Submit 3 Copies to Appropriate District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO. 30-025-06823

5. Indicate Type of Lease STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name: W. S. Marshall "B"

1. Type of Well: OIL WELL ☒ GAS WELL ☐ OTHER

2. Name of Operator: Marathon Oil Company

8. Well No. 5

3. Address of Operator: P. O. Box 552, Midland, Texas 79702

9. Pool name or Wildcat: Paddock

4. Well Location
Unit Letter N : 660 Feet From The South Line and 1980 Feet From The West Line

Section 27 Township 21-S Range 37-E NMPM Lea County

10. Elevation (*Show whether DF, RKB, RT, GR, etc.*) GL 3411'

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	PLUG AND ABANDONMENT	☐
PULL OR ALTER CASING	☐			CASING TEST AND CEMENT JOB	☐		
OTHER: Add open hole pay in Paddock	☒			OTHER:			☐

12. Describe Proposed or Completed Operations (*Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work*) SEE RULE 1103.

Marathon Oil Company proposes to deepen the above referenced well approximately 85' to add open hole pay in the Paddock. Following is the procedure:

1. Test safety anchors.
2. MIRU pulling unit with ± 5500' of 2 7/8" 6.5#/ft., N-80 workstring and drill collars.
3. Kill well w/2% KCl water.
4. Remove stuffing box and install rod stripper.
5. POOH w/3/4" steel rods and 2" x 1 1/4" x 12' pump.
6. N/D wellhead and N/U 6" series 900 BOP's w/ 2 3/8" pipe rams on top and blind rams on bottom.

(See Attachment I)

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

SIGNATURE _____ TITLE Hobbs Production Sup't. DATE 7-11-90

TYPE OR PRINT NAME J. R. Jenkins TELEPHONE NO. (915) 682-1626

(This space for State Use)

APPROVED BY ORIGINAL SIGNED BY JERRY SEXTON DISTRICT I SUPERVISOR TITLE _____ DATE JUL 16 1990

CONDITIONS OF APPROVAL, IF ANY:

ATTACHMENT I

Item 12 (continued)
W. S. Marshall "B" No. 5
Page 2

7. POOH w/ 2 3/8" tubing and stand back.
8. Switch BOP rams to 2 7/8".
9. PU and RIH w/ 2 7/8" 6.5/ft., N-80 workstring and 5" cement retainer to ± 5090'. Set cement retainer.
10. MIRU Cementers.
11. Establish rate and pressure into perfs from 5132'-50' and 5183'-93' w/2% KCl water. Squeeze perfs.
12. Pull out of retainer and reverse circulate to pit w/2% KCl water. POOH w/2 7/8" 6.5#/ft., N-80 workstring.
13. RIH w/2 7/8" 6.5#/ft., N-80 workstring, drill collars, and 4 1/4" bit. WOC for at least 18 hrs.
14. Drill out retainer and cement to 5194'. Test squeeze to 1000 psi.
15. If test is obtained, continue w/next step. If not, resqueeze.
16. Drill out retainer located at 5194' and then cement to original T.D. of 5245'. Circulate hole clean w/2% KCl water.
17. Start drilling new formation at 5245' and continue to the new proposed T.D. of 5330'.
18. Circulate hole clean w/2% KCl water.
19. POOH w/2 7/8" 6.5#/ft., N-80 workstring, drill collars and 4 1/4" bit.
20. RU loggers w/full lubricator and test to 1000 psig.
21. RIH w/WL and run CCL, GR, CNL & CBL from T.D. to min. depth charge.
22. POOH and rig down loggers.
23. RIH w/2 7/8" 6.5#/ft., N-80 workstring and treating pkr to ± 5198'. Hydrotest to 6500 psig while RIH.
24. Set pkr. Pressure backside to 500 psig. Acidize w/4000 gallons of 20% NEFE acid using rock salt as a diverting agent. Record ISDP.
25. Swab on the well one day to recover load and establish productivity.
26. Release pkr. POOH w/2 7/8", 6.5 #/ft., N-80 workstring and treating pkr.
27. RU perforators w/full lubricator and test to 1000 psig.
28. RIH w/perforating guns and perforate w/2 JSPF at depths picked after CNL run. Estimate 100-140 shots.
29. POOH and rig down perforators.
30. RIH w/2 7/8", 6.5 #/ft., N-80 workstring, mechanical collar locator and pin point injection tool (10' spacing) to ± 5190'. *Starting depth will be determined after perf depths are finalized.
31. Spot acid to pkr. Set tool. Use 15% NEFE acid and acidize w/8 bbls.
32. Release tool. PUH 5'. Set tool and acidize w/8 bbls.
33. Repeat procedure until entire perforated interval has been acidized. Should be 14 stops with a total acid volume of 5,000 gallons.
34. POOH w/2 7/8", 6.5#/ft., N-80 workstring, mechanical collar locator and pinpoint injection tool.
35. RIH w/2 7/8", 6.5#/ft., N-80 workstring and treating packer ± 4950'.
36. Set pkr. Pressure backside to 1000 psig and fracture stimulate.

Basic recommendation:

140,000 lbs. of 16/30 Ottawa sand
20,000 lbs. of 16/30 resin coated sand
Sand concentration 1-6 lb/gal.
Average wellhead treating pressure - 4300 psig
Maximum treating pressure - 6,000 psig
30% CO_2 gelled water system
1 stage job

37. After stimulation, flow back and swab on well 1 to 2 days to recover load and establish productivity.
38. Kill well w/2% KCl water. Unset pkr. POOH w/2 7/8", 6.5#/ft., N-80 workstring and treating pkr.
39. RIH w/2 7/8", 6.5#/ft., N-80 workstring to TD and check for fill.
40. POOH w/2 7/8", 6.5#/ft., N-80 workstring, laying down.
41. Switch BOP rams to 2 3/8".
42. RIH w/2 3/8" tubing, SN and tubing anchor to ± 5200'.
43. Remove BOP. Install wellhead w/rod stripper.
44. RIH w/steel rods and pump. Final rod design will be made after swab (post frac) results are obtained.
45. Hang well on and start pumping to production facilities.
46. RDMOL