

3. The operator's minimum specifications for pressure:

Operator's minimum specification for pressure control, Exhibit H, is a schematic diagram of the BOP stack. Ram type preventers will be tested to the rated working pressure of the stack of to 70% of the minimum internal yield of the casing, whichever is less. Annular-type preventers will be tested to 50% of their working pressure. Tests will be run at the time of installation, prior to drilling out of each casing shoe and at least every 14 days or first trip out of hole after 14 days since previous pressure test. Pipe rams will be operationally checked each 24 hour period and blind rams with annular preventer each time pipe is pulled out of hole. Accessories to the BOP's include an upper and lower kelly valve with handle, floor safety valve, remote control panel, accumulator (Exhibit G), drill string and choke manifold (Exhibit J) with pressure rating equivalent to the BOP stack. The accumulator shall have sufficient capacity to open the hydraulically-controlled choke line valve (if so equipped), close all rams plus the annular preventer, and retain a minimum of 200 psi above the pre-charge on the closing manifold without the use of the closing unit pumps. There will be a fill up line above the annular preventer which is the uppermost preventer into the drilling nipple. BHP at T.D. is ± 1800 psi.

4. The proposed Casing and Cementing Program:

A. CASING PROGRAM

<u>CASING</u>	<u>HOLE SIZE</u>	<u>CSG SIZE</u>	<u>WT/FT</u>	<u>GRADE</u>	<u>CPLG</u>	<u>SETTING DEPTH</u>	<u>COND</u>
Surface	11"	8-5/8"	24	K-55	8RS	450'±	New
Prod.	7-7/8"	5-1/2"	15.5	K-55	8RS	3600'±	New

Both surface and production casing will be cemented back to surface and both strings of casing will be tested to 1000 psi.

Surface casing cement will be circulated back to surface. (100% excess)
Production casing will be cemented from TD to surface. (30% excess over caliper log)

B. CEMENTING PROGRAM

Surface Casing: 8-5/8" @ 450'± Class "H" + 2% CaCl_2 , 11" x 8-5/8" (0.2542 cu ft/ft) (450')(100% excess) = 175 sx.

Production Casing: 5-1/2" @ 3600'±, two stage w/DV tool @ 2000'

1st Stage:

Lead = 150 sxs Class "C" + 2% CaCl_2
Tail = 225 sxs Class "H" + Gas Block

RECEIVED

SEP 24 1995
JCD HOBBS
OFFICE