

5-15-95
RECEIVED

APR 26 1995



**Marathon
Oil Company**

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

OIL CONSERVATION DIV.
SANTA FE

1130

April 24, 1995

**Mr. David Catanach
State of New Mexico
Oil Conservation Division
Energy and Minerals Department
2040 South Pacheco
Santa Fe, New Mexico 87501**

**Re: Request for Exception to Rule 303-A
Downhole Commingling
Dayton Hardy No. 3
UL 'J' 1980' FSL & 1980' FEL
Sec. 20, T-21-S, R-37-E
Blinebry and Drinkard Pools
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 Drinkard and Blinebry formations in the above mentioned well.

This well was recently plugged back and recompleted, then swab tested in the Drinkard oil and gas pool. A retrievable bridge plug was set isolating the Drinkard. The Blinebry was then perforated, acidized and is now being rod pumped.

Commingling of the two zones will allow for incremental production to be gained from the Drinkard while continuing to produce the Blinebry Pool. This will reduce waste and maximize the productive capability of the wellbore. It will also allow Marathon to use its existing production equipment to its optimum efficiency. The well will continue to be rod pumped keeping producing reservoir pressures and minimizing cross flow.

Enclosed is the pertinent data supporting this application as outlined in Rule 303-A. If additional information is necessary, please contact Tom Price at (915) 687-8324.

Sincerely,

Thomas M. Price

**Thomas M. Price
Advanced Engineering Technician**

TMP\9507\jb

Attachments

REQUEST FOR EXCEPTION TO RULE 303-A
Dayton Hardy # 3
Downhole Commingle Blinebry Oil & Gas & Drinkard Pools

- A: Operator
Marathon Oil Company
P.O. Box 552
Midland, Texas 79702
- B: Lease Name & Well No
Dayton Hardy No. 3
UL "J" 1980' FSL & 1980' FEL
Sec 20, T-21-S, R-37-E
Lea Co., New Mexico
- C: Plats and Offset Operators
Attached
- D: C-116's
Attached
- E: Production Decline Curves
The Blinebry is a recent completion and no production data is available for Drinkard since 1970. See attached notices and completion reports in lieu of production decline curves as per Rule 303-A section "D" item (5).
- F: Estimated Bottomhole Pressures
Blinebry - calculated - 400
Drinkard - measured - 414
- G: Fluid Characteristics
Marathon has surface commingled the produced fluids from both zones without compatibility problems.
- H: Value
Marathon receives the same price for product from both zones and value will not be adversely affected. If the Downhole Commingling is permitted additional reserves will be recovered from the Tubb, while maximizing recoveries from the Blinebry.

I: Production Allocation

<u>Pool</u>	<u>BOPD</u>	<u>MCFPD</u>	<u>BWPD</u>	<u>ESTIMATE METHOD</u>
Blinebry	14	107	19	Pump Tests
<u>Drinkard</u>	<u>6</u>	<u>30</u>	<u>43</u>	Swab Tests
TOTAL	20	137	62	

<u>Allocated Percentages</u>	<u>Oil %</u>	<u>Gas %</u>	<u>Water %</u>
Blinebry	70	78	31
<u>Drinkard</u>	<u>30</u>	<u>22</u>	<u>69</u>
TOTAL	100	100	100

J: Ownership

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

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.

**Marathon Oil Company
Dayton Hardy Lease
N/2 SE/4 Section 20, T-21-S, R-37-E
Lea County, New Mexico
Offset Operators and Addresses**

Section 20, Township 21-S, Range 37-E

**Cross Timbers Operating Company
810 Houston St., Ste 2000
Ft. Worth, TX 76102-6298**

**Campbell and Hedrick
P.O. Box 401
Midland, TX 79702-0401**

**American Exploration Company
1331 Lamar, Ste 900
Houston, TX 77010-3088**

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

**P & P Producing Incorporated
P.O. Box 3178
Midland, TX 79702-3178**

**Chevron USA Incorporated
15 Smith Rd., Midland, TX 79705
P.O. Box 1150
Midland, TX 79702-1150**

**Texaco Exploration and Production Inc.
Heritage Center, Midland, TX 79701
P.O. Box 3109, Midland, TX 79702-3109**

Section 21, Township 21-S, Range 37-E

**Stevens and Johnson Operating Co.
P.O. Box 2249
Witcha Falls, TX 76307-2249**

**Conoco Incorporated
10 Desta Drive, Ste 100W
Midland, TX 79705**



**Marathon
Oil Company**

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

April 20, 1995

**Offset Operators
Dayton Hardy Lease
(Mailing List Attached)**

**Re: Request for Exception to Rule 303-A
Downhole Commingling
Dayton Hardy No. 3
UL "J" 1980' FSL and 1980' FEL
Sec. 20, T-21-S, R-37-E
Blinebry and Drinkard Pools
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 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 attached addressed envelope. Also, please return one copy to Marathon at the letterhead address.

Sincerely,

**Thomas M. Price
Advanced Engineering Technician**

**TMP/9509/lr
Enclosure**

Agreed and accepted this _____ day of _____ 1995

by _____, as representative of

_____.

Submit 2 copies to Appropriate
District Office.
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

State of New Mexico
Energy, Minerals and Natural Resources Department
OIL CONSERVATION DIVISION

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

Form C-116
Revised 1/1/89

GAS - OIL RATIO TEST

Operator Marathon Oil Company		Pool BLINEBRY OIL & GAS / DRINKARD		County LEA											
Address P.O. Box 552, Midland, TX 79702		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.
DAYTON HARDY "C" BLINEBRY OIL & GAS	3	J	20	21S	37E	4/15/95	P	NONE	NA	24	19	37.7	14	107	7643
DAYTON HARDY "C" DRINKARD CALCULATED FROM SWAB TEST DHC PERMITTING USE ONLY	3	J	20S	21S	37E	3/22/95	S	NONE	NA	24	43	38.2	6	30	5000

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

Thomas M. Price

Printed name and title

4/20/95

Date

915/687/8324

Telephone No.

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.
30-025-06689

5. Indicate Type of Lease
STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name
DAYTON HARDY "C"

8. Well No.
3

9. Pool name or Wildcat
BLINEBRY/DRINKARD

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 checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER	
2. Name of Operator Marathon Oil Company	
3. Address of Operator P.O. Box 552, Midland, TX 79702	
4. Well Location Unit Letter J 1980 Feet From The SOUTH Line and 1980 Feet From The EAST Line Section 20 Township 21-S Range 37-E NMPM LEA County	
10. Elevation (Show whether DF, RKB, RT, GR, etc.) GL:3495 KB:3506	

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐
OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS ☐ PLUG AND ABANDONMENT ☐
CASING TEST AND CEMENT JOB ☐
OTHER: RECOMPLETE BLINEBRY & DRINKARD ☒

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.

3-7-95 MIRU PU. POOH W/RODS & PUMP. NU BOP. POOH W/TBG. TESTED BOP. C/O TO 3869'. SQZD PERFS 3940-64 W/50SX CLASS "C" CMT. SQZD GRAYBURG PERFS 3709-3822 W/125 SX CLASS "C" CMT. DRILLED OUT CMT & RETAINER FROM 3620-3828. TESTED 3709-3822 SQZ TO 1000 PSI. TEST OK. DRILLED CMT & RETAINER 3884-3967. TESTED SQZ 3940-64 TO 1000 PSI. DRILLED OUT CIBP @ 5352. C/O TO 6671' TD. ACIDIZED OPEN HOLE SECTION W/4500 GALLONS 15% HCL. SWABBED BACK TO FRAC TANK. RAN STATIC BHP. SET RBP @ 6605'. LOADED HOLE W/2% KCL. PERFORATD DRINKARD 6479-6592 W/2JSP4 -116 HOLES. ACIDIZED 6479-6592 W/5500 GALLONS 15% HCL. SWABBED TO FRAC TANK. RETRIEVED RBP & RESET @ 5910'. LOADED HOLE W/2% KCL. PERFED BLINEBRY 5586-90, 5600-10, 5620-35, 5648-52, 5665-80, 5774-85, 5805-10, 5815-20, 5830-35, 5858-62 W/2 JSPF. (156 HOLES). ACIDIZED BLINEBRY W/3000 GALLONS 15% HCL. FRACTURED W/50,000 GALLONS 65 QUALITY CO2 FOAM & 133,000# SAND. BLEW BACK TO FRAC TANK TO CLEAN UP. POOH W/STIMULATION STRING. C/O TO 5872'. INSTALLED 2 3/8" PRODUCTION TBG. ND BOP. NU TREE. INSTALL 1 1/2" PUMP & RODS. RDMO PU. SET PUMPING UNIT TURNED WELL TO TEST BLINEBRY 4-5-95.

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

SIGNATURE T. M. Price TITLE AET DATE 4-19-95

TYPE OR PRINT NAME TOM M. PRICE TELEPHONE NO. 915-682-1626

(This space for State Use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Submit to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-105
Revised 1-1-89

WELL API NO.

30-025-06689

5. Indicate Type Of Lease

STATE ☐

FEE ☒

6. State Oil & Gas Lease No.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well:

OIL WELL ☒

GAS WELL ☐

DRY ☐

OTHER ☐

b. Type of Completion:

NEW
WELL ☐

WORK
OVER ☒

DEEPEN ☐

PLUG
BACK ☐

DIFF
RESVR ☒

OTHER ☐

2. Name of Operator

Marathon Oil Company

3. Address of Operator

P.O. Box 552, Midland, TX 79702

7. Lease Name or Unit Agreement Name

DAYTON HARDY "C"

8. Well No.

3

9. Pool name or Wildcat

BLINEBRY

4. Well Location

Unit Letter **J** : **1980** Feet From The **SOUTH** Line and **1980** Feet From The **EAST** Line

Section **20**

Township **21-S**

Range **37-E**

NMPM **LEA**

County

10. Date Spudded

3-7-95

11. Date T.D. Reached

12. Date Compl.(Ready to Prod.)

4-5-95

13. Elevations(DF & RKB, RT, GR, etc.)

GL:3495 KB:3506

14. Elev. Casinghead

15. Total Depth

6617

16. Plug Back T.D.

RBP @ 5910'

17. If Multiple Compl. How

Many Zones? **2**

18. Intervals

Drilled By

Rotary Tools

ALL

Cable Tools

19. Producing Interval(s), of this completion - Top, Bottom, Name

5586-5862 BLINEBRY

20. Was Directional Survey Made

NO

21. Type Electric and Other Logs Run

NONE

22. Was Well Cored

NO

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
NO CHANGE SEE	ORIGINAL	COMPLETION	REPORT		

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

25. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
2 3/8"	5553	NONE

26. Perforation record (interval, size, and number)

5586 - 5862 SELECTIVE 156 .5' HOLES

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL

AMOUNT AND KIND MATERIAL USED

5586-5862

3000 GALLONS 15% HCL

5586-5862

50,000 GALLONS 65 QUAL CO2

5586-5862

133,000# SAND

28. PRODUCTION

Date First Production

4-5-95

Production Method (Flowing, gas lift, pumping - Size and type pump)

1 1/2" ROD PUMP

Well Status (Prod. or Shut-in)

PROD

Date of Test

4-15-95

Hours Tested

24

Choke Size

NONE

Prod'n For

Test Period

Oil - Bbl.

14

Gas - MCF

107

Water - Bbl.

19

Gas - Oil Ratio

7643

Flow Tubing Press.

PUMP

Casing Pressure

25

Calculated 24-

Hour Rate

Oil - Bbl.

14

Gas - MCF

107

Water - Bbl.

19

Oil Gravity - API (Corr.)

37.7

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

VENTED

Test Witnessed By

T. W. HALLUM

30. List Attachments

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature

Printed

Name **TOM M. PRICE**

Title

AET

Date

4-19-95

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.

30-025-06689

5. Indicate Type of Lease

STATE ☐

FEE ☒

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 ☒

GAS
WELL ☐

OTHER

2. Name of Operator

Marathon Oil Company

8. Well No.

3

3. Address of Operator

P.O. Box 552, Midland, TX 79702

9. Pool name or Wildcat

BLINEBRY/DRINKARD

4. Well Location

Unit Letter J : 1980 Feet From The SOUTH Line and 1980 Feet From The EAST Line

Section 20 Township 21-S Range 37-E NMPM LEA County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)

GL:3495 KB:3506

11.

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐

PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐

CHANGE PLANS ☐

PULL OR ALTER CASING ☐

OTHER: Downhole Commingle ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☐

OTHER: RECOMPLETE BLINEBRY & DRINKARD ☐

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 Co is requesting permission to downhole commingle the Blinebry Oil & Gas and Drinkard pools in this well. This work would be accomplished by removing a retrievable bridge plug from 5,910' and lowering the tubing in the well.

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

SIGNATURE

T M Price

TITLE AET

DATE 4-20-95

TYPE OR PRINT NAME TOM M. PRICE

TELEPHONE NO. 915-687-8324

(This space for State Use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY: