

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
BLM

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

5. Lease Designation and Serial No.

SF 078194

6. If Indian, Allottee or Tribe Name

070 FARMINGTON, NM

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Ludwick LS #7

9. API Well No.

30-045-08985

10. Field and Pool, or Exploratory Area

Blanco Mesaverde

11. County or Parish, State

San Juan

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

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 31, T-30-N, R-10-W, L
1650' FSL & 990' FWL

12. 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 Add Pay
☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracrunng
☐ 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 add pay in the Menefee formation in the Mesaverde according to the attached procedure.

RECEIVED
MAR 25 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 15, 1998

(This space for Federal or State office use)

Approved by

/s/ Duane W. Spencer

Title

Date

MAR 23 1998

Conditions of approval if any:

BLM(6), NMOC(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

**Ludwick LS 7
Menefee Pay Add
February 5, 1998**

Objective

Funds in the amount of \$108,000 are requested to cement squeeze the existing PC perforations and add Menefee pay in the Ludwick LS 7. The well has approximately 45' of Menefee that will be perforated and fracture treated. Addition of this pay should result in a production increase of 300 mcf/d.

Wellbore Specs (See attached Wellview information)

Amoco files appear not "up to date" (ie, indicates original tbgr/packer set in '56 still in well). Files indicate PC/MV well w/ single string of 2 3/8" tbgr to 4854', and Baker model D packer @ 2493'. PC production up backside shut-in. MV currently producing through tbgr. Drilled in 1956.

LOCATION: 1650' FSL, 990' FWL, Section 31, T 30 N, R 10 W, San Juan County

EL: 5979'; TD: 4926'; PBTD: 4910'

CASING: 5 1/2" liner, 15.5#, J-55, from 4195' to 4922'; TOC @ liner top (temp survey)

7 5/8", 26.4# J-55 set @ 4273', cemented w/ 600 sx's (TOC @ 1995', temp)

10 3/4", 36#, K-55 set @ 172', 125 cu ft of cement (circ to surf)

TUBING: 2 3/8" EUE, 4.7#, J-55

TREE: 10" 600 x 6" 600 OCT, w/ 2 3/8" EUE flange connection on top.

FORMATION TOPS:

MV PTLK -- 4668'
MV MEN -- 4160'
MV CLHS -- 4000'
PC -- 2360'

EXISTING PERFS:

PC: 2384'-2396'; 2410'-2422'

MV Ptlk : 4666'-4680'
4722'-4735'
4841'-4852'
4864'-4884'
4894'-4908'

PROPOSED PERFS:

MV MEN: 4285', 93', 4301', 06', 14', 45', 49', 52', 62', 78', 81', 84',
4410', 43', 48', 86', 89', 4504', 18', 22', 26', 41', 44'

Notes:

Well recently acquired from Amoco.

Records are marginal. Shows no plunger in well; tubing/packer from original '56 completion.

Have yet to acquire logs from Amoco. Contact office just prior to rigup to see if available.
(If open hole log not obtained, can have faxed down from Amoco office).

Baker Model D packer to be fished/milled out.

Liner top overlap approx 100' only, based on records.

February 5, 1998

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**

- A. RU. Blow well down (both backside & tbg) and kill with minimum amount of 1% KCl. NU BOP's
- B. Sting out of packer w/ 2 3/8" tbg string.

3. **Attempt to fish/mill Model D packer**

- A. RIH with workstring & fishing assemble and attempt to retrieve Baker Model D packer @ 2493'. If unsuccessful, attempt to mill over & retrieve (note: insuff rat hole to push down).
- B. After fishing out packer, TIH with workstring and set EZdrill BP @ 2450'. POOH.

4. **Squeeze PC**

NOTE: Notify OCD prior to squeeze work.

- A. RIH w/ workstring and treating packer & ensure both sets of PC perms are broken down, and BP holding. Afterwards, set packer @ 2400' and pump 30 sxs; PU and reset @ 2350' and pump remainder of cement squeeze (total of 70 sxs), displacing to 2350'. PU, reverse circulate, and POOH. WOC.
- B. Next day, RIH w/ workstring and collars and bit, and drillout cement to BP. Pressure test to 500#. IF good test, proceed to drillout BP. Cleanout to liner top.
- C. RIH w/ EZ drill BP for 5 1/2" csg and set @ 4600'. Pressure test csg/ liner top/ BP to 500#. POOH.
- D. IF no CBL log acquired, proceed to RIH w/ CBL/GR correlation log in 5 1/2" csg and run from minimum interval, starting from BP. Correlate w/ GR/Induction.
NOTE: Contact Craig Moody or Scott Jordan for OH correlation log.

5. **Perforate Menefee**

RU wireline company and perforate the Menefee with 23 select fire shots using a 3 1/8" HSC w/ .37" holes as follows:

MV MEN: 4285', 93', 4301', 06', 14', 45', 49', 52', 62', 78', 81', 84',
4410', 43', 48', 86', 89', 4504', 18', 22', 26', 41', 44'

5. **Acidize and Frac Menefee**

A. PU workstring & 5 1/2" treating packer & RIH; spot 15% HCL acid across perfs, and ballout as per BJ procedure. MONITOR BACKSIDE PRESSURE DURING JOB FOR ANY INDICATIONS OF LINER TOP FAILURE. POOH.

B. PU 7 5/8" treating packer on 3 1/2" frac-string, w/ 2 7/8" slimhole tailpipe & cup assembly, RIH. Position tailpipe into top of 5 1/2" liner, and set 7 5/8" packer. Pressure test backside.

C. Proceed w/ single stage Slickwater frac, as per BJ attached procedure.

Flow-back. Allow to clean-up & get stabilized test rate. NOTE: Length of stabilized rate test dictated by Regulatory. (ie, may need to revise commingle allocations). Four hour stabilized test minimum.

6. **Drill Out Bridge Plug**

A. After POOH w/ 3 1/2" assembly, RIH w/ workstring into 5 1/2" csg & drillout BP. C/O to PBTD using gas or air. POOH.

7. **Return Well to Production**

Run 2-3/8" production tubing (w/ SN for plunger lift one joint off bottom) and set @ 4670'. Install plunger & put in swab mode; put on production.. Monitor well for rate at least one week.

West Team

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Superseded by
the new plat

All distances must be from the outer boundaries of the plat.

RECEIVED
BLM 7 (PM)

EL PASO NATURAL GAS COMPANY		LUDWICK		(SF-078194)	SAN JUAN
L	31	30-N	10-W	98 MAR 18 PM 1:13	
1650	SOUTH	990	WEST	70 FARMINGTON, NM	
5969	P. C. & M. V.	AZTEC PICTURED CLIFFS BLANCO MESA VERDE		146.57 & 295.98	

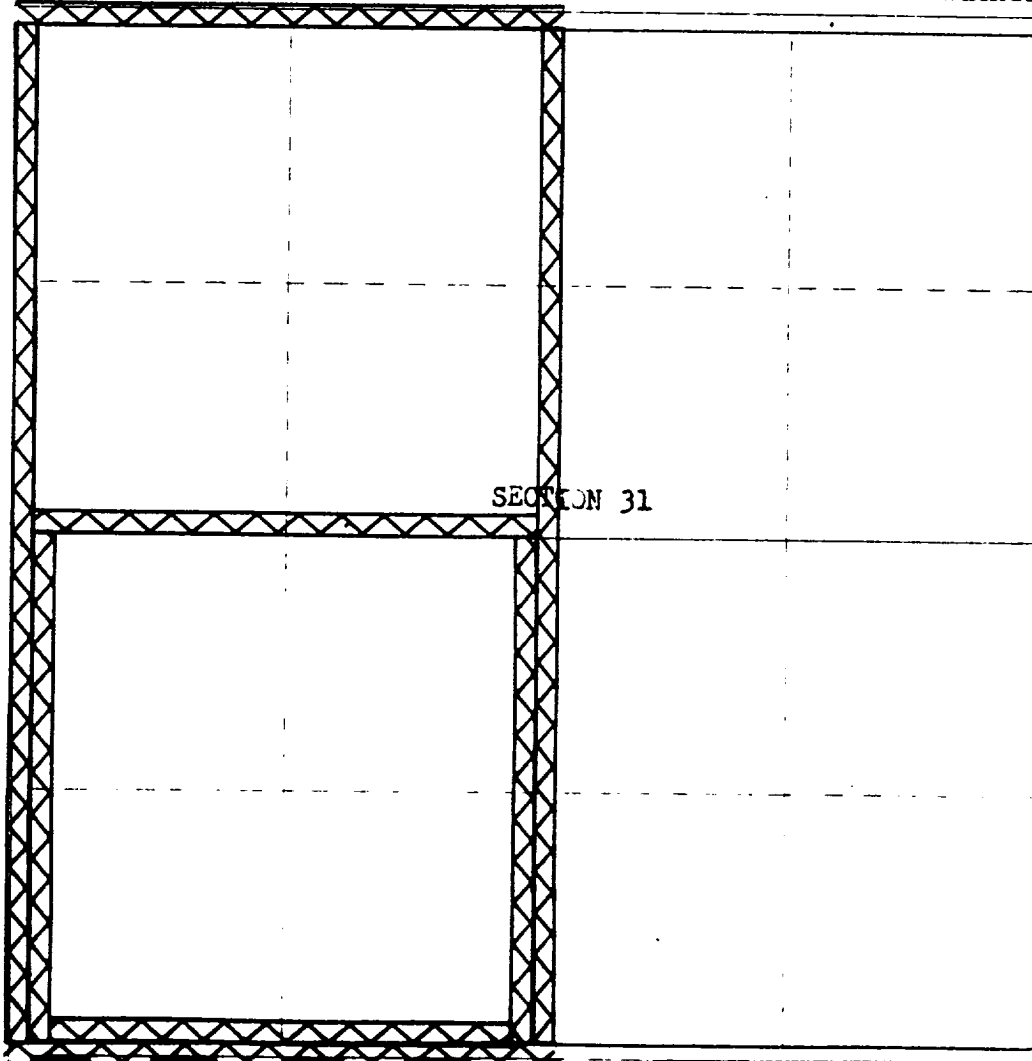
1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, force-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

NOTE: PLAT REISSUED TO SHOW CORRECTED ACREAGE DEDICATION PER NEW SURVEY. 2-11-70



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Original Signed F. H. WOOD
Petroleum Engineer

El Paso Natural Gas Co.

February 15, 1970

I hereby certify that the well location shown on this plat was obtained from the notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my knowledge and belief.

MARCH 30, 1956

C. C. WALKER