

7. Estimated tops of important geologic markers:

San Andres	1,975 TVD
Abo Shale	5,500 TVD
Strawn	8,525 TVD
Atoka Clastics	8,875 TVD
Lower Atoka	8,975 TVD
Morrow Clastics	9,050 TVD
Chester	9,275 TVD

8. Estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered:

Primary Objective: Morrow 9,050' TVD

9. The proposed casing program is as follows:

Surface: 13 3/8" 48# H-40 ST&C new casing set from 0-400'

Intermediate: 8 5/8" 24# & 32# J55 LT&C new casing set from 0-2,000'.

Production: 5 1/2" 17# N80 new casing set from 0-9,500' TVD.

10. Casing setting depth and cementing program:

1. 13 3/8" surface casing set at 400' in 17 1/2" hole. Circulate cement to surface with 250 sks 35/65/6% gel + 2% CaCl₂ mixed at 12.4 ppg, Yield – 2.0 cf/sk and 180 sk Class C + 2% CaCl₂ mixed @ 14.8 ppg, Yield – 1.32 cf/sk.
2. 8 5/8" 24# & 32# J-55 casing set at 2,000' in 11" hole. A fluid caliper will be ran to determine exact cement volume required. Cement will be circulated to surface with 600 sks 35/65/6% gel + 5% salt mixed at 12.4 ppg, yield – 2.15 cf/sk and 220 sks Class C + 1% CaCl₂ mixed at 14.8 ppg, yield – 1.32 cf/sk.
3. 5 1/2" 17# dual grade N80 casing set at 9,500' TVD. Hole will be logged to determine exact cement volume to bring TOC to 7,000'.

Cement with: 500 sks TXI + 4% D800 + .4% D167 – 2% D65 +.2% D46 mixed @ 13.0 ppg, yield – 1.47 cf/sk.