

12/10/07 DATE IN	SUSPENSE	W Jones ENGINEER	12/10/07 LOGGED IN	DHC TYPE	DKU0734454096 APP NO.
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ABOVE THIS LINE FOR DIVISION USE ONLY

3780

## 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.**

RECEIVED  
2007 DEC 10 PM 1:50

SLD was sent copy of  
DHC application & \$30.00  
fee.

[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.

Brian Collins		Engineer	5 Dec 07
Print or Type Name	Signature	Title	Date
		engineering@markob.com	
		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

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

MARBOB ENERGY CORPORATION P O BOX 227  
Operator Address  
DIME STATE #1 J-30-18S-28E EDDY COUNTY, NM  
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 14049 Property Code 35056 API No. 30-015-33659 Lease Type: ☐ Federal ☒ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	WILDCAT CANYON GAS	WILDCAT STRAWN GAS	WILDCAT ATOKA GAS
Pool Code	96072	96081	96049
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	9058-9104' PERF	9529-9750' PERF	9937-10129' PERF
Method of Production (Flowing or Artificial Lift)	FLOWING	FLOWING	FLOWING
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 500 PSI PRODUCING BHP	EST 500 PSI PRODUCING BHP	EST 500 PSI PRODUCING BHP
Oil Gravity or Gas BTU (Degree API or Gas BTU)	N/A	N/A	N/A
Producing, Shut-In or New Zone	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: Rates:	Date: 28 NOV 07 Rates: 29 MCFD	Date: 19 NOV 07 Rates: 54 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 20 % 20 %	Oil Gas 28 % 28 %	Oil Gas 52 % 52 %

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 Brian Collins TITLE ENGINEER DATE 30 NOV 07

TYPE OR PRINT NAME BRIAN COLLINS TELEPHONE NO. ( 575 ) 748-3303

E-MAIL ADDRESS engineering@marbob.com

**Engineering Summary**  
**Form C-107A**  
**Application for Downhole Commingling**  
**Marbob Energy Corporation**  
**Dime State No. 1 (J-30-18S-28E)**

Marbob Energy proposes to downhole commingle the Atoka, Strawn and Canyon zones. No crossflow will occur because this well will be produced into a pipeline at a flowing pressure significantly lower than the surface shut-in pressures of each zone.

The Atoka, Strawn and Canyon reserves are calculated as follows:

**Atoka:**

The Atoka tested approximately 54 MCFD after being acidized (155 psia on 1/8" choke). Best engineering estimate is that Atoka will come in at 54 MCFD and that all zones will decline at the same rate. The zonal allocation will be based on initial Atoka production rate. The best engineering estimate is that any oil produced will be produced in the same ratio as the gas production.

**Strawn:**

The Strawn tested at approximately 29 MCFD after being acidized (83 psia on 1/8" choke). Best engineering estimate is that Strawn will come in at 29 MCFD and that all zones will decline at the same rate. The zonal allocation will be based on initial Strawn production rate.

**Canyon:**

The Canyon wasn't tested yet at the time this application was prepared. Best engineering estimate is that Canyon will come in at 20 MCFD and that all zones will decline at the same rate. The zonal allocation will be based on initial Canyon production rate.

The proposed allocation follows. If actual tests are significantly different than shown in allocation below, a new allocation will be submitted.

Atoka Gas	$\frac{54 \text{ MCFD}}{54+29+20 \text{ MCFD}}$	= 52%
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Oil		= 52%
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Strawn Gas	$\frac{29 \text{ MCFD}}{54+29+20 \text{ MCFD}}$	= 28%
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Oil		= 28%
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Canyon Gas	$\frac{20 \text{ MCFD}}{54+29+20 \text{ MCFD}}$	= 20%
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Oil		= 20%
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## State of New Mexico

## DISTRICT I

1626 N. FRENCH DR., HOBER, NM 88240

Energy, Minerals and Natural Resources Department

Form C-102

Revised JUNE 10, 2003

## DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 80210

## OIL CONSERVATION DIVISION

Submit to Appropriate District Office

1220 SOUTH ST. FRANCIS DR.

State Lease - 4 Copies

Santa Fe, New Mexico 87505

Fee Lease - 3 Copies

## DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

## DISTRICT IV

1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code 74640	Pool Name CEMETARY MORROW (GAS)
Property Code	Property Name HANG'EM HIGH FEDERAL	Well Number 1
OGRID No. 14049	Operator Name MARBOB ENERGY CORPORATION	Elevation 3472'

## Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	35	19-S	25-E		660	NORTH	1980	EAST	EDDY

## 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 320	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

	<b>OPERATOR CERTIFICATION</b> I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  Signature AMY REID Printed Name LAND DEPARTMENT Title JUNE 21, 2005 Date
	<b>SURVEYOR CERTIFICATION</b> 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. APRIL 22, 2005 Date Surveyed  Signature & Seal of Professional Surveyor GARY GIBSON Certificate No. 12641
	GEODETIC COORDINATES NAD 27 NME Y=590160.3 N X=463243.4 E LAT.=32°37'20.63" N LONG.=104°27'09.79" W

Submit 3 Copies To Appropriate District Office  
District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. 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. <b>30-015-33659</b>
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input 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.)		7. Lease Name or Unit Agreement Name DIME STATE
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other		8. Well Number 1
2. Name of Operator MARBOB ENERGY CORPORATION		9. OGRID Number 14049
3. Address of Operator P O BOX 227 ARTESIA, NM 88211-0227		10. Pool name or Wildcat WILDCAT
4. Well Location Unit Letter J : 1980 feet from the SOUTH line and 1580 feet from the EAST line Section 30 Township 18S Range 28E NMPM EDDY County NM		
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3561' GR		
Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>		
Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____		
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:		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"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
OTHER: DOWNHOLE COMMINGLING <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	

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.

SEE ATTACHED C-107A APPLICATION FOR DOWNHOLE COMMINGLING

THE PROPOSED ALLOCATION IS WILDCAT ATOKA - OIL 52% - GAS 52%  
WILDCAT STRAWN - OIL 28% - GAS 28%  
WILDCAT CANYON - OIL 20% - GAS 20%

NEW ALLOCATIONS WILL BE SUBMITTED IF ACTUAL WELL PRODUCTION IS SIGNIFICANTLY DIFFERENT THAN THAT ABOVE.

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 Brian Collins TITLE Engineer DATE 30 Nov 07

Type or print name  
**For State Use Only**

E-mail address:

Telephone No.

APPROVED BY: \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
Conditions of Approval (if any): \_\_\_\_\_



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**marbob**  
energy corporation

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November 30, 2007

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  
Dime State #1  
Township 18 South, Range 28 East, NMPM  
Sec. 30: Unit J  
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 Dime State #1 well located in Eddy County.

We are seeking approval to downhole commingle the Atoka, Strawn and Canyon 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,

*Brian Collins*

Brian Collins  
Petroleum Engineer

BC/dlw  
enclosures