



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. 3
990' FNL & 990" FWL
Unit Letter "D", Section 34, T-26-N, R-5-W
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 Chacra pool 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 Chacra pool producer.

This pool represents marginal production. The well was drilled and completed in the Chacra pool in late 1955. In early 1963, the Chacra was perforated and stimulated. Plans are to perforate the Pictured Cliffs and downhole commingle both pools.

By downhole commingling the production from these two 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,

A handwritten signature in cursive script, appearing to read 'Jerry Fletcher'.

Jerry Fletcher
Engineering Technician

JF/dt
enclosure

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 30-039-06260	² Pool Code 72439	³ Pool Name PICTURED CLIFFS
⁴ Property Code 6414	⁵ Property Name JICARILLA APACHE	⁶ Well Number # 3
⁷ OGRID No. 14021	⁸ Operator Name Marathon Oil Company	⁹ Elevation 6547'

¹⁰ Surface Location

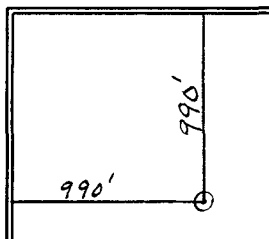

UL or lot no. "D"	Section 34	Township 26-N	Range 5-W	Lot. Idn	Feet from the 990'	North/South Line NORTH	Feet from the 990'	East/West line WEST	County RIO ARriba
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
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¹² Dedicated Acres 160	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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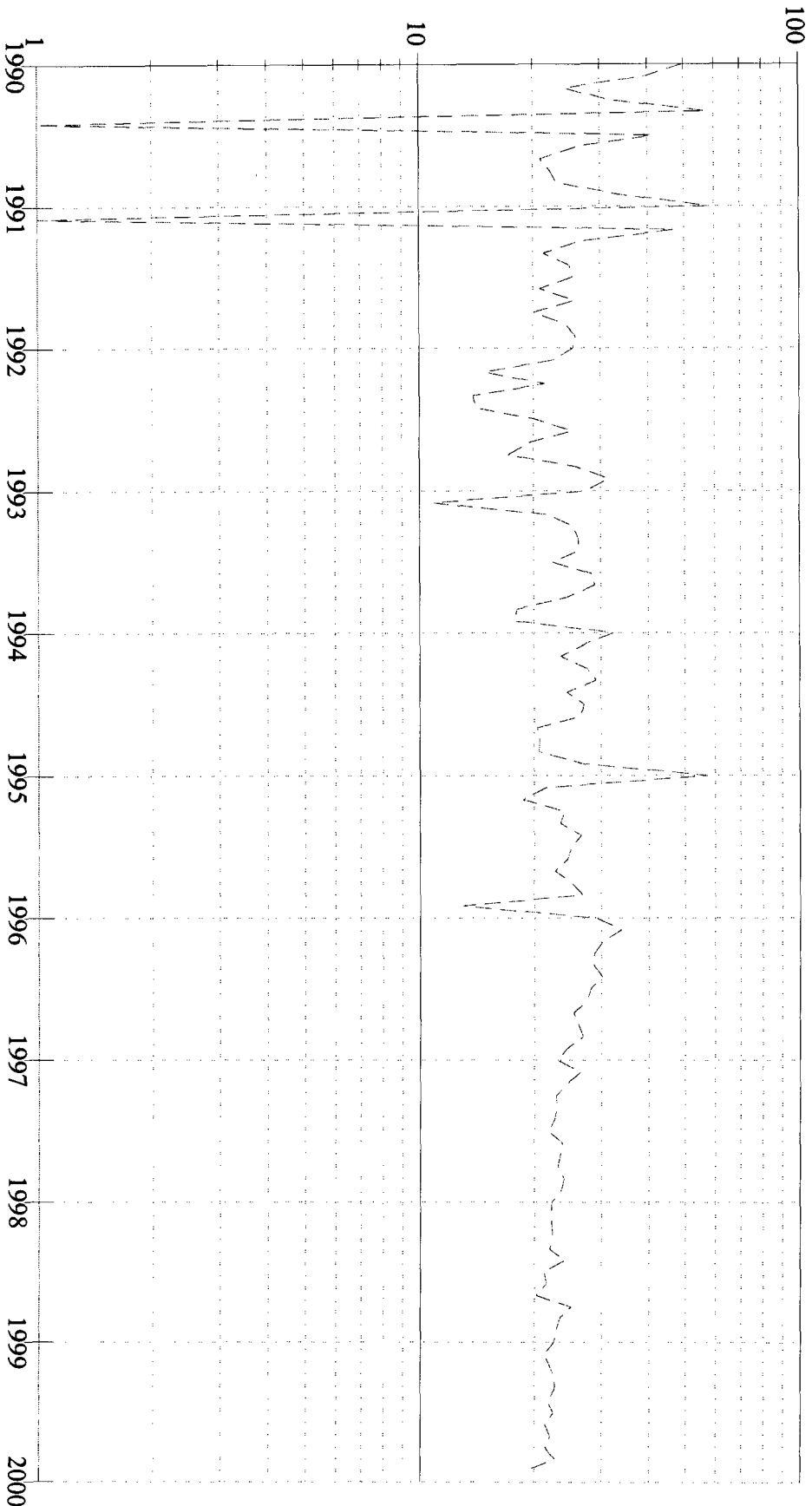
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON--STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	Dedicated Acreage	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature JERRY FLETCHER Printed Name ENGINEER TECH. Title 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

Oil
Gas
Water
Wells

Field: OTERO
Lease: JICARILLA APACHE | Well #3
Operator: MARATHON OIL COMPANY
Production Rate vs Time
For the Period 01/1990 to 12/1999 | API: 30039062600000

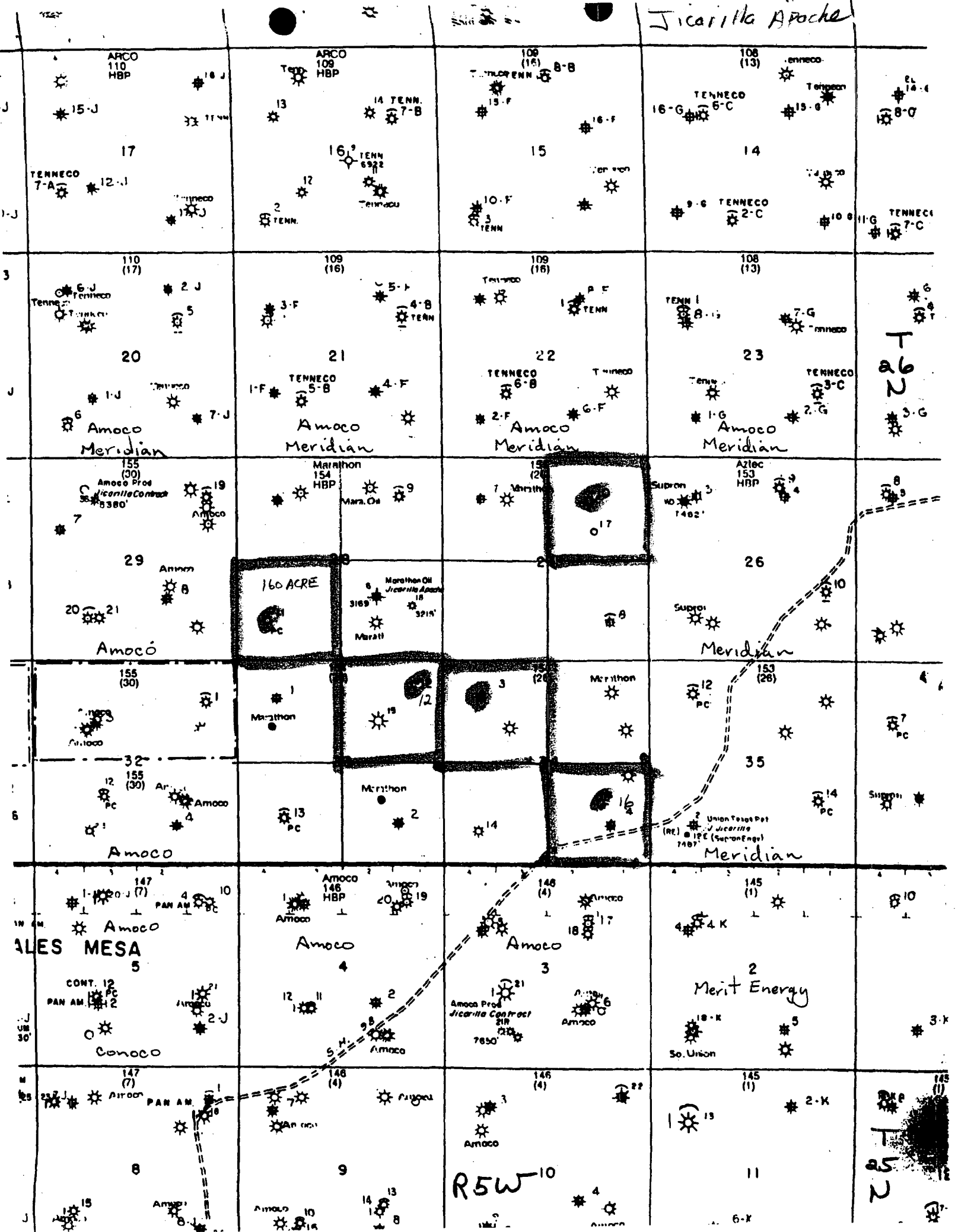
BBI/Day or Mcf/Day



Time

Reported Oil Production = 0 Bbls
Reported Gas Production = 320,811 Mcf
Reported Water Production = 24 Bbls

Jicarilla Apache



District I
1625 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 Co. P.O. Box 552 Midland, Tx. 79702

Operator Address

Jicarilla Apache # 3 "D" 34, 26N, 5W Rio Arriba

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

OGRID No. 14021 Property Code 6414 API No. 30-039-06260 Lease Type: ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	South Blanco Pictured Cliffs		Otero Chacra
Pool Code	72439		82329
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2918 to 3034		3800 to 3822
Method of Production (Flowing or 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#		350#
Oil Gravity or Gas BTU (Degree API or Gas BTU)	37 API		39 API
Producing, Shut-In or New Zone	New Zone		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 Gas 0.0 % 80 %	Oil Gas % %	Oil Gas 0.0 % 20 %

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

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 South Blanco Pictured Cliffs				County Rio Arriba										
Address P.O. Box 552 Midland, TX 79702		TYPE OF TEST - (X) <input checked="" 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.S.	GRAV. OIL	OIL BBL.S.		GAS M.C.F.
Jicarilla Apache	3	"D"	34	26N	5W	8-14-00	F		65		24	0	N/A	0	88	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 Engineer Tech.

Printed name and title

9-14-00

915-687-8357

Date

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
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811 S. 1st Street, Artesia, NM 88210-2834
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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 Otero Chacara		County Rio Arriba										
Address P.O. Box 552 Midland, TX 79702		TYPE OF TEST - (X) <input type="checkbox"/> Scheduled <input type="checkbox"/> Completion <input type="checkbox"/> Special <input checked="" type="checkbox"/>												
LEASE NAME Jicarilla Apache	WELL NO. #3	LOCATION			DATE OF TEST 8-14-00	STATUS F	CHOKE SIZE 65	TBG. PRESS. 65	DAILY ALLOW-ABLE 24	LENGTH OF TEST HOURS 0	PROD. DURING TEST			GAS-OIL RATIO CU FT/BBL N/A
		U 34	S 26N	T 5W							R 0	WATER BLS. N/A	GRAV. OIL 0	

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.
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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

9-14-00

915-687-8357

Date

Telephone No.

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



Subject	Jicarilla Commingling Allocation Percentages	Page No.	Of
File	-	By	WSL
		Date	9/12/2000

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 Newfee 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 Newfee addition of 75 MCFD

Estimated stabilized total rate $\cong 370$ MCFD

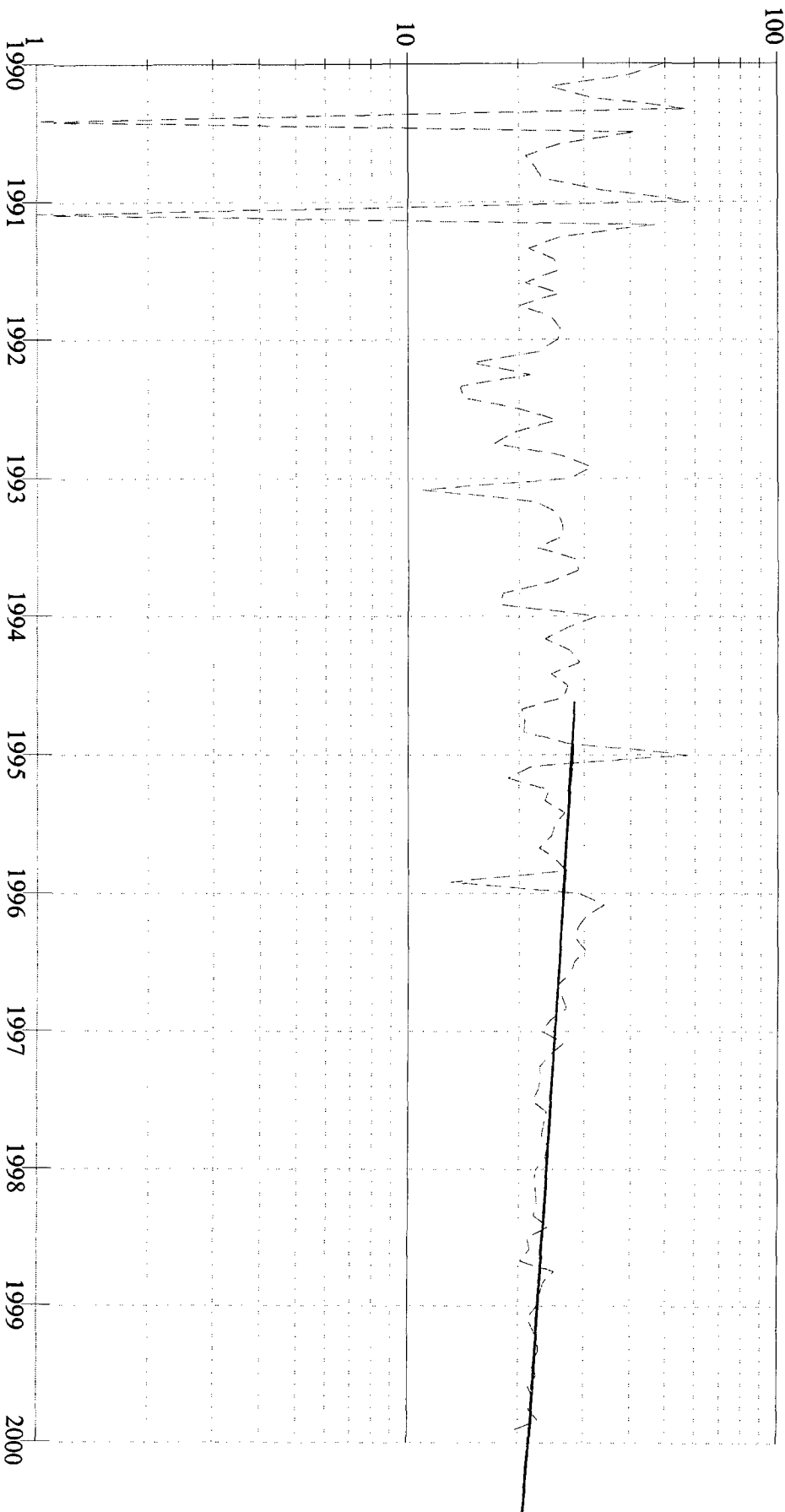
Estimated Otero Chavira rate $\cong 160$ MCFD $> \frac{160}{370} = 43.25\%$

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

Oil
Gas
Water
Wells

Field: OTERO
 Lease: JICARILLA APACHE | Well #3
 Operator: MARATHON OIL COMPANY
 Production Rate vs Time
 For the Period 01/1990 to 12/1999 | API: 30039062600000

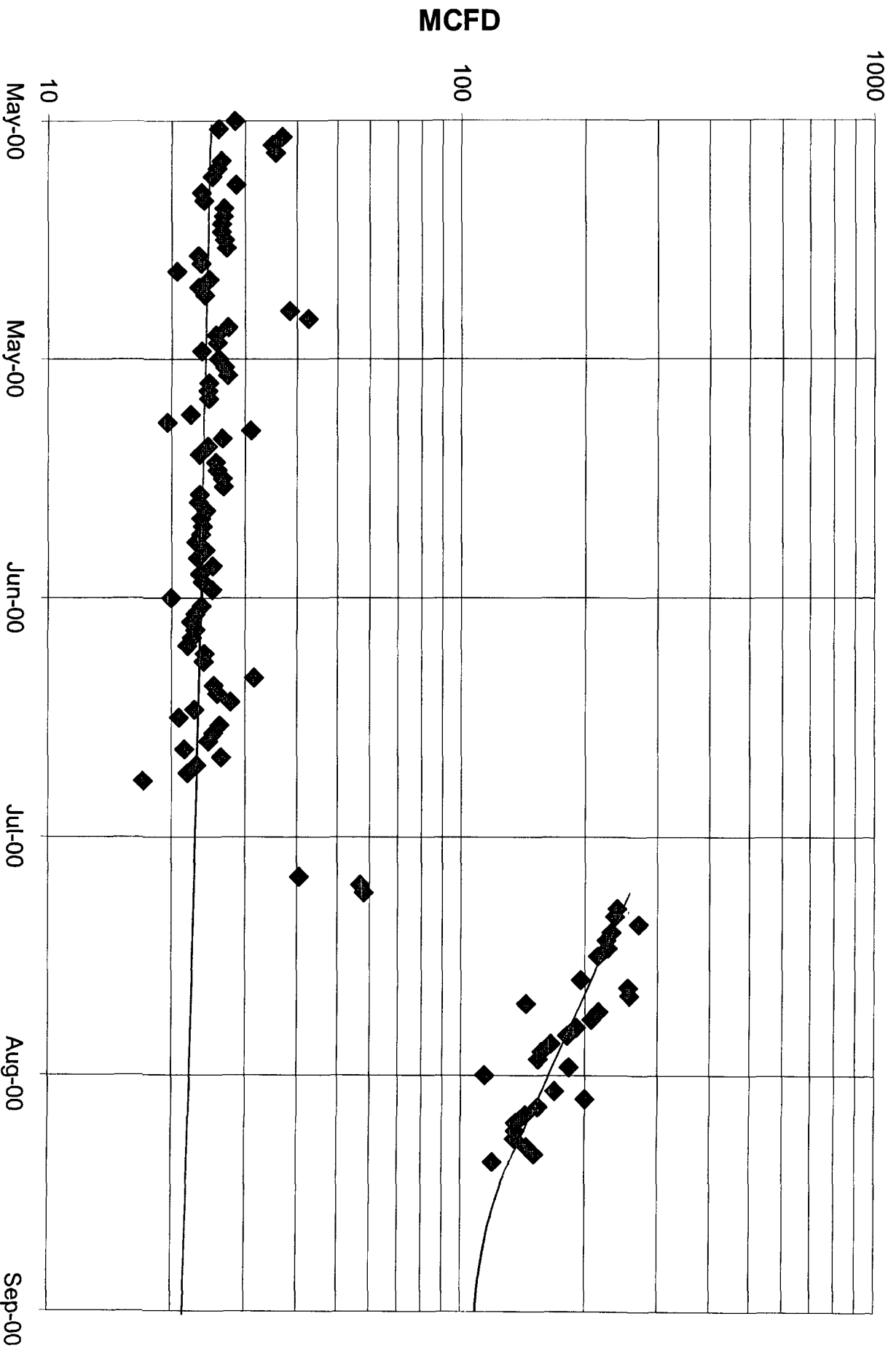
BBI/Day or Mcf/Day



Reported Oil Production = 0 Bbls
 Reported Gas Production = 320,811 Mcf
 Reported Water Production = 24 Bbls

Time

Jicarilla Apache #3



Mid-Continent Region
Production United States

app # 57432



**Marathon
Oil Company**

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

2785

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

JUL 24 2000

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