

**NASH DRAW #1
SECTION 13-T23S-R29E
NASH DRAW BRUSHY CANYON FIELD
LEA COUNTY, NEW MEXICO**

**WORKOVER PROCEDURE
AUGUST 11, 1993**

"K" Zone Completion

- 1) R.U. completion unit, N.D. wellhead and P.O.H. with rods and pump. Install B.O.P. and P.O.H. with tubing.
- 2) Set two (2) 500 bbl. frac tanks and load with treated 2% KCL water with 1 gallon per 1000 gallons surfactant.
- 3) T.I.H. with 7 5/8" R.B.P. and packer. Set R.B.P. at +/- 6850', load casing and test R.B.P. to 1000 psi. Approximate casing volume is 350 bbls.
- 4) Spot three (3) barrels of 7 1/2% NEFE acid at 6820'. P.O.H. with tubing and packer.
- 5) Perforate 6772, 73, 74, 75, 76, 80, 81, 82, 83, 84, 86, 87, 88, 89, 90, 6800, 01, 02, 03, 12, 13, 14, 15, & 16, 24 shots, select fire, .42" diameter, casing gun. Correlate to Casing Bond Log Dated October 12, 1992.
- 6) P.U. 7 5/8" Packer and G.I.H. to +/- 6725'. Spot acid and balls to the end of tubing. Set packer and pressure annulus to 1000 psi. Break down perfs and acidize with 1500 gallons 7 1/2% NEFE acid with 48 7/8" RCN ball sealers in the first 1000 gallons, 2 balls sealers per barrel. Rate 3 to 5 BPM, ballout at 1000 psi above pump-in pressure. Maximum pressure 5000 psi. Release ballsealers and displace acid.
- 7) Swab or flow to recover load and test. If oil cut is > 25% and the zone is not communicated with the "L" zone prepare to fracture stimulate. If zones are communicated the frac treatment will be redesigned.
- 8) Frac "K" zone with 15,200 gallons WF140 carrying 21,800 pounds of AcFRAC PR 20/40 sand. Rate 8 to 10 bpm anticipated surface pressure 2000 psi, maximum pressure 5000 psi. Flush with tubing volume, approximate displacement volume to the perfs is 43.5 bbls, do not over flush. Treatment schedule:

10,000 gallons PAD
600 gallons at 1 PPG PR 20/40 sand
600 gallons at 2 PPG PR 20/40 sand