

APPLICATION TO DRILL
 POGO PRODUCING COMPANY
 EAST LIVINGSTON RIDGE UNIT # 9
 660' FSL & 330' FWL SEC.18
 T22S-R32E LEA CO. NM

9. Cementing & Casing setting depth:

20" Conductor	Set 40' of 20" conductor and cement to surface with Redi-Mix.
10 3/4" Surface	Set 800' of 10 3/4" H-40 32.75# ST&C casing cement with 675 Sx. of cement + additives, circulate cement to surface.
7 5/8" Intermediate	Set 4500' of 7 5/8" J-55 26.4# ST&C casing cement with 1350 Sx of cement + additives circulate cement to surface.
4 1/2" Production	Set 8750' of 4 1/2" J-55 & N-80 11.6# LT&C casing cement with 900 Sx. cement + additives. Bring top of cement back to 3500' verify with log or temp. survey.

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 the 10 3/4" 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
0-800'	8.6	29-34	NC	Fresh water Spud Mud
800-4500'	10-10.5	28-30	NC	Brine water paper for Seepage control.
4500-8750'	10-10.5	28-34	NC	Brine water paper for Seepage control.

Sufficient mud materials to maintain mud properties, meet lost circulation and weight increase requirments 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.