

APPLICATION TO DRILL

CONCHO OIL & GAS CORP.

EDITH FEDERAL # 4

UNIT "K" SECTION 25

T18S-R33E LEA CO. NM

9. Cementing and Setting Depth:

| | | |
|---------|--------------|---|
| 20" | Conductor | Set 40' of 20" conductor pipe and cement to surface with Redi-mix. |
| 13 3/8" | Surface | Set 400' of 13 3/8" 48# H-40 ST&C casing. Cement with 300 Sx. of Class "C" Light cement + additives, tail in 250 Sx. of Class "C" + 2% CaCl + 1/4# Flocele/Sx. circulate cement to surface. |
| 8 5/8" | Intermediate | Set 3700' of 8 5/8" 32# J-55 ST&C casing. Cement with 1000 Sx. of Class "C" Light + additives, tail in with 300 Sx. of Class "C" cement + 2% CaCl + 1/4# Flocele/Sx. circulate cement to surface. |
| 5 1/2" | Production | Set 10,200' of 5 1/2" 17# N-80 LT&C casing. Cement with 600 Sx. of Class "H" 50/50 POZ + additives, estimate top of cement 6000'. |

10. Pressure Control Equipment: Exhibit "E". A 900 Series 3000 PSI working pressure B.O.P. consisting of a double ram type preventor with a bag type annular preventor. BOP unit will be hydraulically operated. Exhibit "E-1". Choke manifold and closing unit. BOP will be nipped up on 13 3/8" casing and will be operated at least once each 24 Hr. period while drilling and blind rams will be operated when out of hole during trips. Flow sensor, PVT, 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 |
|--------------|-----------|-------|---------------|--|
| 40-400' | 8.4-8.7 | 29-34 | NC | Fresh water spud mud add paper to control seepage. |
| 400-3700' | 10.1-10.3 | 29-38 | NC | Brine water, add paper to control seepage and use high viscosity sweeps to clean hole. |
| 3700-9000' | 9.0-9.3 | 29-38 | NC | Cut Brine |
| 9000-10,200' | 9.0-9.3 | 29-38 | 10 cc or Less | Cut Brine use a polymer to reduce water loss and high viscosity sweeps to clean hole. |

Sufficient mud materials to maintain mud properties, meet lost circulation and weight increase requirements will be kept at well site at all times. In order to log well and run casing the viscosity may have to be raised and the water loss lowered in order to do so.