

DATE 11/10/08	SUSPENSE 11/13/08	ENGINEER W. Jones	LOGGED IN DHC	TYPE 4124	APP NO PKUR0831843107
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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.

Print or Type Name

Signature

Title

Date

e-mail Address

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

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

2008 NOV 10 PM 3 17  
APPLICATION FOR DOWNHOLE COMMINGLING

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

MARBOB ENERGY CORPORATION P O BOX 227 ARTESIA, NM 88210  
Operator Address

BIGFOOT STATE 1 K-20-19S-28E EDDY  
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 14049 Property Code 37073 API No 30-015-22567 Lease Type: ☐ Federal ☒ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Winchester; Wolfcamp, NW (Oil)		Winchester; Upper Penn, West (Oil)
Pool Code	97044		96810
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	8863-8868' perms		9644-9749' perms
Method of Production (Flowing or Artificial Lift)	Flow		Flow
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)	Est 3800#		Est 4000#
Oil Gravity or Gas BTU (Degree API or Gas BTU)	Est 42° API		Est 42° API
Producing, Shut-In or New Zone	New Zone		New Zone
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: n/a Rates: n/a	Date: Rates:	Date: 11/05/08 Rates: 5 BOPD 200 MCFD
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 58 % 17 % %	Oil Gas % %	Oil Gas 42 % 83 %

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? Yes ☒ No ☐

NMOCD Reference Case No. applicable to this well: \_\_\_\_\_

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 George H. Freeman TITLE Senior Engineer DATE 11/07/08

TYPE OR PRINT NAME George H. Freeman TELEPHONE NO. (575) 748-3303

E-MAIL ADDRESS engineering@marbob.com

**Engineering Summary**  
**Form C-107A**  
**Application for Downhole Commingling**

Marbob Energy Corporation  
Bigfoot State #1 (Unit K-Sec. 20-T19S-R28E)

Marbob Energy proposes to downhole commingle the Strawn (West Winchester Upper Penn) and Wolfcamp (Northwest Winchester Wolfcamp) in the captioned well. The Strawn was acid treated and tested approximately 5 BOPD/200 MCFD. The Wolfcamp has not been tested yet. The best engineering estimate is that the Wolfcamp will test 7 BOPD/40 MCFD and decline at the same rate as the Upper Penn. The oil and gas composition should be almost the same. The proposed zonal allocation is shown below.

Upper Penn Best engineering estimate is that zonal reserves will approximate post treatment well tests.

$\frac{200 \text{ MCFD}}{200+40 \text{ MCFD}}$	=83.3%	Say 83% Gas
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$\frac{5 \text{ BOPD}}{5+7 \text{ BOPD}}$	=41.7%	Say 42% Oil
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<u>Wolfcamp</u>	1 - .83	=17%	Say 17% Gas
	1 - .42	=58%	Say 58% Oil

**MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

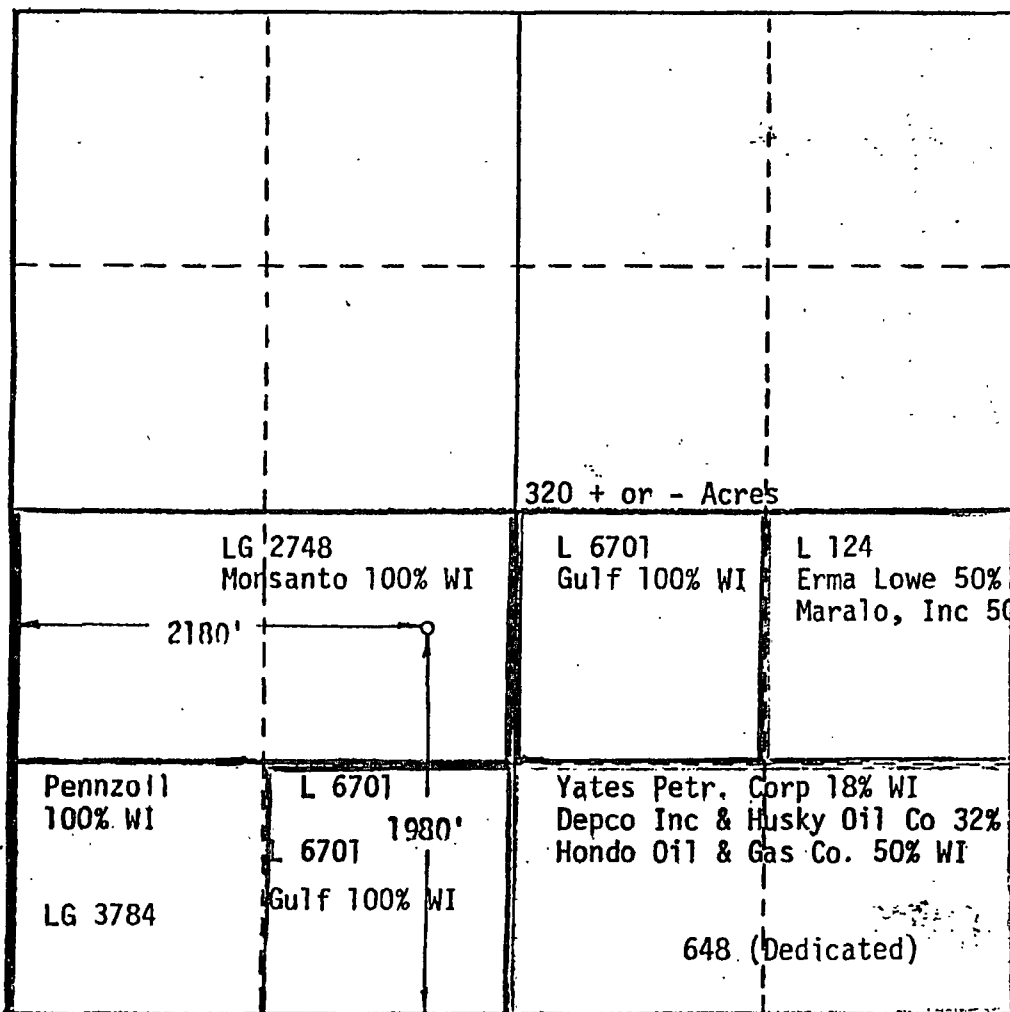
Operator <b>MONSANTO COMPANY</b>			Lease <i>Bigfoot St. Delta State Can.</i>		Well No. <b>1</b>
Unit Letter <b>K</b>	Section <b>20</b>	Township <b>19-S</b>	Range <b>28-E</b>	County <b>EDDY</b>	
Actual Footage Location of Well: <b>1980</b> feet from the <b>South</b> line and <b>2180</b> feet from the <b>West</b> line					
Ground Level Elev. <b>3476'</b>	Producing Formation <b>Morrow</b>		Pool <i>S. Millman</i>	Dedicated Acreage: <b>320+ or -</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. 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 COMMUNITIZATION

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, forced-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.

Name  
**E. M. Scholl**

Position  
**Regional Production Mgr.**

Company  
**Monsanto Company**

Date  
**5/25/78**

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 Surveyed  
**May 18, 1978**

**Richard B. Duniven**

Registered Professional Engineer and/or Land Surveyor

*Richard B. Duniven*

Certificate No. **4882**

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

District I  
1025 N. French Dr., Hobbs, NM 88249  
Hobbs, NM  
1200 W. Central Avenue, Hobbs, NM 88240  
Hobbs, NM  
1001 Rim Brown Rd., Amarillo, NM 89110  
Hobbs, NM  
1201 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

APN Number <b>30-015-22567</b>	Prod Code <b>97044</b>	Field Name <b>Winchester; Wolfcamp, Northwest</b>
Property Land	Property Name <b>BIGFOOT STATE</b>	Well Number <b>1</b>
UPLD No. <b>14049</b>	Operator Name <b>MARBOB ENERGY CORPORATION</b>	Elevation <b>3476'</b>

**10 Surface Location**

Upland Sec. <b>K</b>	Section <b>20</b>	Township <b>19S</b>	Range <b>28E</b>	Lot No.	Feet from the <b>1980</b>	North/South line <b>SOUTH</b>	Feet from the <b>2180</b>	East/West line <b>WEST</b>	County <b>EDDY</b>
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**11 Bottom Hole Location If Different From Surface**

Upland Sec. <b>K</b>	Section <b>20</b>	Township <b>19S</b>	Range <b>28E</b>	Lot No.	Feet from the <b>1980</b>	North/South line <b>SOUTH</b>	Feet from the <b>2180</b>	East/West line <b>WEST</b>	County <b>EDDY</b>
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Horizontal Acres <b>40</b>	Joint or Full	Consolidation Code	Order No.
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No allowable will be assigned in this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

	<p><b>12 OPERATOR CERTIFICATION</b> I hereby certify that the well location shown on this plat is correct and that the well is being drilled in accordance with the provisions of the Oil Conservation Act, N.M.S.A. 19-1-1, et seq., and the rules and regulations of the Oil Conservation Division, N.M.S.A. 19-1-1, et seq., and the rules and regulations of the Oil Conservation Division, N.M.S.A. 19-1-1, et seq., and the rules and regulations of the Oil Conservation Division, N.M.S.A. 19-1-1, et seq.</p> <p><i>Nancy T. Agnew</i> 11/7/08 Signature Date <b>Nancy T. Agnew</b> Print Name</p>
	<p><b>13 SURVEYOR CERTIFICATION</b> I hereby certify that the well location shown on this plat is correct and that the well is being drilled in accordance with the provisions of the Oil Conservation Act, N.M.S.A. 19-1-1, et seq., and the rules and regulations of the Oil Conservation Division, N.M.S.A. 19-1-1, et seq., and the rules and regulations of the Oil Conservation Division, N.M.S.A. 19-1-1, et seq.</p> <p>Date of Survey Signature and Title of Technical Surveyor  Print Name</p>

[illegible]

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-22567	Prod Code 96810	Prod Name Winchester Upper Penn, West
Property Name BIGFOOT STATE	Well Number 1	
Tract No. 14049	Operator Name MARBOB ENERGY CORPORATION	Elevation 3476'

<sup>10</sup> Surface Location

Class: K	Section: 20	Township: 19S	Range: 28E	East 1/4:	Year Brought In: 1980	Name of South Line: SOUTH	Fees from the:	East West Line: WEST	County: EDDY
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<sup>11</sup> Bottom Hole Location Is Different From Surface

19. Locality	Season	Time of day	Range	Locality	Year from this	North/South line	Year from this	Direction line	County
K	20	19S	28E		1980	SOUTH	2180	WEST	EDDY

" Maritime Area 40	" Designation John W. Smith	" Classification Code CONFIDENTIAL	" Order No. 1
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No allowance will be assigned to this compliance until all interests have been consolidated or a joint standard unit has been approved by the division.

[illegible]



**marbob**  
energy corporation

November 7, 2008

New Mexico State Land Office  
Oil, Gas & Minerals Division  
P. O. Box 1148  
Santa Fe, NM 87504-1148

Attn: Ms. Jamie Bailey

Re: C-107A Downhole Commingling Application  
Bigfoot State #1  
Township 19 South, Range 28 East, NMPM  
Sec. 20: Unit K  
Eddy County, New Mexico

Dear Ms. Bailey:

Enclosed is the \$30.00 application fee and copy of the Form C-107A Application for Downhole Commingling that we submitted to the NMOCD for the referenced well located in Eddy County.

We are seeking approval to downhole commingle the Strawn and Wolfcamp zones to extend the economic life of the well and maximize the financial benefit to the State of New Mexico.

If you have any questions, please call me at 505-748-3303.

Sincerely,

George H Freeman  
Sr. Engineer

GHF/dlw  
enclosures