SECTION IV PRODUCTION HOLE: (Continued)

G. Casing: 5-1/2", 15.5 lb/ft, J-55, ST&C

PPCo. Allowables:

Burst, psi	4510
Collapse, psi	3810
Tension, K lbs	131

Make-up Torque, ft-lbs:

Optimum	2170
Minimum	1630
Maximum	2710

H. Cement: Set stage tool at approximately 6000'. Circulate to desired TOC based on caliper + 20% for the 1st stage and caliper + 30% for the 2nd stage. Run temperature survey to determine TOC.

1st Stage:

Preflush: Pump 50 bbls fresh water containing 5 ppb of Desco.

Cement: Class "C" Neat. Desired TOC = 6000'.

Slurry Weight:	14.8 ppg
Slurry Yield:	1.32 ft^3/sx
Water Required:	6.3 gal/sx

2nd Stage: WOC 6 hrs between stages.

Preflush: Pump 50 bbls fresh water containing 5 ppb of Desco.

Lead: Class "C" + 20% Diacel "D". Desired TOC = 3000'.

Slurry Weight:	12.0 ppg
Slurry Yield:	2.69 ft^3/sx
Water Required:	15.5 gal/sx

Tail: Class "C" Neat. Desired TOC = 4500'.

Slurry Weight:	14.8 ppg
Slurry Yield:	1.32 ft^3/sx
Water Required:	6.3 gal/sx

I. Notes:

1. Sandblast the bottom 1500 feet of casing.
2. Install one centralizer every other joint from TD to 6000'. Install reciprocating scratchers between each major zone of interest.
3. Run short joint per logging engineer recommendation.
4. Reciprocate casing 20'± while cementing.
5. Displace plug with fresh water.

J. Wellhead: Install 11" - 3000 psi btm x 7 1/16" - 3000 psi top tubing head spool.