Form 3160-5
June 1990

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
FEB 13 1992
O. C. D.
ARTESIA, OFFICE

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

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

6. If Indian, Allottee or Tribe Name

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

7. If Unit or CA, Agreement Designation

SUBMIT IN TRIPLICATE

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

8. Well Name and No.
Johnson "A" Federal #4

2. Name of Operator
Marathon Oil Company

9. API Well No.
30-015-05516

3. Address and Telephone No.
P. O. Box 552, Midland, TX 79702

10. Field and Pool, or Exploratory Area
Shugart (Y,7R,Q,GB)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1980' FSL & 660' FEL
Section 10, T-18-S, R-31-E

11. County or Parish, State
Eddy Co., NM

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 Workover	[ ] 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 initiated operations on 12/11/91 to workover the Johnson "A" Federal No. 4 well. Following is the procedure:

12/11/91 Test anchors to 18-20,000. MIRU X-Pert Rig #7. NU 6" 900 Series BOP w/2 3/8" pipe rams on top & blind rams on bottom. POOH w/2 3/8" tbg, laying down. Install 2 7/8" rams in BOP. TIH w/R-4 tension pkr & 2 7/8" tbg. SDFN.

12/12/91 Set R-4 tension pkr @ 185'. Test BOP to 1500 psi, held OK. Try to establish inj rate down tbg. Load hole w/7 bbls. Psi up to 1500. Bled to 1250 psi in 15 mins. POOH w/pkr. TIH OE to 3330', 16' above perfs @ 3346-62'. Tag up on fill. RU kill truck. CO to 3393'. Est inj rate of 2 BPM @ 1100 psi. POOH w/tbg. TIH w/ret to 3089'. SDFN.

12/13/91 TIH & set ret @ 3200'. Pump cap of tbg before setting ret. Test csg/tbg annulus to 1000 psi, held OK. No indication of csg leak. Test tbg & lines

(See Attachment)

14. I hereby certify that the foregoing is true and correct
Signed Rod J. Prosceno Rod J. Prosceno Title Operations Engineer Date 1/30/92

(This space for Federal or State office use)

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

EB
2-1992

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

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5000 psi, held OK. Mix & pump 200 sx Cl C w/1% CaCl2 & 1% CF-1 (Fl loss additive) @ 1 1/2 BPM @ 950 psi. Displace 1st 15.5 bbls @ 1 BPM @ 1450 psi. SD & stage cmt to ret. Sting out of ret. Left 1200 psi below ret w/no psi drop. Reverse out cmt w/23 bbls fresh wtr. Left 10' cmt on top of ret. POOH w/tbg. SDFN.

12/15/91 PU bit, bit sub, 6 - 3 1/2" DC's & TIH. Tag TOC @ 3190'. RU Lea Fishing Tool to drill out. Squeeze cmt. Drill cmt to 3200'. Drill out cmt ret @ 3200'-3203'. Drill out cmt under ret to 3296'. Cmt drlg @ .8 min/ft w/8,000 WOB max. Cmt still soft. SDFN. Spoke w/Western. Will run test on sample. Should have been hard in 24 hrs.

12/15/91 Drill out cmt 3296'-3385'. Started drlg soft cmt. Continue drlg soft cmt to 3412'. Attempt to test squeeze perfs. Would not hold. Lost 390 psi in 15min. Believe cmt going down hole. POOH w/bit. PU 5 1/2" fullbore pkr & TIH to 3400'. Test squeeze perfs down back side to 1000 psi. Bled off 100 psi in 2 min. Reset pkr @ 3385'. Retest to 1000 psi. Lost 200 psi in 5:40 min. Lost 275 psi in 15 min. Reset pkr @ 3400'. Pressure up below pkr to 1200 psi, held OK. Est inj rate through squeeze perfs of 1/4 BPM @ 1650 psi. POOH w/pkr. PU 5 1/2" cmt ret & TIH to 3100'. SDFN.

12/16/91 FTIH to 3246'. Pump 20 bbls down tbg to clear tool. Set ret @ 3246'. Test pump & lines & tbg to 4000 psi. Est inj rate of 3/4 - 1 BPM @ 1700 psi. Sting out of retainer. Mix & displace cmt to 2500'. Sting into ret & finish mixing cmt (17 bbls or 75 sx mixed @ 14.8 ppg). Started getting returns out of back side. Reverse out cmt. Retest tbg & lines to 4000 psi, OK. Retest back side to 1500 psi, OK. Re-establish inj rate of .8 BPM @ 1900 psi. Had flow on back side. Bleed psi off. Have small flow up tbg when sting into ret & flow up csg when out of ret. Determined ret to be leaking. POOH w/tbg & stinger. TIH w/10 stds of tbg. SDFN.

12/17/91 POOH w/kill string. RU sand line drill & break up ret @ 3246'. Push down to 3412'. TIH w/Baker 5 1/2" cnt ret on 2 7/8" tbg & set @ 3213'. Before setting, pump 20 bbls wtr through stinger. Set ret. Test tbg & lines to 4000 psi, held OK. Test tbg csg annulus to 1250 psi. Est inj rate. Started circ out annulus. Psi up on annulus to 500 psi & try to est inj rate @ 1/2 BPM @ 1500 psi. Annulus psi came up to 1100 psi. Bleed tbg down. Annulus held 1100 psi. Bleed psi off. Sting out of ret & psi up to 1500 psi, held OK. Sting into ret. Psi up to 500 psi on annulus. Pump down tbg until psi on back side comes up to 1000 psi. Surge psi off of back side to see if ret would seal. Did not seal. Sting out of ret. Psi up to 1500 psi. Bled down 400 psi in 5 min. Sting back into ret. Pump .4 BPM down tbg. Had flow of approx .4 BPM out of annulus. Pull 5 stds. SDFN.

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12/18/91 POOH w/tbg & LD stinger. TIH w/Baker fullbore pkr. Set pkr @ 3186'. Test tbg & ret to 2200 psi, held OK. Test annulus to 2000 psi. Lost 180 psi in 5 min. Reset pkr @ 3124'. Pressure up on tbg to 2000 psi, held OK. Lost 20 psi in 5 min. Psi up on annulus to 2000 psi, held OK. Determined that leak in csg from 3124'-86'. POOH w/pkr. TIH w/bit & DC. Drill up ret @ 3213' & push to 3412'. POOH w/bit. TIH w/pkr & set @ 3123' & pump down tbg. Had not flow out of annulus. Set pkr @ 3155'. Pump down tbg @ 3/4 BPM @ 1900 psi. No flow from annulus. Set pkr @ 3186'. Pump down tbg. No flow up csg. Pump @ 1-1 1/4 BPM @ 1900 psi. POOH w/pkr & tbg. SDFN.

12/19/91 FTOH w/tbg & pkr. RU Wedge WL & perf 4 JSPF @ 3159' (had collar @ 3156'). RD Wedge WL. PU pkr & TIH to 2875'. Test pump & lines to 4000 psi, held OK. Test annulus to 1500 psi, held OK. Fish standing valve. Establish inj rate of 13 BPM @ 1750 psi. Open bypass & pump 13 bbls cmt. Close bypass & pump 34 more bbls cmt. Displace to 2960' w/18.6 bbls. Obtain squeeze @ 2600 psi. Stop displacement. Bleed psi down & pull 2 stds to 2814'. Reverse out tbg w/18 bbls fresh wtr. Reset pkr & psi up to 2000 psi. SWI. SDFN.

12/20/91 Had 1175 pis on tbg @ start of day. Bleed psi off. TOOH w/pkr & tbg. PU bit & DC & TIH to TOC @ 2957'. Drill to 3140'. Cmt drlg 1 min/ft. Test cmt to 1000 psi, held OK. Drill to 3171' (squeeze perfs @ 3159'). Test to 1000 psi, held OK. Continue drlg cmt to 3369'. Test squeeze perfs 3346'-62' to 1000 psi, held OK. Continued drlg cmt. Fell out of cmt @ 3375'. Tag up on retainers @ 3406'. Drill up retainers & cmt to CIBP @ 3425'. Drill out CIBP & TIH to 4173'. Circ gas out of hole. TOOH w/35 stds tbg. Close well in. SDFN.

12/21/91 Finish TOOH. L/D DC & bit. Change out 2 7/8" rams. Test lubricator, would not hold. Wait on blind flange. Install flange. Retest - not holding. Change O-ring in packoff. Tighten union halves. Retest. Held 1000 psi. RU lubricator. GIH w/Gamma gun (4") & perf 4 JSPF @ 3932-3939', 3968-79', 3991-95' & 4021-46'. Total 204 holes. RD wireline truck. PU 5 1/2" full bore pkr & TIH to 3800'. Set pkr, load hole w/9 bbls wtr & psi up on annulus to 1000 psi. Pressure test tbg & lines to 4500 psi. Held OK. Fish SV. Stuck SV @ 1000'. Work sand line. Work free. SDFN.

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12/22/91 Psi up on annulus to 1000 psi. Test lines to 5000 psi. Load tbg w/5 bbls. Establish inj rate of 2.4 BPM @ 300 psi. Start acid @ 2 BPM @ 1200 psi. When acid hit perfs, psi broke to 800 psi @ 3 BPM. Pump 4700 gals 15% NEFE acid w/306 ball sealers. Saw ball action from 800-1200 psi. ISIP - 900 psi. 15 min - 800 psi. Leave well SI for 1 hr. Tbg psi @ 500 psi. Open well up to swab. Kicked off flowing. Flow back 2 hrs. Total 30 bbls. Start swab. FL @ surface. Made 18 swab runs. Fluid @ 3800' @ end of swab. Recover 94 bbls fluid (64 swab, 30 flow) 60% oil cut. Fluid in tbg very scattered. Recover 2 bbls on last run. 4 hr swab time. SDFN.

12/23/91 Had 100 psi on tbg @ start of day. Unseat pkr. TIH to 4045' & knock balls off perfs. Reset pkr @ 3800'. Start swab fluid @ 900'. Made 6 runs. Fluid @ 2200', scattered. Recover 25 bbls fluid. Last sample 60% oil. RU Western to frac. Test lines to 4000 psi. Psi up on annulus to 1000 psi. Hold safety mtg. Frac Grayburg w/30,000 gals Minimax 1830 & 47,000# 20/40 sand & 15,000# 20/40 resin coated sand. Frac @ 16 BPM @ 22-2400 psi. Forced SI rate 8 BPM @ 1300 psi. ISIP - 1000 psi, 5 min - 900 psi, 15 min - 900 psi. Close well in. SDFN.

1# sand	16 BPM @ 2400-2200 psi	Min inj psi - 1900 psi
2# sand	16 BPM @ 2200 psi	Avg inj - 2000 psi
3# sand	16 BPM @ 2000 psi	Max inj - 2400 psi
4# sand	16 BPM @ 1900 psi	
5# sand	16 BPM @ 2100 psi	

12/24/91 SITP 0=. Rig Swab. RIH. BFL 400' FS. Swab 8 hr. Rec 178 Bbls. 100% load wtr. Secure well. SDF holidays.

12/25/91 Shut in for Holidays.

12/26/91 Shut in for Holidays.

12/27/91 SITP 0=. Rig Swab. BFL 950' FS. First run - trace of oil. Swab 9 hrs. Rec 191 Bbls load wtr w/trace of oil. FFL 1,800' FS. SDFN

12/28/91 Had 0 psi on tbg @ start of day. Made 1 swab run. Fluid @ 1100'. Recov'd wtr w/trace of oil. Unseat pkr, TIN & tag fill @ 4105'. RU kill truck. C/O sand to 4147'. Circ hole clean. POOH w/2 7/8" work string laying down. Change out rams, GIH w/16' perf mud anchor, SN, 8 jts 2 3/8" J55, 4.70# tbg, tbg anchor & 123 more jts 2 3/8", J-55, 4.7# tbg. MA @ 4086', SN @ 4069' & tbg anchor @ 3817' (131 total jts tbg). ND BOP, set tbg anchor w/15 points. NU type E National wellhead. Close well in. SDFN.

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12/29/91 Reset tbg anchor. RU & run 2" x 1 1/4" x 14' pump w/1" x 10' gas anchor, 161-3/4" rods, 1-6' x 3/4" rod sub, 1 1/4" x 22' polish rod & 1 1/4" x 1 1/2" x 16' pk liner. Hang well on. Space out pump, rig down & release rig.
FINAL REPORT.

12/30/91 Well pumped 0 BO & 75 BW in 18 hr test.

12/31/91 Well pumped 0 BO & 102 BW in 24 hr test.

01/01/92 Well pumped 0 BO & 104 BW in 24 hr test.

01/02/92 Well pumped 0 BO & 103 BW in 24 hr test.

01/03/92 Well pumped 0 BO & 95 BW in 23 1/2 hrs.

01/04/92 Well pumped 108 BW in 24 hrs.

01/05/92 MIRU. Pool Well Service. POOH w/rods & pump. Rel TAC. NU BOP. POOH w/2 3/8" tbg & TAC. RIH w/2 3/8" Baker Model R pkr. SN on 2 3/8" tbg. Unable to set pkr from 3697' down to 3900'. Pull pkr to 3567'. Set pkr. Rig to swab. BFL 1800'. Swab 3 hrs. Rec 41 bbls 15% oil cut. FFL 2200'.

01/06/92 SITP - 0#. Swab Grayburg perfs 9 hrs. BFL 1700'. Rec 150 bbls fluid 10% oil cut. FFL 2200'. SDFN.

01/07/92 SITP 50#. Bled off psig. Ran swab. BFL 1700' FS. 1st run 100% oil. Swab 8 hrs. Rec 110 bbls fluid. Last run 10% oil cut. FFL 2000' FS. SDFN.

01/08/92 SITP 50#. Bled off psig. POOH w/111 jts 2 3/8" tbg, SN & pkr. RIH w/2 3/8" slotted mud anchor (16) 2 3/8" x 1 3/4" x 12' x 14' x 16' working barrel. (18) 10 jts 2 3/8" tbg. (309) 2 3/8" x 5 1/2" TAC. 121 jts 2 3/8" tbg (3747). ND BOP. Set TAC. NU wellhead. Drop SV. RIH w/1 3/4" x 4' plunger, 1-3/4" x 2' sub, 161-3/4" Norris 97 rods, 1-3/4" x 2' rod sub, 1 1/4" x 22' polish rod. Clamp rods off 10" off btm. RD. Release PU.
FINAL REPORT.

01/21/92 Hook up well to 3-phase separator @ Stetco battery. Well pumped 17 BO & 30 BW in 6 hrs w/a gas rate of 86 MCFPD.
NOTE: Separator pressure 85 psi to dump water to waterflood.

01/22/92 Well pumped 72 BO, 196 BW & 55 MCFPD in 19 hrs. TP & CP - 90 psi. Hooked water line to water supply header. Reduce separator pressure to 60 psi.

01/23/92 Well pumped 70 BO, 200 BW & 108 MCFPD in 24 hrs.

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01/24/92 Well pumped 100 BO & 174 BW in 24 hrs. Turned well back through test separator.

01/25/92 Well quit pumping. MIRU X-Pert PU. Change out wellhead from Nat'l type E to 8-5/8 8rd x 6" 900 adapter. Reset tac. Install 6" 900 tbg hanger flange. Respace rods & hang well on. Load & test to 500 psi. Check pump action. Place well on test. NOTE: Wellhead was leaking.

01/26/92 Well pumped 72 BO & 140 BW in 17 hrs. Gas not measured.

01/27/92 Well pumped 110 BO & 168 BW in 24 hrs.

01/28/92 Well pumped 141 BO & 162 BW in 24 hrs.

01/29/92 Well pumped 118 BO & 140 BW in 24 hrs.

01/30/92 Well pumped 107 BO, 130 BW & 46 MCFPD in 24 hrs.

01/31/92 Well pumped 95 BO, 97 BW & 41 MCFPD in 24 hrs. TP & CP 75 psi.