

Houston Division
Production Operations, United States



**Marathon
Oil Company**

OIL CONSERVATION DIVISION
RECEIVED

34 SEP 14 AM 8 50

P.O. Box 2409
Hobbs, NM 88241-2409
Telephone 505/393-7106

September 9, 1994

State of New Mexico
Oil Conservation Division
Energy and Mineral Department
Mr. David Catanach
PO Box 2088
Santa Fe, NM 87501

RE: REQUEST FOR EXCEPTION TO RULE 303-A
DOWNHOLE COMMINGLING
EDITH BUTLER "B" WELL NO. 1
UNIT I, 1980' FSL & 660' FEL
SECTION 13, T-22-S, R-37-E
BLINEBRY AND DRINKARD FORMATIONS
DRINKARD FIELD
LEA COUNTY, NEW MEXICO

Dear Mr. Catanach:

Marathon Oil Company respectfully requests administrative approval for an exception to Rule 303-A to permit the downhole commingling of the Tubb and Drinkard formations in the above mentioned well.

Currently, the well is a Tubb-Drinkard dual producer with the Tubb flowing up the casing and the Drinkard on plunger lift below a packer (see attached wellbore sketch). It is proposed that the packer isolating the two zones be removed thus downhole commingling the Tubb and Drinkard. Both zones will be plunger lifted or rod pumped. The Tubb is currently loaded up, being unable to remove liquids up the casing and the Drinkard is being produced inefficiently under a packer. The downhole commingling of the two zones will allow for both zones to be produced to a lower abandonment pressure and recover additional reserves hereby minimizing waste.

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

Sincerely,

A handwritten signature in dark ink, appearing to read 'T.A. Deines'.

T.A. Deines
Northwest Operations
Production Superintendent

RDG:TAD/94107/kc
Attachments

REQUEST FOR EXCEPTION TO RULE 303-A

EDITH BUTLER "B" WELL NO. 1 DRINKARD FIELD

- (A) Marathon Oil Company
PO Box 2409
Hobbs, NM 88240
- (B) Edith Butler "B" Well No. 1
Unit I, 1980' FSL and 660' FEL
Section 13, T-22-S, R-37-E
Lea County, New Mexico
Commingling Zones: Tubb
Drinkard
- (C) A plat of the area is attached showing the lease and offset operations. Also attached is a C-102 for each formation.
- (D) The Form C-116 for each of the formations is attached. The allocated production for each pool will be based upon the current and historical production declines along with the latest GOR tests.
- (E) Production curves for both the Tubb and Drinkard are attached.
- (F) Estimated bottomhole pressure for each zone:
- | | |
|----------|----------|
| Tubb | 600 psia |
| Drinkard | 700 psia |
- (G) Marathon is commingling the fluids at the surface and has not encountered incompatibility problems.
- (H) If the downhole commingling is approved, additional reserves will be recovered from each formation.

(I) Production from the latest GOR test as follows:

<u>FORMATION</u>	<u>OIL (BPD)</u>	<u>GAS (MCFD)</u>	<u>WATER (BPD)</u>
Tubb	0	20	0
Drinkard	3	50	0
TOTAL	3	70	0

Predicted Production Is:

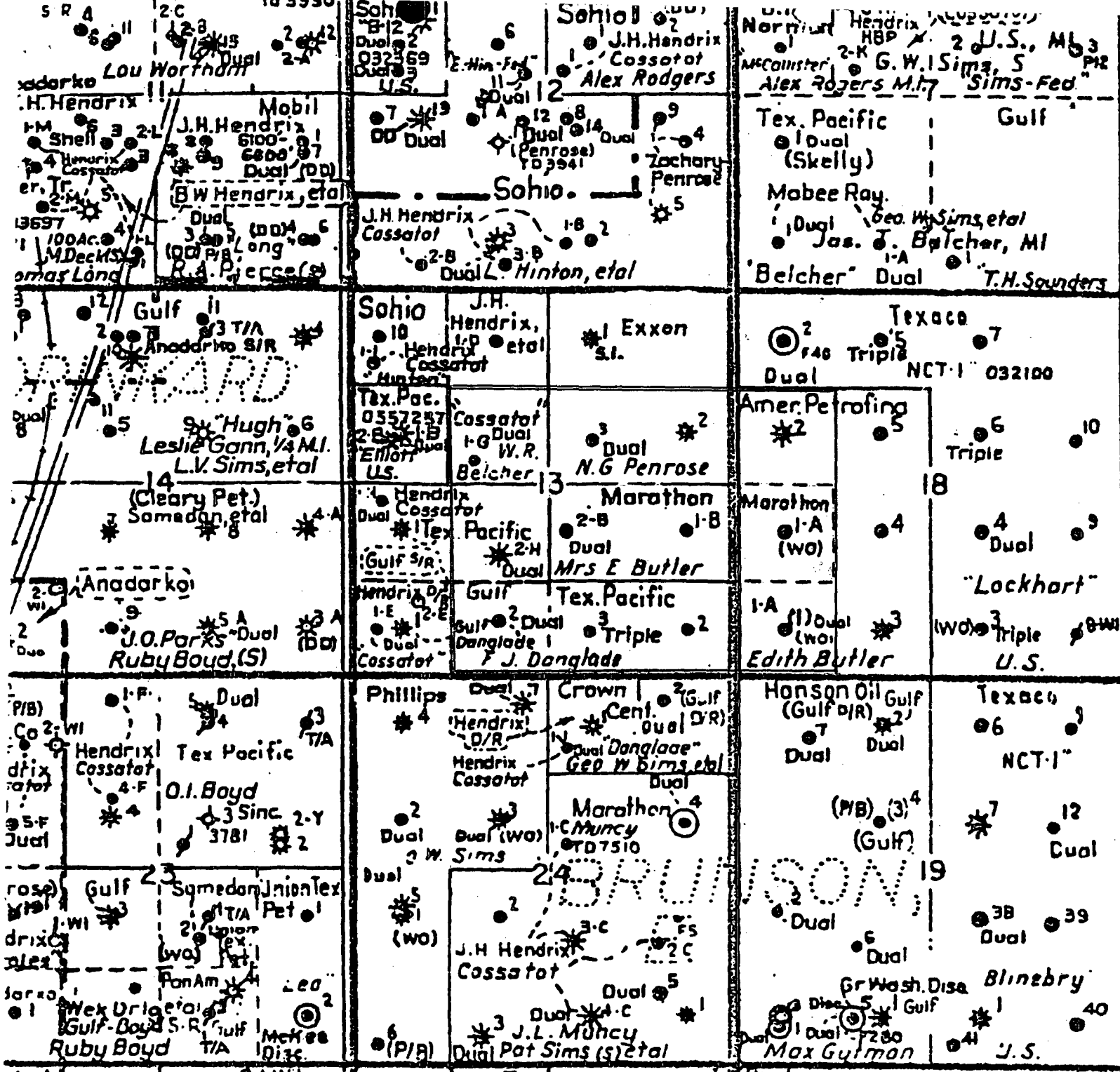
<u>FORMATION</u>	<u>OIL (BPD)</u>	<u>GAS (MCFD)</u>	<u>WATER (BPD)</u>
Tubb	1	60	1
Drinkard	5	100	1
TOTAL	6	160	2

Allocated Percentages should be:

<u>FORMATION</u>	<u>OIL (%)</u>	<u>GAS (%)</u>	<u>WATER (%)</u>
Tubb	16.7	28.6	50.0
Drinkard	83.3	71.4	50.0
TOTAL	100.0	100.0	100

(J) Ownership of the two pools to be commingled are in common and correlative rights will not be violated.

(K) By copy of this letter, we are notifying all offset operators of the proposed commingling.



R-37E

R-38E

MARATHON OIL COMPANY
EDITH BUTLER "B" LEASE

LAND PLAT

DRINKARD AREA
LEA COUNTY, NEW MEXICO

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 10, 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

API Number 30-025-10252		Pool Code	Pool Name South Brunson Drinkard
Property Code	Property Name Edith Butler "B"		Well Number 1
OGRID No. 14021	Operator Name Marathon Oil Company		Elevation 3326' GL

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	22S	37E	--	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 N	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

<div>16</div>	<div>17 OPERATOR CERTIFICATION</div> <p>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 Rick D. Gaddis Printed Name Petroleum Engineer Title August 25, 1994 Date</p>		
	<div>18 SURVEYOR CERTIFICATION</div> <p>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: See Original Plat Certificate Number</p>		

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 10, 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

API Number 30-025-10252	Pool Code	Pool Name South Brunson - Tubb
Property Code	Property Name Edith Butler "B"	Well Number 1
OGRID No. 14021	Operator Name Marathon Oil Company	Elevation 3326' GL

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	22S	37E	--	1980	South	660	East	Lea

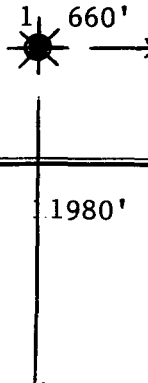
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹³ Dedicated Acres 80	¹³ Joint or Infill N	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

16			13	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 Rick D. Gaddis Printed Name Petroleum Engineer Title August 25, 1994 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: See Original Plat Certificate Number



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

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

GAS - OIL RATIO TEST

Operator		Marathon Oil Company		Pool		County		Lea															
Address		PO Box 552, Midland, TX 79702		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					
				U S T R												WATER BBL.S.		OIL BBL.S.		GAS M.C.F.		CU.FT/BBL.	
Edith Butler "B"		1		I 13 22S 37E		7/15/94		F --		10		--		24		0		0		20		--	

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.

Rick D. Gaddis

Signature

Rick D. Gaddis Petroleum Engineer

Printed name and title

8/25/94

Date

(505) 393-7106

Telephone No.

EDITH BUTLER "B" WELL NO. 1
DRINKARD-TUBB

1980' FSL & 660' FEL
SECTION 13, T-22S, R-37E
LEA COUNTY, NEW MEXICO

TD: 6950' PBD: NA
KB: 3340' GL: NA

SURFACE: 13 3/8", 48#, H-50
SET @ 306'. CMT'D W/ 250 SX.
CIRC'D TO SURFACE.

INTERMEDIATE: 8-5/8", 32#, J-55 SET @
2795'. CMT'D W/1500 SX. TOC UNKNOWN.

PRODUCTION: 5-1/2", 17#, J-55 SET @
6823'. CMT'D W/500 SX. TOC @ 1725'.

TUBING: 2-3/8", 4.6#, H-40, OTIS
SLEEVE, 1 JOINT TUBING, 2-3/8"
OTIS TUBING DIVIDER N PROFILE,
& DOUBLE GRIP PACKER.

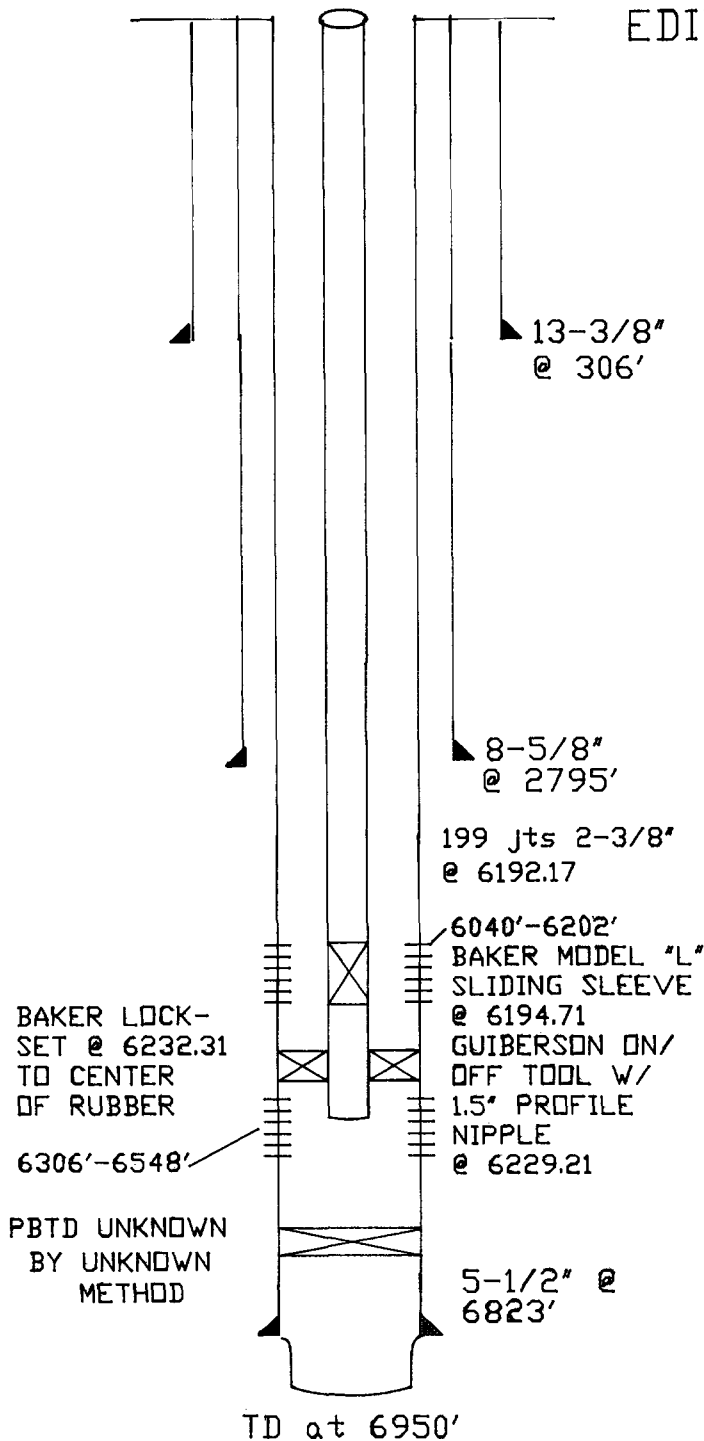
PRESENT COMPLETIONS:

TUBB:

6040'-6140' W/ 4 SPF, 400 HOLES.
6164', 66', 71', 75', 77', 79',
81', 88', 90', 92', 94', 96', 98',
6200', & 02' W/ 1 SPF, 16 HOLES.

DRINKARD:

6306'-6548' W/ 1 SPF, 20 HOLES.



HISTORY: DRILLED IN 1947. COMPLETED OPENHOLE IN THE DRINKARD F/ 6823'-6950'. ADDED TUBB INTERVAL F/ 6040'-6140' IN 1957. ABANDONED OPENHOLE DRINKARD AND ADDED DRINKARD F/ 6306'-6548' IN 1974. ADDED PERFORATIONS IN TUBB F/ 6164'-6202'. ACIDIZED W/ 3000 GALS. FRAC'D ENTIRE TUBB W/ 50000 GALS 64000# 20/40 SD.

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

GAS - OIL RATIO TEST

Operator		Marathon Oil Company		Pool		South Brunson Drinkard		County		Lea					
Address		PO Box 552, Midland, TX 79702		TYPE OF TEST - (X)		Scheduled <input type="checkbox"/>		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		
		U	S	T						R	WATER BBL.S.	GRAV. OIL	OIL BBL.S.	GAS M.C.F.	CU.FT/BBL.
Edith Butler "B"	1	I	13	22S	37E	7/15/94	P --	200	--	24	0	40	3	50	16,667
P = Plunger Lift															

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.



Signature

Rick D. Gaddis

Printed name and title

Petroleum Engineer

August 25, 1994

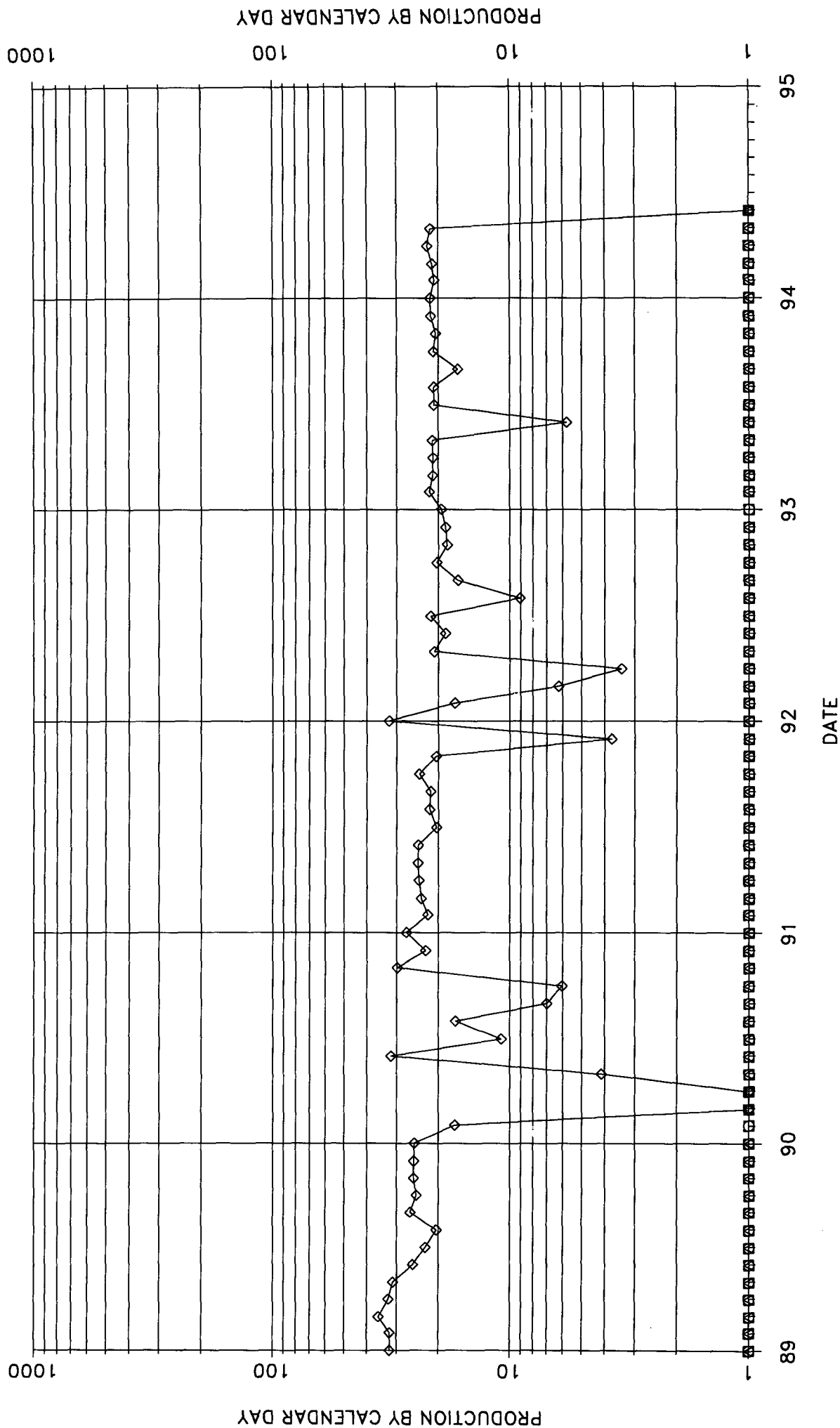
Date

(505) 393-7106

Telephone No.

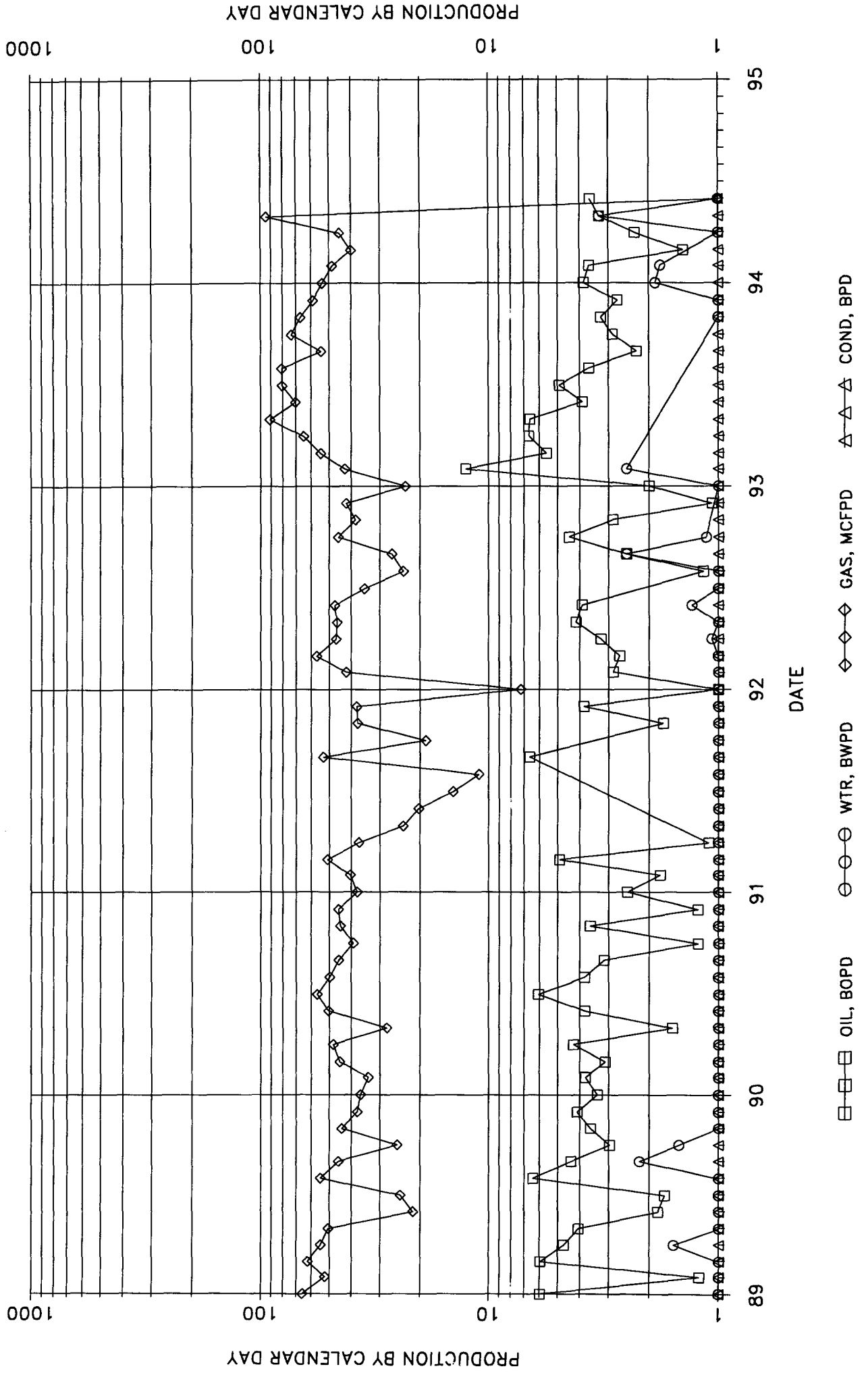
Midland Operations

Field=DRINKARD WNAME=EDITH BUTLER-B-NO. 1 -Tubbb



Midland Operations

Field=DRINKARD WNAME=EDITH BUTLER-B-NO. 1 - Driv/Ard



OFFSET OPERATORS

EDITH BUTLER "B" LEASE SECTION 13, T-22-S, R-37-E LEA COUNTY, NEW MEXICO

SECTION 13, T-22-S, R-37-E

Chevron U.S.A. Incorporated
15 Smith Road
PO Box 1150
Midland, TX 79702-1150

Exxon Company USA
3300 N. "A" Street
PO Box 1600
Midland, TX 79702-1600

John H. Hendrix Corp.
223 W. Wall, Suite 525
Midland, TX 79701-4519

SECTION 18, T-22-S, R-38-E

Fina Oil & Chemical Co.
6 Desta Drive Suite 4400
PO Box 2990
Midland, TX 79702-2990

September 9, 1994

Offset Operators
Edith Butler "B" Well No. 1
(mailing list attached)

RE: REQUEST FOR EXCEPTION TO RULE 303-A
DOWNHOLE COMMINGLING
MARATHON OIL COMPANY
EDITH BUTLER "B" WELL NO. 1
UNIT I, 1980' FSL & 660' FEL
SECTION 13, T-22-S, R-37-E
TUBB AND DRINKARD FORMATIONS
DRINKARD FIELD
LEA COUNTY, NEW MEXICO

Gentlemen:

Marathon Oil Company has filed an application with the New Mexico Oil Conservation Division to downhole commingle the above captioned well. Enclosed, please find 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 return one copy to Marathon at the above address.

Sincerely,



T.A. Deines
Northwest Operations
Production Superintendent

RDG:TAD/94110/kc
Attachments

Agreed and accepted this _____ day of _____,
1994 by _____, as representative of

_____.

Submit 3 Copies
to Appropriate
District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

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

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO. 30-025-10252
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER Dual Oil and Gas Well	7. Lease Name or Unit Agreement Name Edith Butler "B"
2. Name of Operator Marathon Oil Company	8. Well No. 1
3. Address of Operator PO Box 2409, Midland, TX 79702	9. Pool name or Wildcat S. Brunson Drinkard Abo/Tubb
4. Well Location Unit Letter I : 1980 Feet From The South Line and 660 Feet From The East Line Section 13 Township 22S Range 37E NMPM Lea County	
10. Elevation (Show whether DF, RKB, RT, GR, etc.) DF: 3338' GL: 3326'	

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>		CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: Downhole Commingle <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Marathon Oil Company respectfully proposes the downhole commingling of the Tubb and Drinkard Abo formations within the Edith Butler "B" Well No. 1. The packer isolating the two zones will be removed and both zones plunger lifted or rod pumped. This work will commence upon the approval to downhole commingle from the NMOCDC.

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

SIGNATURE Rick D. Gaddis TITLE Petroleum Engineer DATE 8/25/94
TYPE OR PRINT NAME Rick D. Gaddis TELEPHONE NO. 505 393-7106

(This space for State Use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:



STATE OF NEW MEXICO

CONSERVATION DIVISION
RECEIVED
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

94 SEP 19 AM 8 50 OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

9-15-94

BRUCE KING
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 ✓ _____
NSL _____
NSP _____
SWD _____
WFX _____
PMX _____

Gentlemen:

I have examined the application for the:

Marathon Oil Co Edith Butler #1-I 13-22-37
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

[Signature]

Yours very truly,

[Signature]
Jerry Sexton
Supervisor, District 1

/ed