

DATE IN 2/4/08	SUSPENSE	ENGINEER W Jones	LOGGED IN 2/4/08	TYPE DHC	APP NO. PKVR0803552145
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] **[NSP-Non-Standard Proration Unit]** **[SD-Simultaneous Dedication]**
[DHC-Downhole Commingling] **[CTB-Lease Commingling]** **[PLC-Pool/Lease Commingling]**
[PC-Pool Commingling] **[OLS - Off-Lease Storage]** **[OLM-Off-Lease Measurement]**
[WFX-Waterflood Expansion] **[PMX-Pressure Maintenance Expansion]**
[SWD-Salt Water Disposal] **[IPI-Injection Pressure Increase]**
[EOR-Qualified Enhanced Oil Recovery Certification] **[PPR-Positive Production Response]**

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☐ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO
 U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Susie Campos
 Print or Type Name

Signature

Regulatory Tech
 Title

1/29/08
 Date

icampos@marathonoil.com
 e-mail Address

RECEIVED
 2008 FEB 4 PM 2 26

District I
1625 N. French Drive, Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised June 10, 2003

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

APPLICATION TYPE
☒ Single Well
☐ Establish Pre-Approved Pools
EXISTING WELLBORE
☒ Yes ☐ No

APPLICATION FOR DOWNHOLE COMMINGLING

Marathon Oil Company PO Box 3487 Houston, Texas 77253-3487
Operator Address
Marshall "B" 13 L 27 21S 37E Lea
Lease Well No. Unit Letter-Section-Township-Range County
OGRID No. 14021 Property Code 6428 API No. 30-025-37592 Lease Type: ☐ Federal ☐ State ☒ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Penrose Skelly Grayburg		Hare San Andres
Pool Code	50350		78080
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3682' - 3876'		3996' - 4130'
Method of Production (Flowing or Artificial Lift)	Pumping		Pumping
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)	-		-
Oil Gravity or Gas BTU (Degree API or Gas BTU)	35.9		32.8
Producing, Shut-In or New Zone	Producing		Shut In
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: 12/5/07 Rates: 12.2 bbl, 128 mcf 101 bwpd	Date: Rates:	Date: 11/2/06 Rates: 1.5 bbls, 243 mcf 1231 bwpd
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas 89 % 34 %	Oil Gas % %	Oil Gas 11 % 66 %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes ☒ No ☐
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes ☒ No ☐
Are all produced fluids from all commingled zones compatible with each other? Yes ☒ No ☐
Will commingling decrease the value of production? Yes ☐ No ☒
If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? N/A Yes ☐ No ☐
NMOCD Reference Case No. applicable to this well: N/A

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 working, royalty and overriding royalty interests for uncommon interest cases.
- Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

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

SIGNATURE Susie Campos TITLE Regulatory Tech DATE 1/29/08
TYPE OR PRINT NAME Susie Campos TELEPHONE NO. (713) 296-2077
E-MAIL ADDRESS icampos@marathonoil.com

DISTRICT I

1825 N. FRENCH DR., HOBBBS, NM 88240

DISTRICT II

1301 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 and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102

Revised JUNE 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number		Pool Code	Pool Name	
		50350	PENROSE SKELLY; GRAYBURG	
Property Code	Property Name		Well Number	
006428	MARSHALL B		13	
OGRID No.	Operator Name		Elevation	
14021	MARATHON OIL COMPANY		3413'	

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	27	21-S	37-E		990	SOUTH	1980	WEST	LEA

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
Dedicated Acres		Joint or Infill	Consolidation Code		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

	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. <i>Frank M. Krugh</i> Signature FRANK M. KRUGH Printed Name Reg. Comp. REP. III Title December 13, 2005 Date
	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. SEPTEMBER 8, 2005 Date Surveyed Signature & Seal Professional Surveyor Certificate No. GARY JOHNSON 12641

DISTRICT I
1025 N. FRANKLIN DR., ROSA, NM 88240

DISTRICT II
1201 W. GRAND AVENUE, ARIZONA, NM 88210

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

DISTRICT IV
1201 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

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Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-37592	Pool Code 24150	Pool Name EUNICE HARE, SAN ANDRES (GAS)
Property Code 006428	Property Name MARSHALL B	Well Number 13
OGRIID No. 14021	Operator Name MARATHON OIL COMPANY	Elevation 3413'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	27	21-S	37-E		990	SOUTH	1980	WEST	LEA

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Frank M. Krugh</i> Signature FRANK M. KRUGH Printed Name Reg. Comp REP. III Title December 13, 2005 Date</p> <p>SURVEYOR CERTIFICATION</p> <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>SEPTEMBER 8, 2005</p> <p>Date Surveyed Signature & Seal of Professional Surveyor GARY EIDSON 9/20/05 0511.1324 Certificate No. GARY EIDSON 12841 PROFESSIONAL SURVEYOR</p>
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W.S. Marshall B No 13

DHC Commingle

Production Curves

The production curves included with this application were for less than a year due to the fact that the well has not produced for over a year in either formation. The allocation percentages are based on the latest production data available for both formations.

Well allocation

The following formulas were used to derive the allocation percentages for each formation. The well level production was determined by well test. In which each well test was given a weighted percentage based on the well test and producing time.

Hares San Andres

Oil

$$1.5 \text{ bbls} / 13.7 \text{ bbls} = .1095 = 11\%$$

Gas

$$243 \text{ mcf} / 371 \text{ mcf} = .6550 = 66\%$$

Water

$$1231 \text{ bbls} / 1332 \text{ bbls} = .9242 = 92\%$$

Penrose Skelly Grayburg

Oil

$$12.2 \text{ bbls} / 13.7 \text{ bbls} = .8905 = 89\%$$

Gas

$$128 \text{ mcf} / 371 \text{ mcf} = .3450 = 34\%$$

Water

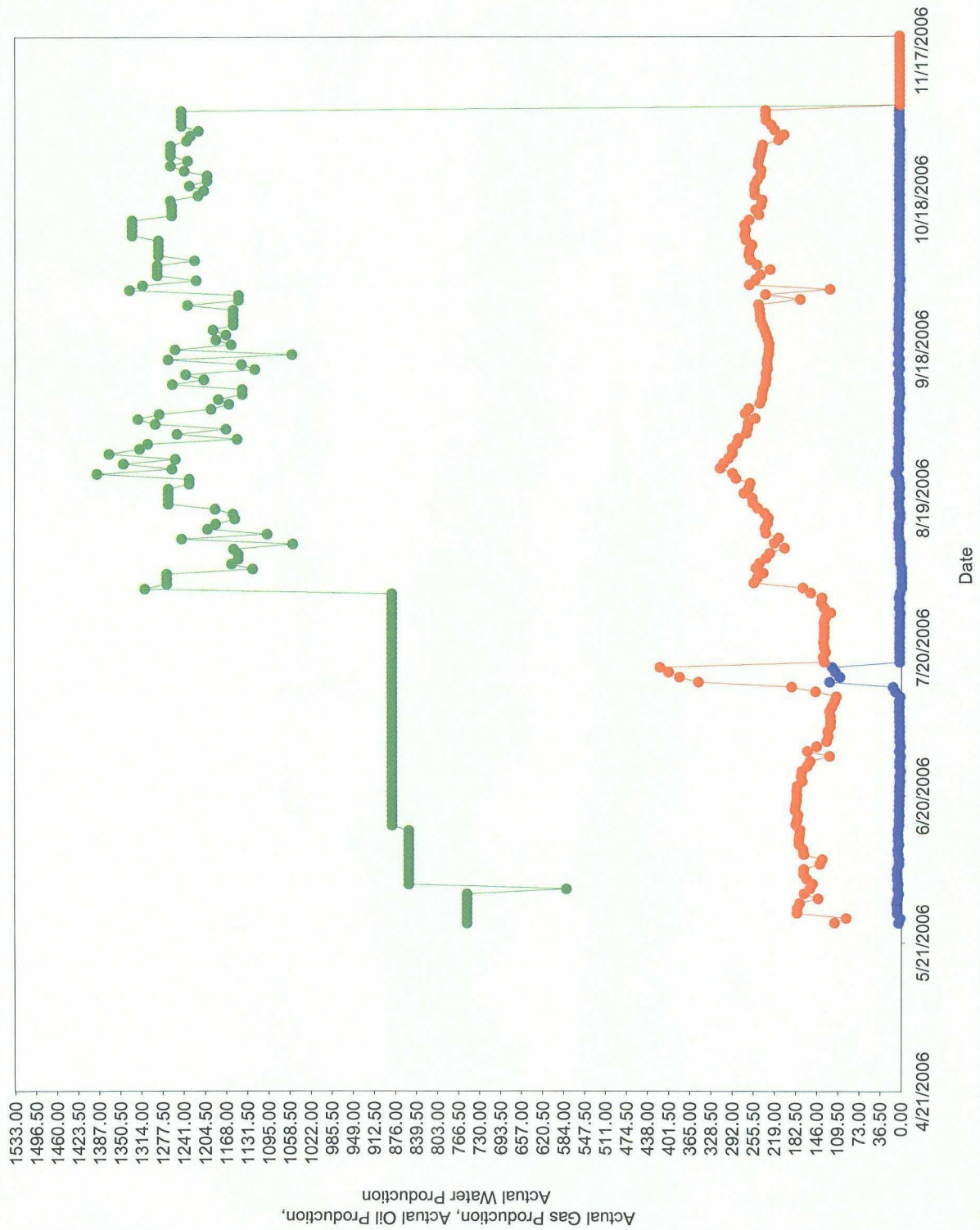
$$101 \text{ bbls} / 1332 \text{ bbls} = .07590 = 8\%$$

W S MARSHALL B NO 13 (IA) SAN ANDRES

Theoretical
Water
Production

Actual Oil
Production

Actual Gas
Production



W S MARSHALL B NO 13 (2) PENROSE SKELLY GRAYBURG

Theoretical
Water
Production

Actual Oil
Production

Actual Gas
Production

