Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

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

5. Lease Designation and Serial No.
LC-029388-D

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE

7. If Unit or CA, Agreement Designation

1 Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
Johnson "B" Fed. A/C 1 #10

2. Name of Operator
Marathon Oil Company

9. API Well No.
30-015-~~05522~~ 26439

3 Address and Telephone No.
P.O. Box 552, Midland, Texas 79702 (915) 682-1626

10. Field and Pool, or Exploratory Area
Shugart, N. (Grayburg)

4 Location of Well (Footage, Sec., T., R., M., or Survey Description)
990 ~~1980~~ FNL & ~~660~~ 450 FWL, Unit Letter D
Section 11, T18S, R31E

SEP - 6 1991
O. C. D.
ARTESIA, OFFICE

11. County or Parish, State
Eddy Co., New Mexico

12 CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other Running Step Rate Test	[ ] 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 of 5/25/91 initiated operations to run a Step Rate Test as follows:

1. RU PU. Unbeamed well, installed rod stripper. POOH, laying down 128-1" x 37.5' fiberglass rods & 128-7/8" x 25' Grade D steel rods & a 2" x 1 1/4" x 24' x 26' x 28' pump. ND wellhead. NU BOP. Released TAC. POOH w/a total of 260 jts of 2 3/8" 4.7#/ft J-55 tbg, TAC, SN & mud anchor. PU 1 jt of 2 3/8" tbg bullplugged, 2 3/8" SN, 10' slotted sub, 3 jts of 2 3/8" tbg, Baker Model EA retrievamatic & RIH w/50 jts of tbg. Closed BOP. Installed tbg valve. SDFWE.
TL 218 BO

2. SITP & SICP = 250 psig. Blew well down. FIH w/207 jts of 2 3/8", 4.7#/ft, J-55 tbg. Set pkr @ 7960' w/slotted sub @ 8060', SN @ 8070' & btm of tbg @ 8104'. Set pkr. ND BOP & NU wellhead. Installed tbg valve. RDMO PU. RU Pro Well Testing. RIH to 8060' w/48 hr pressure bomb.
TL 318 BO

(See Attachment I)

14. I hereby certify that the foregoing is true and correct
Signed C.A. Bagwell Title Engineering Tech. Date 8/16/91

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

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 statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

ATTACHMENT I

3. SITP = 230 psig. SICP = 10 psig. Well SI for BU. Spotted 4 steam cleaned frac tanks.
TL 0

4. SITP = 275 psig. SICP = 10 psig. Pulled bomb off btm @ 11:30 am MST. Chart indicated pressure increasing slightly. RIH w/24 hr bomb, taking gradient stops going in. Bombed on btm @ 2:25 pm MST. Filled frac tanks w/±2000 bbls of wtr.
TL 0

5. SITP = 300 psig. SICP = 10 psig. POOH w/bomb. RD Pro Well Testing. Found connection leaking below surface valve. Blew tbg press down. Changed out leaking connection. RU John West Engineering Inc. RIH w/press bomb to 3900'. Bomb failed to record pressures. POOH w/bomb. RIH w/new bomb & tagged bull plug @ 8104'. BHP of 264.7 psig @ 121°F w/surface pressure of 218 psig. Pumped 39.1 bbls of wtr down tbg with no surface press. Conducted step rate test as follows:

Step #	Tbg Press PSIA	Rate BPD	BHP PSIA	Elapsed Time	Cum Vol Injected
1	3.5 (Vac)	710.4	590.8	30 min	14.8
2	4.8 (Vac)	1440.0	817.7	30 min	44.8
3	6.0 (Vac)	2880.0	1384.8	30 min	104.8
4	746.5	4315.2	2695.8	30 min	194.7

Bottomhole ISIP = 2696 psig. Conducted 2-hr falloff test. Ending BHP was 706.3 psig. RD John West Engineering. Closed well in. SDFWE.
TL 0

6. RU reverse unit. Began injectivity test @ 9:00 am MST. Initial inj rate 1000 BWPD, 0 psig.
TL 240 BW

7. Injected 955 BW in 24 hrs @ an avg tbg press of 150 psig. Well pressured up after injecting a total of 590 BW.
TL 1195 BW

8. Injected 793 BW in 23.5 hrs @ an avg tbg press of 1250 psig.
TL 1195 BW

9. Injected 644 BW in 24 hrs w/1600 psig TP.
TL 1195 BW

10. Injected 401 BW in 24 hrs w/1580 psig TP.
TL 1195 BW

11. Injected 337 BW in 24 hrs w/1540 psig TP.
TL 1195 BW

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ATTACHMENT I

12. Injected 265 BW in 24 hrs w/ 1600psig TP.
TL 3635 BW

13. Injected 104 BW in 12 hrs for a daily rate of 208 BWPD @ tbg press of 1600 psig. Released inj pump @ 7:30 pm MST. SWI.
TL 3635 BW

14. SITP = 240 psig. SICP = 0 psig. Bled off tbg press. Changed out 2500 psig valves and pumping tee to 5000 psig gate valve. RU John West Engineering. RIH to 492' w/7500 psig bomb. Bomb malfunctioned. POOH & reheaded tool. RIH w/ bomb to 8104'. BHP = 3668 psig @ BHT of 108°F. Started step rate test @ 420 BPD rate. Bottomhole bomb stopped recording. Stopped test. POOH w/bomb. Found bomb shorted out. SWI and RD John West Engineering.
TL 3742 BW

15. SITP = 240 psig. SICP = 0 psig. Bled off tbg press. Changed out 2500 psig valves & pumping tee to 5000 psig gate valve. RU John West Engineering. RIH to 492' w/7500 psi bomb. Bomb malfunctioned. POOH & reheaded tool. RIH w/bomb to 8104'. BHP = 3668 psig @ BHT of 108°F. Started step rate test @ 420 BOP rate. Bottomhole bomb stopped recording. Stopped test. POOH w/bomb. Found bomb shorted out. SWI & RD John West Engineering.
TL 3742 BW

16. SITP = Vac. SICP = 0 psig. RU John West Engineering. RIH w/bomb to 8104'. Loaded hole w/15 bbls of fresh wtr. BHP = 3486 psig. Conducted step rate test as follows:

Step #	Avg Rate (BPD)	Tbg Press (PSIA)	BHP (PSIA)	Cum Vol Inj. (bbl)	Min/Step
1	518.4	335.3	3833	10.8	30
2	739.2	752.4	4224	26.2	30
3	1027.2	1218.0	4687	47.6	30
4	1416.0	1718.0	5093	77.1	30
5	2122.0	2350.7	5441	121.3	30
6	2885.0	2686.7	5607	181.4	30
7	3571.2	3184.6	5749	255.8	30

Formation - Parting pressure @ approx 5330 psig. Bottomhole ISP = 5662. Conducted hr falloff. Bottomhole press after 1 hr = 5316 psig. POOH w/bomb. SWI. RD John West Engineering.
TL 4013 BW

17. MIRU X-Pert PU. ND wellhead & NU 6" 900 manual BOP's w/2 3/8" pipe rams. Released Baker retrievamatic & POOH w/tbg. RIH w/2 3/8" mud jt, SN, 7 jts 2 3/8" N-80 tbg w/AB modified couplings, 5 1/2" x 2 3/8" TAC & 253 jts 2 3/8" N-80 tbg w/AB modified couplings. Removed BOP's. Set TAC w/14 points tension. Installed wellhead. Installed rod stripper. RIH w/1" x 6' gas anchor. 2" x 1 1/4" x 24' x 26' x 28' RHB pump & 28-7/8" grade "D" rods. SDFN.
TL 4134 BW

(Continued on Page Four)

ATTACHMENT I

18. FIH w/100- 7/8" Grade D rods & 128 - 1" fiberglass rods, 1" x 18' FG rod, 1" x 6' FG rod, & 1" x 3' FG rod. Spaced out & hung on well. Loaded & tested to 500 psig. Placed well on production.
TL 4154 BW

FINAL TEST.