

DHC 3/22/00

Mid-Continent Region
Production United States

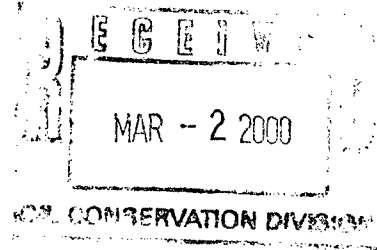


**Marathon
Oil Company**

P.O. Box 552
Midland, TX 79702-0552
Telephone 915/682-1626

February 28, 2000

Mr. David Catanach
Oil Conservation Department
2040 South Pacheco
Santa Fe, New Mexico 87501



RE: **Request for Exception to Rule 303-A
Downhole Commingling
Jicarilla Apache No. 13E
1850' FNL & 930' FWL
Unit Letter "E", Section 33, Township 26-N, Range 5-W
Chacra, Blanco Mesa Verde & Basin Dakota
Jicarilla Field
Rio Arriba County, New Mexico**

Dear Mr. Catanach:

Marathon Oil Company requests administrative approval for an exception to Rule 303-A to permit the downhole commingling of production in the above subject well from the Chacra, Blanco Mesa Verde and the Basin Dakota pools in Rio Arriba County, New Mexico. Marathon also requests a 30 day exception to Rule 303-A to permit the downhole commingling of production while awaiting for approval of this application. If this application is not approved, then the well will remain as a dual producer from the Blanco Mesa Verde and the Basin Dakota pools.

All three pools represent marginal production. The well was drilled and completed as a dual producer in the Blanco Mesa Verde and the Basin Dakota pools in 1981. The Morrison had been perforated first, but after testing wet, the Morrison perfs were isolated before moving uphole to the Basin Dakota and the Blanco Mesa Verde. In 1995, approval was granted by the New Mexico Oil Conservation Division to downhole commingle the Blanco Mesa Verde and the Basin Dakota. Plans are to add perforations in the Chacra and downhole commingle all three pools.

By downhole commingling the production from these three zones, production will be realized that could not economically justify the cost of equipment to separate the zones. Rod pumping equipment will be utilized to keep the PBHP as low as possible. Producing the well in this manner will allow complete development of the productive capacity of the well, prevent crossflow and extend the economic life of both completions, thereby preventing waste.

Enclosed is pertinent data to support this application as outlined in Rule 303-A. If additional information is necessary, please contact me at (915) 687-8268.

Sincerely,

Tim L. Chase
Advanced Engineer Technician

39 MCF - Abund
134 - New Mexico
1/10/99
1/10/99
10/99
10/99

66 MCF - Dakota
as per
Tim Chase
3/27/00

REQUEST FOR EXCEPTION TO RULE 303-A

Jicarilla Apache No. 13, Jicarilla Field

A: Operator

Marathon Oil Company
P.O. Box 552, Midland, Texas 79702-0552

B: Lease Name and Well Number

Jicarilla Apache No. 13E
1850' FNL & 930' FWL, Unit Letter "E", Section 33, Township 26-N, Range 5-W
Jicarilla Field, Rio Arriba County, New Mexico
Chacra, Blanco Mesa Verde, Basin Dakota

C: Plats and Offset Operators

Plat attached. Offset operator list not attached since offset operators no longer need to be notified.

D: C-116's

Attached.

E: Production Decline Curves

Attached

F: Estimated Current Bottomhole Pressures (PSI)

Chacra = 325, Blanco Mesa Verde = 350, Basin Dakota = 375

G: Product Characteristics

Previous commingling of these zones by Marathon and other operators in this area have shown that the produced fluids are compatible and commingling will not cause formation damage

H: Value

Marathon receives the same price for product from these zones, so value won't be adversely affected

I: Production Allocation

<u>POOL</u>	<u>BOPD</u>	<u>MCFPD</u>	<u>BWPD</u>	<u>Estimation Methods</u>
Chacra	0	100	0	Post-Workover Estimate
Blanco Mesa Verde	3	187 ¹³⁴	2	Current Production
Basin Dakota	1	66	0	Current Production
Total	4	347 ³⁰⁰	2	

Allocated %

	<u>Oil %</u>	<u>Gas %</u>	<u>Water %</u>	<u>OIL %</u>	<u>GAS %</u>
Chacra	0.00	28.82	0.00	0%	33%
Blanco Mesa Verde	75.00	52.16	100.00	75%	45%
Basin Dakota	25.00	19.02	0.00	25%	22%
Total	100.00	100.00	100.00		

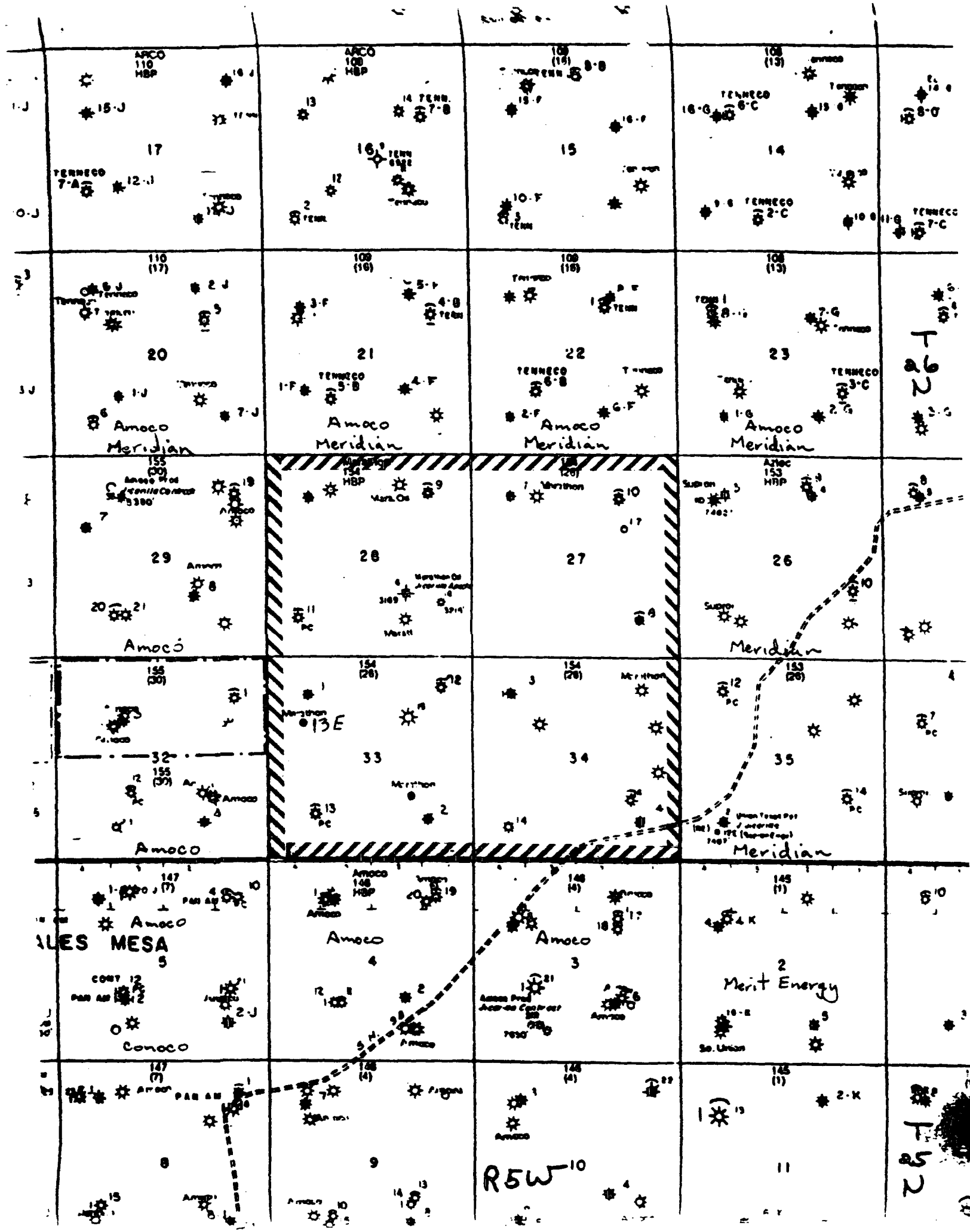
J: Ownership

Ownership of all zones is common and correlative rights will not be compromised

K: Offset Operator Notification

Offset operators are not provided with a copy of this application since they no longer need to be

247



Submit 2 copies to Appropriate District Office.

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

811 S. 1st Street, Artesia, NM 88210-2834

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 Pacheco St.
Santa Fe, NM 87505

Form C-116
Revised 1/1/89

GAS - OIL RATIO TEST

Operator Marathon Oil Company		Pool Blanco Mesa Verde		County Rio Arriba									
Address P.O. Box 2490 Hobbs, NM 88240		TYPE OF TEST - (X)		Completion <input checked="" type="checkbox"/> Special <input type="checkbox"/>									
LEASE NAME Jicarilla Apache	WELL NO. 13E	LOCATION			DATE OF TEST 12/21/99	CHOKE SIZE 5	TBG. PRESS. 53	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS 24	PROD. DURING TEST			GAS-OIL RATIO CU.FT/BBL 60.334
		U E	S 33	T 26N						R 5W	WATER BBL'S 2	GRAV. OIL	

Instructions:

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60°F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

See Rule 301, Rule 1116 & appropriate pool rules.)

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

Kelly Cook
Signature

Printed name and title

Kelly Cook Records Processor

Date

December 28, 1999

Telephone No.
505/393-7106

Submit 2 copies to Appropriate
District Office.
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240
DISTRICT II
811 S. 1st Street, Artesia, NM 88210-2834
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-116
Revised 1/1/89

OIL CONSERVATION DIVISION

2040 Pacheco St.
Santa Fe, NM 87505

GAS - OIL RATIO TEST

Operator Marathon Oil Company		Pool Basin Dakota		County Rio Arriba										
Address P.O. Box 552 Midland, TX 79702		TYPE OF TEST - (X) <input checked="" type="checkbox"/> Scheduled <input type="checkbox"/> Completion		Special <input checked="" type="checkbox"/> X										
LEASE NAME Jicarilla Apache	WELL NO. 13E	LOCATION U S T R E 33 26N 5W			DATE OF TEST 11/19/99	SP. GRAV. F	CHOKE SIZE 35	TBG. PRESS. 35	DAILY ALLOW-ABLE <input type="checkbox"/>	LENGTH OF TEST HOURS 24	PROD. DURING TEST			GAS-OIL RATIO CU.FT/BBL N/A
		WATER BBL.S. 0	GRAV. OIL 39	OIL BBL.S. 1							GAS M.C.F. 66			

Instructions:

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60 F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

Tim L. Chase

Signature

Tim L. Chase Advanced Engineer Technician
Printed name and title

2/9/00
Date

(915) 687-8268
Telephone No.

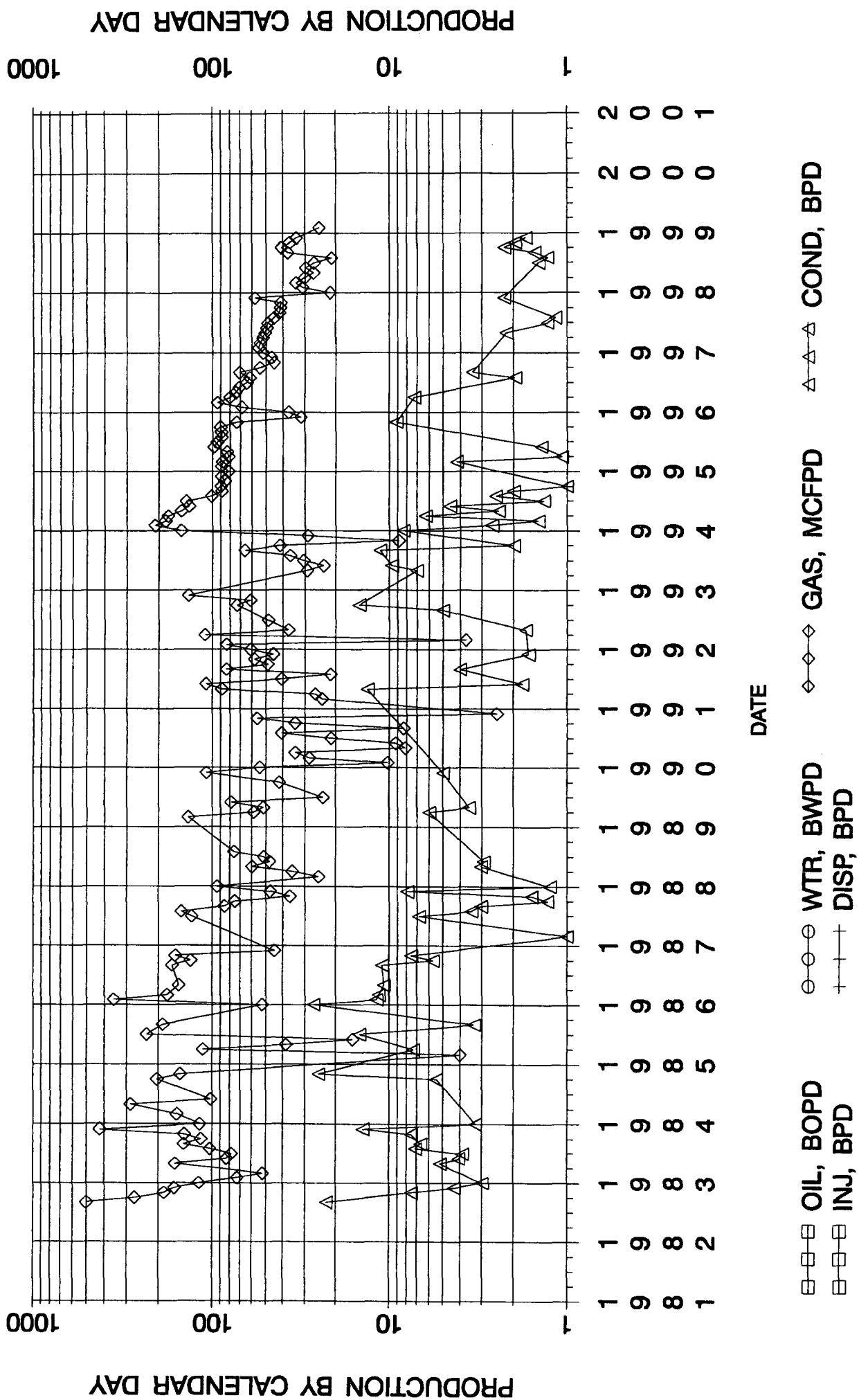
(See Rule 301, Rule 1116 & appropriate pool rules.)

Midland Operations

Allocated Production Data

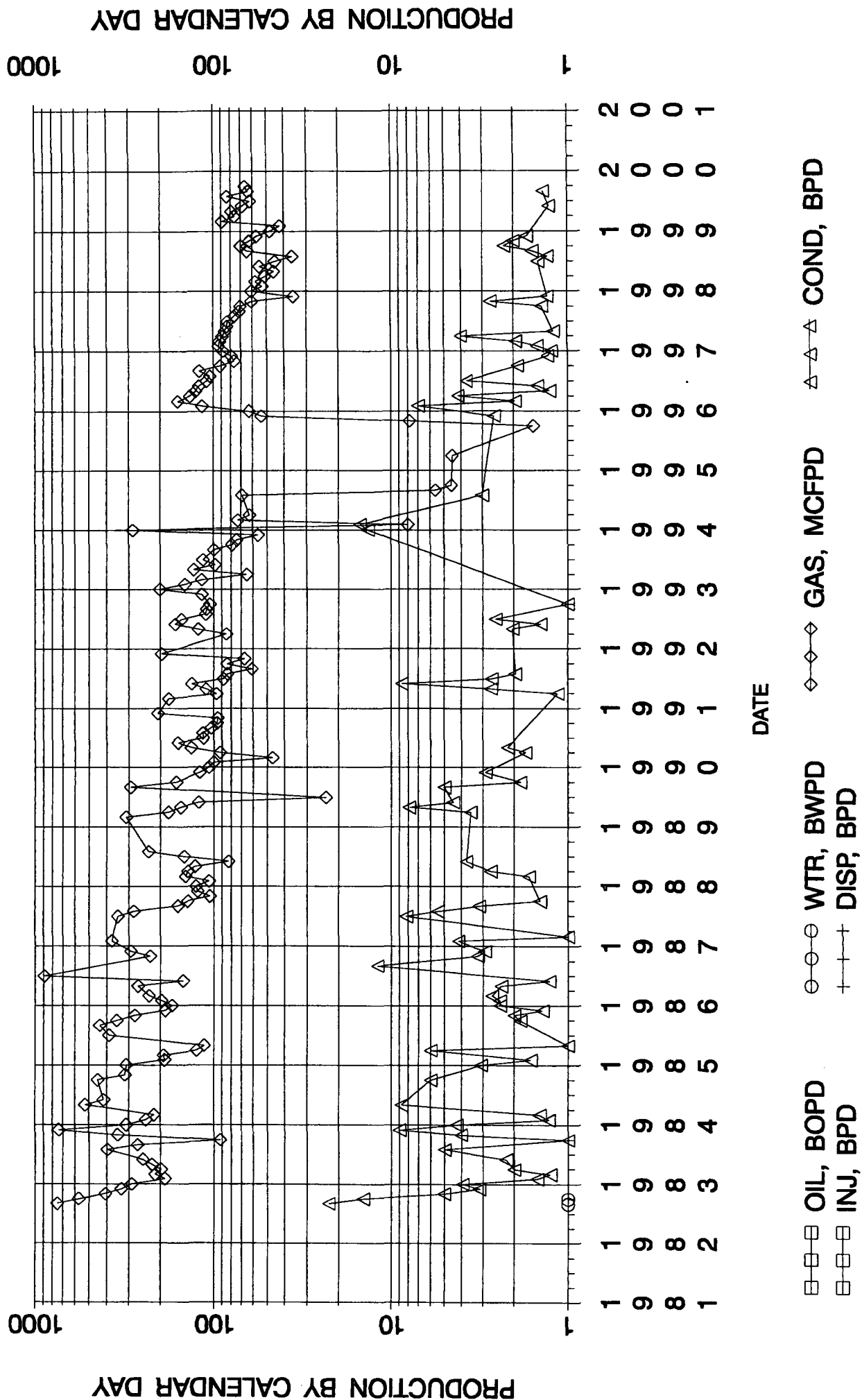
BLANCO MESA VERDE

JICARILLA 13E



Allocated Production Data

JICARILLA 13E



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

WRF

Form C-107
Revised 10-8-78

All distances must be from the outer boundaries of the Section.

Operator MARATHON OIL COMPANY			Lease JICARILLA APACHE		Well No. 13E
Unit Letter E	Section 33	Township 26N	Range 5W	County Rio Arriba	
Actual Footage Location of Well: 1850 feet from the North line and 930 feet from the West line					
Ground Level Elev. 6598	Producing Formation Point Lookout		Pool Blanco Mesaverde	Dedicated Acreage: 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation N/A

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

BLANCO MESAVERDE CERTIFICATION 11-16-81. DALE T. CADDY

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

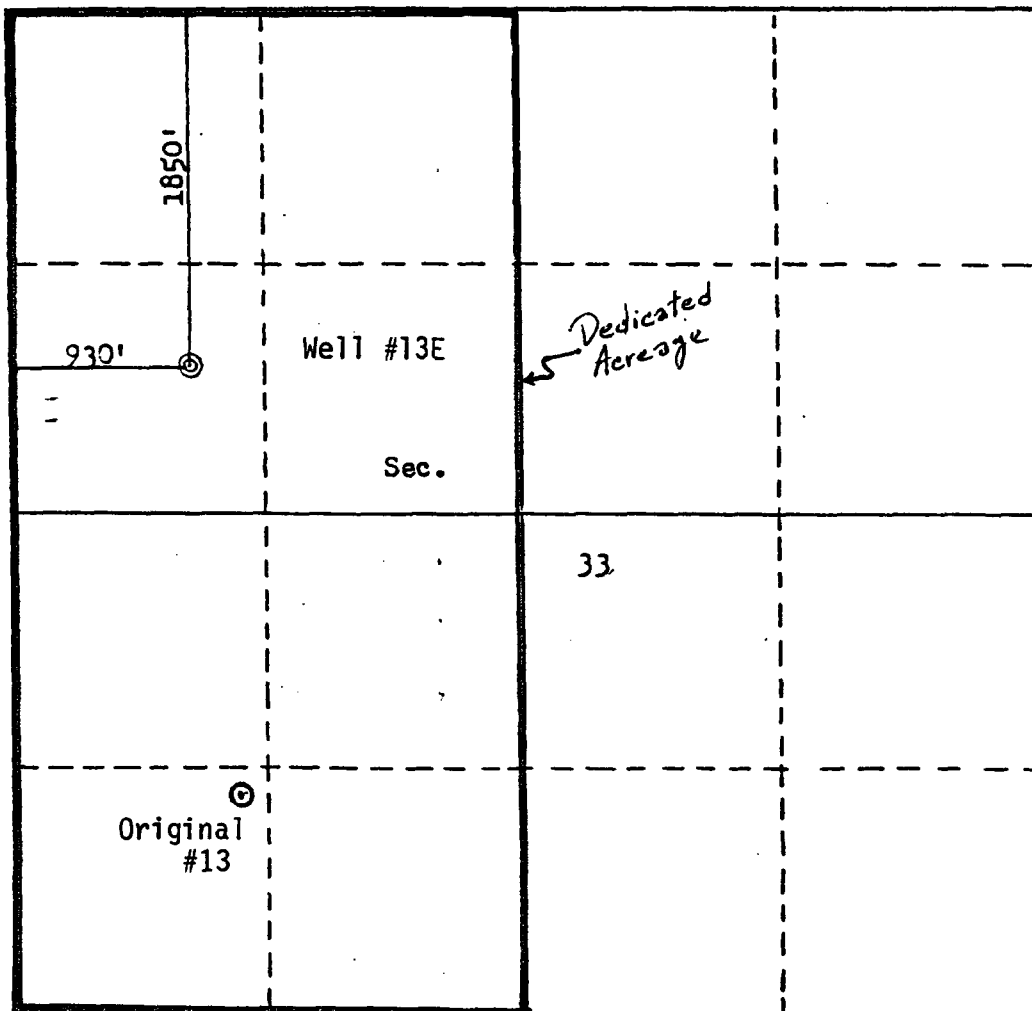
Name
Dale T. Caddy
Position
District Operations Manager

Company
Marathon Oil Company

Date
April 15, 1980

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
March 20, 1980
Registered Professional Engineer and/or Land Surveyor No.
Fred H. Karr Jr.



District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 S. 1st Street, Artesia, NM 88210-2834
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-20006	² Pool Code	³ Pool Name CHACRA
⁴ Property Code 6414	⁵ Property Name Jicarilla Apache	⁶ Well Number 13E
⁷ OGRID No. 14021	⁸ Operator Name Marathon Oil Company	⁹ Elevation (GL) 6598'

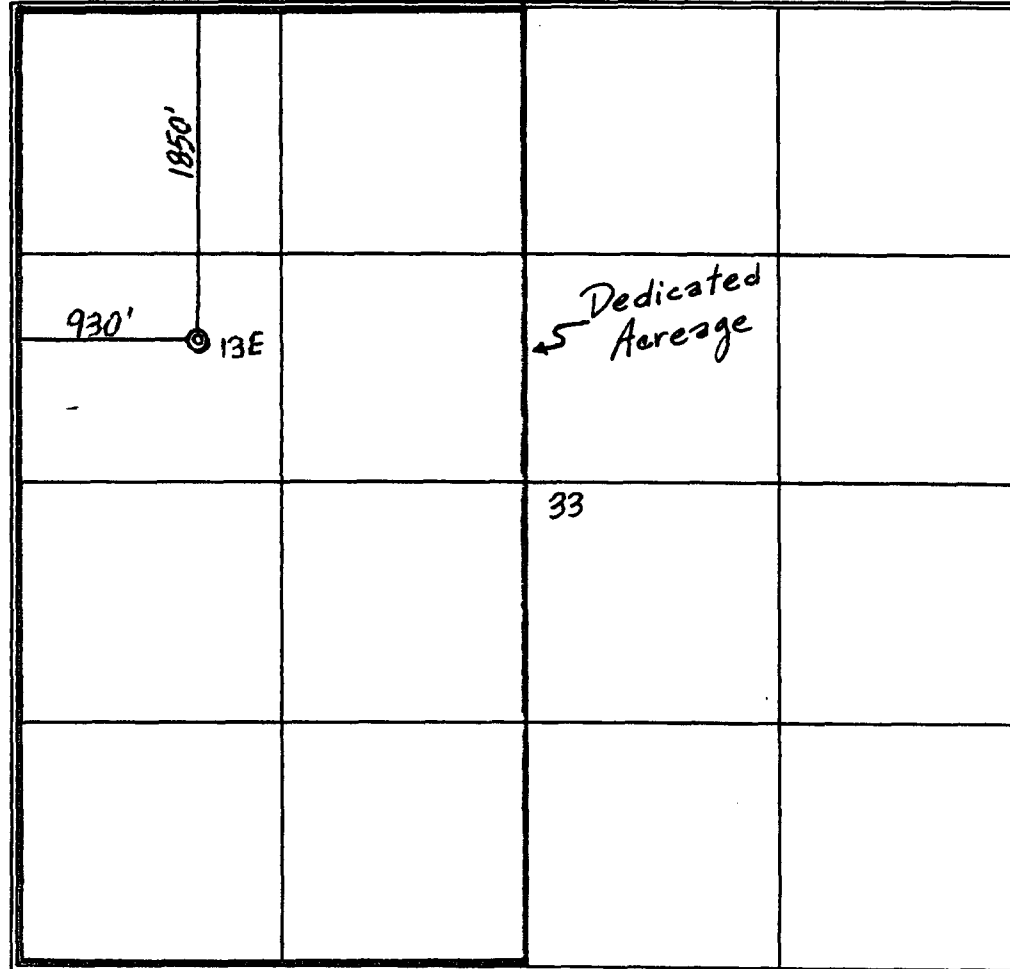

¹⁰ Surface Location

UL or lot no. E	Section 33	Township 26N	Range 5W	Lot. Idn	Feet from the 1850	North/South Line North	Feet from the 930	East/West line West	County Rio Arriba
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON--STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature Tim L. Chase Printed Name Advanced Engineer Technician Title February 29, 2000 Date
	¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey Signature and Seal of Professional Surveyer: Certificate Number

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-107
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

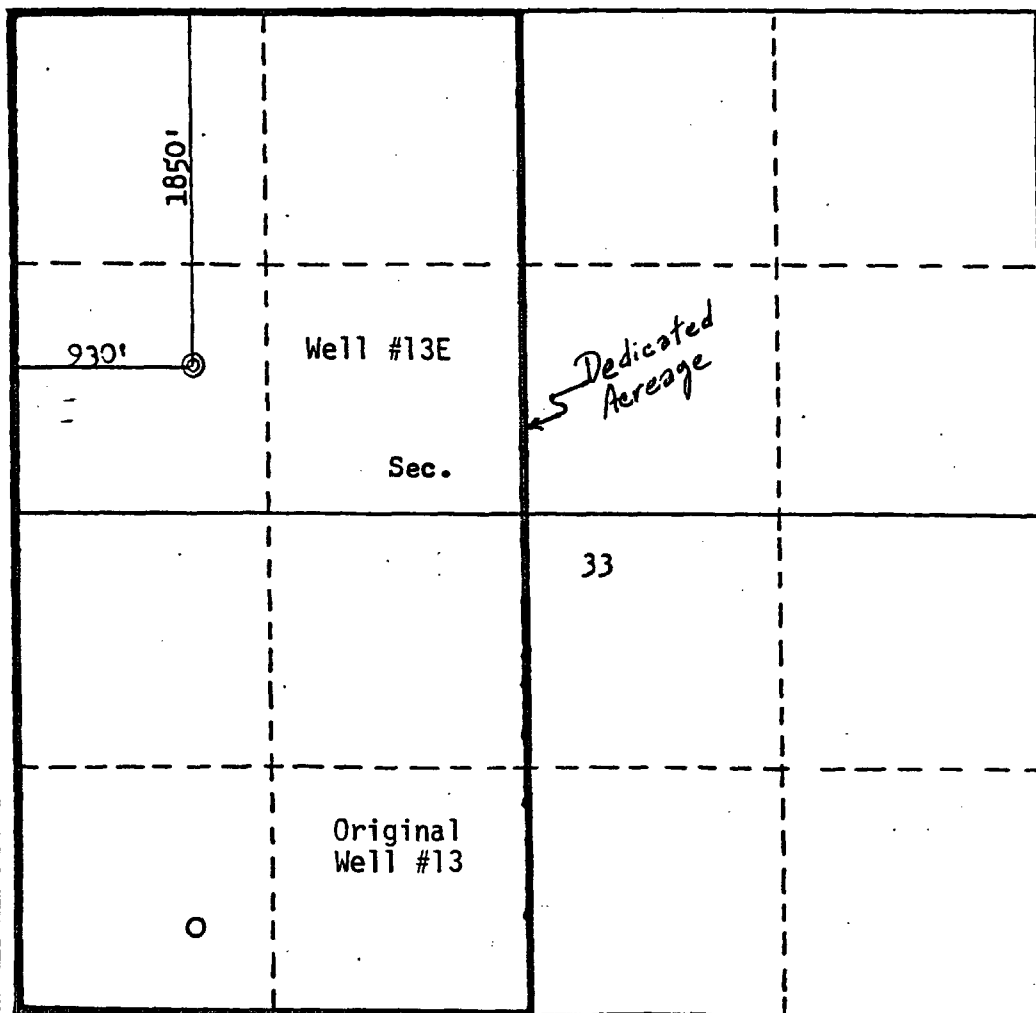
Operator MARATHON OIL COMPANY		Lease JICARILLA APACHE		Well No. 13-E
Unit Letter E	Section 33	Township 26N	Range 5W	County Rio Arriba
Actual Footage Location of Wells: 1850 feet from the North line and 930 feet from the West line				
Ground Level Elev. 6598	Producing Formation Dakota	Pool Basin Dakota	Dedicated Acreage 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
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☐ Yes ☐ No If answer is "yes," type of consolidation N/A

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name

Dale T. Caddy *Dale Caddy*

Position

District Operations Manager

Company

Marathon Oil Company

Date

April 15, 1980

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

March 20, 1980

Registered Professional Engineer
and/or Land Surveyor No.*Fred E. Kott Jr.*
Fred E. Kott Jr.

EXHIBIT "B" - CASE NO. 11353, ORDER NO. R-10470-A

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

FORM C-107-A
New 3-12-96

DISTRICT II
911 S. 1st, Artesia, NM 86210

OIL CONSERVATION DIVISION
2040 S. Pacheco, Santa Fe, NM 87505-6429

APPROVAL PROCESS:
____ Administrative ____ Hearing

DISTRICT III
1000 Rio Brazos, Aztec, NM 87410

**APPLICATION FOR
DOWNHOLE COMMINGLING**

EXISTING WELLBORE
☒ Yes ____ No

Marathon Oil Company **P.O. Box 552** **Midland, Tx 79702**

Jicarilla **13E** **Sec 33, T-26N, R-5W, UL "M"** **Rio Arriba**

LEASE **WELL NO.** **SECTION, TOWNSHIP, RANGE, UNITLETTER** **COUNTY**
SPACING UNIT LEASE TYPES: (CHECK 1 OR MORE)
OGRID NO. 014021 **PROPERTY CODE 6414** **API NO. 30-039-22446** **Federal ☒ State ____ (and/or) Fee ____**

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zones	Lower Zone
1. Pool Name & Pool Code	Chacra	Blanco Mesa Verde	Basin Dakota
2. Top & Bottom of Pay Section (Perforations)	3950-4750'	5126-5150'	7107-7295'
3. Type of production (Oil or Gas)	N/A	Gas	Gas
4. Method of Production (Flowing or Artificial Lift)	N/A	Artificial Lift	Artificial Lift
5. Bottomhole Pressure Oil Zones-Artificial Lift (Est Current)	a. (Current) 0	a. (Current) 325	a. (Current) 350
	b. (Original) ____	b. (Original) ____	b. (Original) ____
6. Oil Gravity (API) or Gas BTU Content	37 API	38 API	39 API
7. Producing or Shut-in?	Not Yet Perforated	Producing	Producing
Production Marginal? (yes or no)	Yes	Yes	Yes
* If Shut-in, give date and o/g/w rates of last production <small>Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.</small>	Date: N/A Rates: N/A	Date: N/A Rates: N/A	Date: N/A Rates: N/A
* If producing, give date and o/g/w rates of recent test (within 60 days)	Date: N/A Rates: N/A	Date: 12/21/99 Rates: 3/181/2	Date: 11/19/99 Rates: 1/66/0
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 0% Gas: 28.82%	Oil: 75.00% Gas: 52.16%	Oil: 25.00% Gas: 19.02%

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones? ☒ Yes ____ No

If not, have all working, overriding, and royalty interests been notified by certified mail? ____ Yes ____ No

Have all offset operators been given written notice of the proposed downhole commingling? ____ Yes ☒ No (no longer necessary)

11. Will crossflow occur? ☒ Yes ____ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable? ☒ Yes ____ No (If No, attach explanation)

12. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ____ No

13. Will the value of production be decreased by commingling? ____ Yes ☒ No (If Yes, attach explanation)

14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☒ Yes ____ No

15. NMOCD Reference Cases for Rule 303(C) Exceptions: ORDER NO(S) _____

16. ATTACHMENTS:

- * C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- * Production curve for each zone for at least one year. (If not available, attach explanation.)
- * For zones with no production history, estimated production rates and supporting data.
- * Data to support allocation method or formula.
- * Notification list of all offset operators. (no longer necessary)
- * Notification list of all working, overriding, and royalty interests for uncommon interest cases.
- * Any additional statements, data, or documents required to support commingling.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE 
TYPE OR PRINT NAME TIM L. CHASE

TITLE Advanced Engineer Technician
TELEPHONE NO. (915) 687-8268

DATE 02/29/00