

DATE: 22 Feb 06	SUSPENSE	ENGINEER: W. Jones	LOGGED IN: 27 Feb 06	TYPE: DHC	APP NO: PCUP0705852332
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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

RECEIVED

District I
1625 N. French Drive, Hobbs, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised June 10, 2003
FEB 22 2007

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

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

APPLICATION TYPE
Oil Conservation Division ☒ Single Well
1220 S. St. Francis Drive, Santa Fe, NM 87505
☒ Existing Wellbore

APPLICATION FOR DOWNHOLE COMMINGLING

☒ Yes ☐ No

MARBOB ENERGY CORPORATION

P O BOX 227

ARTESIA, NM 88211-0227

Operator

Address

LITTLE FEDERAL #1

P-29-T21S-R26E

EDDY COUNTY

Lease

Well No.

Unit Letter-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	UNDER Happy Valley Strawn	78070	Happy Valley Morrow
Pool Code	77920	78055	78060
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	9546-9726' Perf	9888-10132' Perf 10619-10890' Perf	11013-11270' Perf
Method of Production (Flowing or Artificial Lift)	Flow	Flow 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)	N/A	N/A N/A	N/A
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1050	1050 1050	1050
Producing, Shut-In or New Zone	Producing	Producing 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: 2/08/07 Rates: 100 MCFD	02/07/07 (Strn) Date: 02/07/07 (Atka) Rates: 35 MCFD (Strn) 100 MCFD (Atka)	Date: 02/07 Rates: 5 MCFD estimated
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 42 % 42 %	Oil Gas 14 % 14 % 42 % 42 %	Oil Gas 2 % 2 %

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 Petroleum Engineer DATE 02/19/07

TYPE OR PRINT NAME Brian Collins TELEPHONE NO. (505) 748-3303

E-MAIL ADDRESS engineering@marbob.com

DISTRICT I
1625 N. FRANKLIN DR., HOBER, NM 88240

DISTRICT II
1501 W. GRAND AVENUE, ANTERIA, NM 88210

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
OGRIID 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 40.67 AC LOT 5	LOT 3 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 40.62 AC LOT 6	LOT 2 39.77 AC LOT 7	LOT 1 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 40.08 AC
40.90 AC	40.97 AC	40.32 AC	3279.5' 3274.2' 600' 3271.3' 600' 3268.4'

OPERATOR CERTIFICATION

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

Melanie J. Parker
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 & Seal of
Professional Surveyor
GARY EDSON
12/23/04
04.11.1725
Certificate No. GARY EDSON 12641

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), Atoka (Happy Valley Atoka 78055), Strawn (Happy Valley Strawn NE 78075) and Canyon (Undesignated) in the captioned well. The best engineering estimate is that zonal reserves will approximate post treatment well tests.

Morrow The Morrow wasn't individually tested on recent workover. The best engineering estimate is that the 95% Atoka/5% Morrow ratio submitted on the original DHC application still applies. The Atoka recently tested approximately 100 MCFD (120 psi on 12/64" choke), therefore, the Morrow production is estimated to be 5 MCFD.

Atoka The Atoka was tested during a recent workover at approximately 100 MCFD (120 psi on 12/64" choke).

Strawn The Strawn was tested during a recent workover at approximately 35 MCFD (90 psi on 1/8" choke).

Canyon The Canyon was tested during a recent workover at approximately 100 MCFD (120 psi on 12/64" choke).

The proposed zonal allocation follows below. The best engineering estimate is that each zone will produce condensate in the same ratio as gas.

Morrow 5 MCFD rate $\frac{5}{5+100+35+100} = .02 = 2\%$

Atoka 100 MCFD rate $\frac{100}{5+100+35+100} = .42 = 42\%$

Strawn 35 MCFD rate $\frac{35}{5+100+35+100} = .14 = 14\%$

Canyon 100 MCFD rate $\frac{100}{5+100+35+100} = .42 = 42\%$

Submit 3 Copies To Appropriate District Office
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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 ☐ FEE ☐

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

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' GR

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

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 COMPL ☐

OTHER: DOWNHOLE COMMINGLING ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

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.

SEE ATTACHED C-107A APPLICATION FOR DOWNHOLE COMMINGLING

THE PROPOSED ALLOCATION IS: HAPPY VALLEY MORROW 78060 - OIL 2% - GAS 2%
HAPPY VALLEY ATOKA 78055 - OIL 42% - GAS 42%
HAPPY VALLEY STRAWN NE 78075 - OIL 14% - GAS 14%
UNDESIGNATED CANYON - OIL 42% - GAS 42%

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 PETROLEUM ENGINEER DATE 02/19/07

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):