

## APPLICATION TO DRILL

CONCHO OIL & GAS CORP.  
 ELLIOTT FEDERAL # 6  
 UNIT "J" SECTION 30  
 T18S-R30E EDDY 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 425' of 13 3/8" 48# H-40 ST&C casing. Cement with 400 Sx. of Class "C" cement + 2% CaCl <sub>2</sub> + 1/4# Flocele/Sx., circulate cement to surface.
8 5/8"	Intermediate	Set 2100' of 8 5/8" 32# J-55 ST&C casing. Cement with 800 Sx. of Class "C" Light cement + 2% CaCl <sub>2</sub> tail in with 200 Sx. of Class "C" cement + 2% CaCl <sub>2</sub> + 1/4# Flocele/Sx., circulate cement to surface.
5 1/2"	Production	Set 8400' of 5 1/2" casing as follows: 1500' of 5 1/2" 17# N-80 LT&C, 5900' of 5 1/2" 17# J-55 LT&C, 1000' 5 1/2" 17# N-80 LT&C. Cement with 500 Sx. of Class "H" light + additives, tail in with 300 Sx. of Class "H" Premium Plus additives. Estimate top of cement 1800'.

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.

• Proposed Mud Circulating System:

Depth	Mud Wt.	Visc,	Fluid Loss	Type Mud
40-425'	8.4-8.6	29-36	NC	Fresh water spud mud add paper to control seepage.
425-2100'	10.0-10.3	29-38	NC	Brine water add paper to control seepage and clean hole with high viscosity sweeps.
2100-7100'	9.6-9.8	29-38	NC	Cut brine add paper to control seepage and high viscosity sweeps to clean hole.
7100-8400'	9.6-9.8	34-38	10 cc or less	Same as above use polymer to lower water loss.

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.