

Intermediate: 1600' of 8 5/8" 24#, K-55, ST&C, new casing cemented with 200 sx thix-set plug 825 sx LW with 5# gilsonite, 1/4# flocele and 2% CaCl followed by 200 sx Class "C" with 2% CaCl or sufficient volume to circulate cement to bottom of surface casing. Will nipple up 12" API 3000 WP x 10" API 3000 WP casinghead spool and install 10" API 3000 psi WP BOP stack (consisting of 1 pipe ram, 1 blind ram, 1 bag type BOP) to drill 7 7/8" production hole.

Production: 8600' of 4 1/2" 11.6#, K-55, LT&C new casing cemented with sufficient volume (estimated 900 sx) to cover all pay. Cement will be Class "H" with 0.5% fluid loss additive and 5# KCL.

Choke, Kill, and fill lines are indicated on Exhibit I. BOPs will be tested with rig pumps prior to drilling below 8 5/8" casing shoe. BOPs will be tested again by independent concern prior to reaching 6500'. BOPs will be worked once each day, with blind rams worked only on trips.

5. Circulating Medium and Control Equipment:

- 0'- 350' Spud with fresh water gel flocculated with lime and pretreated with 6-8 lb/bbl cottenseed hulls, 2-4 lb/bbl fiber, and 2 lb/bbl paper for possible severe loss circulation zone 100-200'. If necessary drill without returns, or if full returns cannot be established, at casing point mix 150 bbls viscous mud treated with LCM as above and spot on bottom before coming out of hole to run casing.
- 350'-1600' Drill out with fresh water through a controlled section of the reserve pit. Add paper for seepage control or to sweep hole, as needed. At casing point, sweep hole with 150 ± bbls viscous mud with 6-8 lb/bbl LCM before coming out of the hole to run casing.
- 1600'-6000' Drill out with fresh water through a controlled section of the reserve pit. Use paper, sea mud, and salt water gel slugs to sweep the hole and control seepage, as necessary. To control corrosion maintain pH 8.5 to 9.5 with caustic soda and use corrosion chemicals from 1900' to total depth. A possibility of lost circulation exists at 2700 ± and 4700±.
- 6000'-8600' Circulate steel pits and mud up to 34-36 sec/qt viscosity, 10 to 12 cc API filtrate, and 3.0 +% KCL with sea mud-salt water gel (2 to 1 ratio) and drispac-cypan after treating hardness with soda ash. Make solids control equipment operative.