

PNRM 0508859069

C-103 Received 3-28-2005

DHC No. Assigned 3-29-2005

Order Number HOB-0112		API Number 30-025-24943		Operator Marathon Oil Company		County Lea	
Order Date 		Well Name Lou Worthan		Number 013		Location	
						C UL	11 Sec
						225 T (+Dir)	37E R (+Dir)
	Oil %	Gas %					
Pool 1	19190	Drinkard	0%	10%			
Pool 2	62700	Wantz Abo	0%	61%			
Pool 3	62730	Wantz Granite Wash	100%	29%			
Pool 4							
Comments:							
Work completed effective _____							
Work cancelled effective _____							
Supplement _____							

RBDMS
Posted to
3-29-2005

Previously DHC-884

DOWNHOLE COMMINGLE CALCULATIONS:

30-025-24943

OPERATOR: Marathon Oil Company

HOB-0112

PROPERTY NAME: Lou Worthan

WNULSTR: 13-C, 11-22-37

	SECTION I:	ALLOWABLE AMOUNT	
19190	POOL NO. 1 <u>Drinkard</u>	<u>142</u>	<u>852</u> MCF 6000
62700	POOL NO. 2 <u>Wantz Abo</u>	<u>187</u>	<u>1122</u> MCF 6000
62730	POOL NO. 3 <u>Wantz Granite Wash</u>	<u>187</u>	<u>374</u> MCF 2000
	POOL NO. 4 _____		MCF
		POOL TOTALS <u>516</u>	<u>2348</u>

SECTION II:	Oil	Gas
POOL NO. 1 <u>Drinkard</u>	<u>0%</u>	<u>10%</u>
POOL NO. 2 <u>Wantz Abo</u>	<u>0%</u>	<u>61%</u>
POOL NO. 3 <u>Wantz Granite Wash</u>	<u>100% X 516 = 516</u>	<u>29%</u>
POOL NO. 4 _____		

<u>OIL</u>	<u>GAS</u>
SECTION III: <u>142 ÷ 100% = 142</u>	_____
SECTION IV: <u>142 X 0% = 0</u>	_____
<u>142 X 0% = 0</u>	_____
<u>142 X 100 = 142</u>	_____

Submit 3 Copies To Appropriate District
 Office
 District I
 1625 N. French Dr., Hobbs, NM 87240
 District II
 1300 Grand Ave., Artesia, NM 88210
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

Form C-103
 May 27, 2004

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

WELL API NO. 30-025-24943
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 Gas Well Other **DHC**

2. Name of Operator
Marathon Oil Company

3. Address of Operator
P.O. Box 3487, Houston, TX 77253-3487

7. Lease Name or Unit Agreement Name:
Lou Worthan

8. Well Number
13

9. OGRID Number
14021

10. Pool name or Wildcat
Drnk/ Wantz Granite Wash/ Wantz Abo

4. Well Location

Unit Letter **C**; **330** feet from the **North** line and **2080** feet from the **West** line

Section **11** Township **22S** Range **37E** NMPM County **Lea**

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3362' GL

Pit or Below-grade Tank Application or Closure

Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water **780**

Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____

12. 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 MULTIPLE COMPLETION

SUBSEQUENT REPORT OF:

REMEDIAL WORK ALTERING CASING

COMMENCE DRILLING OPNS. PLUG AND ABANDONMENT

CASING TEST AND CEMENT JOB

OTHER: **Downhole Commingle three pools** OTHER:

13. 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. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Marathon Oil Company is proposing to add the Wantz Granite Wash Pool to the existing DHC 884 for the Lou Worthan No. 13. This well was originally permitted to produce out of the Drinkard, Wantz Granite Wash, and Wantz Abo pools. The original DHC 884 was amended in August 1997 to include only the Drinkard and Wantz Abo pools due to high production volumes. The production rates on these two zones has now declined to levels where the Wantz Granite Wash can be produced. Marathon would also like to amend the percentage allocations for oil and gas based on the information available for the last four months of production for each pool Please see the attachments with this application for details.

DHC Order No. HOB-0112

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines , a general permit or an (attached) alternative OCD-approved plan

SIGNATURE Charles E. Kendrick TITLE Engineering Technician DATE 03/23/2005

Type or print name **Charles E. Kendrick** E-mail address: **cekendri@marathonoil.com** Telephone No. **713-296-2096**

For State Use Only

APPROVED BY [Signature] TITLE PETROLEUM ENGINEER DATE MAR 29 2005

Conditions of Approval, if any:

**Marathon Oil Company
Lou Worthan No. 13
Request Exception to Rule 303
Downhole Commingle**

19.15.5 .303.C(3)b

(i) **NMOCD Rule establishing commingle of pools R-11363**
R-11363 established pre-approved downhole commingle of the Drinkard / Wantz Granite Wash, Drinkard / Wantz Abo, & Wantz Granite Wash / Wantz Abo pools

(ii) **List of Pools to be Surface Commingled**
Drinkard (19190)
Wantz Abo (62700)
Wantz Granite Wash (62730)

(iii) **Perforated Intervals**
Drinkard (19190) 6244' – 6339'
Wantz Abo (62700) 6565' – 7070'
Wantz Granite Wash (62730) 7115' – 7211'

(iv) **Method of Allocation – Well Test**
The Lou Worthan No. 13 will be allocated daily production volumes based on well test. The daily production volumes for the Lou Worthan No. 13 will then be allocated to each production pool in the Lou Worthan No. 13 based on percentages established from the last four months of continuous production from the each pool.

	Oil	Gas	Water
Drinkard (19190)	0%	10%	0%
Wantz Abo (62700)	0%	6%	0%
Wantz Granite Wash (62730)	100%	29%	100%

Please see attached spreadsheet for production volume details to support allocation percentages.

(v) **Value of Remaining Production:**
The downhole commingling of production from these pools will not reduce the value of the remaining production in this well.

(vi) **Ownership Interests:**
The owner interest in all pools to be commingled is identical for the Lou Worthan No. 13 well, therefore no notification was sent to interest owners.

(vii) **Notification to SLO and BLM:**

The Lou Worthan is a fee lease therefore no notice to the BLM or State Lands Office is required for this well to be downhole commingled.

LOU WORTHAN NO. 13 DHC AMENDMENT REQUEST

Production for the last four active months by Pool

		Jan-05	Dec-04	Nov-04	Oct-04	Daily Avg.
Drinkard (19190)	Oil (bbls)	0	0	0	0	0
	Gas (mcf)	1261	1316	1344	1424	43
Wantz Abo (62700)	Oil (bbls)	0	0	0	0	0
	Gas (mcf)	7747	8085	8254	8746	267
Wantz Granite Wash (62730)		Dec-96	Nov-96	Oct-96	Sep-96	
	Oil (bbls)	0	116	26	26	1
	Gas (mcf)	4195	3874	3671	6417	126
DHC Percentages		Oil %	Gas %			
Drinkard (19190)		0%	10%			
Wantz Abo (62700)		0%	61%			
Wantz Granite Wash (62730)		100%	29%			



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

E
B



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE NEW MEXICO 87504
(505) 827-5800

CORRECTED ADMINISTRATIVE ORDER DHC-884

Marathon Oil Company
P.O. Box 552
Midland, TX 79702

Attention: Brent D. Lockhart

*Lou Worthan No. 13
Unit C, Section 11, Township 22 South, Range 37 East, NMPM,
Lea County, New Mexico.
Drinkard and Wantz Granite Wash Pools*

Dear Mr. Lockhart:

Reference is made to your recent application for an exception to Rule 303-A of the Division Rules and Regulations to permit the subject well to commingle production from both pools in the wellbore.

It appearing that the subject well qualifies for approval for such exception pursuant to the provisions of Rule 303-C, and that reservoir damage or waste will not result from such downhole commingling, and correlative rights will not be violated thereby, you are hereby authorized to commingle the production as described above and any Division Order which authorized the dual completion and required separation of the two zones is hereby placed in abeyance.

In accordance with the provisions of Rule 303-C-4., total commingled oil production from the subject well shall not exceed 40 barrels per day, and total water production shall not exceed 80 barrels per day. The maximum amount of gas which may be produced daily from the well shall be determined by multiplying 2000 by the top unit allowable for the Wantz Granite Wash Pool.

Assignment of allowable to the well and allocation of production from the well shall be on the following basis:

Drinkard Pool	Oil	0%	Gas	25%
Wantz Granite Wash Pool	Oil	100%	Gas	75%

Corrected Administrative Order DHC-884
Marathon Oil Company
April 30, 1993
Page 2

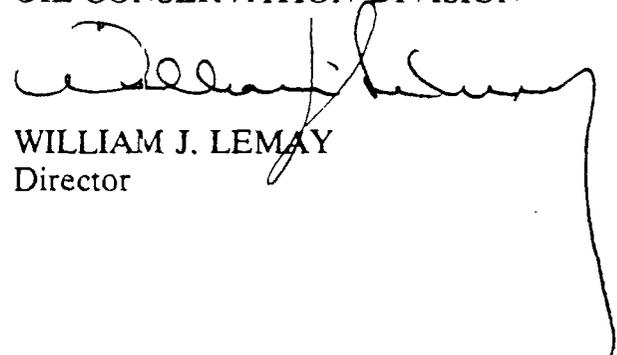
In accordance with the provisions of Rule 303-C, the supervisor of the Hobbs District Office of the Oil Conservation Division shall determine the proper allocation of production from the subject well following its completion.

FURTHER: The operator shall notify the Hobbs District Office of the Division upon implementation of the commingling process.

Pursuant to Rule 303-C-5, the commingling authority granted by the order may be rescinded by the Division Director if, in his opinion, conservation is not being best served by such commingling.

Approved at Santa Fe, New Mexico on this 30th day of April, 1993.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY
Director

S E A L

WJL/BES/amg

cc: Oil Conservation Division - Hobbs

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-122
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

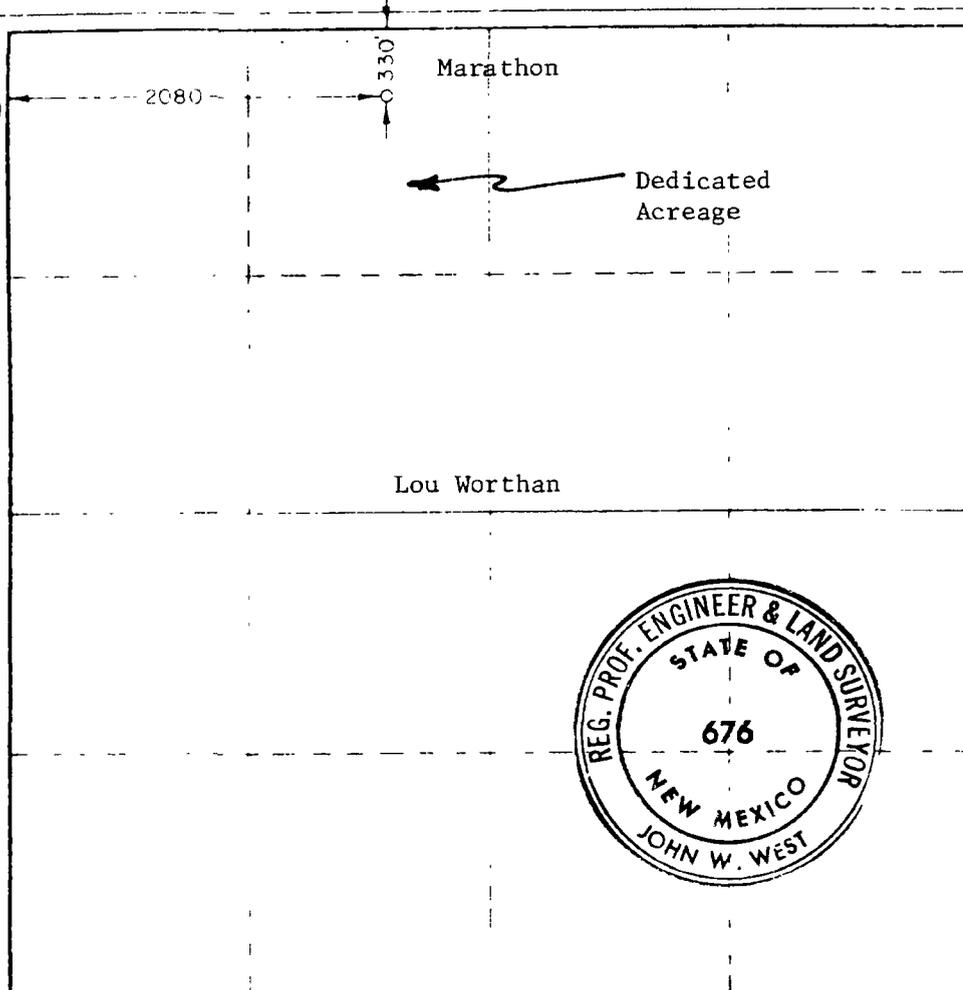
Marathon Oil Company		Lou Wortham		Section No. 13
C	11	22 South	37 East	Lea
2080	West	330	North	
3362.2	Granite Wash	Wantz Granite Wash	40	

- Outline the acreage dedicated to the subject well by colored pencil or hair-pen marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated (Use reverse side of this form if necessary) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, force-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

M. L. Johnston

M. L. Johnston

Petroleum Engineer

Marathon Oil Company

January 1, 1975

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 knowledge and belief

Date of Survey

December 19, 1974

Registered Professional Engineer
No. 676

John W. West

676

330 660 990 1320 1650 1980 2310 2640 2970 3300

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1000 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-102
Revised June 10, 2003

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-24943		² Pool Code 19190		³ Pool Name Drinkard	
⁴ Property Code 006488		⁵ Property Name Lou Worthan			⁶ Well Number 13
⁷ OGRID No. 01363		⁸ Operator Name Marathon Oil Company			⁹ Elevation 3362'

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
C	11	22-S	37-E		330'	North	2080	West	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	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>OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Charles E. Kendrick</i> Signature</p> <p>Charles E. Kendrick Printed Name</p> <p>Engineering Technician Title and E-mail Address cekendrix@marathonoil.com</p> <p>04/01/2005 Date</p>
Certificate Number	

District I
2625 N. French Dr., Hobbs, NM 88240
District II
701 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-102
Revised June 10, 2003

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-24943		² Pool Code 62700		³ Pool Name Wantz Abo	
⁴ Property Code 006488		⁵ Property Name Lou Worthan			⁶ Well Number 13
⁷ OGRID No. 01363		⁸ Operator Name Marathon Oil Company			⁹ Elevation 3362'

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
C	11	22-S	37-E		330'	North	2080	West	Lea

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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

¹⁶ 	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <i>Charles E. Kendrick</i> Signature	
	Charles E. Kendrick Printed Name Engineering Technician cekendrix@marathonoil.com Title and E-mail Address	
	04/01/2005 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.	
Date of Survey Signature and Seal of Professional Surveyor		Certificate Number