

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

5. LEASE DESIGNATION AND SERIAL NO.
SF-078194

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

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUBMIT IN TRIPLICATE

7. IF UNIT OR CA, AGREEMENT DESIGNATION
LUDWICK LS

1. TYPE OF WELL

8. WELL NAME AND NO.

OIL WELL ☐ GAS WELL ☒ OTHER ☐

LUDWICK LS #16M

2. NAME OF OPERATOR

9. API WELL NO.

CONOCO INC.

30-045-29566

3. ADDRESS AND TELEPHONE NO.

10. FIELD AND POOL, OR EXPLORATORY AREA
BLANCO MV / BASIN DK

10 Desta Drive, Suite. 100W Midland, Texas 79705-4500 (915) 686-5424

4. LOCATION OF WELL (Footage, Sec., T., R., M., or Survey Description)

11. COUNTY OR PARISH, STATE

1005' FSL - 1850' FEL, SEC. 31, T30N-R10W, UNIT "O"

SAN JUAN COUNTY, NM

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

TYPE OF SUBMISSION

TYPE OF ACTION

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

- ☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☒ Other: SQUEEZE JOB

- ☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note: Report results 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.)

Please see attached squeeze summary.

RECEIVED
JUL 13 1998
OIL CON. DIV.
DIST. 3

RECEIVED
JUL 24 AM 9:18
OIL CON. DIV.
DIST. 3

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

SIGNED

Debra Bemenderfer

TITLE DEBRA BEMENDERFER, As Agent for Conoco Inc. DATE 6/23/98

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

Conditions of approval, if any:

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

ACCEPTED FOR RECORD

JUL 08 1998

FARMINGTON DISTRICT OFFICE

BY

NMOCD

CONOCO, INC.
LUDWICK LS #16M
Squeeze Summary
API# 30-045-29566

COPY

SEC. 31, T30N-R10W UNIT LETTER 'O'
1005' FSL & 1850' FEL

SQUEEZE 1

- 5/20/98 Rig up Schlumberger, run TDT log from 6892' to 2693', fax log to Midland. Ran CBL log from 6140' to 2723', CBL showed no cement @ 6150'.
- 5/21/98 Run to PBTD @ 6891'. Rig up Blue Jet ran CBL from PBTD @ 6891' TO 4297' and from 2904' TO 2695'. CBL was run with 1000 psi.
- 5/26/98 Released Hallib Packer. POOH with packer and tag cement @ 6417'. Drilled cement to squeeze holes @ 6691'. Tested squeeze cement and casing to 4200 psi. - OK. Tagged PBTD @ 6891'.
- 5/28/98 RIH with Hallib Cement Retainer. Set retainer @ 4865'. Stung out of retainer and pumped down tbg, hand circulation inside the 4 1/2" csg. 4 1/2" loaded with 14 bbls. Stung back into retainer. Pumped 50 sks of 50/50 Poz mix with 4#sk Gilsonite. Pumped @ 3 bpm @ 1000 psi. Stung out and dumped 1 bbl cement on top of retainer. POOH with tbg. Wait 3 hrs. on cement. RIH with 3 7/8" bit and tbg, did not tag any cement inside 4 1/2" csg. Run tbg to 4644' and spot 11 sks of Class h cement over top perf. Pull up to 4296' and reversed out. Pressured to 2000 psi and shut down. Approx cement top @ 4459'.
- 5/29/98 RIH and Tag cement @ 4433'. Drill cement to 4512'. Test cement to 3000 psi -OK. Perf 2 holes @ 4500'. Pump in holes @ 1 BPM @ 1100 psi, with no circ to 7" csg. Perf 2 holes @ 4340'. Pump in both sets of squeeze holes @ 1 BPM @ 1500 psi. RIH with Hallib Cement Retainer, set retainer @ 4452'. Pump down tbg into bottom holes @ .4 BPM @ 1700 psi. and .9 BPM @ 2000 psi. Pump down 4 1/2" csg into top holes @ 1.1 BPM @ 1800 psi, still no circulation to 7" csg. Prep to squeeze, pump 5 bbl fresh water pad, pump 35 sks. Class H cement, displaced with 17.5 bbls water. 4 1/2" standing full of water, showed no signs of circulation. Tagged cement inside tbg @ 4042', Tbg has 369' of cement inside the tbg. Cut 2 3/8" tbg @ 4022'.

SQUEEZE 2

- 6/3/98 Tbg to set Pkr @ 4213'. MI RU BJ Services. Pump 3 bbls 1% KCL to circ up 7", Established rate of 2 1/2 bpm @ 1000#. Pumped 5 bbls fresh wtr pad. Started cement. Pumped 53 bbls (150 sx), 35/65/8% gel + 2% CAC12, 12#/gal. 2 - 2.5 bpm @ 1000#. & 12.6 bbls class H neat, 15.6#/gal. 1 -1.5 bpm @ 1500#. Displaced w/19 bbl 1% KCL. Left about 1/2 bbl in csg. SI @ 1200#.
- 6/4/98 Would not hold press @ 300#. RTTS Pkr, POOH w/tbg, LD Pkr. Tag cement @ 4284'. Drill out to retainer. Test squeeze perms @ 4340 to 2000#. OK. Drill out retainer @ 4452'. Drill out to 4474'. POOH w/tbg to change bit. RIH drill out to 4514' Test to 2000#. OK
- 6/5/98 Drill out cement from 4537' to squeeze perf @ 4620'. Test Csg to 2000#. Drill out retainer @ 4865; drill out to squeeze perf @ 4929. Test Csg to 2000#. Tag fill @ 5190', circ hole.
- 6/8/98 MI RU Blue Jet. RIH w/wireline to run CBL from 5084'. 1st cement @ 4985' TOC @ 3635' KB.

COPY

CONOCO, INC.
LUDWICK LS #16M
Squeeze Summary

API# 30-045-29566

SEC. 31, T30N-R10W UNIT LETTER 'O'
1005' FSL & 1850' FEL

SQUEEZE 3

- 6/15/98 MI RU Blue Jet. PU 4 1/2" Haliburton. Composite plug. RIH to set plug @ 3002'. POOH w/setting tool. Test plug to 2000#. OK. PU 3 1/8" gun w/4 DP charges. RIH to perf 4 1/2" @ 2800' - 2801' KB. POOH release Blue Jet. Loaded hole & got circ. up 7" (2bpm @ 500#) PU Hali. 4 1/2" RTTS Pkr.; RIH w/tbg to set Pkr @ 2597'. MI RU BJ. Established rate, 3 bpm @ 500#. Start w/10 bbl fresh wtr. Pump 75 sx class H neat cement (16 bbls). Avg inj rate 3 bpm @ 250#. Displaced 14 bbls fresh wtr 2.3 bpm @ 500#. ISIP 200#. SI well. Released BJ.
- 6/16/98 Release Pkr. POOH w/tbg, LD Pkr. PU 3 7/8" drill bit RIH w/tbg to tag cement @ 2724'. Drill good cement through 2800'. Press test 4 1/2" csg. Will not hold. Hooked up to 7", press test. Holding good. Retest 4 1/2", pumped into leak @ 1/2 bpm. PU Haliburton 4 1/2" RTTS Pkr, set Pkr @ 2566'. MI RU BJ Services. Re-squeezed perf @ 2800' w/50 sacks, class H cement w/2% CAC12 as follows: Press backside to 300#, SI. Established rate w/5 bbl 1% KCL, 2.4 bpm @ 1200#. Pumped 2 bbl fresh wtr to start. Start 15.6#/gal cement, 10.5 bbl, 1.7 bpm @ 2500#. Start displacement, .5 - 2.0 bpm; locked up w/9 bbls gone. Verified no flow back, released Pkr & reverse circ out. Re-set Pkr, press. Up tbg 2750#. Cement moved. Squeezed in 1 bbl, hesitate 15 min. Squeezed 1/4 bbl, hesitate 15 min. Squeezed 2/10 bbl, press @ 2000#, holding good.
- 6/17/98 Release RTTS packer, POOH w/ tubing. Tag cement @ 2623'. DO to 2820', test casing to 500#.