

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 May 15, 2000

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

Marbob Energy Corporation / P. O. Box 227, Artesia, NM 88211-0227  
Operator Address  
D State 24 O-25-17S-28E Eddy  
Lease Well No. Unit Letter-Section-Township-Range County  
OGRID No. 014049 Property Code 25375 API No. 30-015-31390 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)	2895-3565' perforated		4037-4281' 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: 11/30/02 Rates: 45 bopd 30 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? 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: 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 20 Jan 03

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

OCT 17 2000

## STRICT I

Box 1980, Hobbs, NM 88241-1980

## 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

## STRICT II

Drawer DD, Artesia, NM 86211-0719

## OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

## STRICT III

10 Rio Brazos Rd., Artec, NM 87410

☐ AMENDED REPORT

## STRICT IV

Box 2088, Santa Fe, NM 87504-2088

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number <b>30-015-31390</b>	Pool Code 96830	Pool Name ARTESIA GLORIETTA YESO
Property Code 25375	Property Name "D" STATE	Well Number 24
OGRID No. 14049	Operator Name MARBOB ENERGY CORPORATION ✓	Elevation 3675

## Surface Location

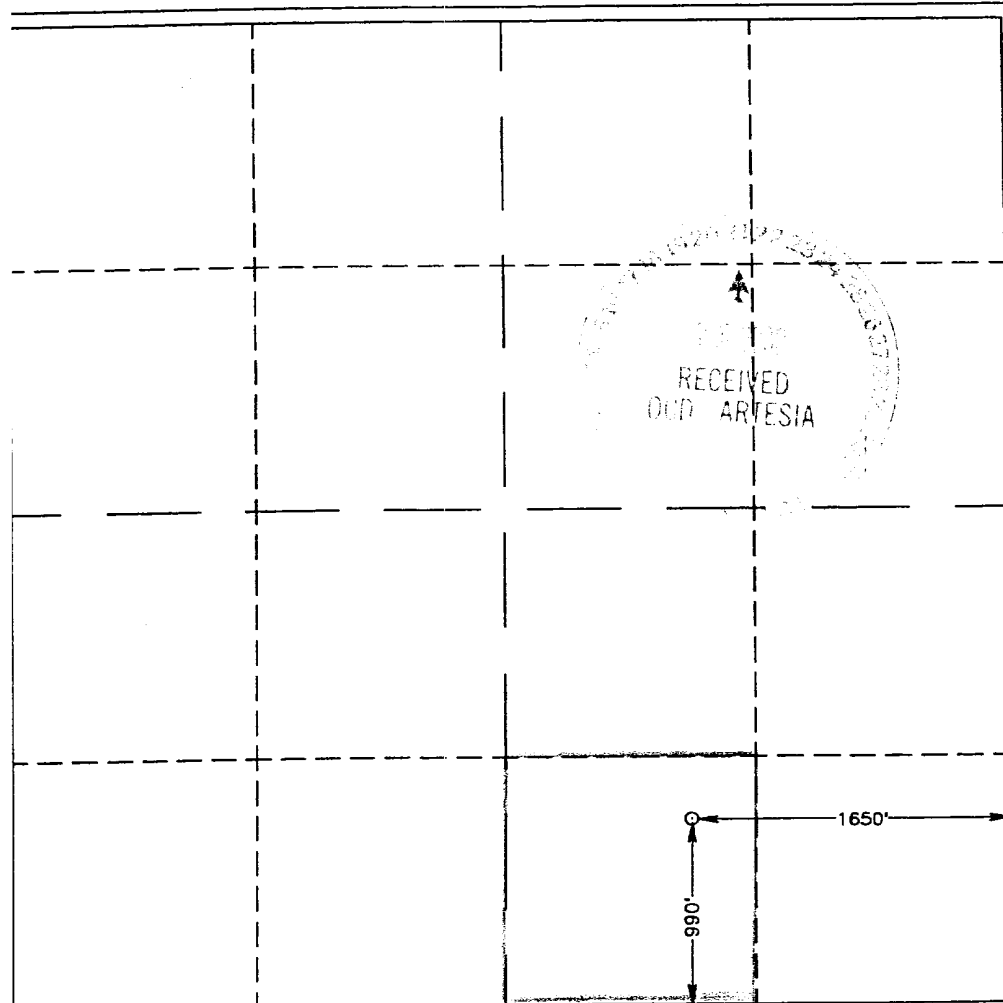
TL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	25	17 S	28 E		990	SOUTH	1650	EAST	EDDY

## Bottom Hole Location If Different From Surface

TL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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

*Robin Cockrum*  
Signature

ROBIN COCKRUM

Printed Name

PRODUCTION ANALYST

Title

10/18/00

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.

OCTOBER 10, 2000

Date Surveyed

JLP

Signature & Seal of  
Professional Surveyor

*Ronald J. Edson*  
W.O. Num. 00-11-1207

Certificate No. RONALD J. EDSON, 3239  
GARY G. EDSON, 12641

**Engineering Summary**  
**Form C-107A**  
**Application for Downhole Commingling**

Marbob Energy Corporation  
D State No. 24 (O-25-17S-28E)  
D State No. 26 (J-25-17S-28E)

As shown on the attached production plots, the estimated per well 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%

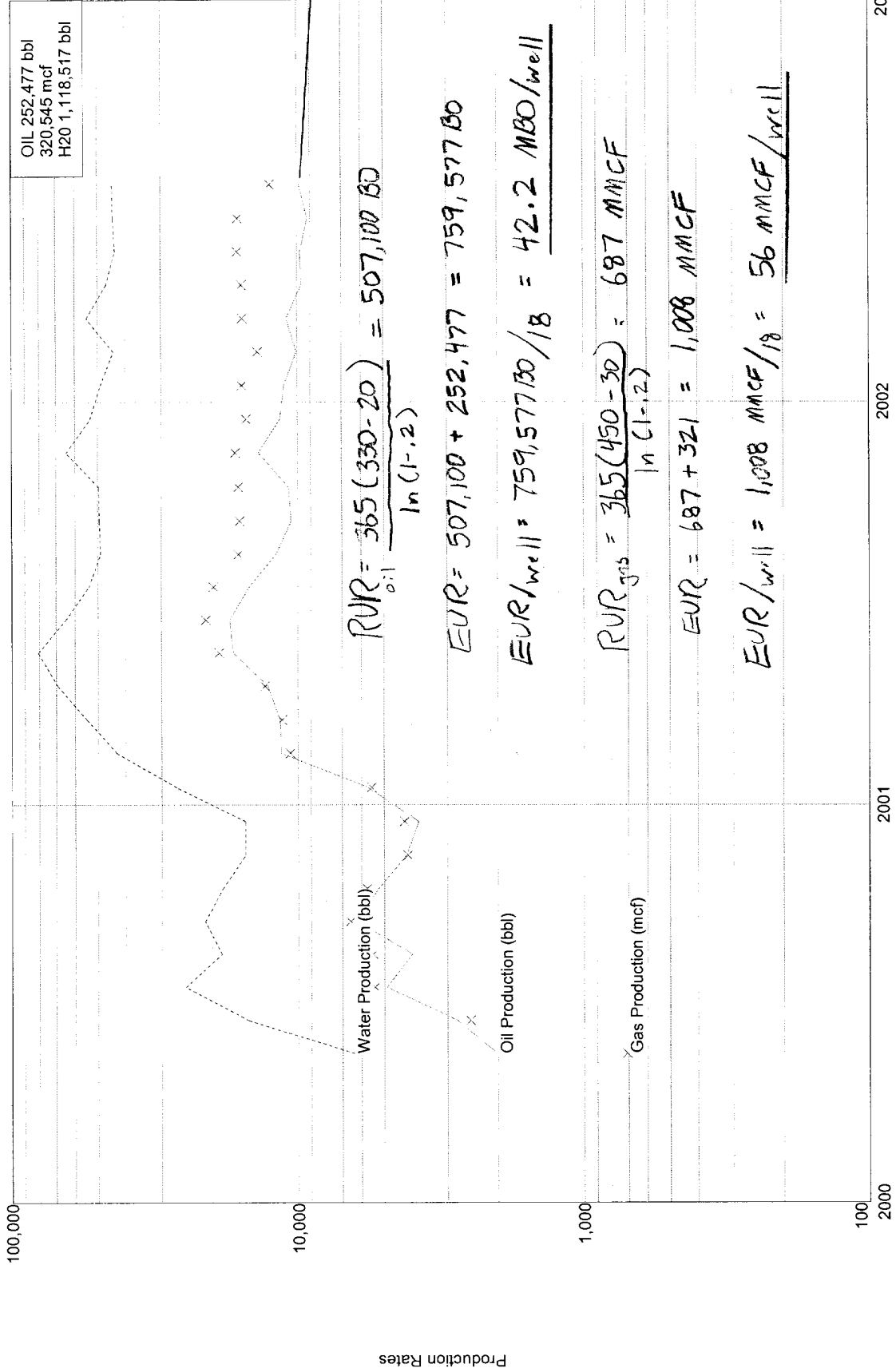
Gas: Yeso =  $\frac{56 \text{ MMCF}}{56+51}$  = 52%

San Andres 1-.52 = 48%

# 18 wells Yeso Production

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

## D STATE - [ MULTIPLE

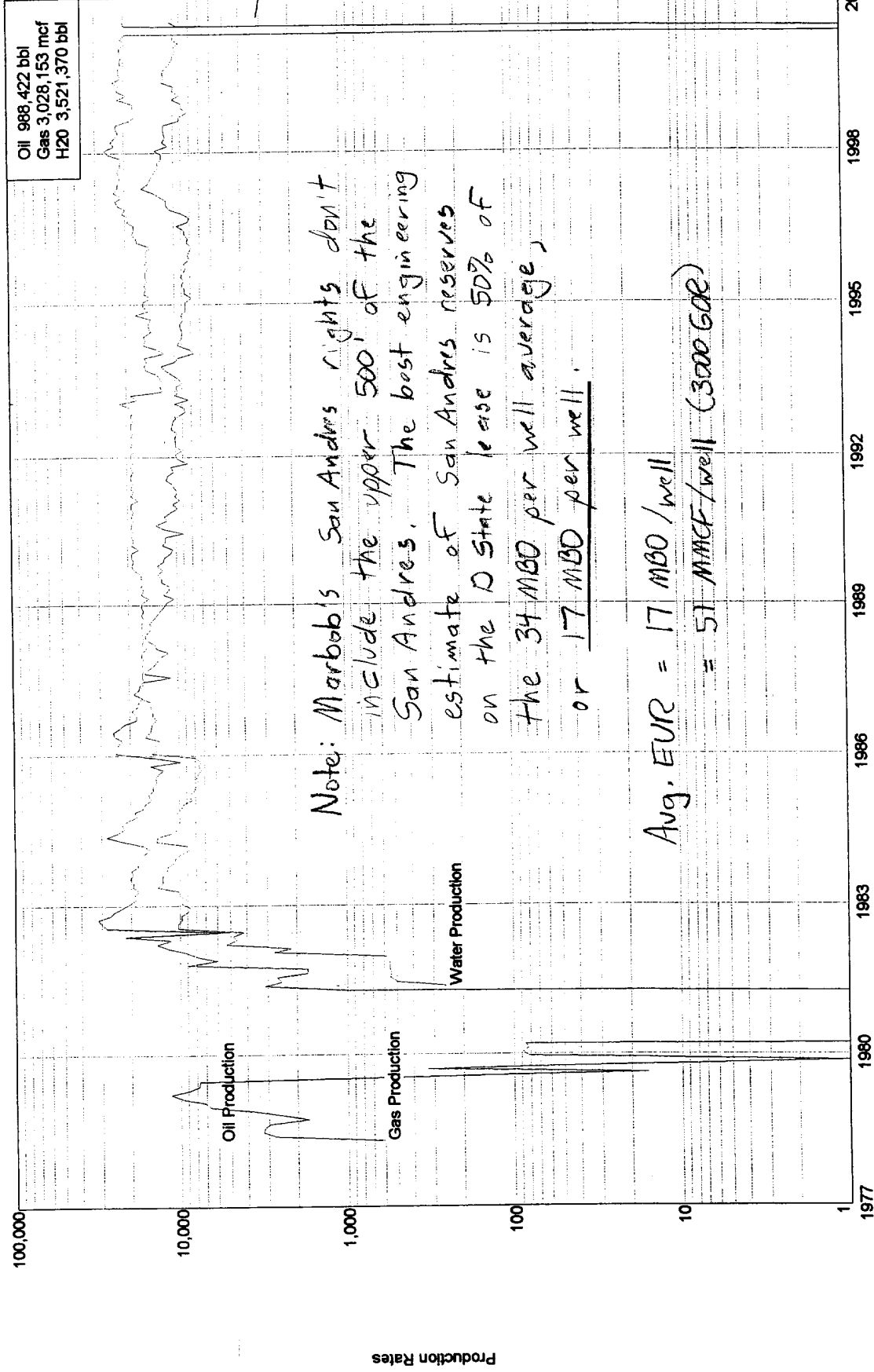


33 San Andres Wells  
 Sec. 26, 27, 34 - 17s-28e  
 Eddy, NM

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



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

Oil Production  
 - Gas Production  
 - Water Production

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

$$Q_1 = 110 \text{ bopd}$$

$$Q_2 = 60 \text{ bopd}$$

$$d = 13\%/yr$$

$$RUR = \frac{-365(110 - 60)}{\ln(1 - 13)}$$

$$= 131,048 \text{ bbl}$$

$$EUR = 988,422 + 131,048$$

$$= 1,119,470 \text{ bbl}$$

2001

$$EUR/well =$$

$$\frac{1,119,470 \text{ bbl}}{33}$$

$$= 33.973 \text{ bbl}$$

Time