

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

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

APPLICATION FOR DOWNHOLE COMMINGLING

Form C-107A  
Revised June 10, 2003

APPLICATION TYPE  
☒ Single Well  
☐ Establish Pre-Approved Pools  
EXISTING WELLBORE  
☒ Yes ☐ No

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/Yeso
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	RECEIVED MAR 24 2006 OCU-ARTESIA	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 II**  
P.O. Drawer DD, Artesia, NM 88211-0719

**DISTRICT III**  
1000 Rio Brason Rd., Artec, NM 87410

**DISTRICT IV**  
P.O. BOX 2058, SANTA FE, N.M. 87504-2058

## 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		Empire	
				ARTESIA-QUEEN GRBG SA		YESO	
Property Code		Property Name				Well Number	
		"D" STATE				21	
OGRID No.		Operator Name				Elevation	
14049		MARBOB ENERGY CORPORATION				3664	

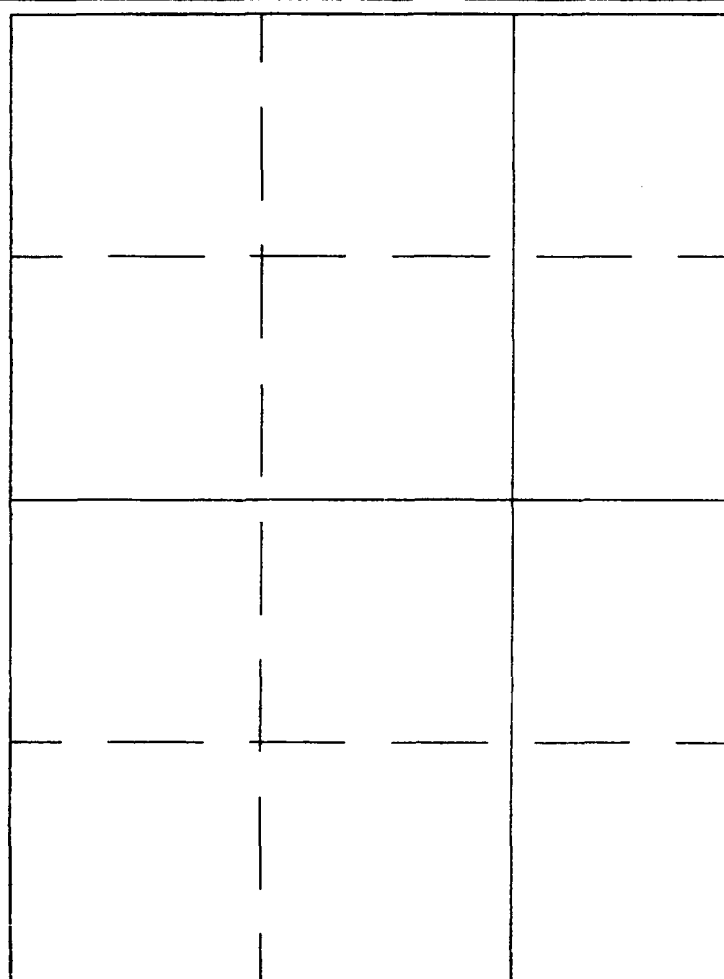
### Surface Location

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

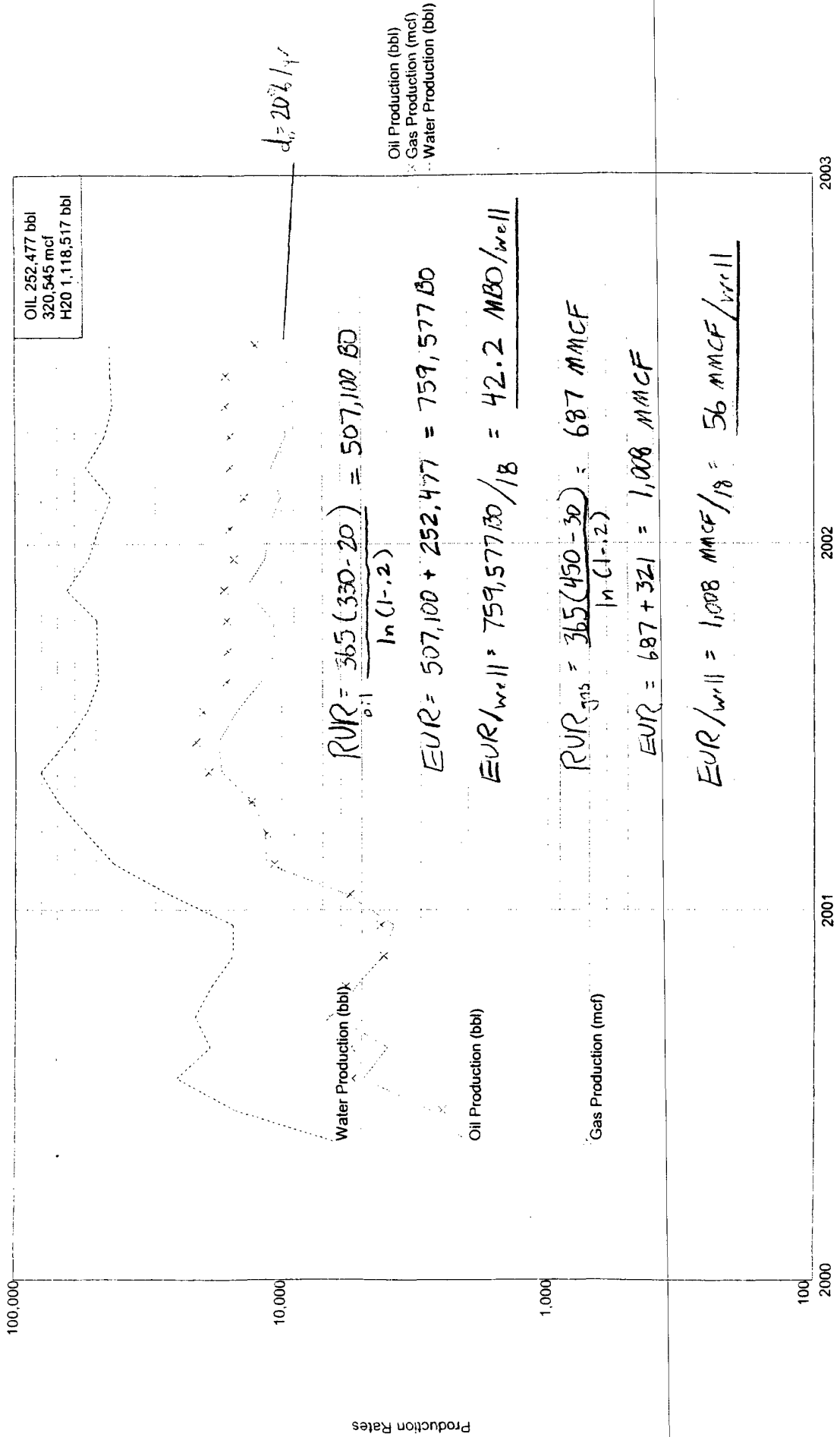
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<div><b>OPERATOR CERTIFICATION</b> <i>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</i> <div style="border-bottom: 1px solid black; margin-top: 10px;"><i>Robin Cockrum</i> Signature</div><div style="border-bottom: 1px solid black; margin-top: 5px;">ROBIN COCKRUM Printed Name</div><div style="border-bottom: 1px solid black; margin-top: 5px;">PRODUCTION ANALYST Title</div><div style="border-bottom: 1px solid black; margin-top: 5px;">2/17/00 Date</div></div>
	<div><b>SURVEYOR CERTIFICATION</b> <i>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.</i> <div style="text-align: right; margin-top: 10px;">FEBRUARY 8, 2000</div><div style="border-bottom: 1px solid black; margin-top: 10px;">Date Surveyed Signature &amp; Seal of Professional Surveyor</div><div style="border-bottom: 1px solid black; margin-top: 5px;"><i>Ronald J. Eidson</i> 2/11/2000 00-11-0189</div><div style="display: flex; justify-content: space-between; margin-top: 10px;"><div>Certificate No.</div><div>RONALD J. EIDSON GARY EIDSON MACON McDONALD</div><div>3239 12641 12185</div></div></div>

18 wells Yeso Production

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

D STATE - [ MULTIPLE



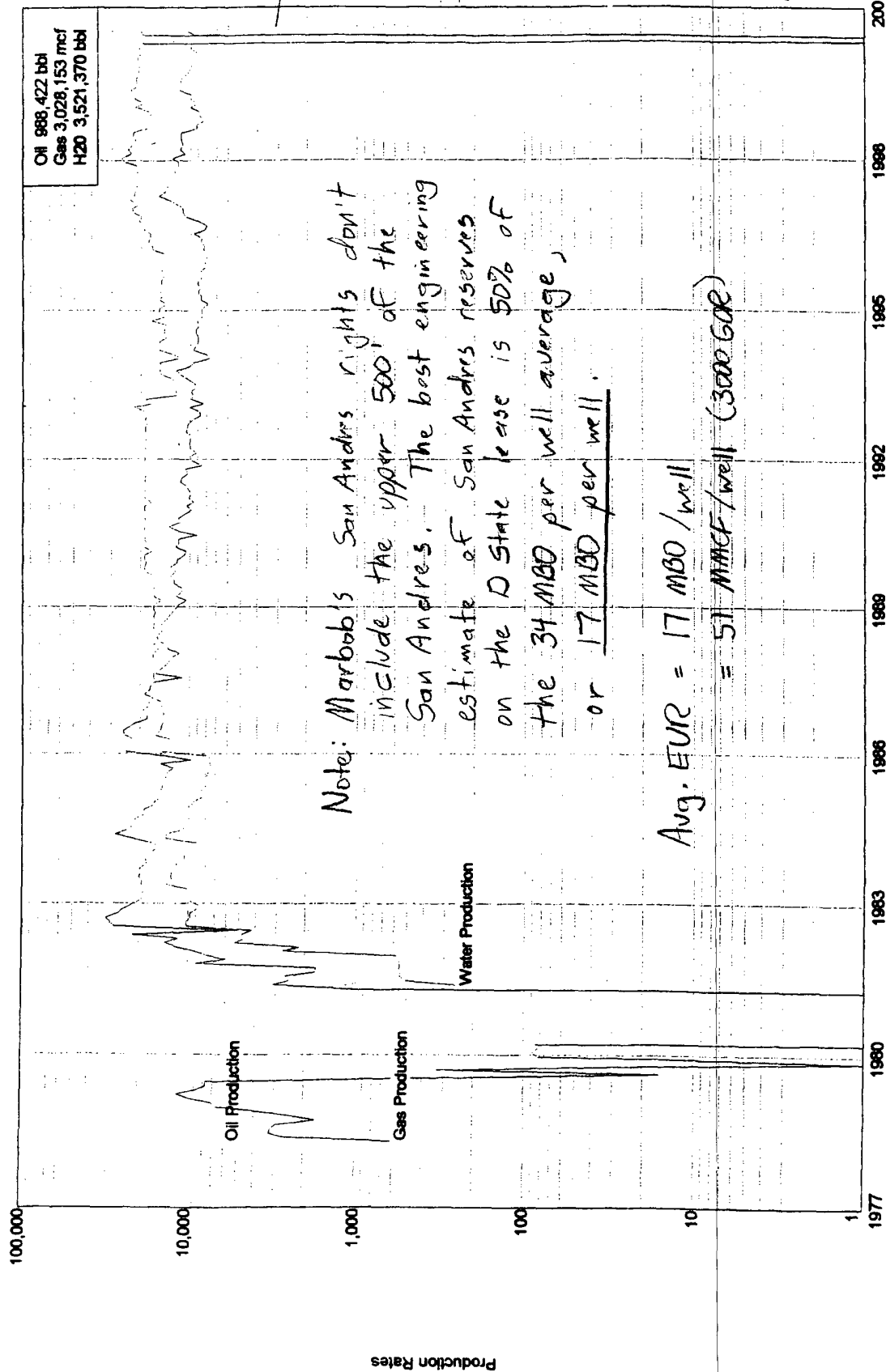
Sec. 26, 27, 34 - 17s-28e  
Eddy, NM

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

Avg. EUR per well = 33.9 MBO  
San Andres

Avg. GOR = 3000 (Avg 101.7 MMCF/w.)

MULTIPLE - MULTIPLE



Note: Marbob's San Andres rights don't include the upper 500' of the San Andres. The best engineering estimate of San Andres reserves on the D State lease is 50% of the 34 MBO per well average, or 17 MBO per well.

Avg. EUR = 17 MBO/well  
= 51 MMCF/well (3000 GOR)

deap = 13%/yr.

Oil Production  
Gas Production  
Water Production

$$RUR = \frac{-365(Q_i - Q)}{\ln(1-d)}$$

$Q_i = 110 \text{ bopd}$   
 $Q_{-1} = 60 \text{ bopd (33\% d)}$   
 $d = 13\%/yr$

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

EUR = 988,422  
+ 131,048  
1,119,470 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 ☒ Gas Well ☐ Other ☐

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 ☐ 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:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
OTHER: DOWNHOLE COMMINGLING <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	

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 NMOCD 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 E-mail address: engineering@marbob.com Telephone No. 505-748-3303  
**FOR STATE USE ONLY** **FOR RECORDS ONLY** **MAR 24 2006**

APPROVED BY: District II Supervisor TITLE DATE

Conditions of Approval (if any):