

**ATTACHMENT TO FORM 3160-5
MARCH 12, 1998**

J. C. WILLIAMSON STANDARD FEDERAL GAS COM. NO. 1

Add Pay and Stimulate

1,980' FNL AND 1,980' FEL, Section 19
T-21-S, R-23-E, Eddy County, New Mexico

1. MIRU pulling unit.
2. Kill well with 2% Kcl
3. ND wellhead and NU BOPs.
4. Release packer and RIH. Tagged bottom @ 7277'. POOH with 2-3/8" tubing and packer.
5. RU tubing testers. PU packer & test tubing in hole. Set packer @ 6966'. Load annulus & test to 500 psi.
6. RU acid company. Acid-frac well with 50% CO₂ foam acid. RD acid Co. Let well flow back until it died.
7. Released packer @ 6966' & POOH.
8. RU wireline. RIH w/HSC guns loaded with 23 gm tungsten lined charges at 4 SPF and 120° phasing.
9. Perforate 6954'-7012', 6864'-6894', 6824'-6844' with 4 SPF for a total of 432 holes. RD wireline.
10. RU Halliburton. RIH w/4-1/2" RBP & a 4-1/2" RTTS packer, 16 jts. 2-3/8" tbg. and 209 jts. 3-1/2" tbg. Set RBP @ 7,052'. PUH and set packer @ 6936'.
11. Acidized formation w/20,000 gals. of 50 quality foamed acid. Max. pressure = 7041 psi. Avg. pressure = 3723 psi. Max rate = 15.1 bpm. Avg. rate = 11 bpm. Used 60 tons CO₂
12. RD Halliburton. Flowed well back. Released packer & retrieved RBP. POOH w/plug & packer. RIH w/new RBP & packer. Set RBP @ 6933', packer @ 6894'.
13. RU Halliburton. Spotted 250 gals. 15% FerCheck acid at 6894'. PUH @ set packer @ 6782'. Broke down perforations.
14. RU frac crew and sand fracture formation w/13,000 gals. 65% CO₂ foam carrying 29,000 lbs. 20/40 sand. Max pressure = 7000 psi, Avg pressure = 6750 psi. Flushed to top perf.
15. RD Halliburton. Opened well on a 12/64" choke and flowed back load. Increased choke size as pressure dropped.
16. Released RTTS. POOH L/D 3-1/2" tbg. POOH w/2-3/8" tbg. RIH w/overshot on 2-3/8" tubing to 6873'. Rig up swab unit and swab well.
17. RIH and tagged sand @ 6878'. Washed sand from 6878' - 6913'.
18. Latched onto RBP. Released it and POOH.
19. RIH w/"XN" nipple on 246 jts. 2-3/8" tbg. Landed tbg. @ 7201'.
20. ND BOPs and NU wellhead.
21. RU swab unit. Swab well.
22. RU JSI. Tagged PBTD @ 7273'. RD wireline. RD meter & testing. Tied in to flowline.