

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

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

2006 MAR 27 PM 12:13

DHC-3676

MARBOB ENERGY CORPORATION

P O BOX 227

ARTESIA, NM 88211-0027

Operator

Address

D STATE #21

I-25-T17S-R28E

EDDY, NM

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 14049 Property Code 25375 API No. 30-015-30975 Lease Type: ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Artesia Qn-GB-SA		Artesia Glorieta/Yesp
Pool Code	3230		96830
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2870-3059' Perforated		4017-4179' Perforated
Method of Production (Flowing or Artificial Lift)	Artificial Lift		Artificial Lift
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)	50 psi producing BHP		100 psi producing BHP
Oil Gravity or Gas BTU (Degree API or Gas BTU)	36°		39°
Producing, Shut-In or 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: Rates:	Date: 12/27/05 Rates: 11 BOPD 27 MCFPD
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 29 % 48 %	Oil Gas % %	Oil Gas 71 % 52 %

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: Administrative Order DHC-2906

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 03/22/06

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**

D State No. 21 (I-25-T17S-R28E)

D State No. 22 (P-25-T17S-R28E)

D State No. 28 (O-25-T17S-R28E)

D State No. 29 (P-25-T17S-R28E)

DAD State No. 41 (J-25-T17S-R28E)

DAD State No. 42 (I-25-T17S-R28E)

As shown on the attached production plots, the estimated EUR for the Yeso is 42 MBO/56 MMCF and for the San Andres is 17 MBO/51 MMCF. The proposed zonal allocation is:

Oil: Yeso =  $\frac{42 \text{ MBO}}{42+17} = 71\%$

San Andres 1-.71 = 29%

Gas: Yeso =  $\frac{26 \text{ MMCF}}{56+51} = 52\%$

San Andres 1-.52 = 48%

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III  
1000 Rio Brason Rd., Aztec, NM 87410

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name ARTESIA-QUEEN GRBG SA <del>XXXXXXXXXX</del> Empire YESO
Property Code	Property Name "D" STATE	Well Number 21
OGRID No. 14049	Operator Name MARBOB ENERGY CORPORATION	Elevation 3664

Surface Location

UL or lot No. 1	Section 25	Township 17 S	Range 28 E	Lot Idn	Feet from the 2310	North/South line SOUTH	Feet from the 330	East/West line EAST	County EDDY
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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 40	Joint or Infill	Consolidation Code	Order No.						

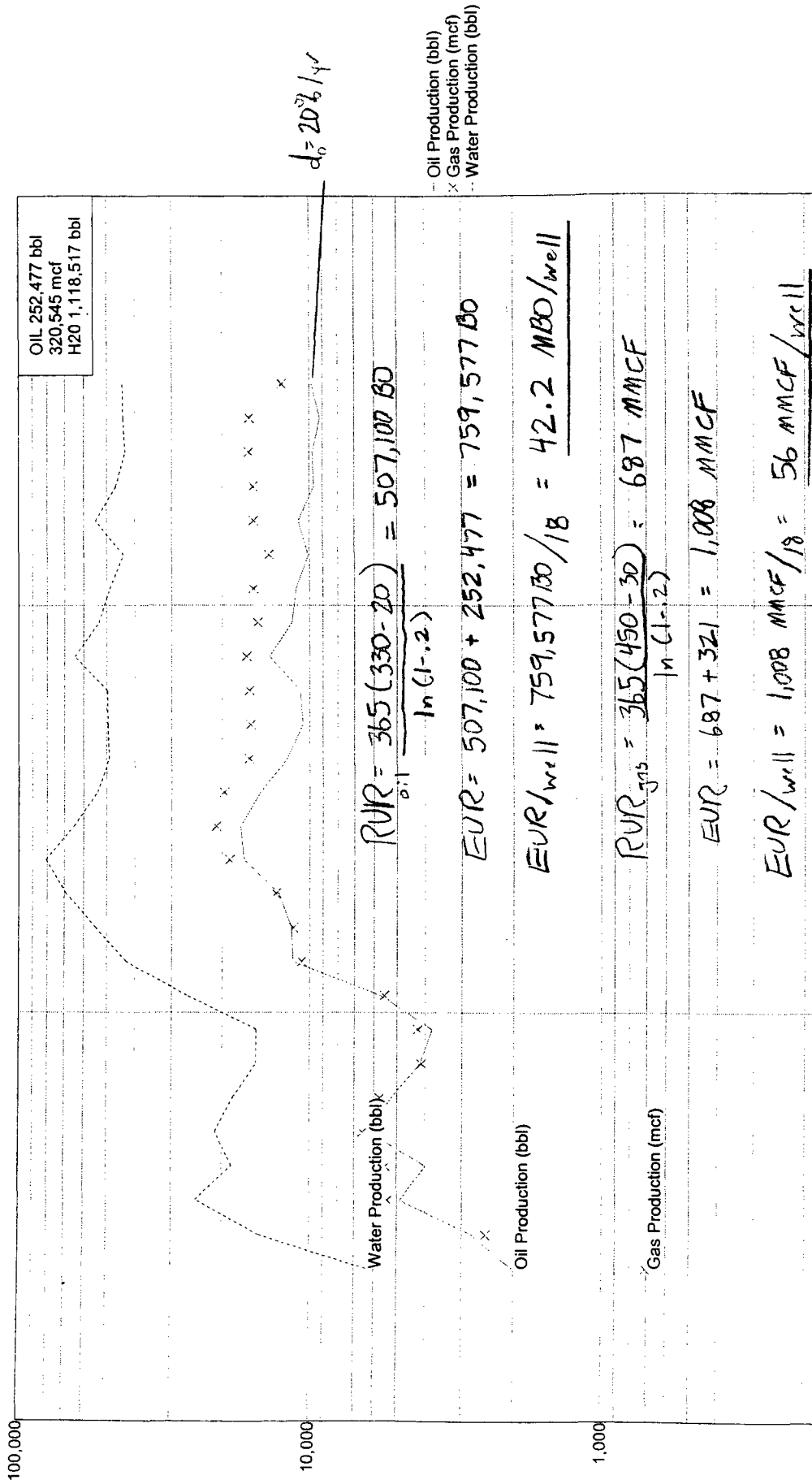
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

										<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 <i>Robin Cockrum</i>	
										Printed Name ROBIN COCKRUM	
										Title PRODUCTION ANALYST	
										Date 2/17/00	
										<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.	
										Date Surveyed FEBRUARY 8, 2000	
										Signature & Seal of Professional Surveyor <i>Ronald J. Eidson</i> 2/11/2000	
										Certificate No. 09-11-0189	
										Certificate No. RONALD J. EIDSON 3239 GARY EIDSON 12641 MACON McDONALD 12185	

18 wells Yeso Production

Lease Name: D STATE  
 County, State: EDDY, Unknown  
 Operator: MARBOB ENERGY CORPORATION  
 Field: ARTESIA  
 Reservoir: MULTIPLE  
 Location:

D STATE - [ MULTIPLE



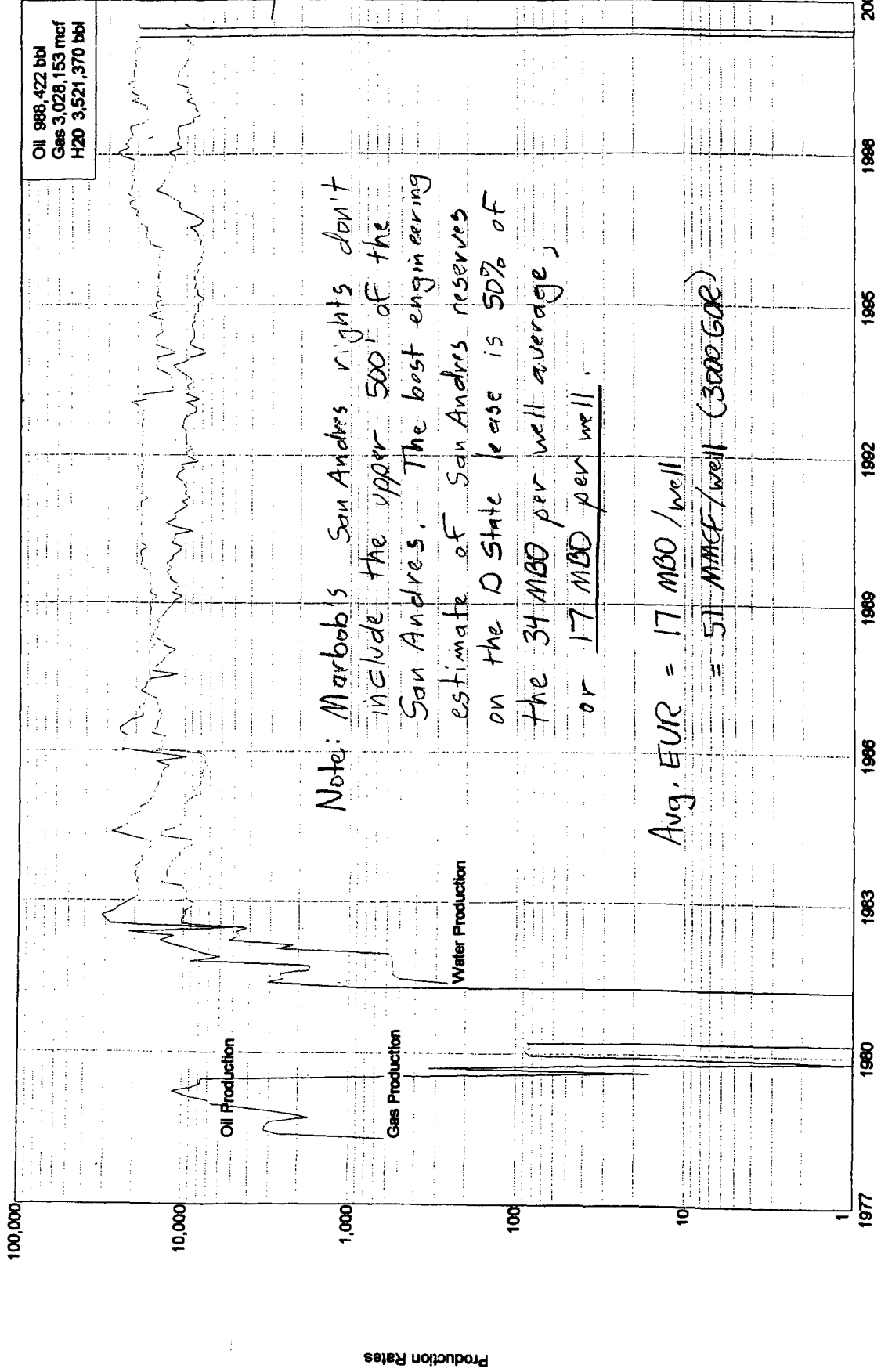
— Oil Production (bbl)  
 x Gas Production (mcf)  
 - - Water Production (bbl)

Lessee Name: MULTIPLE  
 County, State: EDDY, Unknown  
 Operator: MARBOB ENERGY CORPORATION  
 Field: MULTIPLE  
 Reservoir: QUEEN-GRAYBURG-SAN A  
 Location:

Sec. 26, 27, 34 - 17s-28e  
 Eddy, NM

Avg. EUR per well = 33.9 MBO  
 San Andres  
 Avg. GOR = 3000 (Avg 101.7 MMCF/w

MULTIPLE - MULTIPLE



$d_{exp} = 13\%/yr.$

Oil Production  
 - Gas Production  
 - Water Production

$$RUR = \frac{-365(Q_1 - Q_2)}{\ln(1 - d)}$$

$Q_1 = 110 \text{ bo/d}$   
 $Q_2 = 60 \text{ bo/d (33\% d = 13\%/yr)}$

$$RUR = \frac{-365(110 - 60)}{\ln(1 - .13)} = 131,048 \text{ bo}$$

$$EUR = 988,422 + 131,048 = 1,119,470 \text{ BO}$$

$$EUR/well = \frac{1,119,470 \text{ BO}}{33} = 33.923 \text{ BO}$$

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. 30-015-30975
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name D STATE
8. Well Number 21
9. OGRID Number 14049
10. Pool name or Wildcat ARTESIA GLORIETA/YESO

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 <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>	
2. Name of Operator MARBOB ENERGY CORPORATION	
3. Address of Operator P O BOX 228 ARTESIA, NM 88211-0228	
4. Well Location Unit Letter I : 2310 feet from the SOUTH line and 330 feet from the EAST line Section 25 Township 17S Range 28E NMPM EDDY County NM	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3664' 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:

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  
ADMINISTRATIVE ORDER DHC-2906

THE PROPOSED ALLOCATION IS: ARTESIA QN-GB-SA - OIL 29% - GAS 48%  
ARTESIA GLORIETA/YESO - OIL 71% - GAS 52%

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 NMOC guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Brian Collins TITLE ENGINEER DATE 03/22/06

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): \_\_\_\_\_