PROPOSED CASING & CEMENTING PROGRAM

UNCAS "31" STATE WELL NO. 1

13 3/8", 48 lb/ft, H-40 Surface Casing Set at 400' - in a 17 1/2" Hole

Circulate to surface with 400 sacks of Class "C" + 2% CaCl2

Slurry Weight:

14.8 ppg

Slurry Yield:

1.32 cu.ft/sk

Water Requirement:

6.3 gal./sk

9 5/8", 40 lb/ft, J-55 & N-80 Intermediate Casing Set at 4800' - in a 121/4" Hole

Lead: 2500 sx of 35:65 Poz Class "C" + 5% salt + 6% gel + 1/4 lb/sk celloflake

+ 2/10 % antifoamer

Desired TOC = Surface

Slurry Weight:

12.4 ppg

Slurry Yield:

2.15 cu.ft/sk

Water Requirement:

11.99 gal/sk

250 sx of Class "C" Neat Tail:

Slurry Weight:

14.8 ppg

Slurry Yield:

1.32 cu.ft/sk

Water Requirement:

6.31 gal/sk

5 1/2", 17 lb/ft, N-80 & P110 Production Casing Set at 13,600' - in an 8 3/4" Hole

Set stage tool at approximately 11,000'

1 st Stage: Lead - 450 sx of 35:65 Poz Class "H" + 5% salt + 6 % gel + 3/10% ret.

+ 2/10% dispersant + 2/10% antifoamer

Slurry Weight:

13.5 ppg

Slurry Yield:

1.68 cu.ft/sk

Water Requirement:

8.76 gal/sk

1 st Stage: Tail - 250 sx of Class "H" + 5% salt + 2% gel

+ 3/10 % retarder + 2/10% antifoamer

Slurry Weight:

16.4 ppg

Slurry Yield:

1.09 cu.ft/sk

Water Requirement:

5.49 gal/sk