

December 31, 1991

**I. Casing: 7", 26 lb/ft, P-110, LT&C**

PPCo. Allowables:

Burst, psi	7960
Collapse, psi	5880
Tension, K lbs	447

Make-up Torque, ft-lbs:

Optimum	6930
Minimum	5200
Maximum	8660

**II. Cement: Set stage tool at approximately 9000'. Circulate to desired TOC based on caliper volume + 20% excess on the 1<sup>st</sup> stage and 30% excess on the 2<sup>nd</sup> stage. Run one centralizer every joint from TD to 11000' and from 9000' to 7000'. Run temperature survey to determine TOC.**

**1st Stage:**

**Preflush:** Pump 50 bbls of fresh water containing 5 ppb of Desco. (Note - Order Desco from mud company.)

**Lead:** Class "H" + 20% Diacel D + 10% Salt. Desired TOC = 9000'.

Slurry Weight:	12.66 ppg
Slurry Yield:	2.48 ft <sup>3</sup> /sx
Water Required:	13.5 gal/sx

**Tail:** Class "H" + 0.5% Halad-344 + 0.2% HR-7 + 1/4 lb/sx Flocele. Desired TOC = 11000'.

Slurry Weight:	15.6 ppg
Slurry Yield:	1.18 ft <sup>3</sup> /sx
Water Required:	5.6 gal/sx

**Thickening Time:** 3:03 hr:min

**2nd Stage: WOC 6 hrs between stages.**

**Preflush:** Pump 50 bbls of fresh water containing 5 ppb of Desco. (Note - Order Desco from mud company.)

**Lead:** Class "H" + 20% Diacel "D" + 10% Salt. Desired TOC = 4000'.

Slurry Weight:	12.66 ppg
Slurry Yield:	2.48 ft <sup>3</sup> /sx
Water Required:	13.5 gal/sx

**Tail:** Class "H" Neat + 1/4 lb/sx Flocele. Desired TOC = 7000'.

Slurry Weight:	15.6 ppg
Slurry Yield:	1.18 ft <sup>3</sup> /sx
Water Required:	5.6 gal/sx