

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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.

5. Lease Designation and Serial No.

SF 046563

6. If Indian, Allottee or Tribe Name

San Juan, NM

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

CONOCO INC.

3. Address and Telephone No.

10 DESTA DR. STE. 100W, MIDLAND, TX. 79705-4500 (915) 686-5424

4. Location of Well (Footage, Sec., T. R. M. or Survey Description)

Section 34, T-28-N, R-10-W, E
1530' FNL & 930' FWL

7. If Unit or CA, Agreement Designation

8. Well Name and No.

McLeod #2E

9. API Well No.

30-045-24642

10. Field and Pool, or Exploratory Area

Basin Dakota

11. County or Parish, State

San Juan

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

TYPE OF SUBMISSION

- ☒ Notice of Intent
☐ Subsequent Repon
☐ Final Abandonment Notice

TYPE OF ACTION

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

(Note: Repon result of multiple completion on well completion or recompletion report and log form.)

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.)*

It is proposed to squeeze this well to repair the casing according to the attached procedure.

RECEIVED
APR - 6 1998
OIL CON. DIV.
DIST. 3

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

Signed

Kay Maddox

Title

Kay Maddox

Regulatory Agent

Date

March 23, 1998

(This space for Federal or State office use)

Approved by

/s/ Duane W. Spencer

Title

Date

APR - 2 1998

Conditions of approval if any

BLM(6), NMOCD(1), SHEAR, PONCA, COST ASST, FILE ROOM

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

NMOCD

McLeod #2E
Cement Squeeze and Completion Optimization.
March 19, 1998

API Code: 300452464200

Location: SEC 34 –28N – 10W, 1530' FNL, 930' FWL

Objective

Funds in the amount of \$47,000 are requested for the McLeod #2E well to pull tubing and packer, clean out well to PBTD, squeeze cement behind casing, and configure the well for optimized plunger lifted production. Cement top may be as low as 6300' with top perforation at 6344', there may be communication behind pipe to producing zone. This cement squeeze will ensure isolation from upper intervals and enable us to set packer higher for optimized plunger lift. This is a tax credit wellbore that should produce in excess of 100 Mcfgd.

History

The subject well was initially completed as a flowing Dakota gas well through Lower Dakota perforations 6630'-6650' during December, 1981. In January, 1983, the well was recompleted in the Upper Dakota through perforations 6344'-6510' which potentialled for 670 MCFPD CAOF. Swab testing on April 23, 1987, was performed in an attempt to kick off the well, but recovered mud and cotton seed hulls and confirmed the presence of a casing leak. Production prior to the leak averaged 324 MCFPD, 2 BOPD, with no water.

A casing leak was isolated between 3878' – 3904' and unsuccessfully squeezed on 6/24/87 and a packer was set at 6296'. Swab testing of the well in September, 1994, indicated that packer was leaking or a leak had developed below the packer. The McLeod #2E was originally completed with a long interval between 6270' & 2400' (DV Tool @ 2417') with no cement behind pipe which developed casing leaks, it may not be economic or possible to successfully squeeze off all leaks. Since cement top is at 6300' and top perforation @ 6343' there may be behind pipe communication and there is no room to raise the packer and configure for optimized plunger lift in current configuration. We intend to squeeze cement behind pipe from 6120'-4700', raise the packer to 4800' to increase compressive annular volume, and extend end of tubing with seating nipple to mid perforations in order to optimize plunger lifted production from this well and ensure isolation from upper intervals. If the well resumes sustained economic production we will then run a slim hole string and cement in place to repair the wellbore.

Work Plan

- 1) A workover rig will be moved in and pull the 2-3/8" string and Baker Model R-3 packer.
- 2) Wireline will set a EZ Drill BP above perforations @ 6320'.
- 3) Rig will RIH Test Packer and test casing above BP, concentrating on interval from 4600' to BP @ 6320'.
- 4) Wireline will perforate squeeze holes at 6120' and 4700'.
- 5) Rig will RIH work string and set cement retainer @ 6100', establish circulation with 1% KCl, pump gel sweep, circulate cement, unsting from retainer and circulate clean with 1%KCl, POH and WOC.
- 6) Rig will RIH work string and drill out and clean out to PBTD @ 6550', blow hole dry with air, and POOH.
- 7) Rig will TIH 2-3/8" production tubing and set double latch packer @ 4800' and SN on end of tubing landed @ 6430', rig will swab well in if necessary and rig down and move off.
- 8) Well will be on plunger lift and watched closely for first few weeks.

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Completion Details

Surface Casing: 8-5/8", 24#, STC, K-55 set @ 312', cmt. w/240 sxs class B.

Production Casing: 5-1/2", 15.5#, STC, K-55, set @ 6662' KB, cmt w/175 sxs RFC, 360 sxs 65-35 PAZ. **PBTD @ 6550', TD @ 6650'.**

Production Tubing: 2-3/8", 4.7#, J-55, set @ 6296' with Baker Model R-3 packer @ 6296'-6300' w/12,000# set down.

Unsuccessful Squeeze Interval @ 3878'-3904', DV tool @ 2417'.

Perforations: Dakota 6344'-6377', & 6440

PROCEDURE

1. Pre Work

- A. Locate and test deadman anchors. Spot flowback pit (20x20) and prepare. Inform operator of work to be done and time frame. Check for location size and equipment placement. Identify any hazards (power lines, H2S, tight equipment fits).
- B. Have pressure gauges on both casing and tubing when necessary (during acid, frac, testing).
- C. Hold Safety Meeting before rigging up to discuss potential hazards and meeting place in case of an emergency.

2. Pull Tubing/ Set BP/ Test Casing

- A. RU. Blow well down (both backside & tbg) and kill with minimum amount of 1% KCl. NU BOP's
- B. POOH 203 joints of 2 3/8", 4.7# , J-55 production tubing and Baker Model R-3 packer.
- C. RU wireline and set EZ Drill BP @ 6320'
- D. RIH with work string and test packer, test casing for leaks between 4600' and BP. If a leak is detected isolate and consult engineering.

3. Shoot Squeeze holes/ Squeeze Cement

- A. RU wireline and shoot squeeze holes at 6120' and 4700', RD wireline.
- B. RIH with cement retainer and work string and set at 6100'.
- C. Establish circulation with 1% KCl.
- D. Pump gel sweep pill and cement as per BJ's procedure.
- E. Unstring from retainer, circulate clean with water and POOH, WOC.

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4. **Drill Out & Clean Out to PBTD @ 6550'**
- A. Pick up bit, RIH with work string and drill out cement retainer and EZ drill BP and clean out to PBTD @ 6550'. POOH Work string.
 - B. RIH production tubing mule shoe on bottom with SN and set double latch packer at 4800' with end of tubing at mid perms (6430').
 - C. Swab well in if necessary and inform operator to put on plunger lift.

West Area Team

Cc: Well File, Tom Lenz, Linda Hernandez, Greg Vick (Farmington)