

ABOVE THIS LINE FOR DIVISION USE ONLY

3858

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

**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  Approved Pools  
Santa Fe, NM  EXISTING WELLBORE

District III  
1000 Rio Brazos Road, Aztec, NM 87410

District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

APPLICATION FOR DOWNHOLE COMMINGLING  Yes  No

*DHC-3858*

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	<i>77920</i> <del>UNDES Happy Valley Atoka</del> <i>UNDES Canyon</i>	<i>78070</i> <del>Happy Valley Strawn</del> <i>Happy Valley Atoka</i>	<del>Happy Valley Morrow</del>
Pool Code	<i>96239</i>	<del>78055</del>	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	Date: 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 42 % Gas 42 %	Oil 42 % Gas 42 %	Oil 2 % Gas 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. FRANCIS DR., BOBBS, NM 86240

DISTRICT II  
1501 W. GRAND AVENUE, ANTERIA, NM 86210

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 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

<p>LOT 4 40.67 AC LOT 5</p>	<p>LOT 3 GEODETTIC 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</p>	<p>LOT 2 39.77 AC LOT 7</p>	<p>LOT 1 39.69 AC LOT 8</p>	<p><b>OPERATOR CERTIFICATION</b> I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  <i>Melanie J. Parker</i> Signature <b>Melanie J. Parker</b> Printed Name Land Department Title January 5, 2005 Date</p>
<p>40.75 AC LOT 12</p>	<p>40.70 AC LOT 11</p>	<p>39.88 AC LOT 10</p>	<p>39.80 AC LOT 9</p>	<p><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.  DECEMBER 16, 2004 Date Surveyed Signature &amp; Seal of <i>GARY EDSON</i> Professional Surveyor NEW MEXICO 04.11.1725 Certificate No. GARY EDSON 12641</p>
<p>40.90 AC LOT 13</p>	<p>40.97 AC LOT 14</p>	<p>40.21 AC LOT 15</p>	<p>39.98 AC LOT 16 40.08 AC</p>	
<p>40.90 AC</p>	<p>40.97 AC</p>	<p>40.32 AC</p>	<p>3279.5' 3274.2' 600' 600' 3271.3' 3268.4'</p>	

**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  $\frac{100}{5+100+35+100} = .42 = 42\%$

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

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 [X] 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 [X]

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 [Signature] TITLE PETROLEUM ENGINEER DATE 02/19/07

Type or print name BRIAN COLLINS E-mail address: engineering@marbob.com Telephone No. 505-748-3303
For State Use Only

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