

APPLICATION TO DRILL

NCHO RESOURCES, INC..
TOMCAT "21" FEDERAL # 8
UNIT "I" SECTION 21
T23S-R32E LEA CO. NM

9. CEMENTING & SETTING DEPTH:

20" Conductor Drill 25" hole to 40'. Set 40' of 20" conductor Cement to surface with Radi-mix.

13 3/8" Surface Drill 17 1/2" hole to 650'. Run and set 650' of 13 3/8" 48# E-40 ST&C casing. Cement with 550 Sx. of Class "C" Premium cement + additives circulate Cement to surface.

8 5/8" Intermediate Drill 11" hole to 4900'. Run and set 4900' of 8 5/8" K-55 & S-80 32# LT&C casing. Cement with 1400 Sx. of Premium Plus Class "C" cement + additives circulate cement or at least 200' above 13 3/8" C

5 1/2" Production Drill 7 7/8" hole to 9100'. Run and set 9100' of 5 1/2" K-55 17 & 15.5# LT&C casing. Cement with 550 Sx. of Class "E" cement + additives estimated top of cement 7600'.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E". A Series 900 3000 PSI working pressure B.O.P. consisting of a double ram type preventor with a bag type annular preventor. The B.O.P. unit will be hydraulically operated. Exhibit "E-1". Choke manifold and closing unit. The B.O.P. will be nipples up on 13 3/8" casing and will be operated at least once each 24 hour period while drilling and blind rams will be operated when out of hole on trips. Full opening stabbing valve and upper kelly cock will be utilized. No abnormal pressure or temperature is expected while drilling.

11. PROPOSED MUD CIRCULATING SYSTEM:

Depth	Mud Wt.	Visc.	Fluid Loss	Type Mud System
40-650' ^{1200'}	8.6-9	32-34	N/C	Fresh water system use paper to control seepage
650-4900'	10-10.1	29-34	N/C	Brine water use lime for pH control and paper to control seepage.
4900-8900'	8.4-8.5	28-34	N/C	Fresh water use Gel & paper to control seepage and clean hole.
8900-9100'	8.5-9.0	32-34	10-15 cc or less	Fresh water with Gel/Pac Clean hole with high viscosity sweeps.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, and casing the viscosity and/or water loss may have to be adjusted to meet these needs.