

PHILLIPS PETROLEUM COMPANY

Odessa, Texas

May 16, 2001

LEAMEX #7

FRACTURE TREAT GRAYBURG AND REACTIVATE

Recommended Procedure

1. MIRU DDU. Hook up workover pit. ND wellhead and NU shop tested, Class 1 BOP and environmental tray.
2. PU and TIH with 5 1/2" treating packer on 3 1/2" workstring. Test workstring to 6000# while GIH. Set packer at 4640'+/- and test CIBP to 1000#. Release packer and set packer at 4350'+/-.
3. MIRU Halliburton. Test surface lines to 5500 psig and pressure annulus to 500 psig. Fracture treat Grayburg perfs, 4375-4606', w/ 31,200 gallons of 30/25# Delta Frac carrying 104,500 lbs of 16/30 mesh Brady sand. Treat at 35 BPM and max P of 4500 psig as follows:
 - a. Pump 7200 gallons of 30# Delta Frac Pad.
 - b. Pump 9000 gallons of 25# Delta Frac, Ramp 1-4 ppg 16/30 Brady Sand (22500 lbs).
 - c. Pump 8000 gallons of 25# Delta Frac, Ramp 4-6 ppg 16/30 Brady Sand (40000 lbs).
 - d. Pump 7000 gallons of 25# Delta Frac, 6 ppg 16/30 Brady Sand (42000 lbs).
 - e. Flush w/ 1570 gallons of slick water (one bbl short of top perf).
 - f. Record ISIP, 5 min, 10 min, and 15 min shut in pressures.
 - g. Shut in well until gel breaks.
4. RU swab equipment and swab well in. RD swab equipment.
5. Unseat packer. TOOH and LD workstring and packer.
6. Haul in 2 3/8" tubing and rods. TIH with 2 3/8" production tubing.
7. ND BOP and NU WH.
8. RIH with pump and rods.
9. Install Pumping Unit from Leamex #38.
10. Hang well on. RDMO DDU and place well on production. Report results in DIMS for three days and drop from report.