

Form 3160-5  
(November 1994)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
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.

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires November 30 2000

5. Lease Serial No.  
**TRACT 251, CONTRACT 154**  
6. If Indian, Allottee or Tribe Name  
**JICARILLA APACHE**

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

8. Well Name and No.  
**JICARILLA APACHE #13 E**

9. API Well No.  
**30-039-22446**

10. Field and Pool, or Exploratory Area  
**BLANCO MESA VERDE**

11. County or Parish, State  
**RIO ARRIBA 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 552 Midland, TX 79702**

3b. Phone No. (include area code)  
**915-687-8356**

4. Location of Well (Fontage, Sec., T., R., M., or Survey Description)  
**UL "E", SEC. 33, T-26-N, R-5-W  
1850' FNL & 930' FWL**

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input checked="" type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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 recomplete 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 recompletion 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.)

**PROPOSE TO ADD PERFS IN THE BLANCO MESA VERDE POOL 4916' - 5296'. ISOLATE LOWER GRANEROS & DAKOTA PERFS AND PRODUCTION TEST THE MESA VERDE.**

SEE ATTACHED WORKOVER PROCEDURE FOR DETAIL.  
AFMSS

Adjud	<i>Amy</i>
Engr	<i>[Signature]</i>
Gecl	
Sur	
Appvl	

*\* Approved For 30 day flow test.*

**RECEIVED**  
**OCT 22 1999**  
**OIL CON DIV**

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed) **R. J. LONGMIRE** *Walter Luman*

Title **DRILLING SUPERINTENDENT**

Date **10/19/99**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title *Perro E.*

Date **10/19/99**

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 **ABQ Field Office**

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.

(Instructions on reverse)

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*✓*

**WORKOVER PROCEDURE****Jicarilla Apache #13E****Jicarilla Field**

1850' FNL &amp; 930' FWL

Section 33, T-26-N, R-5-W

Rio Arriba County, New Mexico

Date: October 13, 1999Purpose: Add Menefec PayGWI: 100%NRI: 87.5%AFE #: 377799AFE Amount: \$125,000AFE Days: 10Elevations: KB: 6610'GL: 6598'TD: 7473'PBTD: 7310'Surface Csg: 9-5/8" 36# K-55 ST&C @ 526' cmt'd w/ 400 sks (circulated)Production Csg: 7" 20# K-55 ST&C (1054-3353'), 23# K-55 ST&C (0 to 1054' & 3353-5399'), & 29# N-80 LT&C @ 7473' cmt'd w/ 999 sks in 2 stages w/ DV tool @ 4107' (1st stage 416 sks - DNC, 2nd stage 583 sks - DNC) [Drifts: (29#) = 6.059", (23#) = 6.241" 80% Burst (20#) = 2992 psi]Tubing: 230 jts 2-3/8" 4.7# J-55 EUE 8rd thg @ 7201' w/ API SN @ 7200'Fish In Hole: Baker Retrieval "D" packer & jewelry underneath @ 7262-96'Perforations: Point Lookout: 5126', 28', 30', 32', 33', 34', 36', 38', 40', 41', 42', 44', 46', 48', 50' (15 holes)

Graneros: 7107', 11', 12', 15', 17' (5 holes)

Dakota: 7241', 42', 44', 46', 49', 51', 53', 55', 73', 85', 87', 89', 91', 95' (14 holes)

Morrison: 7353-58', 7376-84' (1 SPF) - Under Cement Retainer @ 7310'

Anticipated BHP: 800 psi in the Mesaverde  
500 psi in the DakotaComments: 1) Use 2% KCl in all workover fluids.

2) Use 3-1/2" 9.3# N-80 tubing for frac string. [Drift = 2.867" 80% Burst = 8128 psi]

**PROCEDURE**

1. Inspect location and improve if necessary. Test safety anchors to 22,500#.
2. MRU PU. ND wellhead. NU BOP w/ pipe rams for 2-3/8" thg on top & 2 valves below blind rams on bottom. Test BOP as per Drilling Department. POOH w/ 2-3/8" tubing.
3. Change pipe rams to 2-7/8". PU 2-7/8" workstring. RIH & mill/fish out Retrieval "D" packer @ 7262'. Do not spend more than two days on the attempt. Clean out well to PBTD @ ±7310'. POOH.
4. RIH w/ 5-1/2" straddle assembly & set RBP @ ±5350'. Pressure test RBP to 1500 psi. Dump 2 sacks sand on RBP. POOH & LD packer & 2-7/8" tubing.
5. RU WL: Run GR-CCL log across interval ±5350-3750'. Correlate with Dresser Atlas CNL-CDL dated 11/15/80. Perforate the Mesaverde @ 4916', 4946', 4960', 4994', 5030', 5045', 5055', 5062', 5070', 5082', 5083', 5091', 5093', 5153', 5156', 5206', 5217', 5246', 5282', & 5296' (20' - 20 shots) w/ 3-1/8" csg guns loaded 1 SPF using 12 gram charges.
6. Change pipe rams to 3-1/2". RIH w/ 5-1/2" packer on 3-1/2" tubing & set @ ±4850'. Hydrotest thg in hole to 7000 psi.
7. RU stimulation company. Breakdown Mesaverde perms 4916-5296' (35 holes) w/ 1750 gallons 15% HCl using 55 x 1.1 SG BioBalls spaced evenly to divert. Allow time for BioBalls to dissolve, then sand fracture stimulate perms as per recommendation (exact job design forthcoming) with approximately 100,000# 20/40 sand @ 60-70 BPM and 7000 psi maximum pressure. Tag all sand stages w/ radioactive isotopes. RD stimulation company.
8. Flow back load. POOH w/ packer & LD 3-1/2" tubing. Tag TD with sinker bar to check sand fill (clean out if necessary). RU slickline. Run after frac log across interval ±5350-4550'. RD slickline.
9. Change pipe rams to 2-3/8". RIH with 2-3/8" production tubing and set packer @ ±4850'. ND BOP. NU wellhead. RDMO PU.
10. Place well on production & test Mesaverde. RBP will be pulled at a later date when rate stabilized.

xc: D. W. Arnst  
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