COMPLETION PROCEDURE
2nd BONE SPRING CARBONATE

Sand 7 Federal No. 4
560' FSL & 2125' FWL
Sec. 7, T-18-S, R-31-E
Eddy County, New Mexico

Date: 8-18-90
EOG WI: 100%
EOG NRI: 77.5%
AFE No.: 0107300011 $511,400

WELL DATA

ELEVATION, GL: 3608.5' KB: 3624.5' TD: 8614' PBTD: 8443'

CASING: 13 3/8" 61# WC-50 STC set @ 710'. Cement circulated to surface.
8 5/8" 32# K-55 and S-80 LTC set @ 2506'. Cmt circ to surface.
5 1/2" 17# K-55 LTC set @ 8613'. TOC @ 2370' by CBL.

TUBING: 2 7/8" 6.5# J-55 EUE 8rd landed @ 8239.76' w/ mud anchor, perf sub,SN,TAC.

PERFORATIONS: 2nd Bone Spring sand 8346 - 8397, 4 spf, total of 205 holes.

PROCEDURE

1. MIRU pulling unit. TOH & LD rods and pump. TOH w/ tubing.

2. RU WL. Perforate 2nd Bone Spring Carbonate w/ 4" casing gun, 90 degree phased, as follows: 7774 - 7792 and 7812 - 7866 w/ 1 spf, total of 74 0.50" diameter holes. These perforations are correlated to the Western Atlas Dual Laterolog dated 7-21-90. The perforations according to the Wedge Wireline cement bond/gamma ray cased hole log dated 8-1-90 are as follows: 7770 - 7788 and 7808 - 7862. RD WL.

3. PU & TIH w/ 5 1/2" RBP and pkr on 2 7/8" tubing. Set RBP @ +/- 8000'. Set pkr @ 7970' and pressure test RBP to 4000 psig. Release pkr. Circulate 2 sx of sand on top of RBP.

4. Pull tbg to 7866' and spot 150 gals of 15% NEFE acid. Pull pkr to 7680. RU pump truck and prep to acidize. Displace 1800 gals acid to end of tubing and set pkr @ 7680'. Acidize perfs 7774 - 7866 with a total of 5000 gals of 15% NEFE containing 1 gpt HAI-60, 3 gpt LoSurf-300, 10 gpt Fe-1A, and 50 lbs Fe-2. Distribute 111 1.3 specific gravity ball sealers throughout acid. Anticipated treating pressure = 2500 psig @ 4 BPM. Maximum allowable treating pressure = 4500 psig. Anticipated ISDP = vacuum. RD pump trucks.

5. Flow and/or swab test. Determine stabilized production rate.

6. Release pulling unit. Turn to production.