

District I
1623 N. Hudson Drive, 1st fl., NM 88240

District II
1301 W. Grand Avenue, Artesia, NM 88210

District III
10800 Ray Thomas Road, Artesia, NM 87410

District IV
1320 S. St. Francis IV, 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 CORPORATON

P O BOX 227

ARTESIA, NM 88211-0227

Operator

Address

LITTLE FEDERAL #1

P-29-T21S-R26E

EDDY COUNTY

Lease

Well No.

Unit Lencer-Section-Township-Range

County

OGRID No. 14049 Property Code 34633 API No. 30-015-33960 Lease Type: ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	HAPPY VALLEY ATOKA		HAPPY VALLEY MORROW
Pool Code	78055		78060
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	10619-10890' PERF'D		11013-11270' PERF'D
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. 4720 PSI BHP	RECEIVED JAN 31 2006 JUN-ARTESIA	EST. 4440 PSI BHP
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1050		1050
Producing, Shut-In or New Zone	PRODUCING		PRODUCING
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: 11/23/05 Rates: 530 MCFD	Date: Rates:	Date: 11/11/05 Rates: 30 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 95 % 95 %	Oil Gas % %	Oil Gas 5 % 5 %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones?
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?

Yes ☒ No ☐
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 01/11/06

TYPE OR PRINT NAME BRIAN COLLINS TELEPHONE NO. (505) 748-3303

E-MAIL ADDRESS engineering@marbob.com

1/11/06 - 1 copy to OED
1 copy to BLM
orig + 1 copy SFCD

Engineering Summary
Form C-107A
Application for Downhole Commingling

Marbob Energy Corporation
Little Federal No. 1 (Unit P, Sec. 29-T21S-R26E)

Marbob Energy proposes to downhole commingle the Morrow (Happy Valley Morrow 78060) and Atoka (Happy Valley Atoka 78055) in the captioned well. The Morrow was fracture treated and only tested approximately 30 MCFD (10 psig, 12/64" ck). The Atoka was acidized and tested approximately 530 MCFD (680 psig, 12/64" ck). Both zones tested sweet gas with same BTU content. The proposed zonal allocation is shown below.

<u>Morrow</u>	Best engineering estimate is that zonal reserves will approximate post treatment well tests.		
	$\frac{30 \text{ MCFD}}{30+530 \text{ MCFD}}$	=5.4%	Say 5% Gas and Oil
<u>Atoka</u>	1 - .05	=.95	Say 95% Gas and Oil

DISTRICT I
1626 N. FRANCES DR., ROSA, NM 86240

DISTRICT II
1301 W. GRAND AVENUE, ALBUQUERQUE, NM 84210

DISTRICT III
1000 Rio Bravo 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 78060	Pool Name HAPPY VALLEY; MORROW
Property Code	Property Name LITTLE ROUNDY ROUND FEDERAL	Well Number 1
OGRID No. 14049	Operator Name MARBOB ENERGY CORPORATION	Elevation 3274'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
16	29	21-S	26-E		555	SOUTH	1017	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 324.34		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

LOT 4	LOT 3	LOT 2	LOT 1
GEODETIC COORDINATES NAD 27 NME Y=525639.5 N X=507507.3 E LAT.=32°26'42.34" N LONG.=104°18'32.39" W			
40.67 AC LOT 5	40.62 AC LOT 6	39.77 AC LOT 7	39.69 AC LOT 8
40.75 AC LOT 12	40.70 AC LOT 11	39.88 AC LOT 10	39.80 AC LOT 9
40.90 AC LOT 13	40.97 AC LOT 14	40.21 AC LOT 15	39.98 AC LOT 16 40.09 AC
40.90 AC	40.97 AC	40.32 AC	3279.5' 3274.2' 600' 600' 551' 3271.3' 3268.4'

RECEIVED
JAN 31 2006
JUANITA

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

Signature
Melanie J. Parker
Printed Name
Land Department
Title
January 5, 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.
DECEMBER 16, 2004
Date Surveyed
Signature of Gary B. Edson
Professional Surveyor
GARY B. EDSON
NEW MEXICO
04.11.1725
Certificate No. GARY EDSON 12841

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. 30-015-33960
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name LITTLE FEDERAL
8. Well Number 1
9. OGRID Number 14049
10. Pool name or Wildcat HAPPY VALLEY

Pit or Below-grade Tank Application ☐ or Closure ☐

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 _____

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
MARBOB ENERGY CORPORATION

3. Address of Operator
P O BOX 227
ARTESIA, NM 88211-0227

4. Well Location
Unit Letter P : 555 feet from the SOUTH line and 1017 feet from the EAST line
Section 29 Township 21S Range 26E NMPM EDDY County NM

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3274'

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

NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPL <input type="checkbox"/> OTHER: DOWNHOLE COMMINGLING <input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF: REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/> COMMENCE DRILLING OPNS. <input type="checkbox"/> P AND A <input type="checkbox"/> CASING/CEMENT JOB <input type="checkbox"/> OTHER: <input type="checkbox"/>
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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: HAPPY VALLEY MORROW 78060 - OIL 5% - GAS 5%
HAPPY VALLEY ATOKA 78055 - OIL 95% - GAS 95%

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 01/11/06

Type or print name BRIAN COLLINS
For State Use Only

E-mail address: engineering@marbob.com Telephone No. 505-748-3303

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



marbob
energy corporation

OCD

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JAN 17 2006

January 11, 2006

Bureau of Land Management
2909 W. 2nd St.
Roswell, NM 88201

Attn: Mr. Armando Lopez

Re: Downhole Commingling Application
Little Federal #1, Unit P, Sec. 29-T21S-R26E
Eddy County, New Mexico

RECEIVED

JAN 31 2006

OCD-ARTESIA

JAN 12 10 11 AM '06

RECEIVED

Dear Mr. Lopez:

Enclosed is a copy of the downhole commingling application submitted to the NMOCD for the captioned well.

Please contact me at 505-748-3303 if you have any questions.

Sincerely,

Brian Collins
Petroleum Engineer

BC/dlw
enclosure

