

DHC 4/24/00

Mid-Continent Region  
Production United States

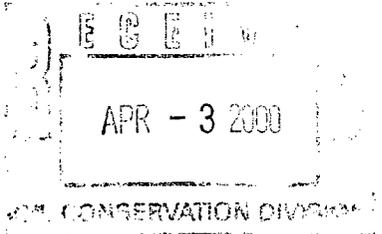


P.O. Box 552  
Midland, TX 79702-0552  
Telephone 915/682-1626

2716

March 31, 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. 10  
1100' FNL & 1550' FEL  
Unit Letter "B", Section 27, Township 26-N, Range 5-W  
South Blanco Pictured Cliffs, Basin Dakota & Tapacito Gallup  
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 South Blanco Pictured Cliffs, Basin Dakota & Tapacito Gallup 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 South Blanco Pictured Cliffs and Basin Dakota pools.

All three pools represent marginal production. The well was drilled and completed as a dual producer in the Basin Dakota and Cliffhouse (Mesa Verde) pools in late 1966. In early 1975, the Cliffhouse was re-perforated, stimulated and cement squeezed due to lack of productivity. One month later, the well was perforated in the South Blanco Pictured Cliffs and downhole commingled with the Basin Dakota. Plans are to perforate the Tapacito Gallup 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) 687-8255.

Sincerely,

Tim L. Chase  
Advanced Engineer Technician

**REQUEST FOR EXCEPTION TO RULE 303-A**  
**Jicarilla Apache No. 10, Jicarilla Field**

**A: Operator**

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

**B: Lease Name and Well Number**

Jicarilla Apache No. 10  
1100' FNL & 1550' FEL, Unit Letter "B", Section 27, Township 26-N, Range 5-W  
Jicarilla Field, Rio Arriba County, New Mexico  
South Blanco Pictured Cliffs, Basin Dakota & Tapacito Gallup

**C: Plats and Offset Operators**

Plat attached.

**D: C-116's**

Attached.

**E: Production Decline Curves**

Attached

**F: Estimated Current Bottomhole Pressures (PSI)**

South Blanco Pictured Cliffs = 300, Tapacito Gallup = 325, Basin Dakota = 350

**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>
South Blanco PC	0	44	0	Current Production
Tapacito Gallup	0	100	9	Estimated Production
Basin Dakota	0	75	0	Current Production
Total	0	219	9	

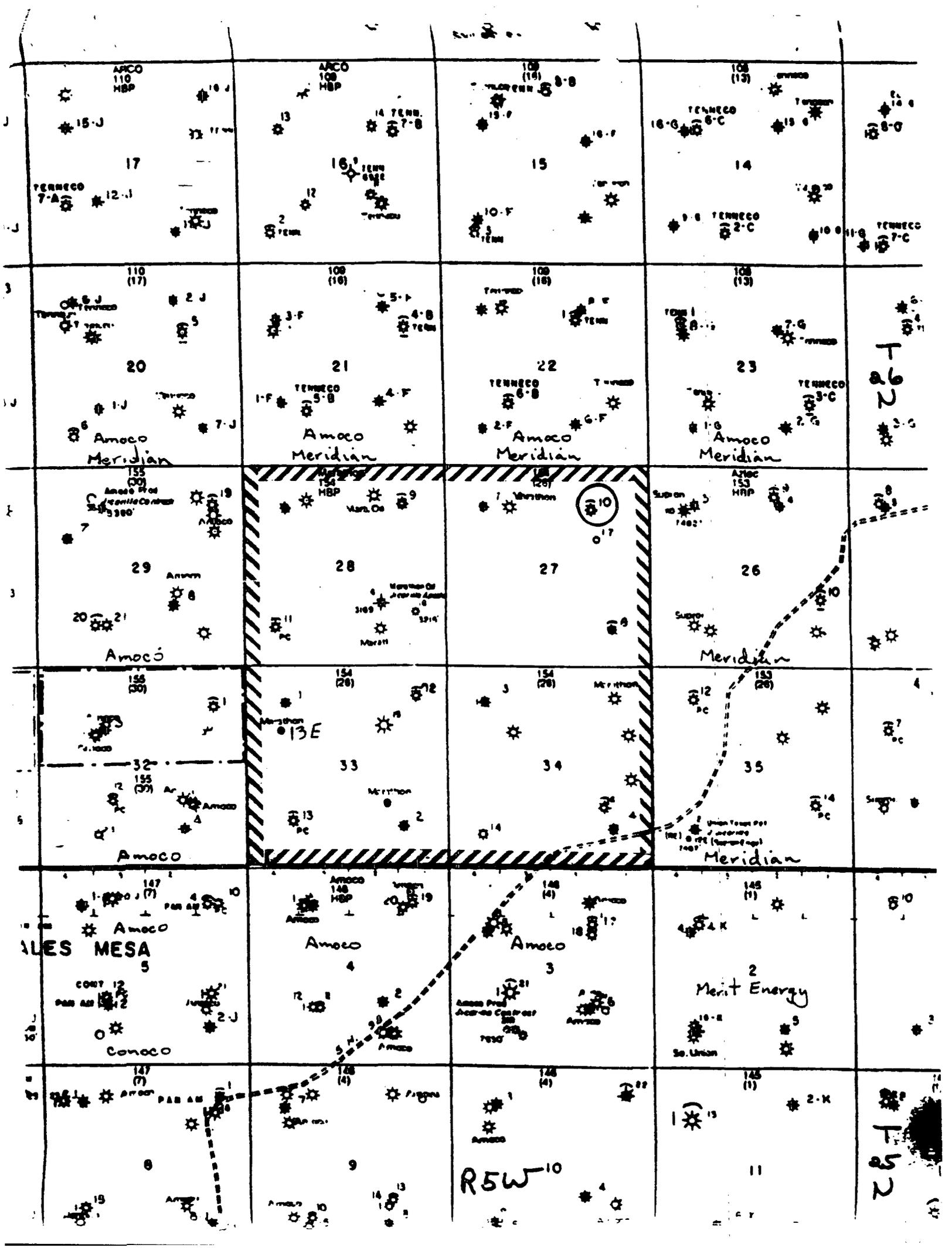
<u>Allocated %</u>	<u>Oil %</u>	<u>Gas %</u>	<u>Water %</u>
South Blanco PC	0.00	20.09	0.00
Tapacito Gallup	0.00	45.66	100.00
Basin Dakota	0.00	34.25	0.00
Total	0.00	100.00	100.00

**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



APCO  
110  
HBP

APCO  
108  
HBP

108  
(15)

108  
(13)

17

16

15

14

TENNECO  
7-A

14 TENN  
7-B

TENNECO  
6-C

110  
(17)

108  
(18)

108  
(18)

108  
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20

21

22

23

T-92

Amoco  
Meridian

Amoco  
Meridian

Amoco  
Meridian

Amoco  
Meridian

155  
(30)

154  
(29)

154  
(29)

153  
HBP

29

28

27

26

Amoco

Meridian

Meridian

155  
(30)

154  
(29)

154  
(29)

153  
(29)

32

33

34

35

Amoco

Meridian

Meridian

LES MESA

Amoco

Amoco

Merit Energy

147  
(7)

146  
(6)

146  
(6)

145  
(5)

9

10

11

R5W-10

T-92

Conoco

Amoco

Amoco

Merit Energy

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 <b>Marathon Oil Company</b>		Pool <b>South Blanco Pictured Cliffs</b>		County <b>Rio Arriba</b>										
Address <b>P.O. Box 552 Midland, TX 79702</b>		TYPE OF TEST - (X) <input type="checkbox"/> Scheduled <input type="checkbox"/> DAILY ALLOWABLE		Completion <input type="checkbox"/> Special <input checked="" type="checkbox"/> X										
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	T.B.G. PRESS.	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS-OIL RATIO CU.FT/BBL		
		U	S	T					R	WATER BBL.	GRAV. OIL		OIL BBL.	GAS M.C.F.
<b>Jicarilla Apache</b>	<b>10</b>	<b>B</b>	<b>27</b>	<b>26N</b>	<b>5W</b>	<b>2/4/00</b>	<b>F</b>	<b>66</b>	<b>24</b>	<b>0</b>	<b>N/A</b>	<b>0</b>	<b>44</b>	<b>N/A</b>

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

Signature 

Printed name and title  
**Tim L. Chase Advanced Engineer Technician**

Date  
**3/31/00**

Telephone No.  
**(915) 687-8268**

**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.)

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 <b>Marathon Oil Company</b>		Pool <b>Basin, Dakota</b>		County <b>Rio Arriba</b>									
Address <b>P.O. Box 552 Midland, TX 79702</b>		TYPE OF TEST - (X)	Scheduled <input type="checkbox"/>	Completion <input type="checkbox"/>	Special <input checked="" type="checkbox"/>								
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS-OIL RATIO CU.FT/BBL
		U	S	T						R	WATER BBL.	GRAV. OIL	
<b>Jicarilla Apache</b>	<b>10</b>	<b>B</b>	<b>27</b>	<b>26N</b>	<b>5W</b>	<b>2/4/00</b>	<b>66</b>		<b>24</b>	<b>N/A</b>	<b>0</b>	<b>75</b>	<b>N/A</b>

**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 I. Chase*

Signature

**Tim I. Chase** Advanced Engineer Technician

Printed name and title

3/31/00

Date

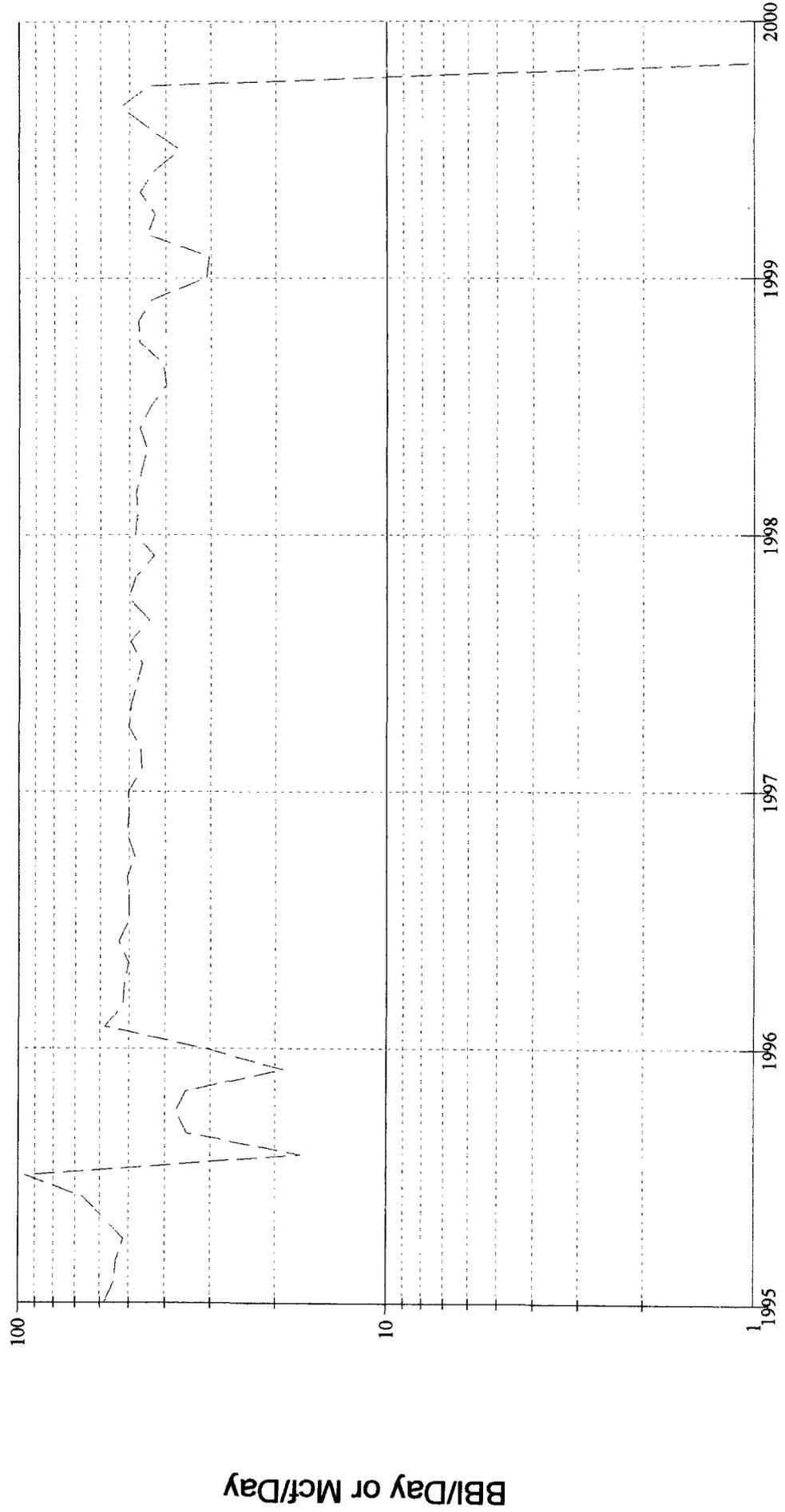
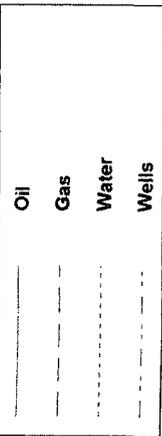
(915) 687-8268

Telephone No.

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

**SOUTH BLANCO PICTURED CLIFFS**  
**JICARILLA APACHE Well #10**  
**Operator: MARATHON OIL COMPANY**

Production Rate vs Time  
 For the Period 01/1995 to 12/1999 | API: 30039081200000



Time

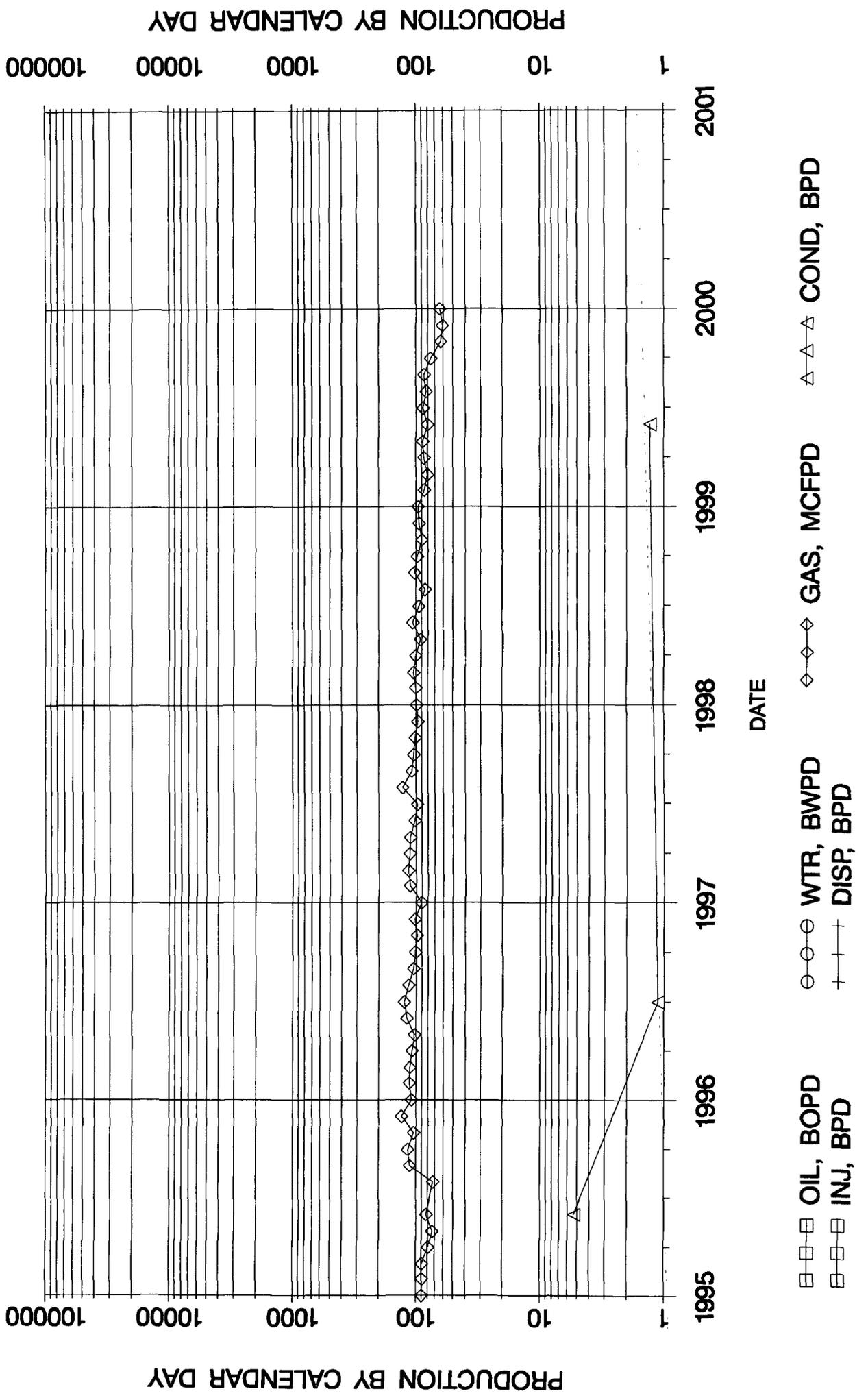
Reported Oil Production = 0 Bbls  
 Reported Gas Production = 552,987 Mcf  
 Reported Water Production = 18 Bbls

# Midland Operations

Allocated Production Data

BASIN DAKOTA

JICARILLA NO. 10



NF MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-128  
Effective 1-1-65

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

Operator <b>Marathon Oil Company</b>		Lease <b>Jicarilla Apache</b>		Well No. <b>10</b>
Unit Letter <b>B</b>	Section <b>27</b>	Township <b>26N</b>	Range <b>5W</b>	County <b>Rio Arriba</b>
Actual Footage Location of Well: <b>1100'</b> feet from the <b>North</b> line and <b>1550'</b> feet from the <b>SE/4 NW/4 NE/4</b> line				
Ground Level Elev. <b>6525'</b>	Producing Formation <b>Pictured Cliffs</b>	Pool <b>South Blanco Pictured Cliffs</b>	Dedicated Acreage: <b>160</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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 been consolidated by communitization, unitization, force-pooling, etc?

**RECEIVED**

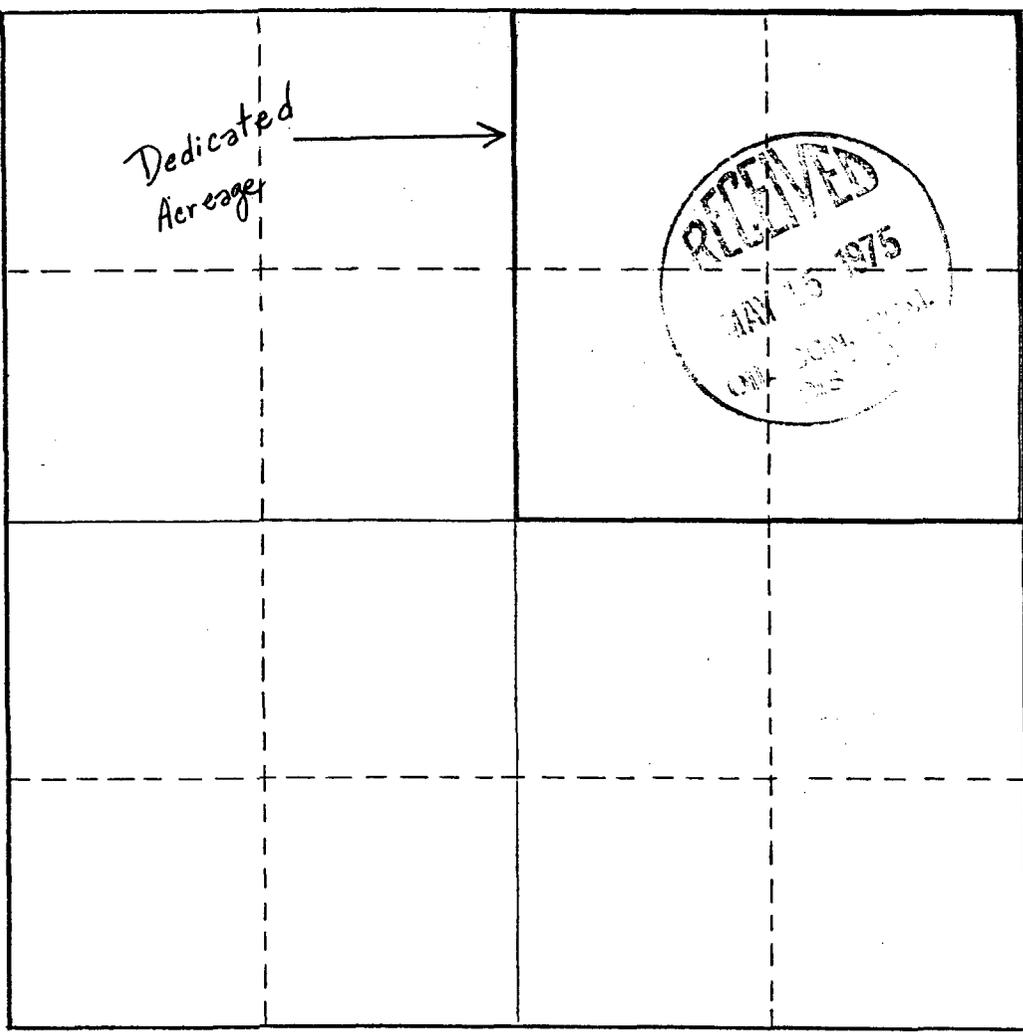
**MAY 20 1975**

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

**CASPER DISTRICT OPERATIONS**

If answer is "no," list the owners and tract descriptions which have actually been consolidated (use reverse side of this form if necessary.) Marathon Oil Company - Tract 251

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: Paul J. Johnson

Position: District Operations Manager

Company: Marathon Oil Company

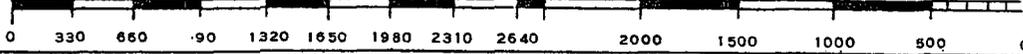
Date: 5-12-75

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: \_\_\_\_\_

Registered Professional Engineer and/or Land Surveyor: \_\_\_\_\_

Certificate No.: \_\_\_\_\_



Copies to: WCS - Div., REW - m. Fadden 5-20-75

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACERAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section

Operator <b>MARATHON OIL COMPANY</b>		Lease <b>Jicarilla Apache</b>			Well No. <b>10</b>
Unit Letter <b>B</b>	Section <b>27</b>	Township <b>26 North</b>	Range <b>5 West</b>	County <b>Rio Arriba</b>	
Actual Footage Location of Well:					
<b>1100</b> feet from the <b>North</b> line and		<b>1550</b> feet from the <b>East</b> line			
Ground Level Elev. <b>6525</b>	Producing Formation <b>Dakota</b>	Pool <b>Basin-Dakota</b>	Dedicated Acreage: <b>320</b> Acres		

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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 (X) No If answer is "yes," type of consolidation .....

If answer is "no," list the owners and tract descriptions which have actually consolidated. (Use reverse side of this form if necessary.) Marathon Oil Company - Tract 251

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

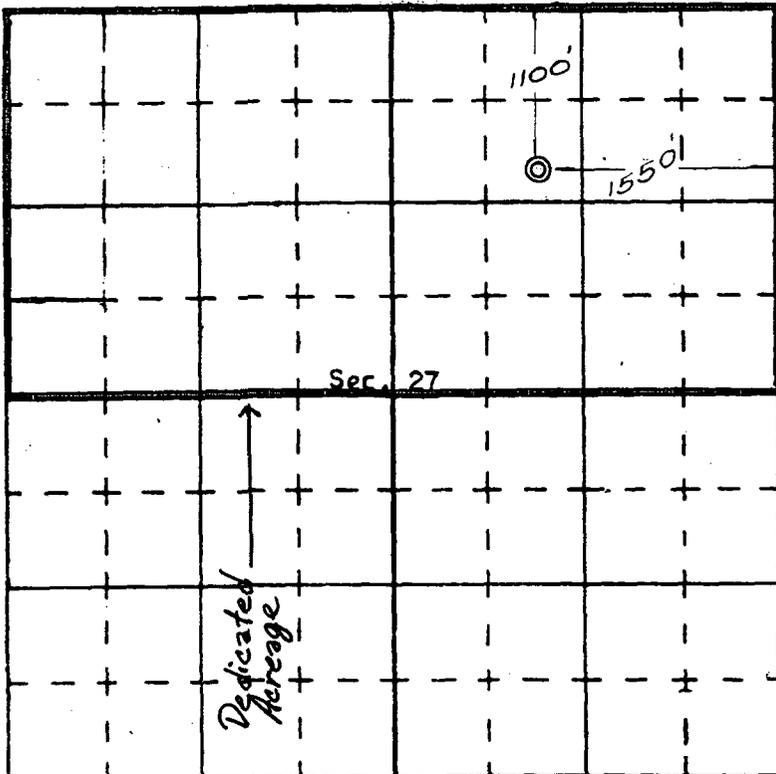
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*A. Scullin*  
Name  
District Operations Manager  
Position  
Marathon Oil Company  
Company  
October 24, 1966  
Date

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.

August 25, 1966  
Date Surveyed  
Registered Professional Engineer  
and/or Land Surveyor

*E. J. [Signature]*  
Certificate No. 3602



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

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30-039-08120</b>		<sup>2</sup> Pool Code		<sup>3</sup> Pool Name <b>Tapacito Gallup</b>	
<sup>4</sup> Property Code <b>6414</b>		<sup>5</sup> Property Name <b>Jicarilla Apache</b>			<sup>6</sup> Well Number <b>10</b>
<sup>7</sup> OGRID No. <b>14021</b>		<sup>8</sup> Operator Name <b>Marathon Oil Company</b>			<sup>9</sup> Elevation <b>6538' (KB)</b>

<sup>10</sup> Surface Location									
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
<b>B</b>	<b>27</b>	<b>26N</b>	<b>5W</b>		<b>1100</b>	<b>North</b>	<b>1550</b>	<b>East</b>	<b>Rio Arriba</b>

<sup>11</sup> 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

<sup>12</sup> Dedicated Acres <b>160</b>	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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

	<p><sup>17</sup> OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <p><i>Tim L. Chase</i></p> <p>Signature <b>Tim L. Chase</b></p> <p>Printed Name <b>Advanced Engineer Technician</b></p> <p>Title <b>March 31, 2000</b></p> <p>Date</p>
	<p><sup>18</sup> SURVEYOR CERTIFICATION</p> <p><i>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.</i></p> <p>_____</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyer:</p> <p>_____</p> <p>Certificate Number</p>
	<p>Dedicated Acreage</p>

**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

<b>Marathon Oil Company</b>	<b>P.O. Box 552</b>	<b>Midland, Tx 79702</b>
<b>Jicarilla</b>	<b>10</b>	<b>Sec 34, T-26N, R-5W, Rio Arriba</b>
<small>LEASE</small>	<small>WELL NO.</small>	<small>SECTION, TOWNSHIP, RANGE, UNIT COUNTY</small>

**OGRID NO. 014021** **PROPERTY CODE 6414** **API NO. 30-039-08120** **Federal**  **State \_\_\_** **(and/or) Fee \_\_\_**

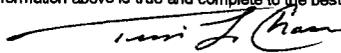
The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zones	Lower Zone
1. Pool Name & Pool Code	South Blanco Pictured Cliffs	Tapacito Gallup	Basin Dakota
2. Top & Bottom of Pay Section (Perforations)	2968-2990'	6508-6760'	7154-7382'
3. Type of production (Oil or Gas)	Gas	Gas (Expected)	Gas
4. Method of Production (Flowing or Artificial Lift)	Artificial Lift	Artificial Lift (Proposed)	Artificial Lift
5. Bottomhole Pressure Oil Zones-Artificial Lift (Est Current)	a. (Current) 300	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?	Producing	Not Yet Perforated	Producing
Production Marginal? (yes or no)	Yes	Yes (Expected)	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: 02/04/00 Rates: 0/44/0	Date: N/A Rates: N/A	Date: 02/04/00 Rates: 0/75/0
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 0.00% Gas: 20.09%	Oil: 0.00% Gas: 45.66%	Oil: 0.00% Gas: 34.25%

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 ) 687-8255

DATE 03/31/00