

## APPLICATION TO DRILL

POGO PRODUCING COMPANY  
 LOST TANK "33" FEDERAL #5  
 1980' FSL & 1980' FEL SEC. 33  
 T21S-R31E EDDY CO. NM

9. Cementing & Casing setting depth:

20"	Conductor	Set 40' of 20" conductor and cement to surface with Redi-mix.
13-3/8"	Surface	Set 520' of 13-3/8" 54.5# J-55 casing. Cement with 530 sx of Class "C" + additives. Circulate cement to surface.
8-5/8"	Intermediate	Set 3945' of 8-5/8" 32 & 24# J-55 casing. Place D.V. Tool at 3,500' cement with 1400 sx of cement + additives. Circulate cement to surface.
5-1/2"	Production	Set 8200' of 5-1/2" 17 & 15.5# J-55 LT&C casing. Place D.V. at 6000'. Cement with 1704 sx cement + additives. Circulate 2nd stage to surface.

10. Pressure Control Equipment:

Exhibit "E" shows a 900 Series 3000 PSI working pressure double ram type Blow Out Preventor, hydraulically operated. Exhibit "E-1" shows the choke manifold and closing unit. Blind rams on top and pipe rams on bottom to correspond with the drill pipe size being used. The BOP will be nipped up on 13-3/8" casing and remain on the hole till the casing is run and cemented. The BOP will be tested after each string of casing is run and will be worked at least once each day while drilling and blind rams will be worked when drill pipe is out of hole. Flow sensor, PVT, full opening, stabbing valve and upper kelley cock will be utilized.

11. Proposed Mud Circulating System:

Depth	Mud Wt.	Mud Visc.	Fluid Loss	Type Mud
0 - 520'	8.4-8.6	29-34	NC	Fresh water. Spud mud. Use paper to control seepage.
520 -3945'	10.0-10.2	29-30	NC	Brine water. Add lime for pH control and paper for seepage.
3945'-8200'	8.4-8.6	29-30	NC	Fresh water.

Sufficient mud materials to maintain mud properties, meet lost circulation and weight increase requirements will be kept at the 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.

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