sx cellophane. Displace the cement to the float. Shut in.
- 5) Wait on cement 12 hrs before drilling out. Test pressure control equipment to 1000 psi for 30 minutes before drilling through the casing shoe.
- 6) Drill 7 7/8" hole with brine at native conditions to a depth of 7000'.
- 7) At 7000' depth maintain the mud viscosity between 32 - 34 seconds per quart and reduce water loss to 10 cc per 30 seconds
- 8) Drill to TD of 8000'. Estimated BHP = 2500 psi
- 9) Circulate hole for 4 hours with mud at designed conditions.
- 10) Pull out of the hole, lay down drill string
- 11) Run 5 1/2" casing with guide shoe, float collar, latchdown wiper plug baffle and 20 centralizers, one on each collar from the first collar up. Install DV tool @ 5000'
- 12) Cement stage 1 with 220 sx 35:65:6 poz "H" + 5% salt + 1/4#/sx celloflake + 395 sx "H" + 1/4 #/sx celloflake. Open DV tool at 5000' and cement stage 2 with 670 sx "C" + 3% salt + fluid loss chemicals - circulate cement to surface - displace plug with 2% KCL water, release pressure and leave shut in.

RECEIVED
OFFICE OF THE ATTORNEY GENERAL
ROSWELL OFFICE

NOV 24 P 3 16

RECEIVED