

Minimum Casing Design Factors:  
Collapse 1.125; Burst 1.0; Tensile Strength 1.8

**B. Cementing Program:**

1. Surface Casing: 200 sacks Class "C" Lite containing ½#/sk cellophane flakes + 3% CaCl<sub>2</sub> + 5#/sk gilsonite followed by 400 sacks of Class "C" Neet containing 3% CaCl<sub>2</sub>.
2. Intermediate Casing: 200 sacks Class "II" + 10% Thixad + ½#/sk cellophane + 1% CaCl<sub>2</sub> + 1150 sacks Class "C" + 6% gel + 5 #/sk gilsonite + 250 sacks Class "C" + 2% CaCl<sub>2</sub>.
3. Production Casing: 1000 sacks Class "II" containing .7% fluid loss additive + .3% friction reducer additive + 5 #/sk compressive strength enhancer + 5% NaCl. Shallower productive zones may be cemented by placing a multiple stage cementing tool in the production casing below zones of interest if necessary and cementing with a "Lite" slurry w/ necessary additives.

Mewbourne Oil Company reserves the right to change cement design as hole conditions may dictate.

**5. Mud Program:**

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0' - 450'	FW gel	8.4 - 8.7	28 - 38	NC
450' - 1950'	Brine	10.0	28	NC
1950' - 7000'	Cut Brine	9.2 - 9.6	28	NC
7000' - 8650'	Cut Brine	9.2 - 9.6	34 - 38	< 10 cc

Sufficient mud materials to maintain mud properties, control loss circulation, and contain a blow out will be available at the well site during drilling operations. Mud will be checked daily by mud company personnel.

**6. Evaluation Program:**

Samples: 10' samples from intermediate casing to TD.  
Logging: CD-DSNL from TD to casing; DLL-Micro SFL from TD to casing.  
Coring: As warranted.  
DST: As warranted.