

Application for Permit to Drill
Myers Langlie Mattix Unit #274

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6. Proposed total depth is 3,800 feet.
7. Estimated tops of important geologic markers.

Anhydrite	1160'
Yates	2950'
Seven Rivers	3220'
Queen	3450'
Penrose	3620'
Total Depth	3800'

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

Primary Objective: Queen 3450'

9. The proposed casing program is as follows:

Surface: 8-5/8" OD 24# K55 ST&C new casing

Production: 5-1/2" OD 15.5# K55 ST&C new casing

10. Casing setting depth and cementing program:

- A. 8-5/8" OD surface casing set at 400' in 12-1/4" hole. Circulate cement with 260 sacks Class C + 2% CaCl_2 + 0.25 lb/sk cellophane flakes. If cement does not circulate, determine the top of cement by temperature survey then finish cementing to the surface through 1" in the annulus using Class "C" with 2% CaCl_2 .
- B. 5-1/2" OD production casing set @ 3800' in 7-7/8" hole. Circulate Cement with 660 sacks Class H + 15 lb/sk salt + 0.25 lb/sk cellophane flakes followed by 150 sx 50/50 Poz w/ 2% gel + 3 lb/sk KCl + 0.3% Halad 9.

Note: Cement volumes may need to be adjusted to hole caliper.