



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

11/2/98

GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

RE: Proposed:

MC	_____
DHC	_____ <i>X</i> _____
NSL	_____
NSP	_____
SWD	_____
WFX	_____
PMX	_____

Gentlemen:

I have examined the application for the:

<i>Marathon Oil Co</i>	<i>Edith Butler B[#]</i>	<i>1-I-13-22s-37e</i>
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

Recommend approval.

Yours very truly,

Chris Williams
Supervisor, District 1

/ed

Houston Division
Production Operations, United States



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

October 23, 1998

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

**RE: Request for Exception to Rule 303-A
Downhole Commingling
Edith Butler "B" Well No. 1
Unit Letter I, 1980' FSL & 660' FEL
Section 13, T-22-S, R-37-E
Blinebry Oil & Gas, Tubb Oil & Gas and South Brunson Drinkard-Abo
Drinkard Field
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 Blinebry Oil & Gas, Tubb Oil & Gas and South Brunson Drinkard-Abo pools in Lea County, New Mexico. Marathon also request a 30 day exception to Rule 303-A to permit the downhole commingling of production while awaiting for approval of application. If application is not approved, then the well will be worked over to produce only the Blinebry Oil & Gas pool.

All three pools have marginal production. The Tubb and Drinkard-Abo were downhole commingled in 1994 (order DHC-1048). In 1996, a workover isolated the Tubb and Drinkard-Abo below a bridge plug. Pay was then added in the Blinebry Oil & Gas zones. Current production is from the Blinebry Oil & Gas pool. The RBP will be removed and the three pools will be downhole commingled. By downhole commingling the production from the 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, preventing crossflow.

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, appearing to read 'Thomas P. Kacir'.

Thomas P. Kacir
Production Engineer

TPK/dbc
Enclosure

REQUEST FOR EXCEPTION TO RULE 303-A

Edith Butler "B" Well No. 1

Drinkard Field

A: Operator

Marathon Oil Company
P.O. Box 2409
Hobbs, New Mexico 88240-2409

B: Lease Name and Well Number

Edith Butler "B" Well No. 1
Unit Letter I, 1980' FSL & 660' FEL
Section 13, T-22-S, R-37-E
Lea County, New Mexico
Drinkard: Blinebry Oil & Gas, Tubb Oil & Gas, South Brunson Drinkard-Abo Pools

C: Plats and Offset Operators

Attached

D: C-116's

Attached

E: Production Decline Curves

Attached

F: Estimated Bottomhole Pressures

	Current
Blinebry Oil & Gas	300 psi
Tubb Oil & Gas	350 psi
South Brunson Drinkard-Abo	500 psi

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 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>
Blinebry Oil & Gas	20	145	10	Current Production
Tubb Oil & Gas	1.2	48	0.5	Pre-1996 Workover Production
S. Brunson Drinkard-Abo	<u>5.8</u>	<u>117</u>	<u>0.5</u>	Pre-1996 Workover Production
Total	27	310	11	

<u>Allocated Percentages</u>	<u>Oil %</u>	<u>Gas %</u>	<u>Water %</u>
Post-workover utilizing above production			
Blinebry Oil & Gas	74.1	46.8	91.0
Tubb Oil & Gas	4.4	15.5	4.5
S. Brunson Drinkard-Abo	<u>21.5</u>	<u>37.7</u>	<u>4.5</u>
Total	100	100	100

J: Ownership

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

K: Offset Operator Notification

By copy of this letter we are notifying all offset operators (see list, Item C) of the proposed commingling, by certified mail.

OFFSETTING OPERATORS
Edith Butler "B" Well No. 1
UL "I", 1980' FSL, 660' FEL
Section 13, T-22-S, R-37-E
Lea County, New Mexico
Drinkard Field

Exxon Corporation
P.O. Box 4697
Houston, Texas 77210-4697

John H. Hendrix Corp.
P.O. Box 3040
Midland, Texas 79702-3040

Ernie L. Hegwer
513 E. Zia Drive
Hobbs, NM 88240

Houston Division
Production Operations, United States



**Marathon
Oil Company**

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

October 23, 1998

Exxon Corporation
P.O. Box 4697
Houston, Texas 77210

**RE: Request for Exception to Rule 303-A
Downhole Commingling
Edith Butler "B" Well No. 1
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Section 13, T-22-S, R-37-E
Blinbry Oil & Gas, Tubb Oil & Gas, South Brunson Drinkard-Abo Pools
Drinkard Field
Lea County, New Mexico**

Ladies and/or Gentlemen:

Marathon Oil Company has filed an application with the New Mexico Oil Conservation division for a downhole commingling production permit in the above referenced well. Please find enclosed a copy of the application as outlined in Rule 303-A.

If you are in agreement and waive all objections to the downhole commingling, please sign below and mail the original to the NMOCD in the enclosed addressed envelope. Also, please return one copy to Marathon at the letterhead address.

Sincerely,

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

Thomas P. Kacir
Production Engineer

TPK/
Enclosure

Agreed and accepted this _____ day of _____ 1998

by _____, as representative of

Houston Division
Production Operations, United States



**Marathon
Oil Company**

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

October 23, 1998

John H. Hendrix Corporation
P.O. Box 3040
Midland, Texas 79702

**RE: Request for Exception to Rule 303-A
Downhole Commingling
Edith Butler "B" Well No. 1
Unit Letter I, 1980' FSL & 660' FEL
Section 13, T-22-S, R-37-E
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Thomas P. Kacir
Production Engineer

TPK/
Enclosure

Agreed and accepted this _____ day of _____ 1998

by _____, as representative of



**Marathon
Oil Company**

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

October 23, 1998

Ernie L. Hegwer
513 Zia Drive
Hobbs, NM 88240

**RE: Request for Exception to Rule 303-A
Downhole Commingling
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Thomas P. Kacir
Production Engineer

TPK/
Enclosure

Agreed and accepted this _____ day of _____ 1998

by _____, as representative of

[illegible]

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 Blinebry Oil & Gas		County Lea										
Address P.O. Box 2490, Hobbs, NM 88241		TYPE OF TEST - (X)		Completion ☐ Special ☒										
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 CUFT/BBL	
		U	S	T						R	WATER BBLs.	GRAV. OIL		OIL BBLs.
EDITH BUTLER 'B'	1	I	13	22S	37E	09/04/98	P	250		24	10	20	145	7.250
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.

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

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

Thomas P. Kac1r

Signature

Thomas P. Kac1r Production Engineer

Printed name and title

October 23, 1998

Date

(505) 393-7106

Telephone No.

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

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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

GAS - OIL RATIO TEST

Operator Marathon Oil Company		Pool Tubb Oil & Gas / South Brunson Drinkard-Abo		County LEA			
Address P.O. Box 2490, Hobbs, NM 88241		TYPE OF TEST - (X)		Completion ☐ Special ☒			
LEASE NAME	WELL NO.	LOCATION			LENGTH OF TEST HOURS	PROD. DURING TEST	GAS-OIL RATIO CUFT/BBL
		U	S	T			
EDITH BUTLER 'B'	1	I	13	22S	37E	24	
Tubb Oil & Gas						0.5	1.2
S. Brunson Drinkard-Abo						0.5	5.8
Tota1 (DHC-1048)						1.0	7.0
							48
							117
							165
							40,000
							20,172
							23,571
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.

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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.

Thomas P. Kacir
Signature

Thomas P. Kacir **Production Engineer**

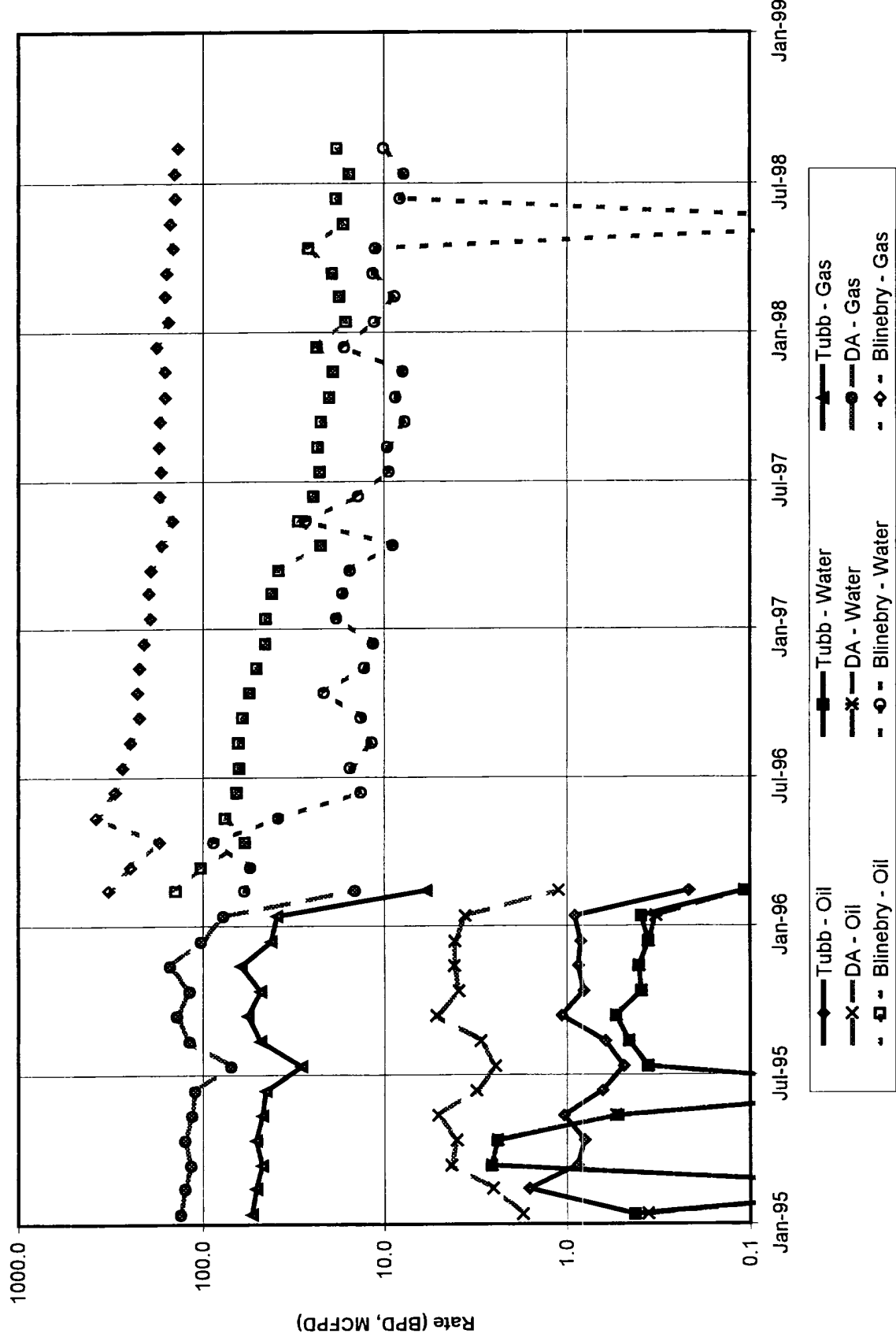
Printed name and title

October 23, 1998 **(505) 393-7106**

Date Telephone No.

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

Edith Butler 'B' Well No. 1
UL 'I', Sec 13, T-22-S, R-37-E



Blinebry / Tubb / Drinkard-Abo
DHC Application

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

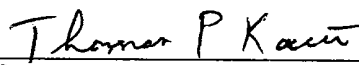
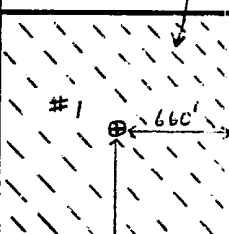
¹ API Number 30-025-10252		² Pool Code 6660		³ Pool Name Blaine Oil & Gas	
⁴ Property Code 6377		⁵ Property Name Edith Butler "B"			⁶ Well Number 1
⁷ OGRID No. 014021		⁸ Operator Name Marathon Oil Company			⁹ Elevation GL: 3326'

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
I	13	22-S	37-E		1980	South	660	East	Lea

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 No	¹⁴ Consolidation Code NA	¹⁵ Order No. NA
-------------------------------------	-------------------------------------	--	-------------------------------

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.  Signature Thomas P. Kacir Printed Name Production Engineer Title 10/23/98 Date	
		Lease Boundary →		Dedicated Acreage 	
				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. See Original Plat. Date of Survey Signature and Seal of Professional Surveyer: Certificate Number	

1

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
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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

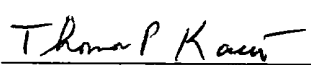
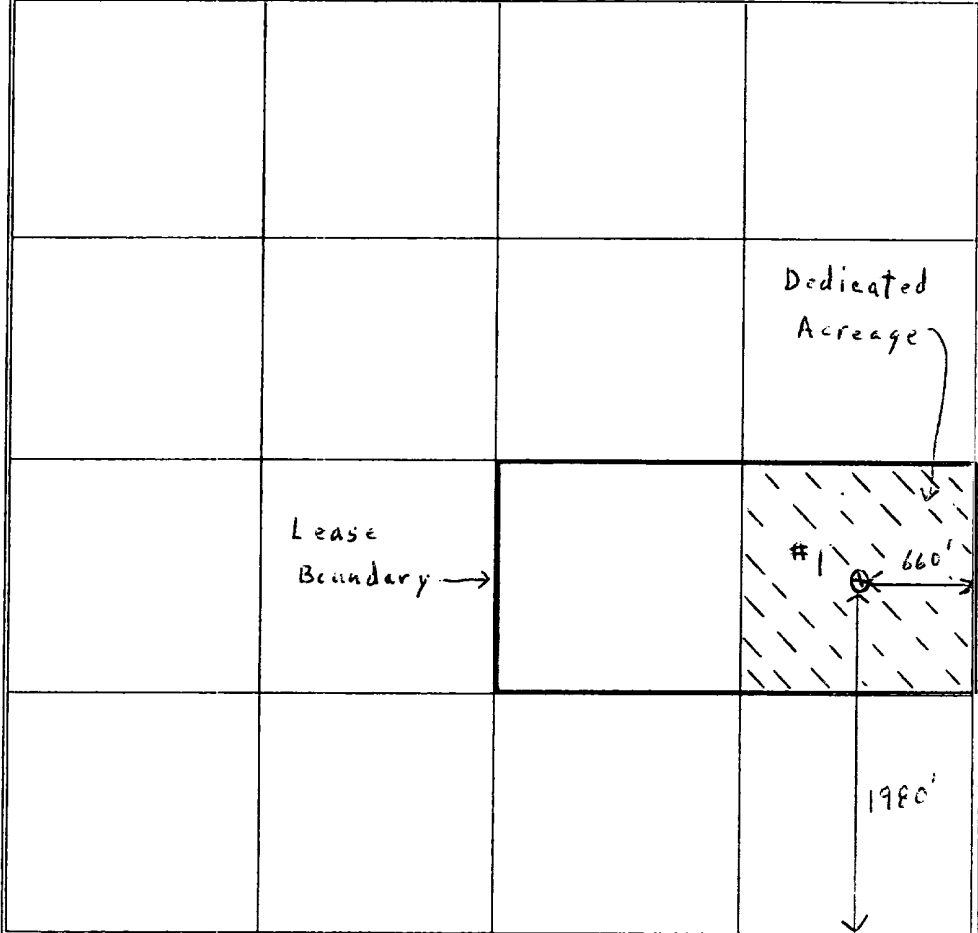
¹ API Number 30-025-10252		² Pool Code 60240		³ Pool Name Tubb Oil & Gas	
⁴ Property Code 6377		⁵ Property Name Edith Butler "B"			⁶ Well Number 1
⁷ OGRID No. 014021		⁸ Operator Name Marathon Oil Company			⁹ Elevation GL: 3326'

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
I	13	22-S	37-E		1980	South	660	East	Lea

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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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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.	
				 Signature Thomas P. Kacir Printed Name Production Engineer Title 10/26/98 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. See Original Plat. Date of Survey Signature and Seal of Professional Surveyer: Certificate Number	

01

1

EXHIBIT "R" - CASE NO. 11353, ORDER NO. R-10470-A

DISTRICT I

P.O. Box 1900, Hobbs, NM 88240

DISTRICT II

811 South First St., Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Artesia, 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 88240
Edith Butler B 1 UL I, Sec. 13, T-22-S, R-37-E Lea
 Well No. Unit Tr. - Sec. - Twp. - Rge. County
 OGRID NO. 014021 Property Code 6377 API NO. 30-025-10252 Spacing Unit Lease Types: (check 1 or more)
 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	Blinebry Oil & Gas 6660	Tubb Oil & Gas 60240	Brunson; Drinkard-Abo South 9700
2. Top and Bottom of Pay Section (Perforations)	5482 - 5840'	6040 - 6202'	6306 - 6548'
3. Type of production (Oil or Gas)	Oil	Oil	Oil
4. Method of Production (Flowing or Artificial Lift)	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) 300	a. 350	a. 500
	b. (Original) --	b. --	b. --
6. Oil Gravity (°API) or Gas BTU Content	37 API	37 API	41 API
7. Producing or Shut-In?	Producing	Shut-In	Shut-In
Production Marginal? (yes or no)	Yes	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 * If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: Rates: N/A	Date: 12/18/95 Rates: 1.2/48/0.5	Date: 12/18/95 Rates: 5.8/117/0.5
	Date: 9/4/98 Rates: 10/145/10	Date: Rates: N/A	Date: Rates: N/A
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 74.1 % Gas: 46.8%	Oil: 4.4 % Gas: 15.5 %	Oil: 21.5 % Gas: 37.7%

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

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 Thomas P. Kacir TITLE Production Engineer DATE 10/23/98

TYPE OR PRINT NAME _____ TELEPHONE NO. (505) 393-7106