

## APPLICATION TO DRILL

POGO PRODUCING COMPANY  
 LAMUNYON FEDERAL # 72  
 UNIT "F" SECTION 21  
 T23S-R37E LEA CO. NM

9. CEMENTING CASING & SETTING DEPTH:

20"	Conductor	Set 40' of 20" conductor and cement to surface Redi-mix.
8 5/8"	Surface	Set 1100' of 8 5/8" 24# J-55 ST&C casing. Cement with 800 Sx. of Class "C" cement + additives, circulate cement to surface.
5½"	Production	Set 6100' of 5½" 15.5# J-55 ST&C casing. Cement in two stages, place DV Tool at 4100' ±. Cement with 1600 Sx. of Class "H" cement + additives, circulate cement to surface.

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. B.O.P. will be hydraulically operated. Exhibit "E-1" shows choke manifold & closing unit. B.O.P. will be nipples up on 8 5/8" casing and will be operated at least once each 24 Hr. period while drilling and blind rams will be worked when out of hole on 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:

<u>DEPTH</u>	<u>MUD WT.</u>	<u>VISC.</u>	<u>FLUID LOSS</u>	<u>TYPE MUD</u>
40-1100'	8.6-8.8	30-38	NC	Fresh water spud mud add paper to control seepage
1100-4400'	10-10.5	29-38	NC	Brine water add paper to control seepage, lime for pH control.
4400-6100'	10-10.5	34-40	10 cc or less	Brine water use salt water Gel for viscosity control add starch for water loss control, add soda to control pH.

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