

DHC 3/22/00

Mid-Continent Region
Production United States

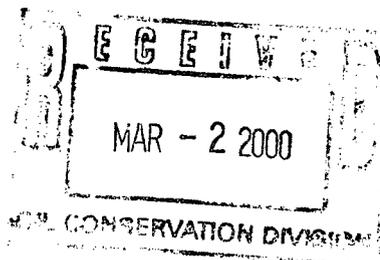


P.O. Box 552
Midland, TX 79702-0552
Telephone 915/682-1626

February 28, 2000

2691

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. 13
1190' FSL & 1190' FWL
Unit Letter "M", Section 33, Township 26-N, Range 5-W
South Blanco Pictured Cliffs, 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 South Blanco Pictured Cliffs, 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 South Blanco Pictured Cliffs and Blanco Mesa Verde pools.

All four pools represent marginal production. The well was drilled and completed as a dual producer in the South Blanco Pictured Cliffs and Basin Dakota pools in 1967. In September, 1999, perforations were added in the Blanco Mesa Verde. The Basin Dakota perforations were isolated, and the well was returned to dual production from the South Blanco Pictured Cliffs and the Blanco Mesa Verde. Plans are to remove the bridge plug isolating the Basin Dakota, perforate the Chacra and downhole commingle all four pools.

By downhole commingling the production from these four 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

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. 13
1190' FSL & 1190' FWL, Unit Letter "M", Section 33, Township 26-N, Range 5-W
Jicarilla Field, Rio Arriba County, New Mexico
South Blanco Pictured Cliffs, 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)

South Blanco Pictured Cliffs = 300, 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>
South Blanco PC	0	82	0	Current Production
Chacra	0	100	0	Post-Workover Estimate
Blanco Mesa Verde	9	409	8	Current Production
Basin Dakota	0	53	0	Post-Workover Estimate
Total	9	644	8	

	<u>Allocated %</u>	<u>Oil %</u>	<u>Gas %</u>	<u>Water %</u>
South Blanco PC		0.00	12.73	0.00
Chacra		0.00	15.53	0.00
Blanco Mesa Verde		100.00	63.51	100.00
Basin Dakota		0.00	8.23	0.00
Total		100.00	100.00	100.00

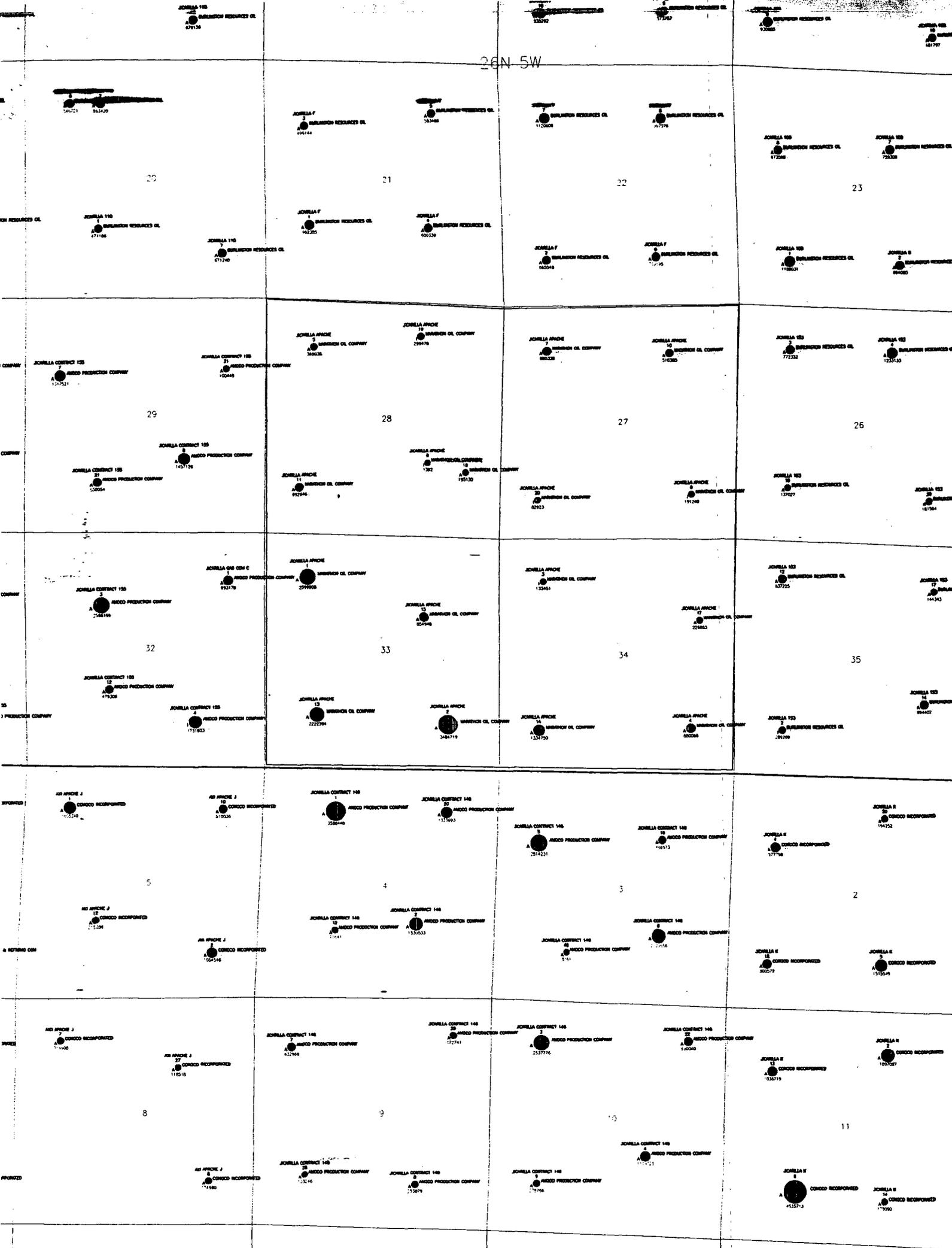
J: Ownership

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

26N 5W



OIL CONSERVATION DIVISION

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

2040 Pacheco St.
Santa Fe, NM 87505

GAS - OIL RATIO TEST

Operator Marathon Oil Company		Pool South Blanco Pictured Cliffs		County Rio Arriba		
Address P.O. Box 552 Midland, TX 79702		TYPE OF TEST - (X)		Completion <input type="checkbox"/> Special <input checked="" type="checkbox"/>		
LEASE NAME Jicarilla Apache	WELL NO. 13	LOCATION			LENGTH OF TEST HOURS 24	GAS-OIL RATIO CU.FT/BBL N/A
		U M	S 33	T 26N		
DATE OF TEST 12/15/99		CHOKE SIZE F	TBG. PRESS. 66	DAILY ALLOW. ABLE <input type="checkbox"/>	PROD. DURING TEST	GAS M.C.F. 82
					GRAV. OIL 0	
					WATER BBL. 0	

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
2/4/00 Date
(915) 687-8260 Telephone No.

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.)

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

Submit 2 copies to Appropriate District Office.
DISTRICT I
 P.O. Box 1980, Hobbs, NM 88240
DISTRICT II
 1111 1st Street, Artesia, NM 88210-2834
DISTRICT III
 1000 Rio Brazos Rd., Aztec, NM 87410

GAS - OIL RATIO TEST

Operator		Pool		County									
Hatchon Oil Company		Blanco Mesa Verde		Rio Arriba									
Address		TYPE OF TEST - (X)		Completion									
P.O. Box 2490 Hobbs, NM 88240		<input type="checkbox"/> Scheduled <input checked="" type="checkbox"/> Special		<input type="checkbox"/> Special									
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS-OIL RATIO CUFT/BBL
		U	S	T						R	WATER BBLs.	GRAV. OIL	
Jicarilla Apache	13	M	33	26N	5W	11/16/99	F	66	24	8	9	409	45.444

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

Kelly Cook
 Signature
 Kelly Cook
 Printed name and title
 11/17/99
 Date
 393-7106
 Telephone No.

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.)

State of New Mexico
 Energy, Minerals and Natural Resources Department
OIL CONSERVATION DIVISION

Form C-116
 Revised 1/1/89

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

2040 Pacheco St.
 Santa Fe, NM 87505

GAS - OIL RATIO TEST

Operator		Pool		Basin		County							
Marathon Oil Company				Dakota		Rio Arriba							
Address		TYPE OF TEST - (X)		Completion		Special							
P.O. Box 552 Midland, TX 79702		S F L S		<input type="checkbox"/>		<input checked="" type="checkbox"/>							
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKESIZE	TBG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS-OIL RATIO CU.FT/BBL
		U	S	T						R	WATER BBL.	GRAV. OIL	
Jicarilla Apache	13	M	33	26N	5W	9/15/99	F	66	24	0	0	53	N/A

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

Signature: Tim L. Chase
 Printed name and title: Advanced Engineer Technician
 Date: 2/4/00
 Telephone No.: (915) 687-8268

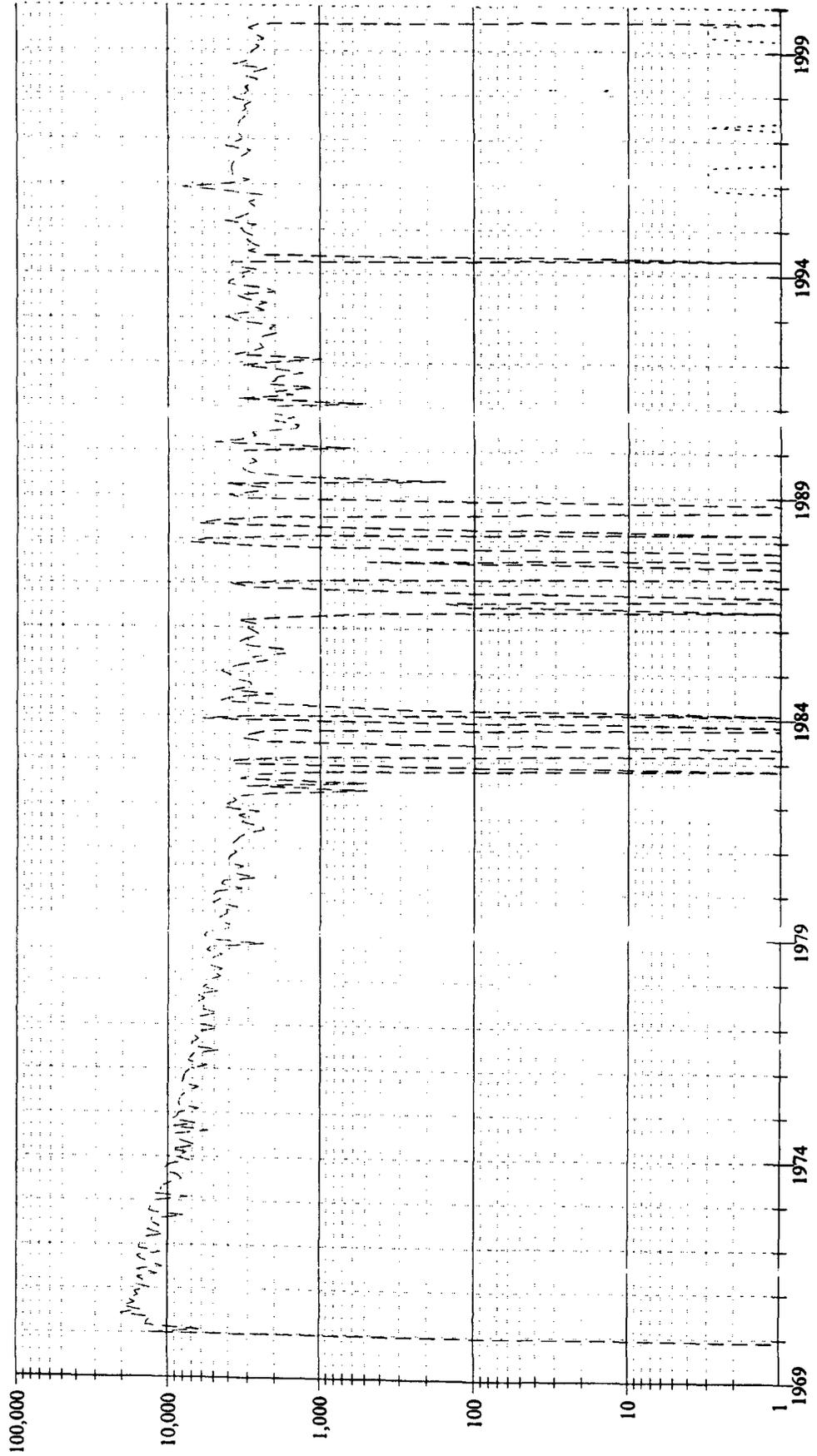
Instructions:
 During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables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

JICARILLA FIELD
JICARILLA APACHE WELL NO. 13
SOUTH BLANCO PICTURED CLIFFS PRODUCTION

Production Rate vs Time
 For the Period 01/1969 to 12/1999 | API: 30039200060000

Oil	—
Gas	- - -
Water	· · ·
Wells	—



Time

Reported Oil Production = 0 Bbls
 Reported Gas Production = 2,312,903 Mcf
 Reported Water Production = 36 Bbls

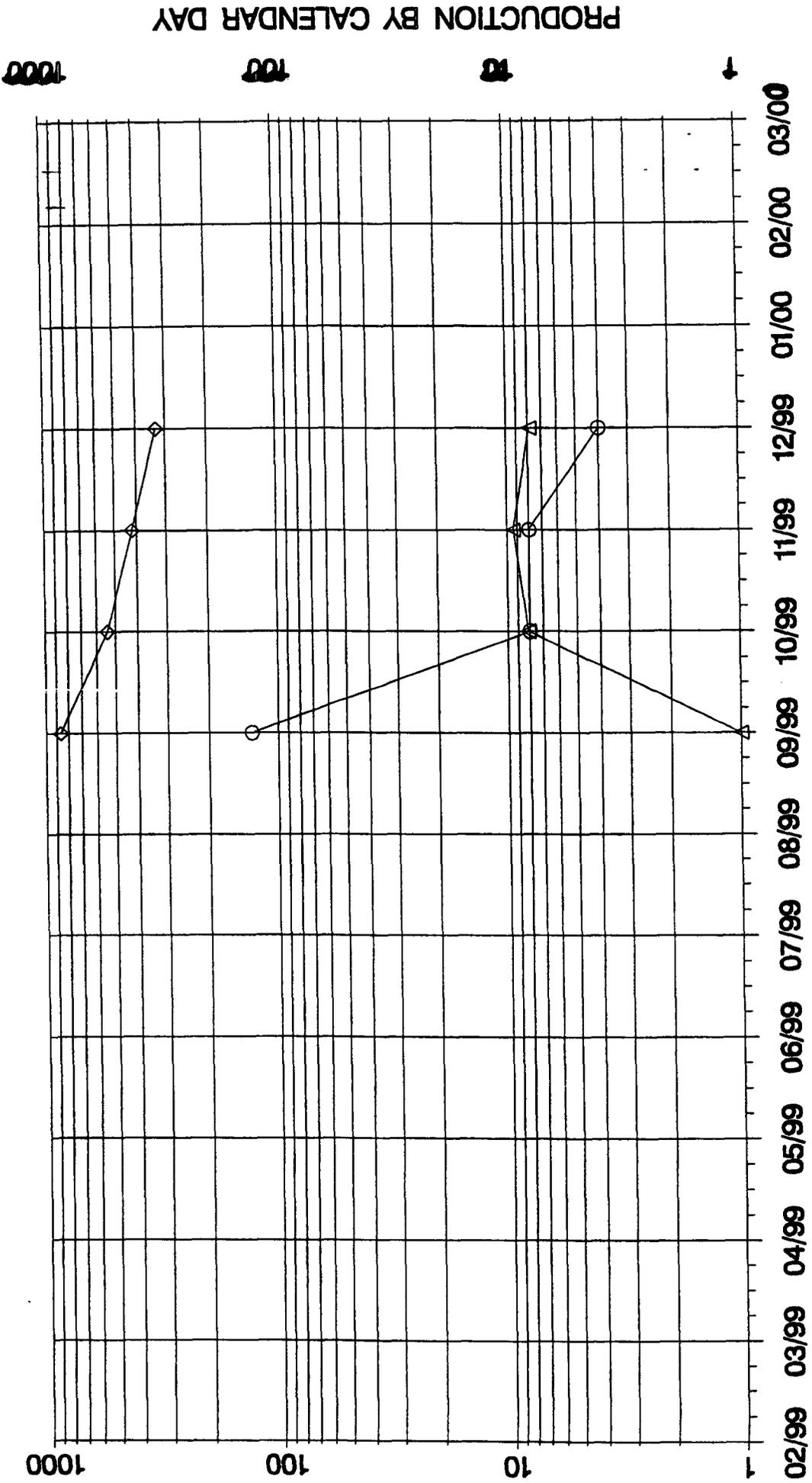
Plot Displays Monthly Totals
 Copyright (C) 1900 by Petroleum Information/Dwights LLC

Midland Operations

Allocated Production (past year)

JICARILLA NO. 13

BLANCO MESA VERDE



DATE

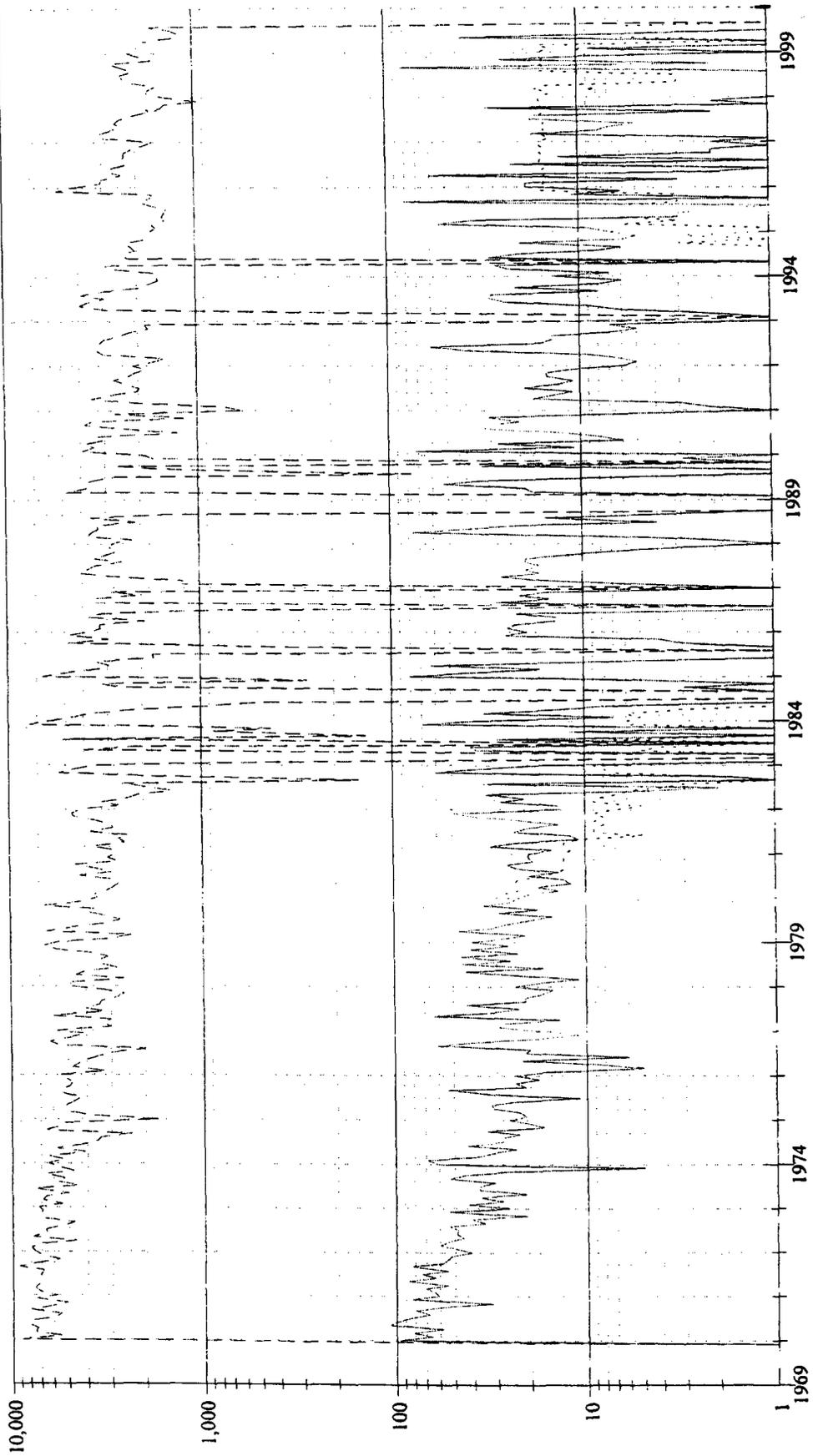
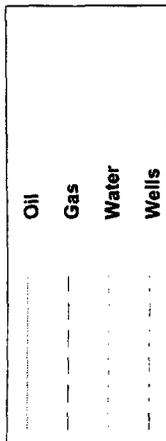
- OIL, BOPD
- INJ, BPD
- ◇-◇-◇ WTR, BWPD
- + + + DISP, BPD
- × × × GAS, MCFPD
- △-△-△ COND, BPD

PRODUCTION BY CALENDAR DAY

PRODUCTION BY CALENDAR DAY

**JICARILLA FIELD
JICARILLA APACHE NO. 13
BASIN DAKOTA PRODUCTION**

Production Rate vs Time
For the Period 01/1969 to 12/1999 | API: 30039200060000



BRI/MO OR Mcf/MO

Time

ported Oil Production = 14,769 Bbls
ported Gas Production = 1,519,061 Mcf
ported Water Production = 1,128 Bbls

Plot Displays Monthly Totals
Copyright (C) 1900 by Petroleum Information/Dwights LLC

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACERAGE DEDICATION PLAT**

All distances must be from the outer boundaries of the Section

Operator MARATHON OIL COMPANY		Lease Jicarilla Apache			Well No. 13		
Unit Letter M	Section 33	Township 26 North	Range 5 West	County Rio Arriba			
Actual Footage Location of Well:							
1190	feet from the	South	line	1190	feet from the	West	line
Ground Level Elev. 6598	Producing Formation Pictured Cliffs		Pool South Blanco Pictured Cliffs	Dedicated Acreage: 160		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: _____

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

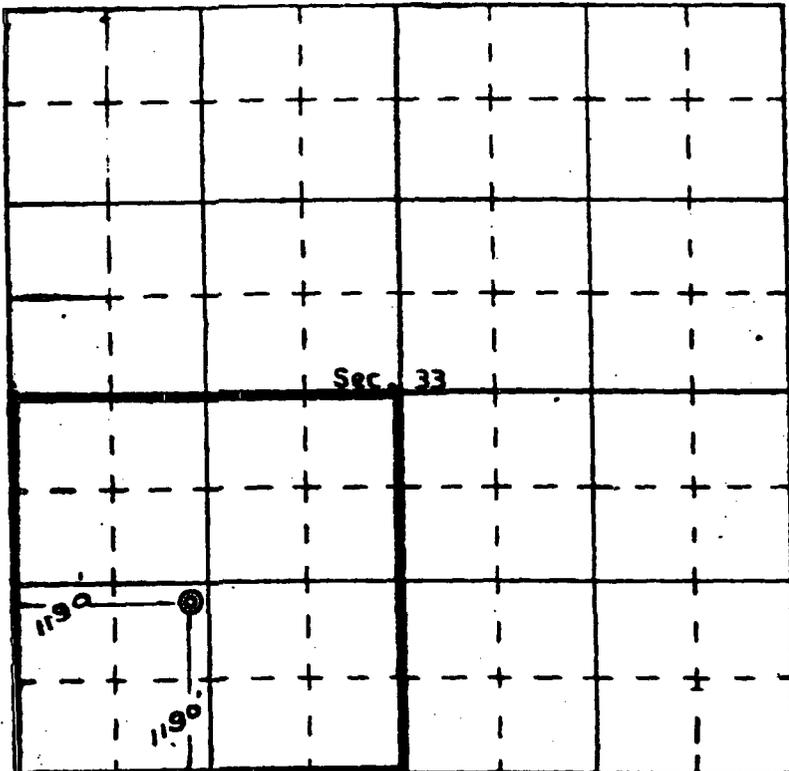
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

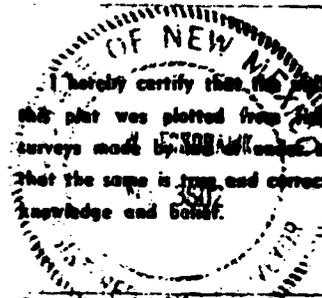
Lester Down
Name _____

Area Superintendent
Position _____

Marathon Oil Company
Company _____

February 20, 1967
Date _____





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

Date Surveyed: **February 18, 1967**
Registered Professional Engineer
and/or Land Surveyor

E. S. Carver
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

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 13
⁷ OGRID No. 14021		⁸ Operator Name Marathon Oil Company			⁹ Elevation (KB) 6611'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
M	33	26N	5W		1190	South	1190	West	Rio Arriba

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 160	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

				<p>¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p></p> <p>Signature Tim L. Chase Printed Name Advanced Engineer Technician Title February 28, 2000 Date</p>
				<p>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.</p> <p>Date of Survey Signature and Seal of Professional Surveyer:</p>
				Certificate Number

Dedicated Acreage
←

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised October 18, 1994

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

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

99 SEP 27 PM 1:22

AMENDED REPORT

070 FARMINGTON, NM

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-20006	² Pool Code	³ Pool Name BLANCO MESA VERDE
⁴ Property Code 6414	⁵ Property Name JICARILLA APACHE	
⁷ OGRID No. 14021	⁸ Operator Name Marathon Oil Company	⁶ Well Number 13 ⁹ Elevation 6611' KB

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
M	33	26-N	5-W		1190	SOUTH	1190	WEST	RIO ARRIBA

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 160	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>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i> Signature <i>Walter Longmire</i> R. J. LONGMIRE Printed Name DRILLING SUPERINTENDENT Title 9/22/99 Date
13E				¹⁸ SURVEYOR CERTIFICATION <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> Date of Survey Signature and Seal of Professional Surveyer:
13	160 AC PROPRATION UNIT		LEASE BOUNDARY	Certificate Number

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACERAGE DEDICATION PLAT**

All distances must be from the outer boundaries of the Section

Operator MARATHON OIL COMPANY		Lease Jicarilla Apache			Well No. 13
Unit Letter M	Section 33	Township 26 North	Range 5 West	County Rio Arriba	
Actual Footage Location of Well: 1190 feet from the South line and 1190 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.
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 (**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

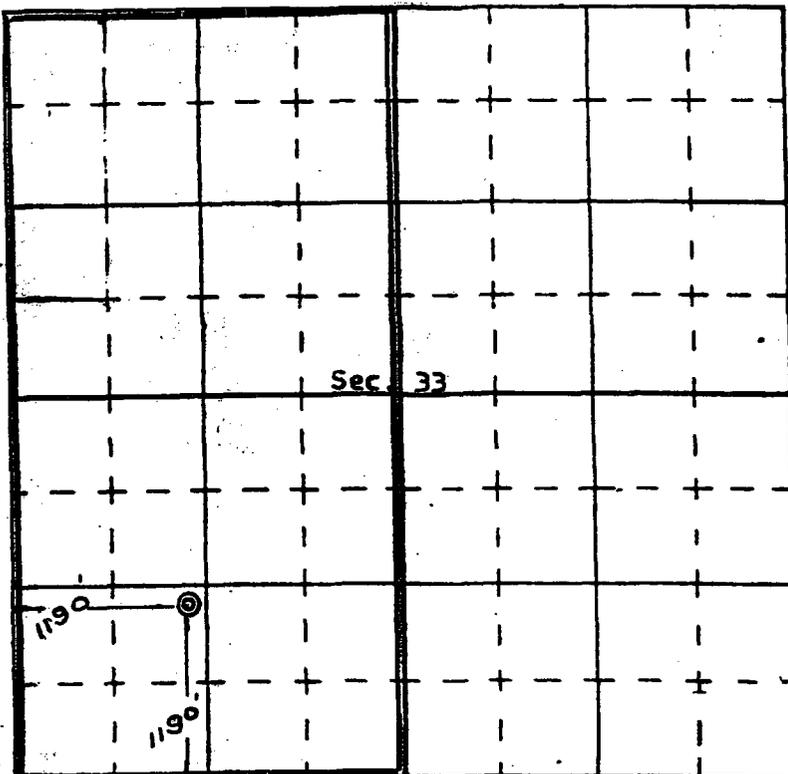
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Lester Brown
Name

Area Superintendent
Position

Marathon Oil Company
Company

February 20, 1967
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.

February 18, 1967
Date Surveyed
Registered Professional Engineer
and/or Land Surveyor

E. D. Cahohawk
Certificate No. 3602

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 APPROVAL PROCESS:
2040 S. Pacheco, Santa Fe, NM 87505-6429 Administrative Hearing

DISTRICT III
1000 Rio Brazos, Aztec, NM 87410

APPLICATION FOR EXISTING WELLBORE
DOWNHOLE COMMINGLING Yes No

Marathon Oil Company P.O. Box 552 Midland, TX 79702

Jicarilla 13 Sec 33, T-26N, R-5W Rio Arriba

LEASE WELL NO. SECTION, TOWNSHIP, RANGE, UNIT COUNTY
SPACING UNIT LEASE TYPES: (CHECK 1 OR MORE)

OGRID NO. 014021 PROPERTY CODE 6414 API NO. 30-039-20006 Federal , State , (and/or) Fee

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zones	Intermediate Zones	Lower Zone
1. Pool Name & Pool Code	South Blanco Pictured Cliffs	Chacra	Blanco Mesa Verde	Basin Dakota
2. Top & Bottom of Pay Section (Perforations)	2907-2954'	3950-4750'	4869-5267'	7264-7322'
3. Type of production (Oil or Gas)	Gas	N/A	N/A	Gas
4. Method of Production (Flowing or Artificial Lift)	Artificial Lift	N/A	Artificial Lift	Artificial Lift
5. Bottomhole Pressure Oil Zones-Artificial Lift (Est Current)	a. (Current) 300	a. (Current) 0	a. (Current) 325	a. (Current) 350
	b. (Original) ___	b. (Original) ___	b. (Original) ___	b. (Original) ___
6. Oil Gravity (API) or Gas BTU Content	37 API	37 API	38 API	39 API
7. Producing or Shut-in?	Producing	Not Yet Perforated	Producing	Shut-In (Isolated)
Production Marginal? (yes or no)	Yes	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	Date: 0/53/0 Rates: 9/15/99
* If producing, give date and o/g/w rates of recent test (within 60 days)	Date: 12/15/99 Rates: 0/82/0	Date: N/A Rates: N/A	Date: 12/15/99 Rates: 9/409/8	Date: N/A Rates: N/A
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 0.00%	Oil: 0%	Oil: 100.00%	Oil: 0.00%
	Gas: 12.73%	Gas: 15.53%	Gas: 63.51%	Gas: 8.23%

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 *Tim L. Chase* TITLE Advanced Engineer Technician DATE 02/28/00
TYPE OR PRINT NAME TIM L. CHASE TELEPHONE NO. (915) 687-8268