

RECOMPLETION PROCEDURE

Lightfoot 20 State No. 1
Travis Field
810' FSL and 660' FWL
Sec 20, T-19-S, R-28-E
Eddy County, NM

AFE NO.: 301300

Date: February 22, 2000

Purpose: Recomplete to Wolfcamp and DHC with Strawn

Elevation: 3484' KB 3468' GL

Estimated Cost: \$100,000

Estimated Workover Duration: 6 days

Drillers TD: 10000'

PBTD: 9923'

Surface Casing: 13-3/8", 48#, H-40 casing at 445'. Cemented with 370 sks. Circulated cement to surface.

Intermediate Casing: 9-5/8", 36#, J-55 casing at 2941'. Cemented with 850 sks. Circulated cement to surface.

Production Casing: 5-1/2", 17 & 20#, L-80 casing at 10000' with DV tool at 8506'. Cemented casing in two stages. First Stage: Cemented with 700 sks. Circulated cement to surface. Second Stage: Cemented with 1380 sks. Cement did not circulate. TOC @ 3050' via Temp. Survey

20# Casing (Surface - 4643') ID: 4.778" Drift: 4.653" Burst: 6888 psi
17# Casing (4643' - 9622') ID: 4.892" Drift: 4.767" Burst: 6192 psi
20# Casing (9622' - 11171') ID: 4.778" Drift: 4.653" Burst: 6888 psi

Tubing: 2-7/8", 6.5#, L-80, EUE tubing to 9547', an on/off tool with a 2.313" "X" profile at 9511', a 5-1/2" PLS packer at 9515', a 2.313" "XN" profile nipple with a 2.205" nogo at 9546' and a 2-7/8" wireline entry guide. (80% Burst = 8456 psi)

Existing Perforations:

Strawn(2 JSPF): 9624-50', 9664-76', 9680-97', 9710-24' (138 holes)

Current Production:(2/2/2000) Flowed via intermitter at the rate of 12 BOPD and 52 MCFPD.

Safety Consideration: Run sufficient amount of killstring during any extended shut-in period.

1. File Downhole Commingling permit with the NMOCD.
2. Notify Hobbs Production personnel of impending workover.
Cut paraffin as needed.
3. Test safety anchors to 22,500#.
4. Kill well as necessary with 2% KCl water. ND wellhead. NU 7-1/16" 5M Hydraulic BOPE with 2-7/8" pipe rams and a 7-1/16" 5M spool with two valves below blind rams
5. Release packer and POOH with +/- 5 stands of 2-7/8" production tubing. Install test plug. Pressure test pipe rams and blind rams to 2500 psi. Retrieve test plug. POOH with 2-7/8" production tubing, laying down packer.
6. PU 5-1/2" packer and RBP with ballcatcher. RIH to +/- 9550' and set RBP. Set packer at +/- 9530'. Test RBP to 2000 psi. Release packer and circulate hole clean with 2% KCl water. RU Halliburton. Spot 250 gals. of 15% double-inhibited Carbonate Completion Acid across proposed perforation interval 8814-24'. RD Halliburton. POOH.
7. RU Electric Line Co. and lubricator. Test lubricator to 2000 psi. RIH with 4" port gun with 23 gram Tungsten-lined charges and gamma ray. Perforate the Wolfcamp at 8814- 8824(40 holes) with 4 JSPF, 90 deg. phasing. RD Electric Line Co. and lubricator.