

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

REC'D OIL CO.
0112.16

FORM APPROVED
Bureau No. 1004-0135
Expires: March 31, 1993

458

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
Enron Oil & Gas Company

3. Address and Telephone No.
P. O. Box 2267, Midland, TX 79702 (915) 694-8278

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
2162 FNL & 784 FEL
Sec. 12, T18S, R29E

5. Lease Designation and Serial No.
LC 060904

6. If Indian, Allotment or Tribe Name

7. If Unit or C.A. Agreement Designation

8. Well Name and No.

Duggan 12 Federal Com. #1

9. API Well No.
30-015-28995

10. Field and Pool, or Exploratory Area
Sand Tank (Upper Penn)

11. County or Parish, State
Eddy, NM

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment
☒ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☐ Other
☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note: Report results of multiple completion or Well Completion or Recompletion Report and Log form 1)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

November 18, 1997

Recomplete gas well from Sand Tank Morrow to Sand Tank Upper Penn as oil well
(see attached workover plan.)

14. I hereby certify that the foregoing is true and correct:

Signed Les Babyak

Title Agent

Date 11/24/97

(This space for Federal or State Officer use)
(ORIG. SGD) LES BABYAK

Approved by _____
Conditions of approval, if any:

Title PETROLEUM ENGINEER

Date DEC 01 1997

Title 18 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, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

RECEIVED
1997 NOV 25 A 10:10
DIRECTOR OF LAND MANAGEMENT
ROOSEVELT OFFICE

**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.
2. 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

6. 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.
8. 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

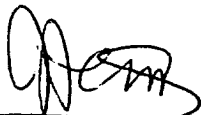
Earl Erdmann Odessa (915) 563-0891

Tools: HES

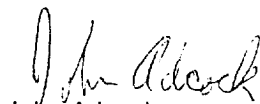
Sean Fletcher Midland (915) 682-4305

Stimulation Services: BJ Services

Jim Boling Artesia (505) 746-3140



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



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)

WELL SCHEMATIC

