

Submit 3 Copies  
to Appropriate  
District Office

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-103  
Revised 1-1-89

**OIL CONSERVATION DIVISION**

2040 Pacheco St.  
Santa Fe, NM 87505

DISTRICT I  
P.O. Box 1980, Hobbs NM 88241-1980

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

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

WELL API NO. 30-025-05911
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. 033250
7. Lease Name or Unit Agreement Name BERTHA BARBER
8. Well No. 6
9. Pool name or Wildcat EUMONT (Y-7R-QN)

**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.)

1. Type of Well:  
OIL WELL  GAS WELL  OTHER

2. Name of Operator  
Marathon Oil Company

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

4. Well Location  
Unit Letter L : 1980 Feet From The SOUTH Line and 660 Feet From The WEST Line  
Section 5 Township 20-S Range 37-E NMPM LEA County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)  
3570' KB, 3559' G.L.

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

NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input checked="" type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
OTHER: <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
	CASING TEST AND CEMENT JOB <input type="checkbox"/>
	OTHER: <input type="checkbox"/>

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.

PROPOSE TO PERF CASING & SQUEEZE CEMENT 2200' - SURFACE.  
SET CIBP @ 3070' AND DUMP 20 SX CEMENT TO ISOLATE LOWER EUMONT PERFS.  
OPEN NEW YATES/EUMONT PERFS 2400' - 2740'.  
ACIDIZE, SANDFRAC, AND KICK OFF TO SALES.

THIS WELL IS CURRENTLY TEMPORARILY ABANDONED.

*Shut in.*

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

SIGNATURE Walter Duncan TITLE DRILLING SUPERINTENDENT DATE 3/24/98  
TYPE OR PRINT NAME D. P. NORDT TELEPHONE NO. 915/687-8356

(This space for State Use)

APPROVED BY ORIGINAL SIGNED BY CHRIS WILLIAMS TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
DISTRICT I SUPERVISOR  
CONDITIONS OF APPROVAL, IF ANY:

**REVISED  
RECOMPLETION PROCEDURE  
BERTHA BARBER NO. 6  
Monument Field  
Lea County, New Mexico  
Page No. 2**

6. RU Electric Line Company and lubricator. Test lubricator to 500 psi. Shoot squeeze holes at +/- 2,166'. RD Electric Line Company and lubricator.
7. RIH with 7" packer to +/- 2,100'. Set packer at +/- 2,100'. Load backside and test packer and casing to 1,000 psi. Establish injection rate into squeeze holes at +/- 2,166' with 2% KCL water. If possible break circulation up 7" - 9-5/8" annulus. Report injection rates and pressures to the Midland Operations Drilling Department. Release packer and POOH with tubing and packer.
8. RIH with 7" cement retainer on 2-7/8" tubing. Set retainer at +/- 2,100'. Sting out of retainer and load hole with 2% KCL water and test retainer to 500 psi. Sting back into retainer and establish injection rate. RU Cement Company. Cement squeeze 7" casing as per attached recommendation. Sting out of retainer and reverse circulate cement from 2-7/8" tubing. POOH with 2-7/8" tubing. RD Cement Company.
9. PU 6-1/8" bit and 4 - 4" drill collars. RIH and tag cement retainer at +/- 2,100'. RU power swivel. Drill out cement and retainer. Pressure test squeeze to 1,000 psi. L/D power swivel. Reverse circulate hole clean with 2% KCL water. Pickle tubing with 250 gals. Of 15% HCl at 1 BPM. Reverse circulate spent acid. POOH, laying down bit and collars.
10. RU Electric Line Company and lubricator. Pressure test lubricator to 500 psi. Run temperature log to determine cement top. RIH with dump bailer and spot 20' of cement on top of CIBP at 3070'. Selectively Perforate Yates formation with 1 JSPF, 120 deg phasing using 4" port guns at 2400-20', 2444-74', 2484-2512', 2518-28', 2554- 64', 2582-2600', 2614-24', 2638-42', 2654-66', 2672-86', 2710-40' (156 Holes). RD Electric Line Company and Lubricator.
11. RIH with 7" packer on 2-7/8" production tubing. Set 7" packer at 2310'. RU Acid Company and acidize perforations 2400-2740' with 5000 gals. of 7-1/2% Ferchek acid and 300 1.3 SG ball sealers. Flush to bottom perforation with 2% KCL water. RD Acid Company. RU swab equipment and swab back spent acid. RD swab equipment.
12. Release packer and POOH with 2-7/8" tubing. Install 3-1/2" pipe rams and test. PU 3-1/2" 9.3#, L-80 workstring. RU Hydrotesters. RIH with 2-7/8" wireline entry guide, a 6'-2-7/8" L-80 tubing sub, a Halliburton 2.313 "X" nipple, two 6'-2-7/8" L-80 tubing subs, a 7" permlatch packer, a tubing seal divider with a 2.313 "X" nipple, a 2-7/8" blast nipple, and a 2-7/8" and 3-1/2" crossover on 3-1/2" workstring, hydrotesting to 8000 psi. Set packer at +/- 2310'. Load backside and test packer and casing to 500 psi.
13. RU Stimulation Company, Tagging Company, Frac Valve and 3" treating lines. Sand Fracture perforations 2400 - 2740' with 70 Quality CO<sub>2</sub> Foam as per attached procedure. Flush to top perforation. RD Stimulation Company.
14. Install Frac Manifold. Flow well back to pit or frac tank to recover load or until well dies.
15. If well dies unset packer and POOH with 3-1/2" packer, otherwise, RU Slick Line Company and Lubricator. RIH with Gauge ring to +/- 2310'. RIH and set PXX plug in X profile of on/off tool. If tubing does not blow down, set plug in "X" nipple of tail pipe. If tubing still does not blow down, POOH with plug and set collar stop, K-2 RSPN, 1.78 FWP and a tubing stop. Blow down tubing. RD Slick Line Company and lubricator.
16. Unjap from on/off tool and POOH with 3-1/2" workstring, laying down workstring.
17. Install 2-7/8" pipe rams and test. RIH with on/off tool overshot on 2-7/8" tubing. Displace annulus with treated 2% KCL water. Space out tubing and latch onto on/off tool. Pressure test casing and packer to 500 psi. ND BOPE. NU wellhead. RU Swab Equipment. Swab down tubing string. RD swab equipment.
18. RU Slickline Company and lubricator. Pull Blanking plug. RD Slickline Company and lubricator.
19. Kick well off to sales. Monitor Flowing tubing pressure and production.
20. RDMOPU.

xc: D. K. Barker            W. S. Landon  
     T. P. Kacir             M. T. Wiskofske  
     D. P. Nordt             Well File

**REVISED  
RECOMPLETION PROCEDURE**

BERTHA BARBER NO. 6  
Monument Field  
1980' FSL and 660' FWL  
Section 5, T-20-S, R-37-E  
Lea County, New Mexico

AFE NO.: 300098

Date: March 20, 1998

Purpose: Recomplete to Upper Eumont (YATES) And Stimulate

Elevation: 3570' KB 3559' GL

Estimated Cost: \$170,000

Estimated Workover Duration: 10 days

Drillers TD: 3890'

PBTD: 3429' (CIBP @ 3460')

Surface Casing: 13", 40# casing at 141'. Cemented with 125 sks. Circulated cmt to surface.

Intermediate Casing: 9-5/8", 36# casing at 1105'. Cemented with 500 sks. Circulated cmt to surface.

Production Casing: 7", 24# casing at 3770'. Cemented with 400 sks. Estimated TOC via GR-CBL-CCL: 2200' 80% Burst = 3488 psi ID = 6.366" Drift = 6.241"

Tubing: 2-3/8", 4.7#, N-80 tubing with a SN at 3187'.

Existing Perfs: Eumont: (1 JSPF): 3133', 35', 37', 43', 50', 54', 56', 58', 72', 73', 79', 84', 86', 88', 91', 95', 97', 3202', 04', 10', 12', 14', 33', 43', 45', 50', 52', 57', 62', 64', 66', 71', 73', 75', 83', 87', 94', 96', 98', 3300', 06', 08', 10', 12', 15', 26', 30', 43', 45', 47', 49' (53 Holes).

Abandoned Perfs: Grayburg/San Andres:(2 JSPF): 3504', 10', 19', 26', 34', 37', 41', 48', 61', 66', 70', 74', 3606', 13, 17', 22', 32', 40', 60', 67', 74', 3730', 34', 48', 58', 67', 71', 77', 83', 95', 3802-08'.

Open Hole: 3817 - 3890'

Anticipated Bottom Hole Pressure: Eumont - 500 psi

Current Production: TA'D

Safety Consideration: Run sufficient amount of killstring during any extended shut-in period.  
3-1/2", 9.3#, L-80 workstring - (80% Burst = 8128 psi)

1. Notify Hobbs Personnel of impending workover.
2. MIRUPU. Disconnect surface equipment. ND wellhead. NU 7-1/16" 3M Hydraulic BOPE with 2-3/8" pipe rams.
3. POOH with 2-3/8" N-80 tubing, laying down.
4. Install 2-7/8" pipe rams. PU 2-7/8" \* 7" RBP and 2-7/8", 6.5# J-55 production tubing. RIH and set RBP at approximately 100'. POOH with tubing and setting tool. Pressure test blind rams to 1000 psi. RIH with 7" tension packer. Set packer at +/- 80'. Pressure test pipe rams to 1000 psi. Release packer and POOH, laying down packer. RIH with BP retrieving tool. Latch onto RBP at +/- 100'. Release BP and POOH, laying down BP.
5. RIH with 6-1/8" bit and 7" casing scraper on 2-7/8" production tubing to +/- 3100'. POOH. RIH with 7" CIBP on 2-7/8" tubing. Set CIBP at +/- 3070'. Circulate hole clean with 2% KCL water. Pressure test casing and CIBP to 1000 psi.