

MORGAN FEDERAL #1
P & A PROCEDURE
June 12, 1979

WELL DATA: 16" @ 40', 9-5/8" @ 1516'; 5-1/2" @ 10,000'.
CIBP @ 9600' w/30' of cement on top
Perfs: 9241' to 9343' (Derry) 16 shots
8786' to 8800' (Strawn) 15 shots
4000' to 4006' (Glorietta) 1 spf

Retrievable Bridge Plugs (w/30' sand) @ 9200' & 4200'.
Cement behind 5-1/2" casing to 2500'.

| CEMENT DATA: | Class "H" w/.2% HR-4 (1) | Class "H" Neat (2) |
|-----------------|--------------------------|--------------------|
| Weight (ppg): | 15.6 | 15.6 |
| Yield (cfps): | 1.18 | 1.18 |
| Water (gps): | 5.2 | 5.2 |
| BHST | 135° | 80° |
| Thickening Time | 3:35 | 3:45 |

1. This procedure was verbally approved by Mr. Ray Stall, USGS Engineer, on June 11, 1979. Notify USGS 24 hours prior to initiating plugging operations. (Artesia office 505/746-9838).
Should the well be plugged on a weekend when the USGS office is closed, call one of these three numbers: Jim Knauff - 746-4138; Ray Stall 746-9623; Joe Laura - 748-2349.
2. Kill the well with fresh water. Insure that both tubing and 2-7/8" annulus are full with water. Remove Christmas tree and install BOP's.
3. Unseat packer. Run in hole to 4170[±] (the top of the sand on the bridge plug) and reverse out all sand then latch onto the retrievable bridge plug (RBP). Unseat the bridge plug then pull out of hole.
4. Run in hole with RBP retrieving head (which was on the packer) and tubing to 9170[±] (the top of the sand on the bridge plug). Reverse out all sand then latch onto the RBP. Unseat the RBP and pull out of hole.

NOTE: When retrieving RBP, equalize the pressure across the RBP then unseat. Keep tubing & annulus full as much as possible throughout all operations.

5. Run in hole with open-ended tubing to PBD. Insure that the hole is filled with mud laden fluid (25 sx/100 bbl. minimum).
6. Pull tubing to each of the following intervals and spot a 200' plug using the designated cement blend across each of the following intervals:

| | Cement | Displacement |
|----------------------------|--------------------|--------------|
| 9000-9200 (Top Derry) | 25 sx * Design (1) | 52 bbl. |
| 7050-7250 (Top Wolfcamp) | 25 sx* Design (1) | 40 bbl. |
| 5425-5625 | 25 sx* Design (2) | 31 bbl. |
| 3900-4100 | 25 sx* Design (2) | 22 bbl. |
| 2550-2750 (Top San Andres) | 25 sx* Design (2) | 14 bbl. |

*These are minimum volumes.

NOTE: Displace each plug of cement with mud-laden fluid (25 sx/100 bbl. minimum). The volume of displacement is to be that needed to spot a balanced plug across the interval.