

26446323

AMEND DHC-2787

10/10/00

Mid-Continent Region
Production United States



**Marathon
Oil Company**

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

9-14-00

Mr. David Catanach
Oil Conservation Division
2040 South Pacheco
Santa Fe, N.M. 87501

Re: DHC percentage allocation.

Dear Mr. Catanach,

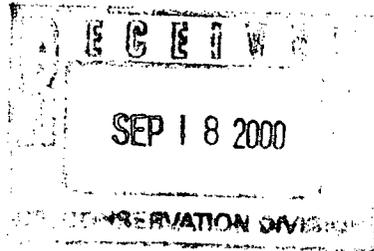
Enclosed is some pertinent data to support the percentage allocations for the Jicarilla Apache # 3, 12, 16. I have attached all previous data for each of the above mentioned wells. I think this data will satisfy the allocation request.

If additional information is needed, please contact me at (915) 687-8357

Regards,

A handwritten signature in cursive script that reads "Jerry Fletcher".

Jerry Fletcher
915-687-8357
Engineer Tech





NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

ADMINISTRATIVE ORDER DHC-2787

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

Attention: Mr. Jerry Fletcher

*Jicarilla Apache No. 16
API No. 30-039-20529
Unit I, Section 34, Township 26 North, Range 5 West, NMPM,
Rio Arriba County, New Mexico.
Blanco-Mesaverde (Prorated Gas – 72319),
Basin-Dakota (Prorated Gas – 71599) and
Otero-Chacra (Gas – 82329) Pools*

Dear Mr. Fletcher:

Reference is made to your recent application for an exception to Rule 303.A. of the Division Rules and Regulations to permit the above described well to commingle production from the subject pools in the wellbore.

It appearing that the subject well qualifies for approval for such exception pursuant to the provisions of Rule 303.C., and that reservoir damage or waste will not result from such downhole commingling, and correlative rights will not be violated thereby, you are hereby authorized to commingle the production as described above and any Division Order which authorized the dual completion and required separation of the zones is hereby placed in abeyance.

The maximum amount of gas which may be produced daily from the well shall be determined by Division Rules and Regulations or by the gas allowable for each respective prorated pool as printed in the Division's San Juan Basin Gas Proration Schedule.

The applicant shall consult with the supervisor of the Aztec District Office of the Division upon completion and testing of the well in order to determine a fixed allocation of production from each of the commingled zones. Upon approval by the Division's Aztec District Office, the applicant shall submit the allocation formula to the Santa Fe Office of the Division.

RECEIVED

AUG 11 2000

Administrative Order DHC-2787

Marathon Oil Company

August 7, 2000

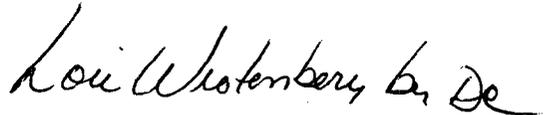
Page 2

REMARKS: The operator shall notify the Aztec District Office of the Division upon implementation of the commingling process.

Pursuant to Rule 303.C.(2), the commingling authority granted herein may be rescinded by the Division Director if conservation is not being best served by such commingling.

Approved at Santa Fe, New Mexico on this 7th day of August, 2000.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



LORI WROTENBERY
Director

SEAL

LW/DRC

cc: Oil Conservation Division - Aztec
Bureau of Land Management-Farmington

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 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"/> Special		Completion <input type="checkbox"/> Special <input checked="" type="checkbox"/>												
LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	STATUS	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	OIL BBL.		GAS M.C.F.
Jicartilla Apache	16	"T"	34	26-N	5-W	8-10-00	F		64	N/A	24	0	N/A	0	85	N/A

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.

Signature 

Jerry Fletcher
 Printed name and title

Date **8-20-00** Telephone No. **915-687-8357**

(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 Marathon Oil Company		Pool Blanco Mesaverde		County Rio Arriba											
Address P.O. Box 552 Midland, TX 79702		TYPE OF TEST - (X) <input checked="" type="checkbox"/> Scheduled <input type="checkbox"/>		Completion <input type="checkbox"/> Special <input checked="" type="checkbox"/>											
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	STATUS	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.S.	GRAV. OIL		OIL BBL.S.
Jicarella Apache	16	"I"	34	26-N	5-W	8-12-00	F	66	N/A	24	0	N/A	0	125	N/A

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.

Signature *Jerry Fletcher*

Jerry Fletcher

Printed name and title

8-20-00

Date

915-687-8357

Telephone No.

(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

Form C-116
 Revised 1/1/89

2040 Pacheco St.
 Santa Fe, NM 87505

GAS - OIL RATIO TEST

Operator Marathon Oil Company		Pool Otera Chacra		County Rio Arriba												
Address P.O. Box 552 Midland, TX 79702		TYPE OF TEST - (X) <input type="checkbox"/> Scheduled <input type="checkbox"/> Special <input checked="" type="checkbox"/>		Completion <input type="checkbox"/>												
LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	STATUS	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	OIL BBL.		GAS M.C.F.
Jicarrilla Apache	16	"T"	34	26-N	5-W	8-14-00	F		65	N/A	24	0	N/A	0	160	N/A

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.

Signature *Jerry Fletcher*

Printed name and title
Jerry Fletcher

Date 8-20-00 Telephone No. 915-687-8357

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



Subject	Jicarilla Conmingling Allocation Percentages	Page No.	Of
File	-	By	WSL
		Date	9/2/2000

Jicarilla Apache # 3

Pre-workover Otero Chavira production $\cong 22$ MCFD $> \frac{22}{110} = 20\%$

Estimated stabilized total rate $\cong 110$ MCFD

Estimated Blanco South Pictured Cliffs rate $\cong 88$ MCFD $> \frac{88}{110} = 80\%$

$$\begin{array}{r} \text{Total} \\ - \text{Chavira} \\ \hline = \text{Pictured Cliffs} \end{array} \quad \frac{110}{22} = 88$$

Jicarilla Apache #12

Pre-workover Basin Dakota production $\cong 140$ MCFD $> \frac{140}{430} = 32.56\%$

Pre-workover Blanco Mesavada production $\cong 30$ MCFD $> \frac{130}{430} = 30.23\%$
+ estimated Moxee addition of 100 MCFD

Estimated stabilized total rate $\cong 430$ MCFD

Estimated Otero Chavira rate $\cong 160$ MCFD $> \frac{160}{430} = 37.21\%$

$$\begin{array}{r} \text{Total} \\ - \text{Mesavada} \\ - \text{Dakota} \\ \hline = \text{Chavira} \end{array} \quad \begin{array}{r} 430 \\ - 130 \\ - 140 \\ \hline 160 \end{array}$$

Jicarilla Apache #16

Pre-workover Basin Dakota production $\cong 85$ MCFD $\frac{85}{370} = 22.97\%$

Pre-workover Blanco Mesavada production $\cong 50$ MCFD $> \frac{125}{370} = 33.78\%$
+ estimated Moxee addition of 75 MCFD

Estimated stabilized total rate $\cong 370$ MCFD

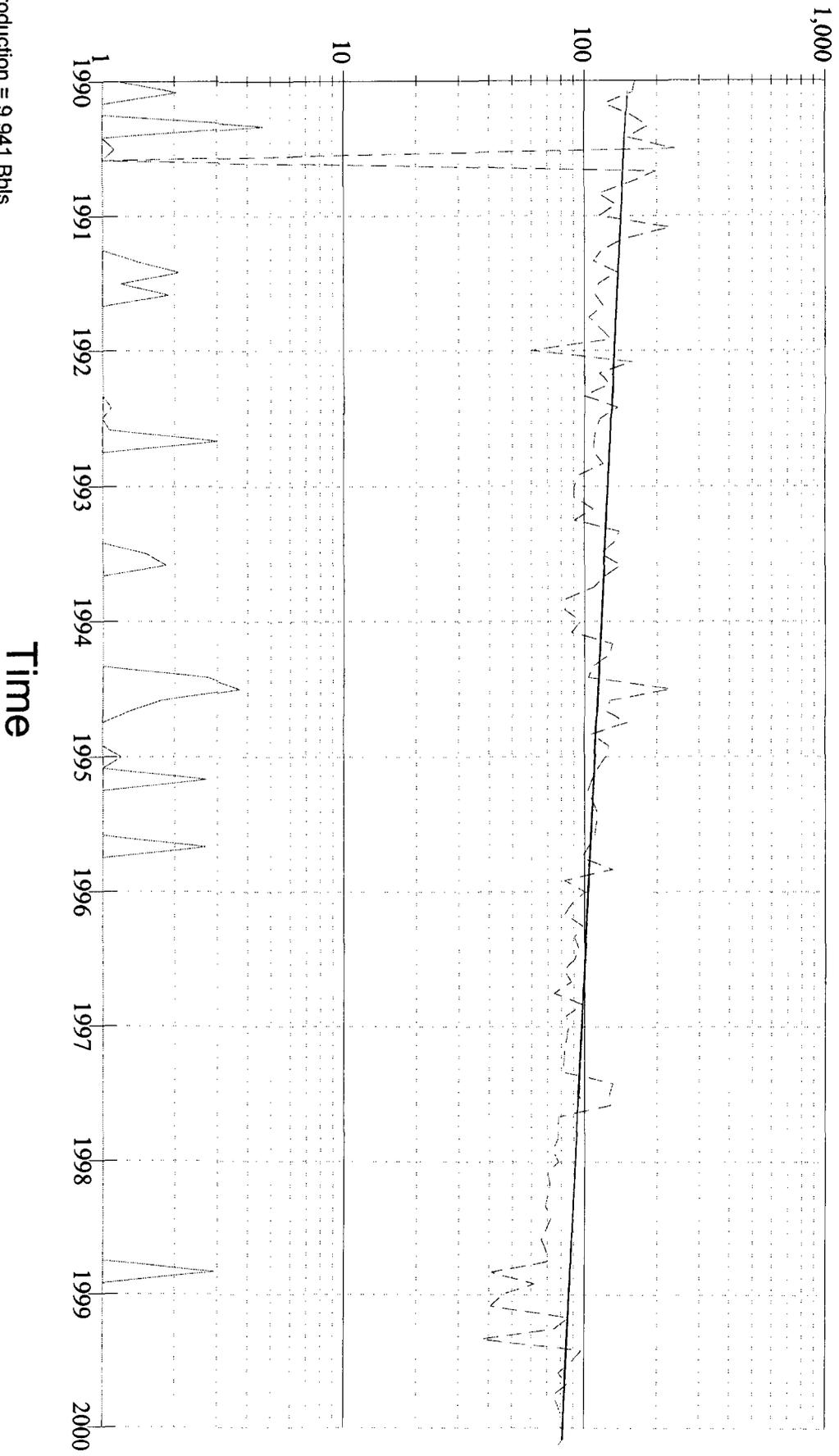
Estimated Otero Chavira rate $\cong 160$ MCFD $> \frac{160}{370} = 43.25\%$

$$\begin{array}{r} \text{Total} \\ - \text{Mesavada} \\ - \text{Dakota} \\ \hline = \text{Chavira} \end{array} \quad \begin{array}{r} 370 \\ - 125 \\ - 85 \\ \hline 160 \end{array}$$

BBI/Day or Mcf/Day

Oil
Gas
Water
Wells

Field: BASIN
Lease: JICARILLA APACHE | Well #16
Operator: MARATHON OIL COMPANY
Production Rate vs Time
For the Period 01/1990 to 12/1999 | API: 30039205290000



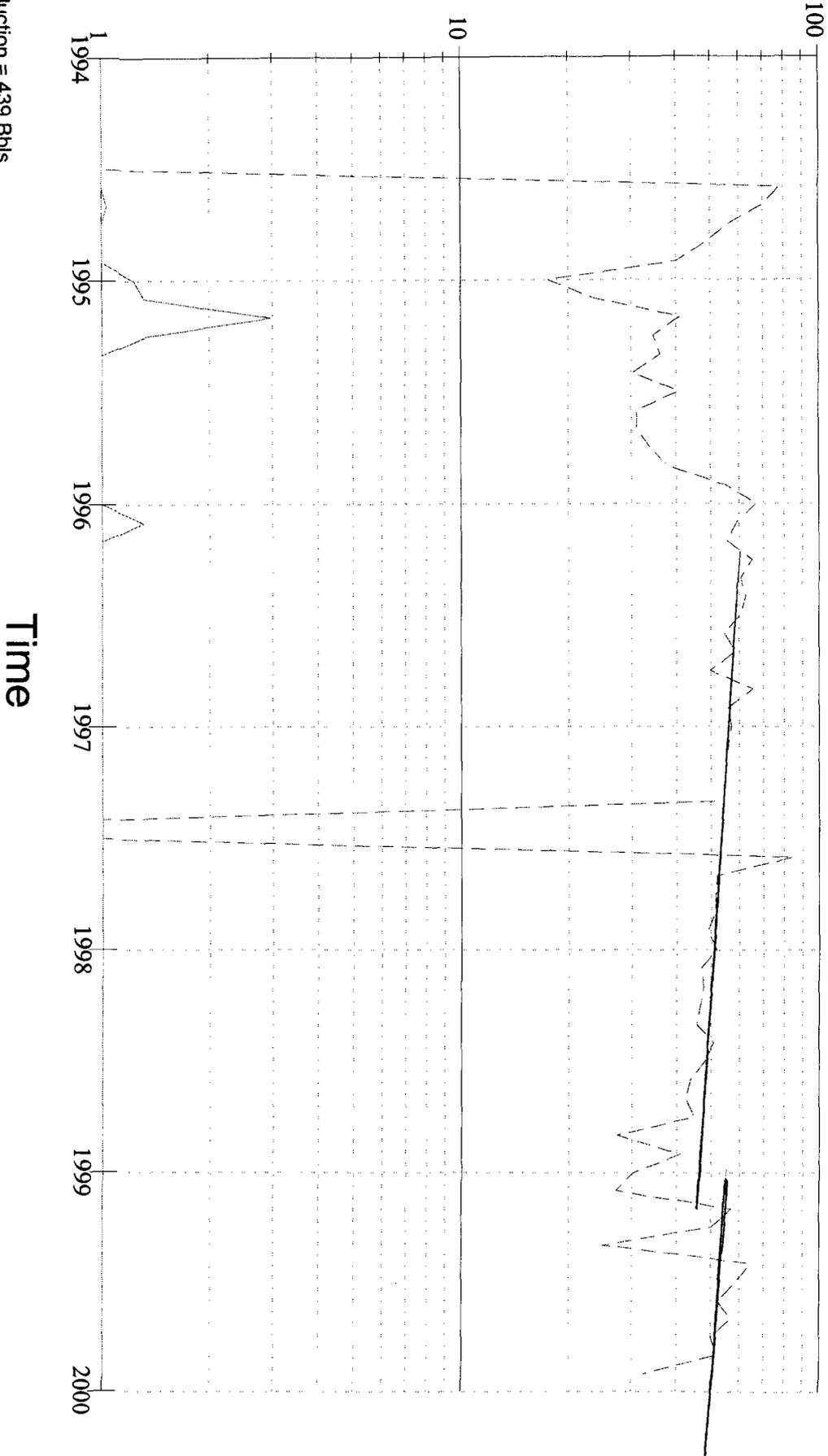
Reported Oil Production = 9,941 Bbls
Reported Gas Production = 1,386,887 Mcf
Reported Water Production = 1,720 Bbls

Time

BBI/Day or Mcf/Day



Field: BLANCO
Lease: JICARILLA APACHE | Well #16
Operator: MARATHON OIL COMPANY
Production Rate vs Time
For the Period 01/1994 to 12/1999 | API: 30039205290000



Reported Oil Production = 439 Bbls
Reported Gas Production = 89,892 Mcf
Reported Water Production = 92 Bbls

Time

Mid-Continent Region
Production United States



**Marathon
Oil Company**

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

Mr. David Catanach
Oil Conservation Division
2040 South Pacheco
Santa Fe, N.M. 87501

Re: Production data

Dear Mr. Catanach,
As per our phone conversation on 7-19-00 the fixed allocation percentage will be submitted after testing each zone.
Thanks for all your help in this matter.

Regards,

Jerry Fletcher
915-687-8357



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

July 13, 2000

Lori Wrotenbery
Director
Oil Conservation Division

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

Attention: Mr. Jerry Fletcher

Re: Form C-107-A
Jicarilla Apache No. 16

Dear Mr. Fletcher:

I have reviewed your application to downhole commingle Blanco-Mesaverde, Basin-Dakota and Otero-Chacra Gas Pool production within the Jicarilla Apache No. 16, and have determined that additional information will be required prior to processing this application. Your application seeks to allocate 45 percent of the gas to the Blanco-Mesaverde Gas Pool, 40 percent of the gas to the Basin-Dakota Gas Pool, and 15 percent of the gas to the Otero-Chacra Gas Pool. The only production data contained in your application are production plots from the Blanco-Mesaverde and Basin-Dakota Gas Pools. In addition, the Form C-102 for the Basin-Dakota Gas Pool is missing, and the Form C-102 for the Blanco-Mesaverde Gas Pool is not correct.

Please provide production data to support your proposed production allocation as required by Form C-107-A. In addition, please provide the missing and corrected Form C-102's. Your application will be reconsidered after receipt of this data.

If you should have any questions, please contact me at (505) 827-8184.

Sincerely,

David Catanach
Engineer

Xc: OCD-Aztec
Bureau of Land Management-Farmington



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

June 22, 2000

Mr. David Catanach
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87501

Re: **Request for Exception to Rule 303-A
Downhole Commingling
Jicarilla Apache No. 16
1600' FNL & 900" FEL
Unit Letter "I", Section 34, T-26-N, R-5-W
Mesa Verde (Point Lookout), Basin Dakota, Menefee, & Otero Chacra
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 Mesa Verde (Point Lookout), Basin Dakota, Menefee, Otero Chacra, & Blanco Mesa Verde 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 for the Mesa Verde and Basin Dakota pools.

All four pools represent marginal production. The well was drilled and completed in the Basin Dakota pool in early 1972, and the Blanco Mesa Verde in 1994. Plans are to perforate the Menefee and Otero Chacra and downhole commingle all four 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 915/687-8357.

Sincerely,


Jerry Fletcher
Engineering Technician

JF/dt

District I
 PO Bóx 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

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

OIL CONSERVATION DIVISION
 2040 South Pacheco
 Santa Fe, NM 87505

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-20529		² Pool Code 72319	³ Pool Name Blanco Mesa Verde
⁴ Property Code 6414	⁵ Property Name JICARILLA APACHE		⁶ Well Number # 16
⁷ OGRID No. 14021	⁸ Operator Name Marathon Oil Company		⁹ Elevation (KB) 6616'

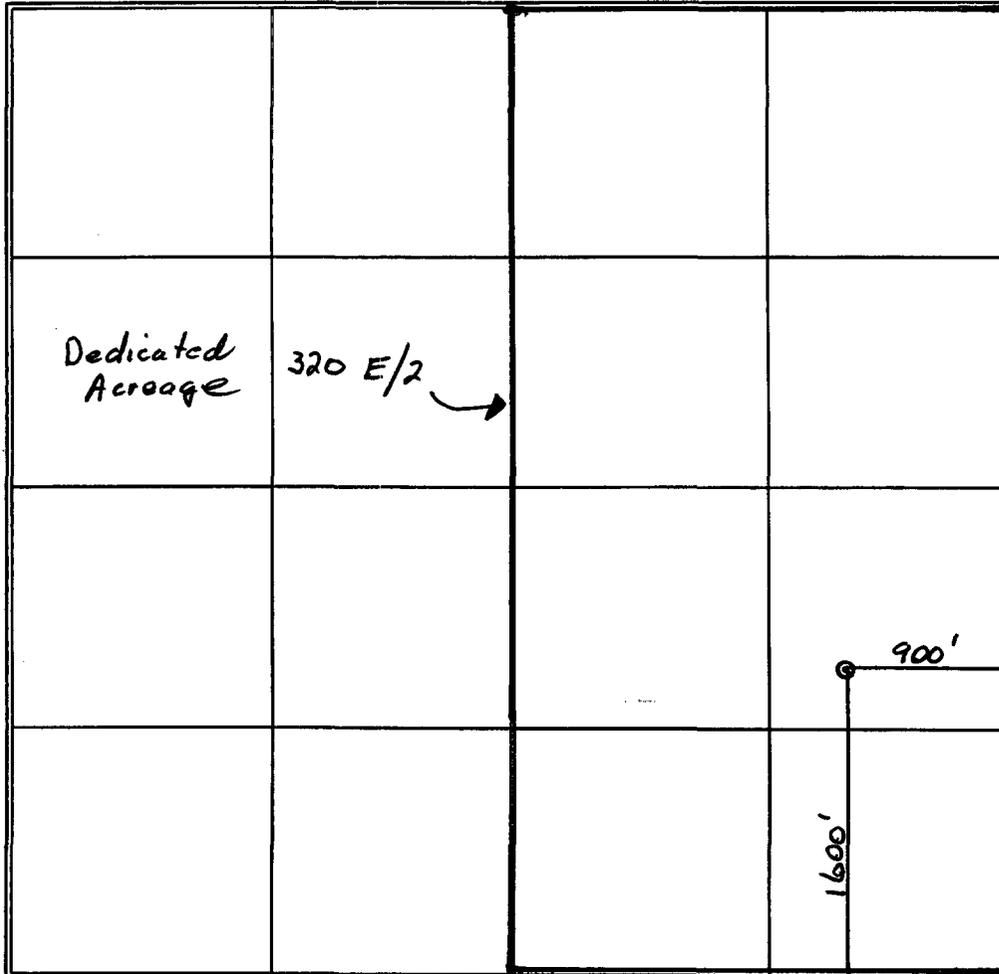
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
"A"	34	T-26-N	R-5-W		1600'	SOUTH	900'	EAST	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 320 E/2		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.

Jerry Fletcher
 Signature

JERRY FLETCHER
 Printed Name

ENGINEER TECH
 Title

7-19-00
 Date

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.

N/A

Date of Survey

Signature and Seal of Professional Surveyer:

Certificate Number

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 30-039-20529		² Pool Code 72319		³ Pool Name Basin Dakota	
⁴ Property Code 6414		⁵ Property Name JICARILLA APACHE			⁶ Well Number # 16
⁷ OGRID No. 14021		⁸ Operator Name Marathon Oil Company			⁹ Elevation (KB) 6616'

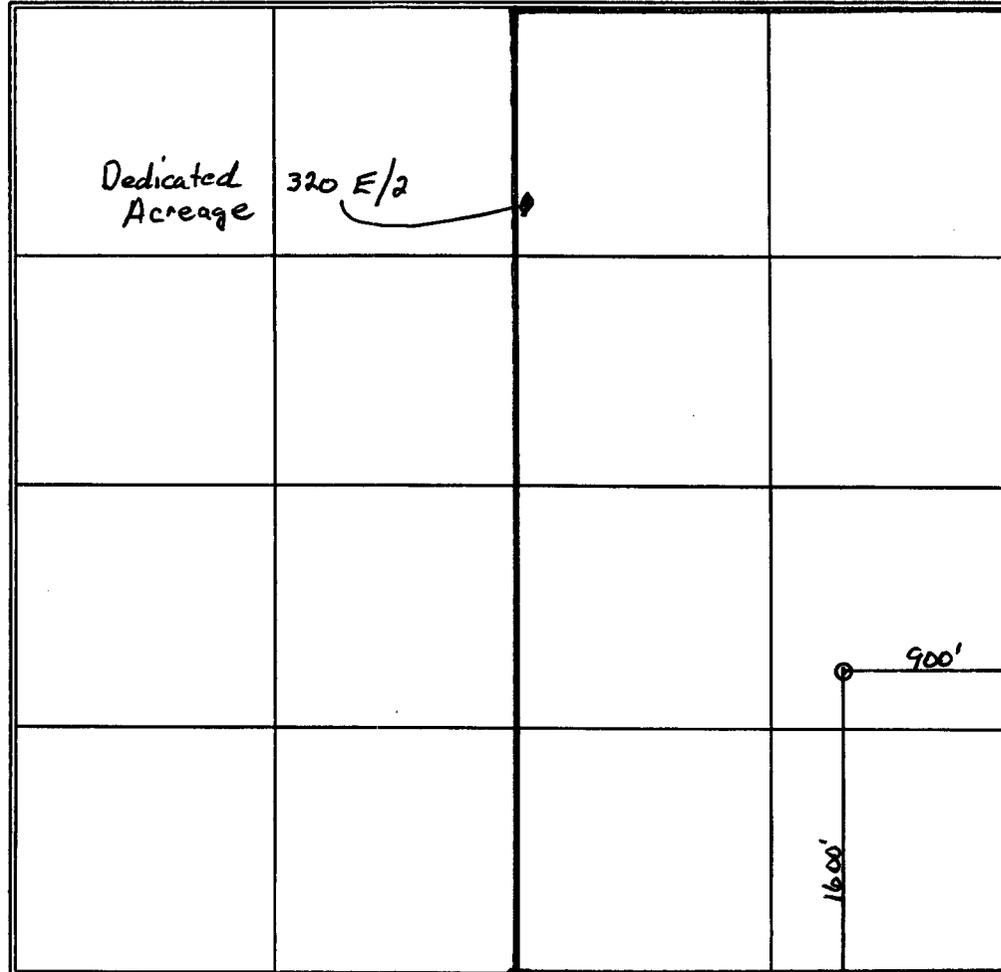
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
"A"	34	T-26-N	R-5-W		1600'	SOUTH	900'	EAST	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 320 E/2		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.

Jerry Fletcher
 Signature
JERRY FLETCHER
 Printed Name
ENGINEER TECH
 Title
7-19-00
 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.

N/A
 Date of Survey
 Signature and Seal of Professional Surveyer:

Certificate Number

District I
 PO Box 1980, Hobbs, NM 88241-1980
 District II
 311 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 30-039-20529		² Pool Code 82329		³ Pool Name Otero CHACRA	
⁴ Property Code 6414		⁵ Property Name JICARILLA APACHE			⁶ Well Number # 16
⁷ OGRID No. 14021		⁸ Operator Name Marathon Oil Company			⁹ Elevation (KB) 6616'

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
"A"	34	T-26-N	R-5-W		1600'	SOUTH	900'	EAST	RIO ARRIBA

¹¹ Bottom Hole Location If Different From Surface

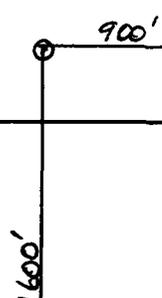
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
"I"									

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	
						<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></p> <p>Signature _____</p> <p>JERRY FLETCHER</p> <p>Printed Name _____</p> <p>ENGINEER TECH</p> <p>Title _____</p> <p>6-20-00</p> <p>Date _____</p>	
						¹⁸ SURVEYOR CERTIFICATION	
						<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>N/A</p> <p>Date of Survey _____</p> <p>Signature and Seal of Professional Surveyer: _____</p> <p>Certificate Number _____</p>	

Dedicated Acreage →



District I
1425 N. French Drive, Hobbs, NM 88240

District II
811 South First Street, Artesia, NM 88210

District III
1000 Rio Brazos Road, Aztec, NM 87410

District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised May 15, 2000

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87505

APPLICATION TYPE

Single Well

Establish Pre-Approved Pools

EXISTING WELLBORE

Yes No

APPLICATION FOR DOWNHOLE COMMINGLING

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

Operator Jicarilla Apache # 16 "I" 34-26N-5W Address Rio Arriba

Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 14021 Property Code 6414 API No. 30-039-20529 Lease Type: Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Otero Chacra	Mesa Verde	Dakota
Pool Code	82329	72319	71599
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3847 to 3872	4725 to 5333	7134 to 7358
Method of Production (Flowing or Artificial Lift)	Artificial Lift	Artificial Lift	Artificial Lift
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)	300#	325#	350#
Oil Gravity or Gas BTU (Degree API or Gas BTU)	38 API	38 API	39 API
Producing, Shut-In or New Zone	New Zone	Producing	Producing
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: N/A Rates: N/A	Date: N/A Rates: N/A	Date: N/A Rates: N/A
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil 0.0% Gas 43.25%	Oil 0.0% Gas 30.23%	Oil 0.0% Gas 32.56%

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones?
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes No
Yes N/A No N/A

Are all produced fluids from all commingled zones compatible with each other? Yes No

Will commingling decrease the value of production? Yes No

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

NMOCD Reference Case No. applicable to this well: _____

- 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 working, royalty and overriding royalty interests for uncommon interest cases.
 - Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

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

SIGNATURE Jerry Fletcher TITLE Engineer Tech. DATE 9-14-00

TYPE OR PRINT NAME Jerry Fletcher TELEPHONE NO. (915) 687-8357

District I
1625 N. French Drive, Hobbs, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised May 15, 2000

District II
811 South First Street, Artesia, NM 88210

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, New Mexico 87505

APPLICATION TYPE
 Single Well
Establish Pre-Approved Pools
EXISTING WELLBORE
 Yes No

District III
1000 Rio Brazos Road, Aztec, NM 87410

APPLICATION FOR DOWNHOLE COMMINGLING

District IV
2040 South Pacheco, Santa Fe, NM 87505

Marathon Oil Company P.O. Box 552 Midland, Tx. 79702
Operator Address
Jicarilla Apache # 16 "I" 34-26N-5W Rio Arriba
Lease Well No. Unit Letter-Section-Township-Range County
OGRID No. 14021 Property Code 6414 API No. 30-039-20529 Lease Type: Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Otero Chacra	Mesa Verde	Dakota
Pool Code	82329	72319	71599
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3847 to 3872	4725 to 5333	7134 to 7358
Method of Production (Flowing or Artificial Lift)	Artificial Lift	Artificial Lift	Artificial Lift
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)	300#	325#	350#
Oil Gravity or Gas BTU (Degree API or Gas BTU)	38 API	38 API	39 API
Producing, Shut-In or New Zone	New Zone	Producing	Producing
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: N/A Rates: N/A	Date: N/A Rates: N/A	Date: N/A Rates: N/A
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil 0.0% Gas N/A	Oil 0.0% Gas N/A	Oil 0.0% Gas N/A

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes No
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes N/A No N/A
Are all produced fluids from all commingled zones compatible with each other? Yes No
Will commingling decrease the value of production? Yes No
If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes No
NMOCD Reference Case No. applicable to this well: _____

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 working, royalty and overriding royalty interests for uncommon interest cases.
- Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

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

SIGNATURE Jerry Fletcher TITLE Engineer Tech. DATE 6-23-00
TYPE OR PRINT NAME Jerry Fletcher TELEPHONE NO. (915) 687-8357