

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.

LC 064391 B

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
Indian Hills Unit

8. Well Name and No.

Indian Hills Unit No. 30

9. API Well No.

30-015-31655

10. Field and Pool, or Exploratory Area

**Indian Basin Morrow Gas Pool
(78960)**

11. County or Parish, State

Eddy NM

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Marathon Oil Company

3a. Address

P.O. Box 3487 Houston, TX 77253-3487

3b. Phone No. (include area code)

713-296-2096

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

SHL UL"L", 1494' FSL & 688' FWL Sec 20, T-21-S, R-24-E

PBTD UL"F", 1341' FNL & 1687' FWL Sec 20, T-21-S, R-24-E

BHL UL"C", 1115' FNL & 1760' FWL Sec 20, T-21-S, R-24-E

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

TYPE OF SUBMISSION

☐ Notice of Intent

☒ Subsequent Report

☐ Final Abandonment Notice

TYPE OF ACTION

☐ Acidize

☐ Alter Casing

☐ Casing Repair

☐ Change Plans

☐ Convert to Injection

☐ Deepen

☐ Fracture Treat

☐ New Construction

☐ Plug and Abandon

☐ Plug Back

☐ Production (Start/Resume)

☐ Reclamation

☒ Recomplete

☐ Temporarily Abandon

☐ Water Disposal

☐ Water Shut-Off

☐ Well Integrity

☐ Other

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

Marathon Oil Company has completed operations to complete the Indian Hills Unit No. 30 to the Mississippian formation. Please see attachment for details of well work performed. The well is shut in at this time.

ACCEPTED FOR RECORD

JAN 26 2006

ALEXIS C. SWOBODA
PETROLEUM ENGINEER

Accepted for record - NMOCD

RECEIVED

APR 21 2006

OCU-ARTESIA

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Charles E. Kendrix

Title

Engineering Technician

Date **01/16/2006**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, 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.

Indian Hills Unit No. 30

Re-complete to Mississippian Formation

- 12/09/2005 MIRU PU. Take delivery of 3 1/2" work string. Nipple up BOP. RIH w/ 3 1/2" tubing.
- 12/10/2005 Noted that wellhead was rated for 3000 psi. Order new wellhead Cont. in hole w/ workstring. Left workstring swinging SI waiting on wellhead.
- 12/13/2005 Nipple down 13 3/8" 3M X 11" 3M "B" spool. NU 13 3/8" 3MX11" 5M "B" spool w/ 9 5/8" 3M seal. Tested seal to 3,000 psi. NU Weatherford 11" 5MX 7 1/16" 5M cross over spool. Installed 7 1/16" 5M frac valve on cross-over flange. RIH w/ Halliburton easy drill CIPB set @ 10556' RU 7" 5000# full lubricator. Test lubricator to 5000 psi. RIH w/ wireline gun w/ gamma tool, Perforated using 2JSPF w/ SP Predator Hollow Carrier, w/ 39 gram Pred 4539 charges in 120° phasing, four intervals in three gun runs as follows:
- | Interval | Ft. | Shots |
|-----------------|-----|----------|
| 10,406'-10,416' | 10' | 20 |
| 10,514'-10,520' | 6' | 12 |
| 10,520'-10,540' | 20' | 40 |
| Totals | 26' | 72 shots |
- Fluid level 25' from surface, 0 pressure after perforating. ND cross over spool and frac valve. NU 11" 5M to 3M change over flange and 11" 3M BOPS w/ 3 1/2" pipe rams. PU RBP & RTTS packer RU hydrotesters- RIH hydrotesting tubing to 9000 psi below slips. Set RPB @ 10,537'. PUH above top perfs SI.
- 12/14/2005 Cont in hole hydro-testing 3 1/2" tubing. Set RBP @ 10,537'. PUH set RTTS packer @ 10,540'. Decided to pickle tubing. Unset RTTS. Pumped 1000 gals pickle acid down tubing, and reversed out w/ 190 bbls treated water. Shut Down
- 12/15/2005 Rigged up Halliburton frac iron. Test lines to 9000 psi. Test backside Relief valve to 1020 psi. Used reversed unit to hold 500 psi on casing. Pump first stage frac slick water pre-flush pad- formation broke at 4600 psi @ 15 BPM. Backside relief valve giving up pressure @ 2700 psi. Upper perfs broke. PUH w/ RTTS packer to frac all three sets of perfs in one stage. Pumped 5000 gals of pre-flush followed by 15,000 gals of 15 % ZCA followed by 15,000 gals CCA sour @ 20 BPM average. Flushed w/ 7500 gallons treated water. Avg treating pressure 5800 psi w/ max pressure of 8261 psi. Shut down Halliburton trucks monitored pressure- stabilized at 3250 psi. Moved packer up hole to set slips- packer by pass opened released pressure to backside. Set slips and vented pressure.

Tied well to flow back equipment w/ Well Testers Inc. Initial pressure @ 2080 psi @ 14:30. Pressure is equalized on tubing and casing. Opened well to tank @ 21/64" choke. Flowing tubing pressure was down to 275 psi @ 18:00 hrs. Well flowing at approximately 32 bbl wtr/ hr w/ no significant gas blow. Total fluid flowed back 160 bbls. Cont testing.

- 12/16/2006 Well died @ 02:00 am. RIH t/ RPB could not latch on to RPB soft tag. POOH laying down 3 1/2" work string. Laid down RTTS packer. Packer was missing rubber elements. RIH w/ 10 stands for kill string. Closed and locked down pipe rams. SD for week end.
- 12/19/2005 Shut in casing pressure 475 psi. Blew down tubing in 58 minutes, did not have to kill well. Laid down 20 joint kill string. Took delivery of 342 joints & 4 -- 4' subs of 2 7/8" tbg. RIH w/ RBP overshot, rig up reverse unit to tubing begin washing down. Caught fluid w/ 6.5 bbls in hole. Estimated 1100 feet to fluid. Latched onto RBP and pulled up 448'. Left tubing above perms. SI.
- 12/20/2005 Shut in casing pressure, 25 psi bled down in 20 minutes. Cont. out of hole w/ tbg @ RBP. LD RBP. PU RIH w/ wireline re-entry guide, 2 7/8" XN profile nipple, , 1 jt 2 7/8" tbg, 7" PLS packer, 2 7/8" on/off tool w/ 2.313 X- profile nipple, and 328 jts 2 7/8" L-80 tubing.. Set PLS packer @ 10,253'. ND BOP, installed 2 7/8" bowl hanger. NU wellhead. Tested wellhead to 5000 psi.
- 12/21/2005 RD PU. RU swab unit. Made 7 swab runs and well unloaded. Tubing pressure varied from 100 to 350 psi. Swabbed and flowed 67 bbls water. Tubing pressure and flow rate tapered off. SI
- 12/22/2005 SI tubing press 1380 psi. Opened well and blew down to 0 psi. Well unloaded 9 bbls water and died. Swabbed and flowed an additional 21 bbl water. SI for weekend.
- 12/28/2005 Six day SI TP was 3100 psi. Well blew down to loop line to 100 psi in 1hr & 45 min. Opened to blow down tank and blew down to 0 psi, let blow to tank for 4 hrs. No fluid to surface. Put back to loop line for flow rate. Well flowing 100 mcf @ 80 psi. Flow to loop line 3 1/2 hrs SI.
- 12/29/2005 16 hr SI press 1400 psi. Drop 6 soap sticks and let fall 30 minutes. Open well to loop line and blow tubing down to 100 psi in 40 minutes, swab to tank and blow to 0 in 10 minutes. Let blow to tank f/ 4 hrs unloaded 5 bbls water. SI
- 12/30/2005 16 hr SI = 1400 psi. Opened well to tank. Blew down in 30 minute. Well stayed dead for 25 minutes and started unloading. Unloaded slugs for 25

min. tubing press climbing to 250 psi w/o choke, after 25 min. tubing press started to fall back. Let flow to tank another 30 minutes unloaded 5 bbls water. SI @ 10:15 am. Opened tank at 1:10 pm w/ 510 psi TP. Blew down to 0 in 10 minutes. SI for weekend.

01/05/2006 RU Halliburton nitrogen. Test pack off to 3000 psi. RIH w/ Coil tubing pumping 600 cfm N2 did not encounter significant fluid to 10,271'. Flowed back only 1.5 bbl water. Left coil on bottom flowed back well 1 hr. FTP = 89# avg sales rate 110 mcf/d @ 95 FTP. Sent test gas to IBGP. Continued to try to flow well to tank and portacheck vessel for next two days. Well is currently shut in for bottom hole build up, and decision as to changing pools.