

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985

dsf

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ DRY ☐ Other _____
b. TYPE OF COMPLETION: NEW WELL ☐ WORK OVER ☐ REPERF ☒ PLUG BACK ☐ DIFF. RESRV. ☒ Other _____
2. NAME OF OPERATOR
Marathon Oil Company
3. ADDRESS OF OPERATOR
P. O. Box 552 Midland, Tx. 79702
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface Unit C, 660' FNL & 1980' FWL
At top prod. interval reported below *
At total depth *

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* No directional survey run
14. PERMIT NO. 30-015-05557 DATE ISSUED NA
15. DATE SPUDDED NA 16. DATE T.D. REACHED NA 17. DATE COMPL. (Ready to prod.) 4-7-92 18. ELEVATIONS (DF. RKB, RT, GR, ETC.)* 3694' KB 19. ELEV. CASINGHEAD 3682'
20. TOTAL DEPTH, MD & TVD 4210' 21. PLUG BACK T.D., MD & TVD 4144' 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY → ROTARY TOOLS X CABLE TOOLS
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
Grayburg: 3972-81', 4015-20', 4023-28', 4034-41' and 4056-94'
25. WAS DIRECTIONAL SURVEY MADE NA
26. TYPE ELECTRIC AND OTHER LOGS RUN GR-Neutron & GR-Guard Log 27. WAS WELL CORED Yes

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	32.3	815'	13-3/4"	525 sxs	0
5-1/2"	15.5	4157'	8-3/4"	500 sxs	0

LINER RECORD					TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
None					2-7/8"	4055'	

31. PERFORATION RECORD (Interval, size and number)
Queen 3318-32' (Squeezed) 3-4-92
Grayburg 3972-4094' (Reperf) 2 SPF for 138 hours
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.
DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED
3318-32' 100 sxs of Class "C" Neat
3972-4094' Acidized w/6400 gals of 15% HCl
Frac'd w/41,500 gals & 82,500#
20/40 & 21,000# Santo1

33.* PRODUCTION
DATE FIRST PRODUCTION 3-24-92 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Pumping WELL STATUS (Producing or shut-in) Producing
DATE OF TEST 4-7-92 HOURS TESTED 24 CHOKE SIZE NA PROD'N. FOR TEST PERIOD → OIL—BBL. 13 GAS—MCF. 8 WATER—BBL. 196 GAS-OIL RATIO 615 to 1
FLOW. TUBING PRESS. 20 psi CASING PRESSURE 20 psi CALCULATED 24-HOUR RATE → OIL—BBL. 13 GAS—MCF. 8 WATER—BBL. 196 OIL GRAVITY-API (CORR.) ---
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Vented (waiting on flowline) TEST WITNESSED BY Allen Wilson
35. LIST OF ATTACHMENTS None

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

Rich D. D.

TITLE

Production Engineer

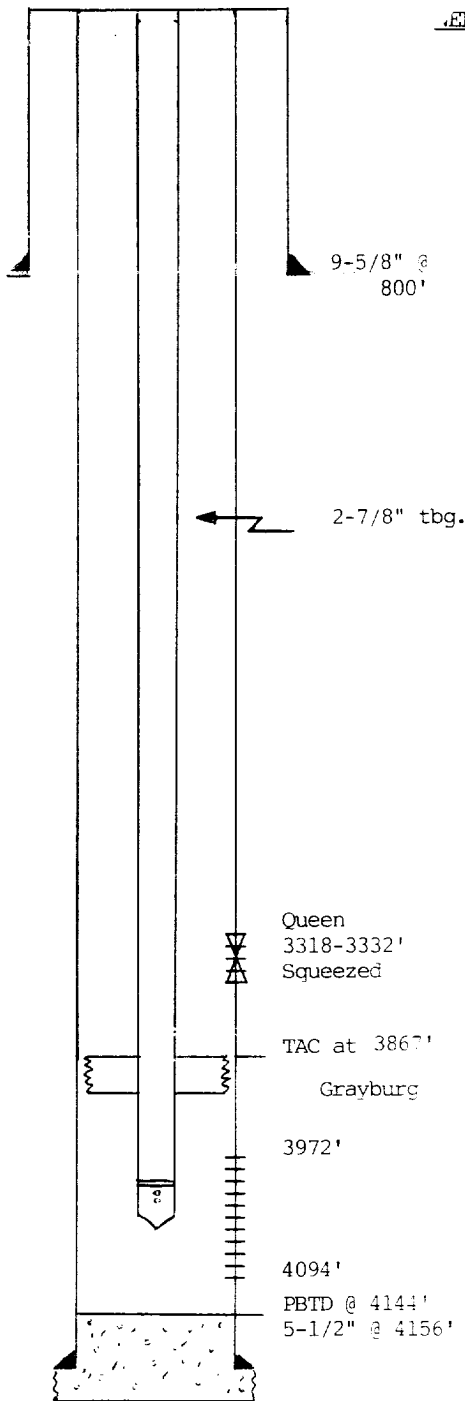
DATE

4-9-92

*(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, flowing and shut-in pressures, and recoveries):				38. GEOLOGIC MARKERS	
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP MEAS. DEPTH TRUE VERT. DEPTH
			** See original Form 3160-4		

WELL DATA SHEET



FIELD Shugart, North

LEASE AND WELL NO. Johnson "B" A/C 2 No. 2

LOCATION 660' FNL & 1980' FWL, Sec. 15, T-18S, R-31E

COUNTY AND STATE Eddy County, New Mexico

STATUS Pumping oil well

TD 4210' PBTD 4144' KB 3694' GL 3682'

SURFACE CASING 9-5/8", 32.3#, H-40 set at 800'
cemented with 525 sxs Trinity Reg. plus 3% gel.

Cement circulated

INTERMEDIATE CASING _____

PRODUCTION CASING 5-1/2", 15.5#/ft, J-55 set at
4156'. Cemented with 500 sxs Trinty Inferno with
3% gel. TOC at 1890' by temp survey.

TUBING 2-7/8", 6.7#/ft., J-55 with SN landed at
4055'. TAC at 3867'. Purge valve in place at
bottom of slotted mud joint.

LINER None

RODS 7/8" & 3/4" x 25' Norris 97 steel sucker rods,
2" pump with 6' gas anchor.

PUMPING UNIT Lufkin C-320

PRESENT COMPLETION: (Formation and Interval)

Grayburg: 3972-81', 4015-20', 4023-28', 4034-41',
and 4056-94' with 2 SPF for 138 holes.

HISTORY Originally completed well as Queen producer at 3318-32' in 1957. Acidized perfs
with 500 gal mud acid and fraced with 20,000 gals refined oil & 20,000# sd. Added Grayburg
perfs on 4-11-62 at 3975-76', 4035-36', 4066-67', & 4089-90' with 4 JSPF. Spotted 250 gals
acid, fraced with 20,000 gals refined oil & 30,000# sd. Set CIBP at 4010' and refraced from
3975-76' with 6000 gals refined oil & 9000# sd. Converted to injection on 8/66 by setting
CIBP at 3420' with 10' cement on plug and installing IPC, 2-3/8" tubing with Johnson 101-S

PREPARED BY: Rick Gaddis DATE 4-9-92

packer at 3250'. Commenced injection into Queen at 3318-32'. Recompleted from injection well to Grayburg producer on 3-3-92. Squeezed Queen perfs 3318-32' with 200-sxs cement. Drilled out cement squeeze and tested to 900 psi. OK. Knocked CIBP's out at 3420' and 4010'. Reperfed Grayburg 2 SPF at 3972-81', 4015-20', 4023-28', 4034-41' and 4056-94'. Acidized perfs with 6400 gals 15% HCL acid. Fracture treated perfs with 41,500 gals Viking I-35 containing 82,500#, 20/40 Mesh Ottawa and 21,000# tempered LC. Placed well on pump. Finalled well on 4-6-92 to pump 13 BOPD, 196 BWPD with 8 MCFG.

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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

O. C. D.
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5. Lease Designation and Serial No.

LC-029388 (d)

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

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, Texas 79702 (915) 682-1626

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

Unit C, 660' FNL & 1980' FWL, Section 15, T-18-S, R-31-E

8. Well Name and No. Johnson "B"
Federal A/C 2 No. 2

9. API Well No.

30-015-05557

10. Field and Pool, or Exploratory Area

Shugart (Y, SR, Q, G)

11. County or Parish, State

Eddy County, NM

12. 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

- ☐ 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 finaled recompletion operations on the Johnson "B" Federal A/C 2 No. 2. This well was recompleted from a Queen injection well to a Grayburg producer. Listed on the attached page is a summary of the work done during the recompletion. The well was finaled on 4-6-92 to pump 13 BO, 196 BW and 8 MCFD in 24 hours from Grayburg perms 3972-4094' OA.

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

Signed R. D. Gaddis Title Production Engineer

Date 4-8-92

(This space for Federal or State office use)

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

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

SPECIFIC INSTRUCTIONS

zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

Item 4—If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 3—Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et. seq., 351 et. seq., 25 U.S.C. et. seq.; 43 CFR 3160.

PRINCIPAL PURPOSE — The information is to be used to evaluate, when appropriate, approve applications, and report completion of secondary well operations, on a Federal or Indian lease.

ROUTINE USES:

(1) Evaluate the equipment and procedures used during the proposed or completed subsequent well operations.

(2) Request and grant approval to perform those actions covered by 43 CFR 3162.3-2(2).

(3) Analyze future applications to drill or modify operations in light of data obtained and methods used.

(4)(3) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION — Filing of this notice and report and disclosure of the information is mandatory once an oil or gas well is drilled.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501, et. seq.) requires us to inform you that: This information is being collected in order to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

This information will be used to report subsequent operations once work is completed and when requested, to obtain approval for subsequent operations not previously authorized. Response to this request is mandatory for the specific types of activities specified in 43 CFR Part 3160.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, (Alternate) Bureau Clearance Officer, (WO-771), 18 and C Streets, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0135), Washington, D.C. 20503.

RECOMPLETION SUMMARY

1. MIRU PU on 3/2/92. Changed out casing valves. Tested casing to 500# (pkr at 3250'). Held OK.
2. ND wellhead, NU BOP. Released 5-1/2" packer and POOH laying down IPC tubing and packer. Changed pipe rams to 2-7/8".
3. PU 5-1/2" RTTS tool, SN and RIH on 2-7/8" workstring. Tagged bottom at 3332' (perfs: 3318-3332'). Tested tubing to 4000 psi, OK. Set packer at 3031'. Loaded and tested backside to 700#, OK. Established pump-in rate of 1/2 BPM at 1800 psi. Released packer. POOH with tubing, SN and packer.
4. PU 4-3/4" bit, casing scraper on 2-7/8" tubing. Cleaned out to 3400'. POOH with tools. PU 5-1/2" RTTS tool, SN and RIH to 3023'. Spotted 50 gals 15% NEFE acid. Displaced acid into perfs 3318-3332'. Inj rate - 2 BPM at 1400 psi.
5. Pressured up backside to 700 psi. Squeezed perfs 3318-3332' with total of 200 sxs. Max squeeze pressure 2250# dropping to 1660 psi and holding.
6. Released RTTS tool and POOH. PU 4-3/4" bit, 3 - 3-1/2" drill collars on 2-7/8" tubing. Tagged cement at 3188'. Drilled soft and green cement to 3367'. Tested squeeze to 900 psi for 15 mins. Notified BLM of test (Shannon Shaw).
7. Drilled out CIBP at 3420'. Could not drill out plug at 4010'. POOH with tools. RU sandline drill and knocked out CIBP at 4010'. RD sandline drill. RIH with bit to 4144', PBTD. POOH with tubing and bit.
8. RU perforators and perforated Grayburg 2 SPF at 3972-81', 4015-20', 4023-28', 4034-41', 4056-94' for a total of 138 holes. RD perforators.
9. RIH with 5-1/2" RTTS tool, SN on tubing to 3869'. Spotted acid to packer. Set packer trapping 500 psi on backside. Acidized Grayburg perfs 3972-4094' with 6400 gals 15% HCL acid, using 300 BS for divert. Max psi - 1600#, min psi - 900#, AIR - 4.1 BPM at 1300#. ISDP - 1000#, 15 min SIP - 900#.
10. Opened well to frac tank. Well flowed 111 BW in 2 hours. RU swab. Made 25 runs - 5 hours. Recovered 149 BW. Last run showed 5% oil with good gas blow after swab.
11. Released packer and RIH to knock balls of perfs. Reset packer at 3869'. Fracture treated Grayburg perfs 3972-4094' with 41,500 gals gelled water carrying, 82,500# of 20/40 and 21,000# of tempered LC. Max psi - 2100#, min psi - 1650#, AIR - 10 BPM at 1800#. ISDP - 1240#, 30 min SIP - 1100#.

12. Opened well to frac tank. Well flowed 76 BW and died. RU swab. Made 32 runs in 4 hours. Recovered 160 BW. SFL at surface, EFL at 1600' FS.
13. Swab an additional 59 runs recoving a trace of oil and 274 BW. RD swab.
14. Released packer and tagged sand at 4090', POOH. RIH with hydrostatic bailer and clean out casing to 4144' PBD. POOH laying down workstring.
15. PU production assembly and RIH. Landed SN at 4055'. Set TAC at 3867'. Removed BOP and NU wellhead.
16. RIH with 2" pump on 7/8" and 3/4" Norris 97 steel sucker rods.
17. Seated pump and spaced out rods. RDPU.
18. Set pumping unit and laid temporary electric line. Started well pumping to frac tanks on 3-24-92.
19. Final report on 4-6-92. Well pumped 13 BO, 196 BW and 8 MCF in 24 hours.