Submit 3 Copies to Appropriate District Office

CONDITIONS OF APPROVAL, IF ANY:

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-103 Revised 1-1-89

District Office OIL CONSERVATION DIVISION DISTRICT I WELL API NO. P.O. Box 1980, Hobbs NM 88241-1980 2040 Pacheco St. 30-025-6591 DISTRICT II Santa Fe, NM 87505 5. Indicate Type of Lease P.O. Drawer DD, Artesia, NM 88210 FEE X STATE DISTRICT III 6. State Oil & Gas Lease No. 1000 Rio Brazos Rd., Aztec, NM 87410 SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A 7. Lease Name or Unit Agreement Name DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) BERTHA BARBER 1. Type of Well: OIL WELL GAS WELL X OTHER 2. Name of Operator 8. Well No. Marathon Oil Company 3. Address of Operator 9. Pool name or Wildcat P.O. Box 552 Midland. TX 79702 MONUMENT 4. Well Location NORTH Unit Letter 660 Feet From The WEST Line and Feet From The Section 20-S 37-E **EDDY** Township Range **NMPM** County 10. Elevation (Show whether DF, RKB, RT, GR, etc.) 3569' KB, 3558' GL 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: . 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. PROPOSE TO ADD PERFORATIONS TO THE UPPER EUMONT (YATES) AND SEVEN RIVERS FORMATIONS AS PER THE ATTACHED PROCEDURE. I hereby certify that the information above is true and complete to the best of my knowledge and belief. NUKU SIGNATURE TITLE DRILLING SUPERINTENDENT 6/23/98 DATE TYPE OR PRINT NAME D. P. NORDT TELEPHONE NO. 915/682-1626 (This space for State Use) APPROVED BY

RECOMPLETION PROCEDURE

BERTHA BARBER NO. 8

Monument Field
1980' FNL and 660' FWL
Section 5, T-20-S, R-37-E
Lea County, New Mexico

AFE NO.:

303498

Date:

June 1, 1998

Purpose:

Recomplete to Upper Eumont (Yates) and Seven Rivers

Elevation:

3569' KB

3558' GL

Estimated Cost:

\$170,000

Estimated Workover Duration: 10 days

Drillers TD:

39001

PBTD:

3560' (CIBP @ 3580')

Surface Casing:

12-1/2", 40# casing at 137'. Cemented with 100 sks.

Circulated cmt to surface.

Intermediate Casing:

9-5/8", 36# casing at 1125'. Cemented with 500

sks. Circulated cmt to surface.

Production Casing:

7", 24# casing at 3800'. Cemented with 400 sks. Estimated TOC 852' (Calc.). 80% Burst = 3488 psi

ID = 6.366" Drift = 6.241"

Tubing:

2-3/8", 4.7#, J-55 tubing with a 7" TAC at 3116',

a SN at 3243' and a mud anchor to 3255'.

Existing Perfs:

Eumont: (1 JSPF): 3137-60', 3227-3320', 3340-90'.

Squeezed Perfs:

Grayburg/San Andres:3597', 99', 3603', 12', 16', 19', 25', 32', 38', 39', 41', 3694-3703', 3712-13',

3732-35', 3744-47', 3750-66'.

Open Hole:

3800'- 3900'

Anticipated Bottom Hole Pressure:

Eumont - 500 psi

Current Production:

(5/11/98)

36 MCFPD and 80 BWPD

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.
- MIRUPU. Disconnect surface equipment. POOH with 1/1/2" IP and 3/4" and 7/8" rod string. ND wellhead. NU 7-1/16" 3M Hydraulic BOPE with 2-3/8" pipe rams.
- 3. POOH with 2-3/8" J-55 tubing.
- 4. PU 2-3/8" * 7" RBP. RIH and set packer type RBP at approximately 100'. Pressure test pipe rams to 1000 psi. POOH with tubing and setting tool. Pressure test blind rams to 1000 psi. 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 2-3/8" production tubing to +/- 3200'. POOH. RU Electric Line Company. Set CIBP at +/- 3070'. Circulate hole clean with 2% KCL water. Pressure test casing and CIBP to 1000 psi. RIH with Dump Bailer. Spot 20' of cement on top of CIBP at +/- 3070'. RD Electric Line Company.

- 6. RIH with 2-3/8" tubing. Pickle tubing with 500 gallons of 15% HCl acid at 1 BPM. Reverse circulate spent acid. POOH. RU Electric Line Company. Run GR-CNL log from PBTD of 3050' to 2000'. Run GR-CBL-RAL-CCL from PBTD of 3050' to 1500'. RIH with 4" port guns and 23 gram Tungsten lined charges. Exact perforations will be determined from GR-CNL log. RD Electric Line Company.
- RIH with 7" packer on 2-3/8" production tubing. Set 7" packer at 2350'. RU Acid Company and acidize perforations with 7-1/2" Ferchek acid and 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.
- Release packer and POOH with 2-3/8" tubing. Install 3-1/2" pipe rams and test. PU 3-1/2", 9.3#, L-80 workstring. RU Hydrotesters. RIH with a 7" treating packer and a seating nipple on 3-1/2" workstring, hydrotesting to 8000 psi. Set packer at +/- 2310'. Load backside and test packer and casing to 500 psi.
- 9. RU Stimulation Company, Tagging Company, Frac Valve and 3" treating lines. Sand Fracture stimulated Eumont with 70 quality CO2 foam as per attached procedure. Flush to top perforation. RD Stimulation Company.
- 10. Install Frac Manifold. Flow well back to pit or frac tank to recover load or until well dies. RU Protechnics. RIH with weight bar and tag sand. If no sand is tagged across perforations, run after-frac Gamma Ray log. RD Protechnics.
- 11. If well dies unset packer and POOH with 3-1/2" packer, otherwise, RU Electric Company and Lubricator. Set 3-1/2" CIBP in 3-1/2" workstring at +/- 2300'. Blow down tubing to test plug. RD Electric Line Company and Lubricator.
- 12. Install stripping stack with Blow Down lines to pit or frac tank and stripping head rubber. Strip out of hole with 3-1/2" workstring, laying down.
- 13. Install 2-3/8" pipe rams and test. Strip in hole with 7" production packer and an on/off tool with a 1.78" "F" profile with plug in place on 2-3/8" production tubing. Set packer at +/- 2350'. Unjay from on/off tool. 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.
- 14. RU Slickline Company and lubricator. Pull Blanking plug. RD Slickline Company and lubricator.
- 15. Kick well off to sales. Monitor flowing tubing pressure and production. If sand was tagged in Step 10, RU coil tubing unit and clean out sand to PBTD. RD coil tubing unit. RU Slickline Company. Run after-frac Gamma Ray log. RD Slickline Company.
- 16. RDMOPU.

xc: D. K. Barker T. P. Kacir

W. S. Landon

M. T. Wiskofske

D. P. Nordt

Well File

W. J. Tank