APPLICATION TO DRILL

CONCHO RESOURCES, INC. SOUTHERN CROSS "15" FEDERAL COM. # 1 UNIT "P" SECTION 15 T18S-R24E EDDY CO. NM

9. Cementing and Setting Depth:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
8 5/8"	Surface	Set 1200' of 8 5/8" $32\#$ J-55 ST&C casing. Cement with 400 Sx. of Class "C" $35/65$ POZ +12% Salt + 6% Bentonite + $\frac{1}{4}\#$ Celoflakes/Sx. + 2% CaCl, tail in 200 Sx. of Class "C" + 2% CaCl, circulate cement to surface.
4 ¹ 2"	Production	Set 9000' of 4½" casing as follows: 1100' of 4½" 11.6# N-80 LT&C, 7000' of 4½" 11.6# K-55 LT&C, 900' of 4½" 11.6# N-80 LT&C casing. Cement with 300 Sx. of Class "H" 35/65 POZ + 6% Salt + 6% Bentonite + ½# Celoflakes /Sx. , tail in with 925 Sx. of Class "H" 50/50 POZ + 6% Salt + 2% Bentonite. Estimate top of cement 4200'±.

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 un-t will be hydraulically operated. Exhibit "E-1". Choke manifold and closing unit. BOP will be nippled up on 8 5/8" 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 -1200"850'	8.4-9.0	28-32	NC	Fresh water add paper to control seepage, add Gel for viscosity - Lime for pH control.
850 1200-5500'	8.4-8.9	28-32	NC	Fresh water use paper to control seepage Lime for pH control.
5000-7750'	9.2-9.6	30-36	NC	Cut Brine paper to control
7750-8290'	9.2-9.6	32-38	8-15 cc	seepage Cut Brine use Drispac with

8290-9000 9.2-9.6 32-38 8 cc or less Cut Brine Drispac System. 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.