

RECEIVED  
Form 3760-5  
June 1990

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.

LC-029409-B

6. If Indian, Name of Tribe

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

Marathon Oil Company

3. Address and Telephone No.

P.O. Box 552, Midland, TX 79702 (915) 687-8329

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

Unit Letter E, 2310' FNL & 330' FWL  
Section 3, T18S, R32E

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Love "3" Federal No. 1

9. API Well No.

30-025-31038

10. Field and Pool, or Exploratory Area

Young, North (B.S.)

11. County or Parish, State

Lea County, New Mexico

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 Acidize existing perfs

add new perfs, acidize & test

☐ 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.)

Marathon Oil Company on 8/29/91 initiated operations to acidize existing perforation and to perforate new zones, acidize and test.

1. MIRU PU. Unbeamed well. Could not unseat pump. Pulled 45,000# (rod weight 14,000#) and sheared 26K shear tool. POOH w/154-1" FG rods, 115-7/8"-25' Norris Grade 90 steel rock leaving 1-7/8" rod, 1-2' x 7/8" pony & a 2" x 1 1/2" x 26' R4BC pump. ND wellhead & NU bench tested (3000 psig on pipe & blind rams) BOP. Released TAC & pulled 70 jts of 2 3/8", 4.7#/ft N-80 EUE tbq (top of fluid). RU swab & pulled FL down to fish in tbq. RD swab. POOH w/74 jts of 2 3/8" tbq. Secured well. SDFN.
2. FOOH w/117 jts of 2 3/8" tbq, TAC, 19 jts of 2 3/8" tbq, SN & mud jt. Recov'd 7/8" steel rod & insert pump. Laid down 10 jts of tbq due to external wear & rod wear. PU Halliburton 5 1/2" RBP, RH, 5 1/2" RTTS tool, SN & RIH on 264 jts of

(See Attachment I)

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

Signed A. Bagwell A. Bagwell

Title Engineering Technician

Date 10/16/91

(This space for Federal or State office use)

Approved by \_\_\_\_\_

Conditions of approval, if any: \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

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 statement or representations as to any matter within its jurisdiction.

\*See instruction on Reverse Side

ATTACHMENT I

2. 2 3/8" tbg to 8270'. Set RBP. PU 13' & set RTTS @ 8257' KB. Loaded tbg w/32 bbls of fresh wtr. Pressure tested tbg, pkr & plug to 4500 psig. Held OK. Opened bypass & equalized tbg & backside for 15 mins. Released RTTS tool. POOH w/6 jts & set RTTS @ 8063' KB. Loaded backside w/fresh wtr. RU swab. RIH w/swab to SN. No fluid encountered. SD for 1 hr. RIH w/swab. Had 100' of fluid in hole. Secured well. SDFN.
3. SITP = 325 psi. Bled tbg to frac tank. RU swab. Had 800' of fluid above SN @ 8055' KB. Recov'd less than 1 bbl of oil & water. RU Western Co. Press csg to 1000 psi. Acidized Bone Spring perf 8125' to 8221' w/10,000 gals of 20% gelled acid w/additives down the tbg. Flushing w/125 bbls of 2% slick KCL water. Min tbg press - 3200 psi, max - 4225 psi. Avg press 3800 psi. AIR - 7.2 BPM. ISIP - 2200 psi, 5 min SIP - 2025, 10 min SIP - 1900 psi & 15 min SIP - 1775 psi. (Note: Western's rate meter failed as acid hit formation, used rate meter on Frac pump to finish job). SWI for 30 min. Opened well to frac tank, flowed for 1 hr recovering 6 BW. RU swab. Starting fluid level at surface. Made 25 swab runs in 8 1/2 hrs recovering 23 BO and 51 BW. Swab well dry, pulling 3 runs per hr. Secured well. SDFN.
4. SITP = 260 psi, bled well to frac tank. RU swab. Starting swab level @ 4500'. Swab well dry in 5 1/2 hrs. Made total of 12 runs recovering 23 BO and 5 BW. Well making good show of gas. Last two swab runs 90% oil. Secured well. SDFN.
5. SITP = 325 psi. Shut down for holiday.
6. Shut down for holiday.
7. SITP = 340 psig. Bled pressure to frac tank. RU swab. Starting FL @ 3500' FS. Made one run, recov'd 6 BO. Well kicked off & flowed 16 BO in 1 hr. Equalized backside w/tbg, killing well. Released RTTS & RIH to retrieve RBP. PCOH w/tbg, pkr & RBC. RU wireline unit. Installed full lubricator. Tested to 1000 psig. RIH w/4" csg gun w/safety sub to 8650'. Safety sub malfunctioned, POOH w/gun, inspection indicated O-ring failed in safety sub. Replaced safety-sub & RIH w/gun. Pulled Gamma-ray-CCL strip from 8250-7700' for correlation. Perf'd from 8055-8070', 2 JSPF for 24 holes. POOH w/gun, all shots fired. RIH w/2nd 4" gun. Got on depth. Perf'd from 8033' to 8046', 2 JSPF for 16 holes. POOH w/gun, all shots fired. RIH w/3rd 4" tandem gun. Perf'd from 7935-38' & 8004-8008'- 2 JSPF for 18 holes. POOH w/gun, all shots fired. RD full lubricator & wireline unit. PU 5 1/2" RBP, RH, 5 1/2" RTTS tool, 2 3/8" WN & RIH on 250 jts of 2 3/8" tbg. Left pkr swinging. Secured well. SDFN.
8. SITP = 500 psig. SICP = 300 psig. Flowed csg to frac tank for 1 hr recovering 16 BO. Pumped 10 BW down tbg to kill well. RIH w/RBP to 8136' KB & set RBP. PU pkr 5' & set. Pressure tested tbg pkr & plug to 4500 psig. Well kicked up backside. Pumped 30 BW down backside to kill well. Released RTTS & PU to 7809' KB & set RTTS tool. Loaded backside w/69 BW and pressured up backside to 1000

(Continued on Page Three)

ATTACHMENT I

8. psig. RU Western Co. Established inj rate of 1 BPM @ 2700 psig w/2% KCL wtr. Acidized perfs 7935-8070' w/5800 gals of 20% gelled acid w/additives dropping 118 BS spaced evenly throughout job. No ball action. Flushed w/3050 gals of 2% KCL wtr w/additives. Min treating press = 2600 psig. Max treating press = 3400 psig. Avg treating press = 2900 psig. AIR = 4.8 BPM. ISDP = 2600 psig, 5 min SIP 2450 psig. 10 min SIP = 2400 psig. 15 min SIP = 2300 psig. SWI for total of 60 mins. Flowed well for 1 hr recovering 28 BW w/show of oil. RU swab. Swab well to SN @ 7808' in 10 runs, waiting 30 mins between runs for gas pressure to bleed off. Recov'd 53 BO & 35 BW while swabbing. Secured well. SDFN.
9. SITP = 830 psig. SICP = 500 psig. Opened csg to frac tank and bled off 11 BF. Opened tbg to frac tank & flowed 27 BF. RU swab & made 10 swab runs in 7 hrs, pulling from SN w/scattered fluid. Shut well in. SDFN. Total recovery for day - 69 BO & 3 BW.
10. SITP = 680 psig. SICP = 50 psig. Opened well to frac tank, flowed 26 BO & died. RU swab. Made 7 runs in 3 hrs recovering 13 BO. Pulled swab from SN w/scattered fluid. Opened bypass & equalized backside w/tbg. Released RTTS tool RIH to RBP. Retrieved RBP & POOH w/tbg, pkr & plug. PU mud anchor, SN, 19 jts of 2 3/8" tbg, 2 3/8" x 5 1/2" TAC & RIH on 261 jts of 2 3/8" tbg, 4.7#/ft, 8rd, N-80, EUE tbg. RU kill truck. Pumped 20 BW down tbg & 20 BW down csg. ND BOP. Set TAC w/12,000# tension @ 8166' KB w/SN @ 8753' KB. NU wellhead. PU 2" x 1 1/2" x 28' RHBC pump w/1" x 10' gas anchor, 7/8" x 2' sub, 7/8" x 25' steel rod, 26-K shear tool, 115-7/8" x 25' steel rods, 154-0.98" x 37.5' Fiberflex fiberglass rods, 0.98" x 8' FG sub. Seated & spaced out pump. Loaded hole w/13 BW & pressured tbg to 500 psig. Held OK. Checked pump action. Started well pumping to frac tank @ 7:00 pm MST.
11. Well pumped 64 BO & 90 BW in 13 hrs.
12. Well pumped & flowed 145 BO, 41 BW in 24 hrs with an estimated 320 MCFC gas rate. Well pumping 10 SPM, 144" stroke. CP = 55 psig. TP = 25 psig.
13. Well pumped 121 BO & 24 BW in 24 hrs. CP & TP = 20 psig.
14. Well pumped 120 BO, 0 BW & 209 MCF in 20 hrs (down 4 hrs to repair dump valves on HT). Well is periodically flowing up the casing.
15. Well pumped 134 BO, 0 BW & 287 MCF in 24 hrs.
16. Well pumped 104 BO, 0 BW & 251 MCF in 24 hrs.
17. Well pumped 112 BO, 0 BW & 252 MCFC in 24 hrs. FL 1491' FAP.
18. Well pumped 103 BO, 0 BW & 269 MCFC in 24 hrs.

(Continued on Page Four)

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HOUSE OFFICE

ATTACHMENT I

19. Well pumped 102 B0, 0 BW & 269 MCFG in 24 hrs.
20. Well pumped 103 B0, 0 BW & 273 MCF in 24 hrs.
21. Well pumped 89 B0, 10 BW & 270 MCF in 24 hrs. FL 1194' FAP.
22. Well pumped 93 B0, 0 BW & 268 MCF in 24 hrs.
23. Well pumped 100 B0, 0 BW & 258 MCF in 24 hrs.
24. Well pumped 100 B0, 0 BW & 256 MCF in 24 hrs. FL 1129' FAP.
25. Well pumped 95 B0, 3 BW & 254 MCF in 24 hrs.
26. Well pumped 92 B0, 6 BW & 255 MCF in 24 hrs. Prior to adding perfs & stimulation treatment, well pumped 70 BOPD, 0 BWPD & 188 MCFGPD.

FINAL REPORT.