

DATE 16 April 07	SUSPENSE	ENGINEER W. Sones	LOGGED IN 17 April 07	TYPE DHC 3885	APP NO. FCLP0710740945
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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

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

APR 16 2007

Oil Conservation Division

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

APPLICATION TYPE

☒ Single Well

☐ Establish Pre-Approved Pools

EXISTING WELLBORE

☒ Yes ☐ No

APPLICATION FOR DOWNHOLE COMMINGLING

MARBOB ENERGY CORPORATION

P O BOX 227

ARTESIA, NM 88211-0027

Operator

Address

HACKBERRY 33 FEDERAL COM #1

E-33-T21S-R26E

EDDY COUNTY

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 14049 Property Code 35782 API No. 30-015-34937 Lease Type: ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	HAPPY VALLEY STRAWN	HAPPY VALLEY ATOKA	HAPPY VALLEY MORROW
Pool Code	78070	78055	78060
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	9832-10013 PERF'D	10319-10586 PERF'D	10932-11040 PERF'D
Method of Production (Flowing or Artificial Lift)	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)	EST 500 PSI FLOWING BHP	EST 500 PSI FLOWING BHP	EST 500 PSI FLOWING BHP
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1050	1050	1050
Producing, Shut-In or New Zone	NEW ZONE	NEW ZONE	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: N/A Rates:	Date: N/A Rates:	Date: 03/25/07 Rates: 50 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 50 % 50 %	Oil Gas 25 % 25 %	Oil Gas 25 % 25 %

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 04/12/07

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

E-MAIL ADDRESS engineering@marbob.com

Engineering Summary
Form C-107A
Application for Downhole Commingling

Marbob Energy Corporation
Hackberry 33 Federal Com No. 1 (Unit E, Sec. 33-T21S-R26E)

Marbob Energy proposes to downhole commingle the Morrow (Happy Valley Morrow 78060), Atoka (Happy Valley Atoka 78055) and Strawn (Happy Valley Strawn 78075) in the captioned well. The Morrow was fracture treated and currently produces approximately 50 MCFD to sales. The best engineering estimate is that the Atoka will produce 50 MCFD and the Strawn will produce 100 MCFD and that all zones will decline at the same rate. The proposed zonal allocation is shown below.

Morrow Best engineering estimate is that zonal reserves will approximate the best engineering estimate of individual zone flow rates and that any condensate produced will be proportional to gas production.

$$\frac{50 \text{ MCFD}}{50+100+50 \text{ MCFD}} = 25\%$$

Atoka $\frac{50 \text{ MCFD}}{50+100+50 \text{ MCFD}} = 25\%$

Strawn $\frac{100 \text{ MCFD}}{50+100+50 \text{ MCFD}} = 50\%$

New allocations will be submitted if actual well production is significantly different than that above.

DISTRICT I

1825 N. PIERCE DR., ROSA, NM 88240

DISTRICT II

1301 W. GRAND AVENUE, ARTERIA, 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 Department

OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102

Revised October 12, 2005

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 HACKBERRY 33 FEDERAL COM.	Well Number 1
OCRID No. 14049	Operator Name MARBOB ENERGY CORPORATION	Elevation 3249'

Surface Location

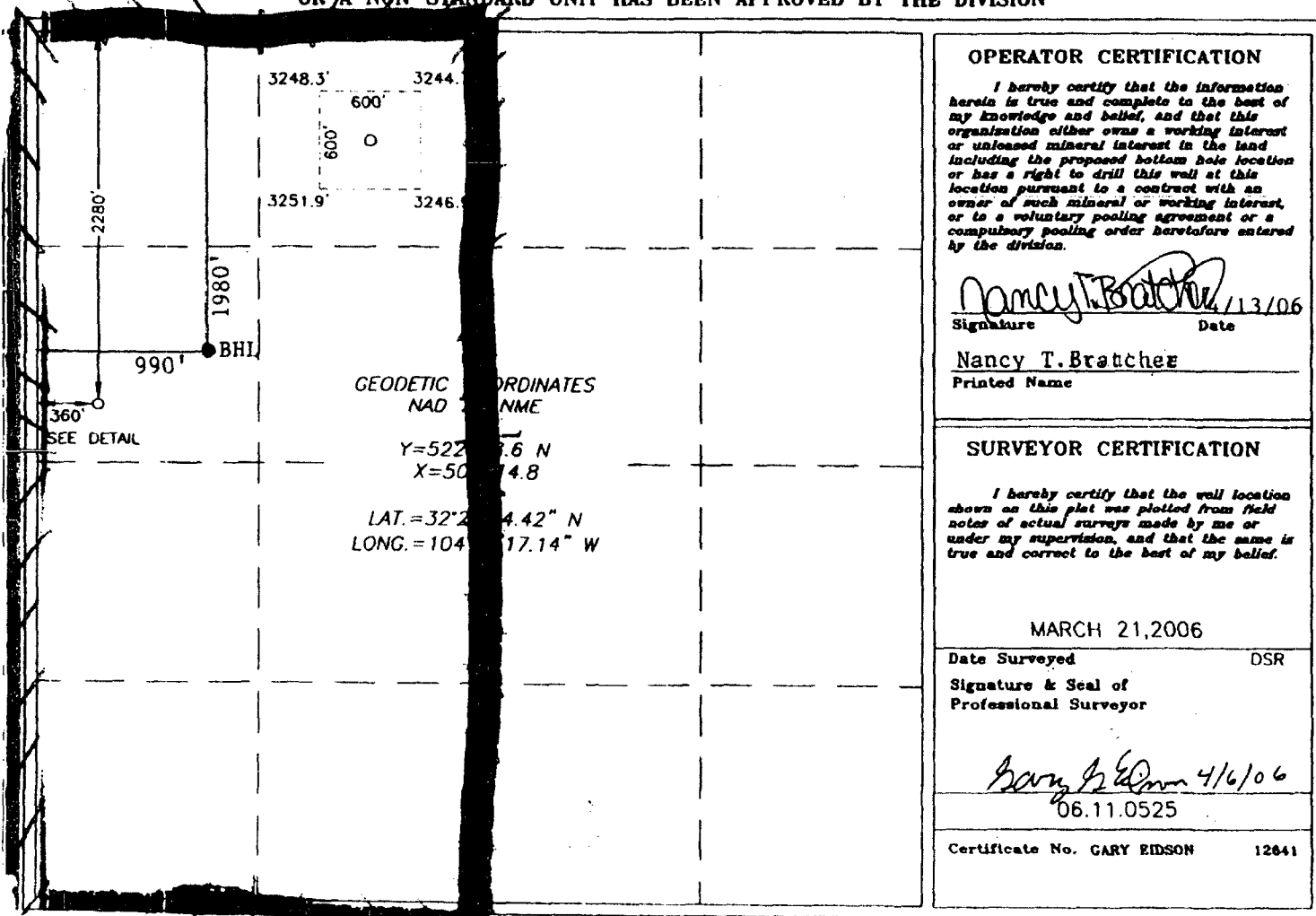
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	33	21-S	26-E		2280	NORTH	360	WEST	EDDY

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
E	33	21-S	26-E		1980	North	990	West	Eddy

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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



OPERATOR CERTIFICATION

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Nancy T. Bratchee 4/13/06
Signature Date

Nancy T. Bratchee
Printed Name

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.

MARCH 21, 2006

Date Surveyed DSR
Signature & Seal of
Professional Surveyor

Gary E. Edson 4/6/06
06.11.0525

Certificate No. GARY EIDSON 12841

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator **MARBOB ENERGY CORPORATION**

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

3b. Phone No. (include area code)
505-748-3303

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**SEC. 33-T21S-R26E, UNIT E
2280 FNL 360 FWL, SW/4NW/4**

5. Lease Serial No.
NMNM113935

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.
HACKBERRY 33 FEDERAL COM #1

9. API Well No.
30-015-34937

10. Field and Pool, or Exploratory Area
HAPPY VALLEY; MORROW

11. County or Parish, State
EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Downhole</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>Commingling</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

SEE ATTACHED C-107A APPLICATION FOR DOWNHOLE COMMINGLING

**THE PROPOSED ALLOCATION IS: HAPPY VALLEY MORROW 78060 - OIL 25% - GAS 25%
HAPPY VALLEY ATOKA 78055 - OIL 25% - GAS 25%
HAPPY VALLEY STRAWN 78075 - OIL 50% - GAS 50%**

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

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

BRIAN COLLINS

Title **ENGINEER**

Signature

Brian Collins

Date

04/12/2007

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

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.
30-015-34937

5. Indicate Type of Lease

STATE ☐ FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

HACKBERRY 33 FEDERAL COM

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 E : 2280 feet from the NORTH line and 360 feet from the WEST line
Section 33 Township 21S Range 26E NMPM EDDY County NM

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3249' 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 25% - GAS 25%
HAPPY VALLEY ATOKA 78055 - OIL 25% - GAS 25%
HAPPY VALLEY STRAWN 78075 - OIL 50% - GAS 50%

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 04/12/07

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):