

N. M. O. C. G. COPY

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE\*  
(Other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

**LC 065300**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

**Bunnell-Federal**

9. WELL NO.

**1**

10. FIELD AND POOL, OR WILDCAT

**Indian-Basin-Upper Penn**

11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA

**Sec. 18, T-21-S, R-23-E, S. 1/4**

12. COUNTY OR PARISH

**Eddy**

13. STATE

**N.M.**

1.

OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR

**ROBERT M. ENFIELD**

3. ADDRESS OF OPERATOR

**Box 807 Roswell, New Mexico**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*

See also space 17 below.)

At surface **1650' P. 3 & E Lines of Sec. 18-T-21-S, R-23-E Eddy County, New Mexico**

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

**4100' D.F.**

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

WATER SHUT-OFF

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

PULL OR ALTER CASING

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

REPAIR WELL

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input checked="" type="checkbox"/>
<input type="checkbox"/>

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. 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.)\*

**7-28-65: Set 8-5/8", 24#, J-55 casing @ 1532' w/775 sacks (300 sacks of 1-1 pos, w/8% gel & 2% CaCl, 425 sacks 1-1- pos w/4% gel & 2% CaCl, 50 sacks neat). Cement did not circulate. Ran Temp. survey. Top cement @ 575'. Ran 1" pipe down back side & pumped 250 sacks neat cement w/7 sacks CaCl. Cement circulated. WOC 24 hours. Tested w/1500#. Held okay.**

**8-19-65: Set 4 1/2", 9.5 All.6#, J-55 casing @ 7499' w/350 sacks Inocer Pos w/2% gel. WOC 48 hours.**

(subsequent report of treatment attached)

RECEIVED  
NOV 18 1965  
U. S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO

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

SIGNED

*[Signature]*

TITLE

**Geologist-Engineer**

DATE

**11-17-65**

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

**NOV 22 1965**  
*[Signature]*  
**H. E. BELL**  
ACTING DISTRICT ENGINEER

TITLE

DATE

## Instructions

**General:** This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 17:** Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of putting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking for approval of the abandonment.

- 8-25-65: T.D. 7500'. Testing. Perforated 7320-30 (n correction), 7408-18, 7442-48 with 1 jet shot per foot. Went in hole with 2" tbg. Set retrievable plug at 7460'. Set packer at 7385'. Acidized perfs 7408-18 and 7442-48 w/500 gals. Swabbed back acid water and acid gas. No. shows. Pulled retrievable plug up to 7365'. Pulled packer to 7302'. Acidized perfs 7320-30 with 500 gals. Swabbed back acid water and well started flowing gas at estimated rate of 500 MCFD. Re-acidized perfs 7320-30 with 2500 gallons acid. Swabbed and started flowing at estimated rate of 1500 MCFD. Re-acidized perfs 7320-30 with 10,000 gals. retarded acid. Swabbing back acid water.
- 8-26-65: T.D. 7500'. Plug back T.D., 7365'. Testing. Swabbed perfs 7320-30 of acid water. Well started flowing an estimated 600 MCFPD. Now testing tubing and packer for a leak.
- 8-27-65: T.D. 7500. PB T.D., 7365'. Prep to run tracer survey. Lowered packer and tested in blank pipe. Showed packer leakage. Pulled packer, bridge plug, and tubing. Perforated 7260-88' with one jet shot per foot. Went back in hole with BP, Pkr & tbg. Set BP at 7302'. Set Pkr at 7239'. Acidized perfs 7260-88' with 1,000 gals. Formation started taking fluid immediately. Maximum treating pressure, 3600#. Initial Shut Down Pressure, 2300#. Treatment pressure indicated possible communication. After swabbing acid water, well started flowing at 600 MCFPD. Lowered BP to 7365'. Set Pkr at 7302'. Pumped water into perfs 7320-30'. Water communicated and flowed out annulus.
- 8-28-65: T.D. 7500'. Ran tracer survey. Survey showed communication from 7330-7156'. Pulled bridge plug, packer, & 2" tbg. Squeezed with 200 sacks through perfs 7260-88', 7320-30', 7408-18', & 7442-88'. Tested w/5,000#. Held okay. **RECEIVED**
- 8-29-65: WOC. **NOV 2 1965**
- 8-30-65: Prep to drill out cement.
- 8-31-65: T.D. 7500'. PB TD, 7450'. Prep to swab. Drilled out cement to 7450'. Pressured up with 2,000# at 7300', 7375', 7450'. Pressured up w/3800# @ 7450'. Held okay. Ran correlation log to drilled out TD 7438' by log. Perforated one jet shot per foot at 7323'-24'-25'. Perforated one jet shot per ft. at 7266-68-70-72-74-76-78-80. Ran BP, pkr and 2" tbg in hole. Set BP @ 7383'. Spotted acid @ 7320'. Set pkr at 7293'. Started pumping 500 gals. acid into perfs 7323-24-25'. Formation started taking fluid at 4400#. Broke back to 3800#. After 200 gals, acid communicated to upper perforations. Moved packer to 7246'. Pumped remaining 300 gals acid into formation @ 3000#. Five Min. shut-in press., 2500#.
- 9-1-65: T.D. 7500'. PBTD, 7246'. Testing. Swabbed acid water from perfs 7323-24-25' and perfs 7266-68-70-72-74-76-78-80'. Swabbed dry. Set BP @ 7246' & pulled tbg to 7130'. Perfd 7206-24- w/1 JSPF. Set pkr. @ 7157'. Acidized perfs 7206-24 w/500 gals. mud acid. Formation started taking fluid @ 2300#. Initial shut down pressure, 3600#. Swabbed acid water w/show gas. TSTM. Checking for leak in BP.
- 9-2-65: T.D. 7500'. PBTD, 7157'. Swabbing acid water & gas @ rate of about 400 MCFPD. Set BP @ 7157'. Perfd 7126-33' w/1 JSPF. Spotted 500 gals. mud acid at 7133'. Set pkr @ 7030'. Pumped acid away. Swabbed back acid water and small amount of gas, TSTM. Re-acidized perfs 7126-33' w/2,000 gals. acid and now swabbing back and getting twice as much gas as before, estimated 400 to 500 MCFPD and looks as if it might still be improving slightly. *comp'd zone*
- 9-3-65: T.D. 7500'. PBTD, 7157'. Shut in for 6-hour period. First hour built up to 675# surface pressure; in six hours, 1750#. Continued to flow at estimated rate of 500 MCFPD. Reacidized with 10,000 gals. retarded acid. Shut in for six hours. Started swabbing back acid water.
- 9-4-65: T.D. 7500'. PBTD, 7157'. Swabbed back acid water. Well kicked off and flowed 924 MCFPD. 1-hr. SIP, 975#.
- 9-5-65: Flowing well to clean up.
- 9-7-65: 18 hr. SIP 2250#. Flowed on 22/64" choke for one hr. FTP 500#. Est. vol. 1.5 MMCF.
- 9-8-65: T.D. 7500'. PBTD, 7157'. Prep to reacidize perfs 7126-33'.  
4:30 p.m.: Treated with 18,000 gals. of 15% retarded acid plus 8,000 gals. 2% acid overflush. Average injection rate of 5 bbls per min. Maximum treating pressure, 3900#. Initial shutdown pressure, 3000#. Shut-in. Will commence swabbing at 5:30 tonight.
- 9-9-65: T.D. 7500'. PBTD, 7157'. Opened well at 5:30 p.m. Acid water flowed back and well kicked off. Now flowing gas and acid water. Well still cleaning up.