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Final Abardonment Notice	Subsequent Report	Non-Routine Fracturing	
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Thu space for Federal (ORIG. SGD) LES BABYAK Approved by	DETROLEND SMAINEER	DEC 01 1997

Title 13 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, firtugous or fraudulent statements or representations as to any maner within its jurisdiction.

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101-10 TTENSON

ENRON OIL & GAS DUGGAN 12 FED. COM. #1 NOVEMBER 18,1997

WELL DATA

AFE No.: 101433 AFE Cost: \$139,500

Location: 2,162' FNL & 784' FEL Sec 12, T18S, R29E Eddy Co., NM

TD: 11,741' PBTD: 11,410' KB: 3,544.5' (19.5' above G.L.)

Casing: 11 3/4" 42# H-40 ST&C casing set @ 663' TOC @ Surface 8 5/8" 32# J-55 ST&C casing set @ 3,946' TOC @ Surface 5 1/2" 17# CF-95 / P-110 LT&C / Buttress casing set @ 11,741' TOC @ Surface

Tubing: 2-7/8", 6.5#, N-80 EUE 8rd @ 11,106' (open-ended)

Current Morrow Perforations: 11,140' – 11,143', 11,158' – 11,162'

Current Production: 50 MCFD, FTP - 250 psig

Proposed Upper Penn Perforations: 9,831' – 9,869' (76 holes)

UPPER PENN COMPLETION PROCEDURE

- 1. RU flowback tank. Spot frac tank w/ 500 bbls treated 2% KCL water (See Fluid Specifications). Blow down well. Kill well if necessary.
- MIRU Pulling unit. ND tree, NU BOP (5,000 psi working pressure). POOH w/ tubing, standing back approximately 1,200' of tubing.
- 3. MIRU wireline unit lubricator and pack-off. RIH w/ gauge ring to 11,140'. RIH w/ CIBP and set @ 11,100' +/-. Cap w/ 35' cement. Pressure test casing to 2,000 psi.
- 4. PU perforating gun with and gamma ray. Make correlation log run from PBTD to 9,700' +/-. Perforate the Upper Penn interval using a 4" casing gun, 60° phased and 23 gram charges as follows:

9,831' - 9,869' (2 SPF, 76 holes)

Note: Perforations depths picked from Western Atlas Neutron/Density log dated 8/1/96.

5. RIH tubing and packer to 9,700' +/-.

ENRON OIL & C DUGGAN "12" FED. COM. NO. 1 November 18, 1997

- MIRU BJ Services acid equipment. Load hole w/ 2% KCL water containing 2 gallons NE-13 per 1,000 gallons. Pump 1,000 gallons pickle acid to the end of the tubing (See Fluid Specifications). Reverse out to the flowback tank. Take samples at the beginning, ending and after acid returns. Have samples tested by BJ for iron content.
- 7. Spot 3 bbls acid across the perforations @ 9,869'. Set packer @ 9,700 +/-. Pressure test backside to 1,000 psig. ND BOP, NU tree.
- Acidize the Upper Penn w/ remainder of 5,000 gallons 15% HCL and 200 7/8" 1.3 ball sealers. (See Fluid Specifications). Pump acid at 5-6 bpm at an anticipated surface treating pressure of 4,000 psi. Maximum pressure of 5,000 psi.
 - A. Establish injection rate and note breakdown pressure.
 - B. Pump 4,875 gallons 15% HCL @ 5-6 bpm dropping 200 ball sealers evenly throughout the acid.
 - C. Flush with 59 bbls 2% KCL water containing 2 gallons NE-13 per 1,000 gallons.
 - D. If the zone balls out, surge balls and continue.
 - E. Note ISIP 5, 10 and 15 min.
- 9. Swab test and evaluate zone for further stimulation. Catch samples of load water and have samples tested by BJ for iron content.

Wireline Services:	Apollo	Earl Erdmann	Odessa (915) 563-0891
Tools:	HES	Sean Fletcher	Midland (915) 682-430	
Stimulation Services:	BJ Services	Jim Boling	Artesia	(505) 746-3140

Hal Crabb III Enron Oil & Gas 11/18/97

John Adcock

John Adcock BJ Services 11/18/97

ENRON OIL & C DUGGAN "12" FED. COM. NO. 1 November 18, 1997 Fluid Specifications

Pickle Acid

1,000 gallons 15% HCL containing (per 1,000 gallons) 2.0 gallons CI-22 (Corrosion Inhibitor)

Ball-out Acid

5,000 gallons 15% HCL containing (per 1000 gallons)

2.0 gallons CI-22 (Corrosion Inhibitor)

10.0 gallons HS-2 (Corrosion Inhibitor)

3.0 gallons Ferrotrol-270 (Iron Reducer)

1.0 gallon Ferrotrol-271 (Catalyst)

15.0 gallons Ferrotrol-300L (Iron Chelator)

10.0 gallons Acetic Anhydride, Organic Acid

2.0 gallons NE-13 (Non-Emulsifer)

Water

21,000 gallons 2% KCL Water containing (per 1000 gallons) 2.0 gallons NE-13 (Non-Emulsifer)

Enron Oil & Gas C.npany



WELL SCHEMATIC

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