

April 22, 1977

7. Estimated tops of important geologic markers:

Clearfork	2800'
Abo	3380'
Wolfcamp	4800'
Canyon	6300'
Strawn	7480'
Atoka	7820'
Morrow	7980'
"b" zone	8120'
"a" zone	8220'
Chester	8280'
TD	8330'

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

A. Primary objective (top) Morrow SS	7980'
B. Secondary objectives (top) Canyon	6300'
Strawn	7480'

9. The proposed casing program is as follows:

Conductor:	13-3/8" OD 48# H40 ST&C new casing
Surface:	8-5/8" OD 24# K55 ST&C new casing
Production:	5-1/2" OD 15.5 and 17# K55 and N80 ST&C and LT&C new casing

10. Casing setting depth and cementing program.

- A. 13-3/8" OD conductor pipe set at 30' by rat hole machine and cemented to the bottom of the cellar with three yards Redi-Mix.
- B. 8-5/8" OD surface casing set at 1800'. Cement with 700 sacks Halliburton Lite weight cement with 5# Gilsonite, 1/4# Flocele and 2% Calcium Chloride followed by 300 sacks Class C with 2% Calcium Chloride. If cement does not circulate, run temperature survey then run 1" in annulus and finish cementing to the surface using Class C and 2-4% Calcium Chloride in stages.
- C. 5-1/2" OD production casing set at 8330'. Cement with 1000 sacks Class H with 3/4% CFR-2 and 3# KCL per sack. Bring cement back to 5500'.