#### PROPOSED CASING & CEMENTING PROGRAM

### HAWKEYE ST. 30 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

# 8 5/8", 32 lb/ft, J-55 & S-80 Intermediate Casing Set at 4800' - in a 11" Hole

Lead: 1600 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

Tail: 300 sx of Class "C" Neat

Slurry Weight: 14.8 ppg Slurry Yield: 1.32 cu.ft/sk Water Requirement: 6.31 gal/sk

# 5 1/2", 17 & 20 lb/ft, N-80 Production Casing Set at 13,500' - in a 7 7/8" Hole

Set stage tool at approximately 10,500'

1 st Stage : Lead - 550 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