

III. GEOLOGICAL INFORMATION:

A. Ground Elevation: 4047' (ungraded)

B. Formation Tops: Yates	600'
Delaware	3,000'
Bone Spring	4,900'
Wolfcamp	8,850'
Canyon	9,600'
Strawn	9,900'
Morrow	10,700'
PTD	11,250'

IV. CEMENT PROGRAM:

Slurry designs included here are subject to change as hole and coverage conditions dictate.

A. Surface Casing: 13-3/8", 48#, H-40 set @ 500' in 17½" hole.

Procedure: Run guide shoe, 1 Jt, insert float, and sufficient 13-3/8" csg to land shoe at or below 500' strap weld shoe and first collar. Run a centralizer at shoe and at top of 2nd and 4th Jts.

Cementing: Cement w/545 sxs of Class "C" w/ 2% CaCl₂. Record the following information for New Mexico Oil Conservation Division report; (see page C-11, NM Rules & Regulations).

- 1) Volume of cement (in ft³), Brand name and additives, percent additives used, and sequence of placement if more than one slurry is used.
- 2) Temperature of cement when mixed.
- 3) Estimated minimum formation temperature in zone of interest.
- 4) Estimate of cement strength at time of drill out or test.
- 5) Actual time cement in place at time of test or drill out.

Drill Out & Testing: WOC 12 hrs minimum, drill out to ± 10' of shoe. PU drillstring ± 10', and close annular and test casing to 600 psig.

B. Intermediate Casing: 8-5/8", 32#, J-55 set @ 3,000' in 12¼" hole.
(Run log to gauge hole volume to determine actual cement volumes to be pumped).

Procedure: Run guide shoe, 1 jt, float collar sufficient casing to land shoe at or below 3,000'. Strap weld shoe and first collar. run a centralizer at shoe and every other collar.

Cementing: Cement w/925 sxs of 50:50 POZ + 10% gel + ~~8#/sk~~ salt + 0.25 lb/sk Flocele followed w/200 sxs Class "C" + 2% CaCl₂. Record 5 parameters as above.