MIDLAND E & P DIVISION

WELL WORK RECOMMENDATIONS
Proposals for Well Reconditioning and Subsurface Maintenance
Workovers, Expense DD's, PB's, and Conversions

Lease: E. O. Carson Well No. 10

Field: Brunson (Ellen)

County: Lea State: New Mexico

RECOMMENDED PROCEDURE:

1. Move in a pulling unit and pull the producing equipment.

2. Set a cast iron bridge plug at approximately 5400' and cap with 20' of cement (6 sx)

3. Pressure test the 7" casing to 2000 psi.

4. Spot 500 gals of 15%, non-emulsion, HCl acid in the bottom of the hole and perforate the following intervals in the Paddock Formation with 1 jet shot per foot:

5150' - 5165'	15'	15 holes
5198' - 5208'	10'	10 holes
5264' - 5276'	12'	12 holes
TOTAL	37'	37 holes

Perforations were selected from Lane Wells Gamma Ray-Neutron log dated 11-19-46.

5. Break down the Paddock Formation (5150'-5276' - 126' OA - 37 holes) with 2500 gals of 15%, non-emulsion HCl acid. Treat at 3 to 5 BPM and use a sufficient quantity of rubber-covered nylon ball sealers to obtain a complete ballout. Approximately 55 ball sealers will be required.

6. Fracture the Paddock Formation (5150-5276 - 126' OA - 37 holes) down the 7" casing with 25,000 gals 9.0 lb/gal salt water and 60,000 lbs 20-40 Ottawa Sand. All water should contain the following additives:

20 lbs/1000 gals of Guar Gum
25 lbs/1000 gals of Adomite Aqua
2 gals/1000 gals of Surfatron 61

Adjust the pH of the water to between 5 and 7. Treat at 50 BPM. Estimated surface treating pressure is 2000 psi at 50 BPM. Use 20 RCN ball sealers distributed evenly throughout the treatment for selectivity.

While injecting the last 10 per cent of the propping agent (6000 lbs), obtain a controlled screen-out by simultaneously reducing the injection rate and increasing the propping agent concentration. The injection rate should be reduced gradually from the recommended treating rate of 50 bbls/min to between 3 and 5 bbls/min and the propping agent concentration should be increased gradually from the recommended treating concentration of 2.4 lbs/gal to between 6 and 8 lbs/gal.

After the controlled screen-out has been obtained, the well should be shut in immediately. No additional pressure should be applied to the well and no additional fracturing fluid should be pumped through the propping agent pack.

7. Shut the well in until the pressure bleeds off or for a maximum of 24 hrs.

8. Clean out, swab, and test the well as required.

9. Return the well to production.