

DHC 6/27/00

Houston Division
Production Operations, United States



**Marathon
Oil Company**

P.O. Box 2490
Hobbs, New Mexico 88240
Telephone 505/393-7106

June 1, 2000

Mr. David Catanach
Oil Conservation Department
Energy and Minerals Department
P.O. Box 2088
Santa Fe, New Mexico 87501

2768

OIL CONSERVATION DIV.
00 JUN - 7 AM 8:51

**RE: Request for Exception to Rule 303-A (Downhole Commingling)
Laughlin Well No. 2
Unit Letter G, 2310' FNL & 2310' FEL
Section 9, T-20-S, R-37-E
Monument Paddock, Monument Tubb
Lea 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 Monument Paddock and Monument Tubb pools in Lea County, New Mexico.

The Laughlin Well No. 2 was initially drilled in September 1997. Perforations were shot in the Abo & Drinkard. After stimulating and testing, the Abo & Drinkard perforations were abandon. The Tubb was then perforated and stimulated in November 1997. A change of ownership occurred in April 1999. Current production is from the Tubb pool. A RBP will be set and the Paddock will be perforated and stimulated. After testing the RBP will be removed and the two pools will be downhole commingled. By downhole commingling the production from the 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.

Enclosed is pertinent data supporting this application as outlined in Rule 303-A. If additional information is necessary, please contact me at (505) 393-7106, ext 201.

Sincerely,

A handwritten signature in cursive script that reads "Thomas P. Kacir".

Thomas P. Kacir
Production Engineer

REQUEST FOR EXCEPTION TO RULE 303-A

Laughlin Well No. 2

Monument Field

A: Operator

Marathon Oil Company
P.O. Box 2490
Hobbs, New Mexico 88241

B: Lease Name and Well Number

Laughlin Well No. 2
Unit Letter G, 2310' FNL & 2310' FEL
Section 9, T-20-S, R-37-E
Lea County, New Mexico
Monument Paddock, Monument Tubb

C: Plats

Attached

D: C-116's

Attached

E: Production Decline Curves

Attached

F: Estimated Bottomhole Pressures

	Current
Monument Paddock	750 psi
Monument Tubb	1000 psi

G: Product Characteristics

Previous commingling of these zones by 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 and value will not be adversely affected.

I: Production Allocation

<u>POOL</u>	<u>BOPD</u>	<u>MCFD</u>	<u>BWPD</u>	<u>Estimated Methods</u>
Monument Paddock	20	10	9	Expected Production
Monument Tubb	<u>5</u>	<u>36</u>	<u>10</u>	Current Production
Total	25	46	19	

<u>Allocated Percentages</u>	<u>Oil %</u>	<u>Gas %</u>	<u>Water %</u>
Monument Paddock	80	22	47
Monument Tubb	<u>20</u>	<u>78</u>	<u>53</u>
Total	100	100	100

J: Ownership

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

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 30-025-34067		² Pool Code 47080	³ Pool Name MONUMENT: PADDOCK
⁴ Property Code 24655	⁵ Property Name Laughlin		⁶ Well Number 2
⁷ OGRID No. 014021	⁸ Operator Name Marathon Oil Company		⁹ Elevation GL: 3541'

¹⁰ Surface Location

UL or lot no. G	Section 9	Township 20-S	Range 37-E	Lot. Idn	Feet from the 2310'	North/South Line NORTH	Feet from the 2310'	East/West line EAST	County LEA
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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 40	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

<p>Sec. 9</p>	<p>¹⁷ 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><u>Thomas P. Kacir</u></p> <p>Signature</p> <p>Thomas P. Kacir</p> <p>Printed Name</p> <p>Production Engineer</p> <p>Title</p> <p>6/1/00</p> <p>Date</p>	
	<p>¹⁸ 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>	

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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-34067	² Pool Code 47090	³ Pool Name MONUMENT: TUBB
⁴ Property Code 24655	⁵ Property Name Laughlin	⁶ Well Number 2
⁷ OGRID No. 014021	⁸ Operator Name Marathon Oil Company	⁹ Elevation GL: 3541'

¹⁰ Surface Location

UL or lot no. G	Section 9	Township 20-S	Range 37-E	Lot. Idn	Feet from the 2310'	North/South Line NORTH	Feet from the 2310'	East/West line EAST	County LEA
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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 80	¹³ Joint or Infill Y	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

				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> <u>Thomas P. Kacir</u> Signature Thomas P. Kacir Printed Name Production Engineer Title 6/1/00 Date
				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: _____ Certificate Number



Marathon Oil Company
Laughlin Lease
Sec 9
T-20-S
R-37-E
ULG, H

1/31/7
Mrs. Iva E. Lee
No. 34-21-
Hwy 9-1-98

S. M. Corrie Co. Inc.
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GAS - OIL RATIO TEST

Operator Marathon Oil Company		Pool Monument; Tubb		County Lea											
Address P.O. Box 2490 Hobbs, NM 88240		TYPE OF TEST - (X)		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.S.	GRAV. OIL	OIL BBL.S.	GAS M.C.F.	
Laughlin	2	G	9	20	37	5/13/00	P	30		24	10	5	36	7200	
For information only															

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

Thomas P. Kacir
Production Engineer

Printed name and title

June 1, 2000

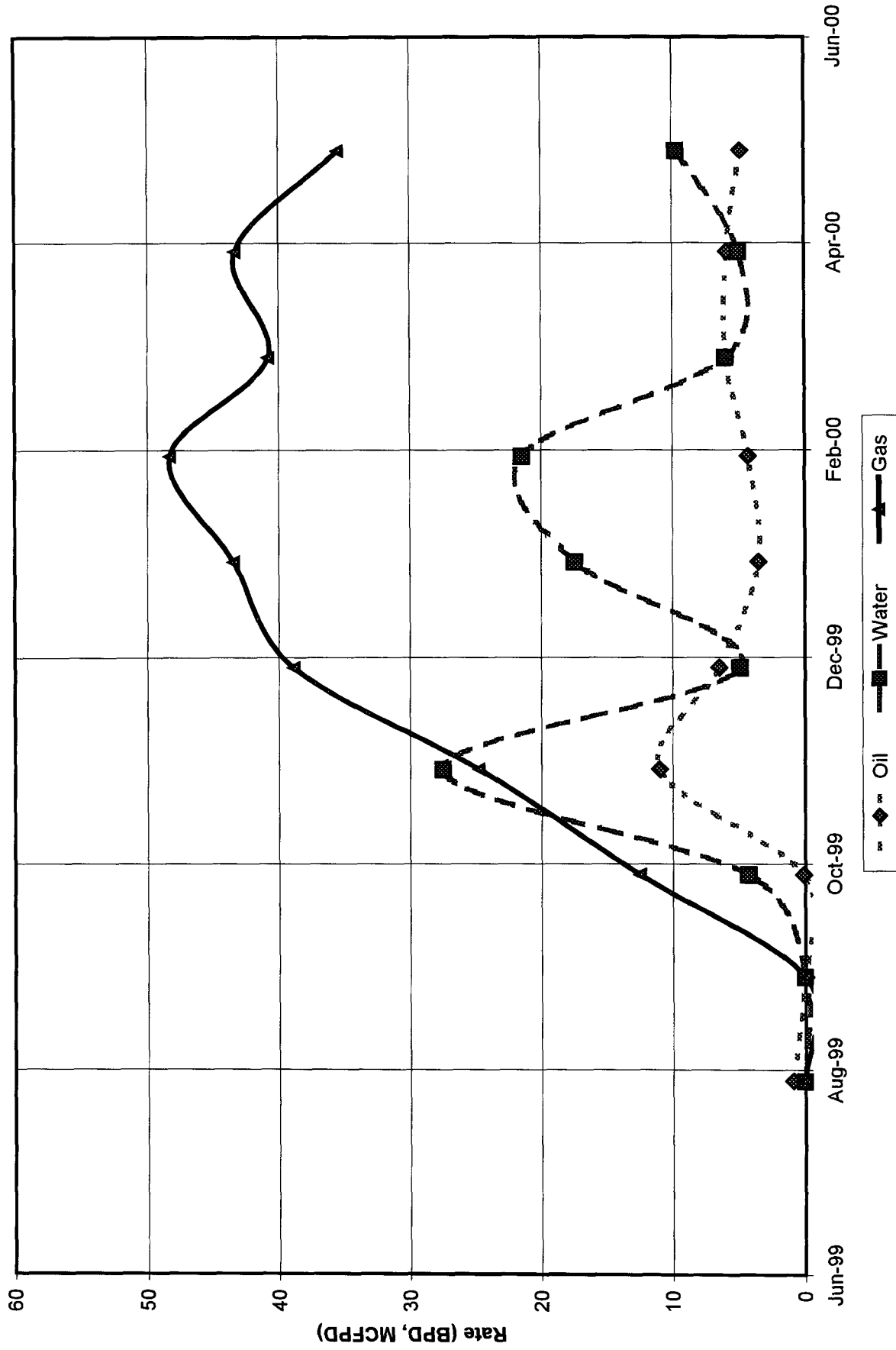
Date

393-7106

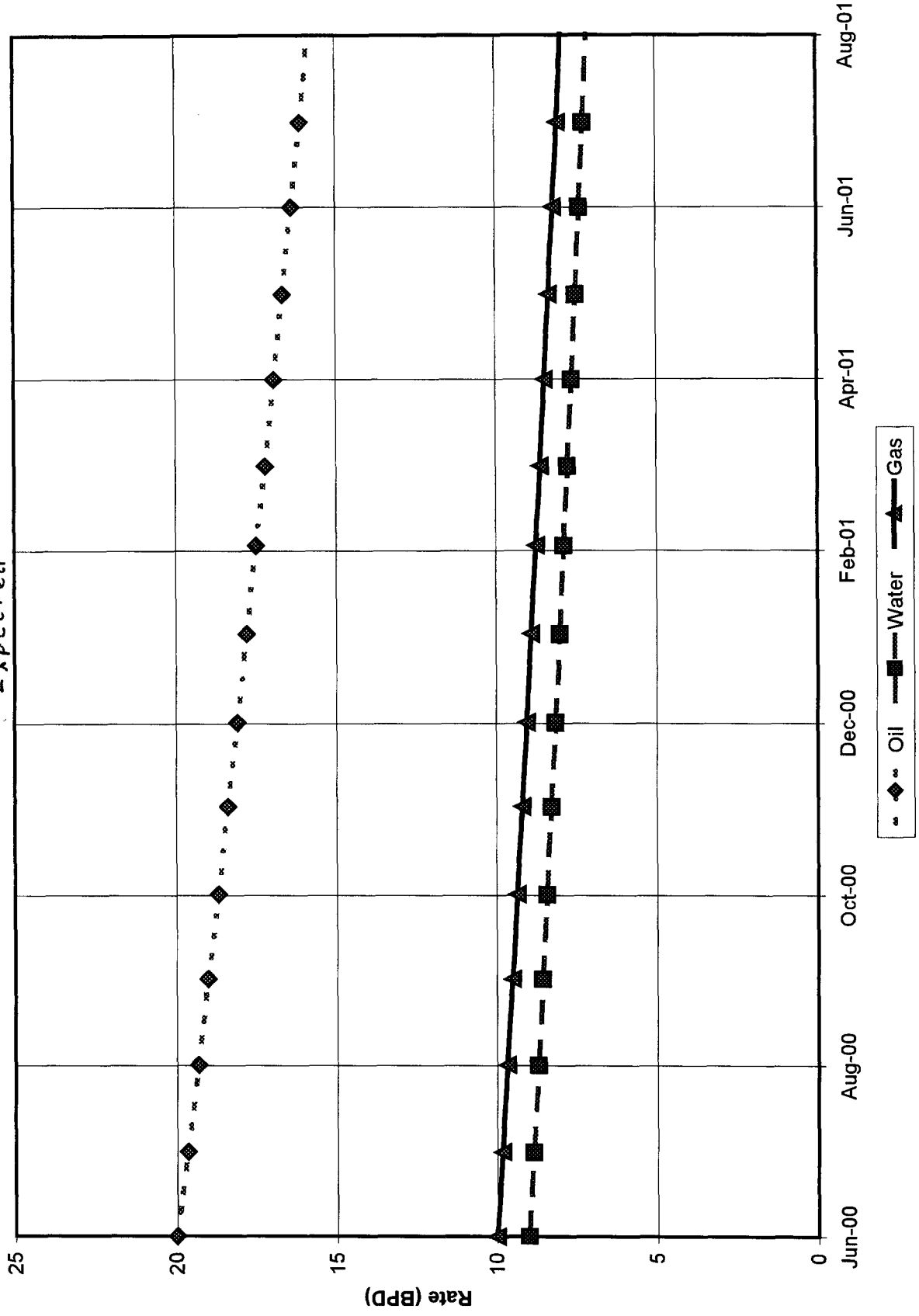
Telephone No.

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

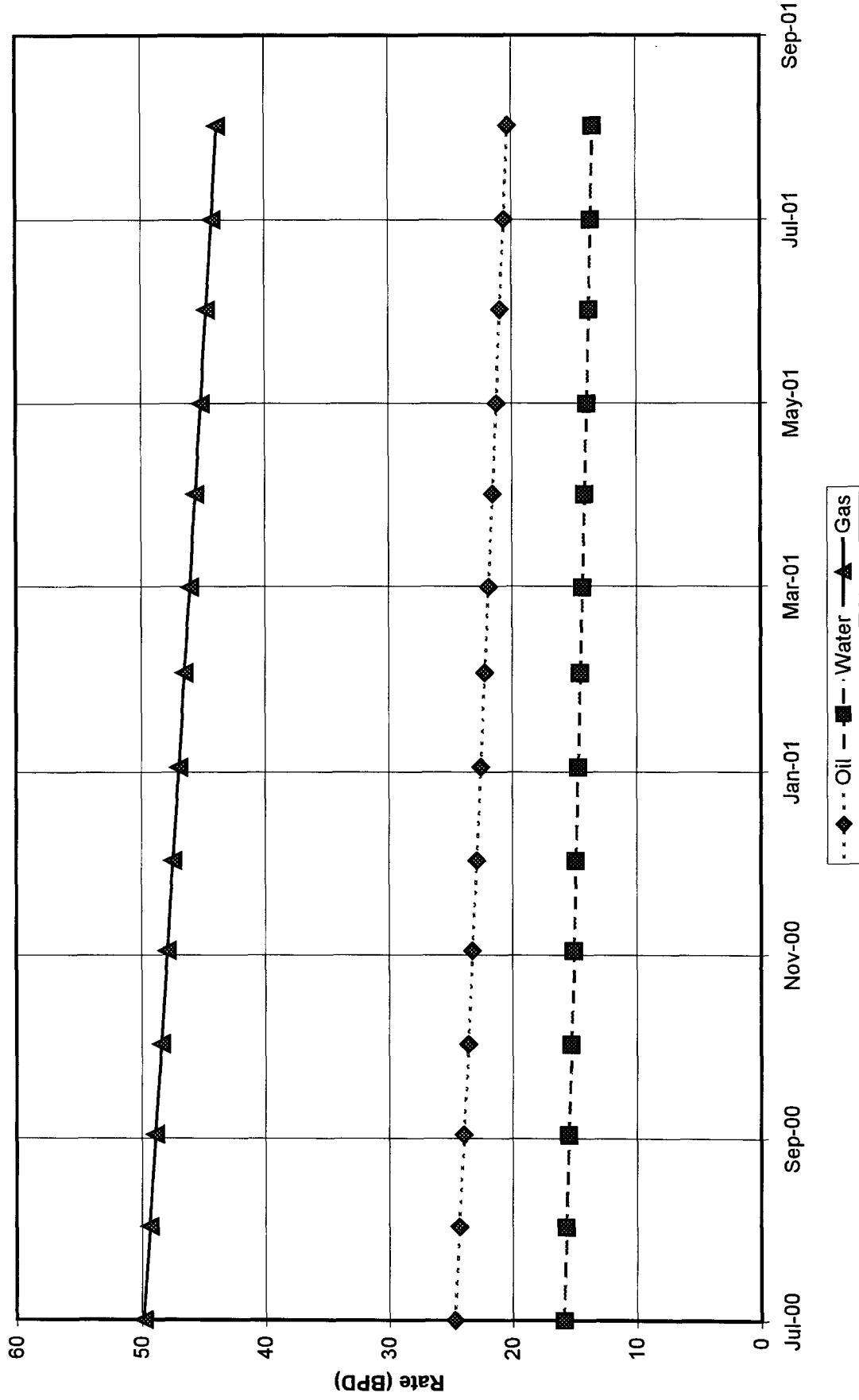
Laughlin Well No. 2 Tubb Production



Laughlin Well No. 2 Paddock Production Expected



Laughlin Well No. 2 Estimated DHC Production



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

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811 South First St., Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

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

APPROVAL PROCESS:

___ Administrative ___ Hearing

EXISTING WELLBORE

☒ YES ___ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Operator Marathon Oil Company Address PO Box 2490 Hobbs, NM 88241

Laughlin Well No. 2 UL G, Sec. 9, T-20-S, R-37-E Lea County

CGSS Unit Ltr. - Sec - Twp - Rgs

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 014021 Property Code 24655 API NO. 30-025-34067 Federal ___ State ___ (land/for) Fee ☒

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zones	Lower Zone
1. Pool Name and Pool Code	Monument Paddock 47080	N/A	Monument Tubb 47090
2. Top and Bottom of Pay Section (Perforations)	Proposed 5166-5206'		6408-6589'
3. Type of production (Oil or Gas)	Oil		Oil
4. Method of Production (Flowing or Artificial Lift)	Artificial Lift		Artificial Lift
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a. (Current) Expected 750 psi b. (Original) N/A	a. b.	a. 1000 psi b. N/A
6. Oil Gravity (° API) or Gas BTU Content	Expected 36° API		37° API
7. Producing or Shut-In?	Shut-in		Producing
Production Marginal? (yes or no)	Expected - Yes		Yes
* If Shut-In, give 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: Expected Rates: 20/10/9	Date: Rates:	Date: Rates: N/A
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: Rates: N/A	Date: Rates:	Date: 5/13/00 Rates: 5/36/10
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 80 % Gas: 22 %	Oil: % Gas: %	Oil: 20 % Gas: 78 %

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? N/A ___ Yes ___ No

11. Will cross-flow 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.
- * Notification list of 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 Thomas P. Kacir TITLE Production Eng. DATE 6/2/00

TYPE OR PRINT NAME Thomas P. Kacir TELEPHONE NO. (505) 393-7106