

MILLER FEDERAL 33 No. 2

PRODUCTION STRING CEMENTING PROCEDURE

1. Run 5 1/2" casing, centralize every other joint to 3600' (5 total required). Place staging tool at 1550'. Install cement basket on first and second joints below staging tool.
2. Cement in two stages as follows:

1. Stage 1:

- a. Pump 20 barrels CW100 chemical wash with fluid loss control.
- b. Cement with 225 sacks Class C 65:35 POZ, containing 6% D20 (gel), 5 lb./sk. D44 (salt), 5 lb./sk. D42 Kolite (extender), .2% D46 (defoamer) and 1/4 lb./sk. D29 (cellophane flakes).
- c. Tail in with 200 sacks Class C containing .4% D60 Flac (fluid loss control).

SLURRY PROPERTIES

	<u>Lead</u>	<u>Tail</u>
Volume cu.ft./sk.	1.94	1.32
Density ppg	12.8	14.8
Water gal./sk.	9.7	6.3

- d. Displace to float. Check float to assure that it holds. Drop opening bomb, open tool and circulate 8 hours.

2. Stage 2:

- a. Pump 400 sacks 12-3 RFC Cement through DV tool. This cement has already been mixed and is in Dowell's yard in Artesia.

SLURRY PROPERTIES

Volume cu.ft./sk.	1.54
Density ppg	14.9
Water gal./sk.	6.8

- b. Run TOC survey if cement does not circulate.