

Chama Petroleum Company
Pennzoil Federal No. 1
September 25, 1980
Page -2-

NOTE Tops: 1st marker joint @ 13,280.55' KB
2nd marker joint @ 13,108.68' KB
3rd marker joint @ 12,819.01' KB
Top of N-80, 20#/
ft., 5-1/2" @ 11,202.42' KB
PBSD @ 13,409.19' KB

NOTE
10 - Centralizers, Type Slim Hole
23 - Centralizers, Type S-3

Ran as follows:

1st.	10' above float shoe
2 thru 14	1 on each collar
15 thru 38	1 on every third collar
39 thru 89	1 on every fifth collar

Cementing Detail:

Cemented through 5-1/2" casing with 20 barrels mud flush ahead, followed by 700 sacks class "H" with 0.8% Halad 22, 0.5% CFR-2 and 5#/sack KCL, 15.6#/gal., 1.22 yield - cu. ft./sack. Plug down at 1:50 a.m. (New Mexico time), August 21, 1980. Bumped plug with 2950 psig. Float held O.K. Cement job was complete at 1.54 a.m.

NOTES

Wait on cement for 4 hours; set 5-1/2" slips; string weight on rig indicator 180,000#; set 110,000 on slips; wait on cement for 7 hours and ran wire-line temperature survey; top of cement at 9450'. Plug back total depth at 13,373'.KB.

Field operations were supervised by Mr. M. L. Southerland.

Yours very truly,

James F. O'Briant
Registered Professional
Engineer

JFO:crm