

RECEIVED

District I
1625 N. French Drive, Hobbs, NM 88240

FEB 16 2005

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised June 10, 2003

District II
1301 W. Grand Avenue, Artesia, NM 88210

~~COOP-ARTESIA~~

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

District III
1000 Rio Brazos Road, Aztec, NM 87410

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

APPLICATION FOR DOWNHOLE COMMINGLING

MARBOB ENERGY CORPORATION P O BOX 227 ARTESIA, NM 88211-0227
Operator Address
EDSEL'S WAND WAVER FEE #1 E-6-24S-28E EDDY COUNTY, NM
Lease Well No. Unit Letter-Section-Township-Range County
OGRID No. 14049 Property Code 32426 API No. 30-015-32818 Lease Type: ____ Federal ____ State ☒ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	LOVING SE ATOKA		BLACK RIVER MORROW
Pool Code	80705		72170
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	11463-11467' PERF		12244-12256' PERF
Method of Production (Flowing or Artificial Lift)	FLOWING		FLOWING
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. 1000 PSI PRODUCING BHP		EST. 1000 PSI PRODUCING BHP
Oil Gravity or Gas BTU (Degree API or Gas BTU)	N/A		N/A
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: N/A	Date: Rates:	Date: FEBRUARY 2005 Rates: EST. 130 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 86 % 86 %	Oil Gas % %	Oil Gas 14 % 14 %

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 ENGINEER DATE 02/15/05
TYPE OR PRINT NAME BRIAN COLLINS TELEPHONE NO. (505) 748-3303
E-MAIL ADDRESS engineering@marbob.com

DISTRICT I
P.O. 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

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

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

DISTRICT IV
P.O. Box 2088, Santa Fe, N.M. 87604-2088

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-32818	Pool Code 80705	Pool Name UNDES. LOVING BLACK RIVER; ATOKA, SE
Property Code 32426	Property Name EDEL'S WAND WAYER FEE	Well Number 1
OGRID No. 14049	Operator Name MARBOB ENERGY CORPORATION	Elevation 3096'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
5	6	24-S	28-E		1650'	NORTH	660'	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
Dedicated Acres 319.66		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

LOT 4	LOT 3	LOT 2	LOT 1
LOT 5			
LOT 6			
LOT 7			

Diagram showing well location and acreage dedication plat. The diagram includes a grid of lots (LOT 1 through LOT 7) and a well location marked with a circle. The well location is situated in LOT 4, near the intersection of the 660' and 600' lines. The diagram also shows the 1650' and 660' dimensions for the well location.

GEODETIC COORDINATES
NAD 27 NME
Y = 454570.5 N
X = 561972.0 E
LAT. 32°14'58.46"N
LONG. 104°07'58.35"W

OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.
Signature: *Diana J. Cannon*
Printed Name: DIANA J. CANNON
Title: PRODUCTION ANALYST
Date: SEPTEMBER 9, 2004

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.
Date Surveyed: May 29, 2003
Signature & Seal of Professional Surveyor: *Ronald J. Edson*
Certificate No.: RONALD J. EDSON 3239
GARY EDSON 12641

Engineering Summary
Form C-107A
Application for Downhole Commingling
Marbob Energy Corporation
Edsel's Wand Waver Fee No. 1 (E-6-24S-28E)

Marbob Energy proposes to downhole commingle the Morrow and Atoka zones. No crossflow will occur because a frac plug acting as a check valve will be placed between the Morrow and Atoka.

The attached decline curve contains the calculations of the Morrow gas reserves (remaining ultimate recovery = 37 MMCF gas). The Atoka reserves are estimated to be 227 MMCF derived by taking the average EUR of two nearby Atoka wells (decline curves attached).

The proposed allocation follows. These zones don't produce significant amounts of oil/condensate, therefore the allocation for oil will be the same as the gas allocation.

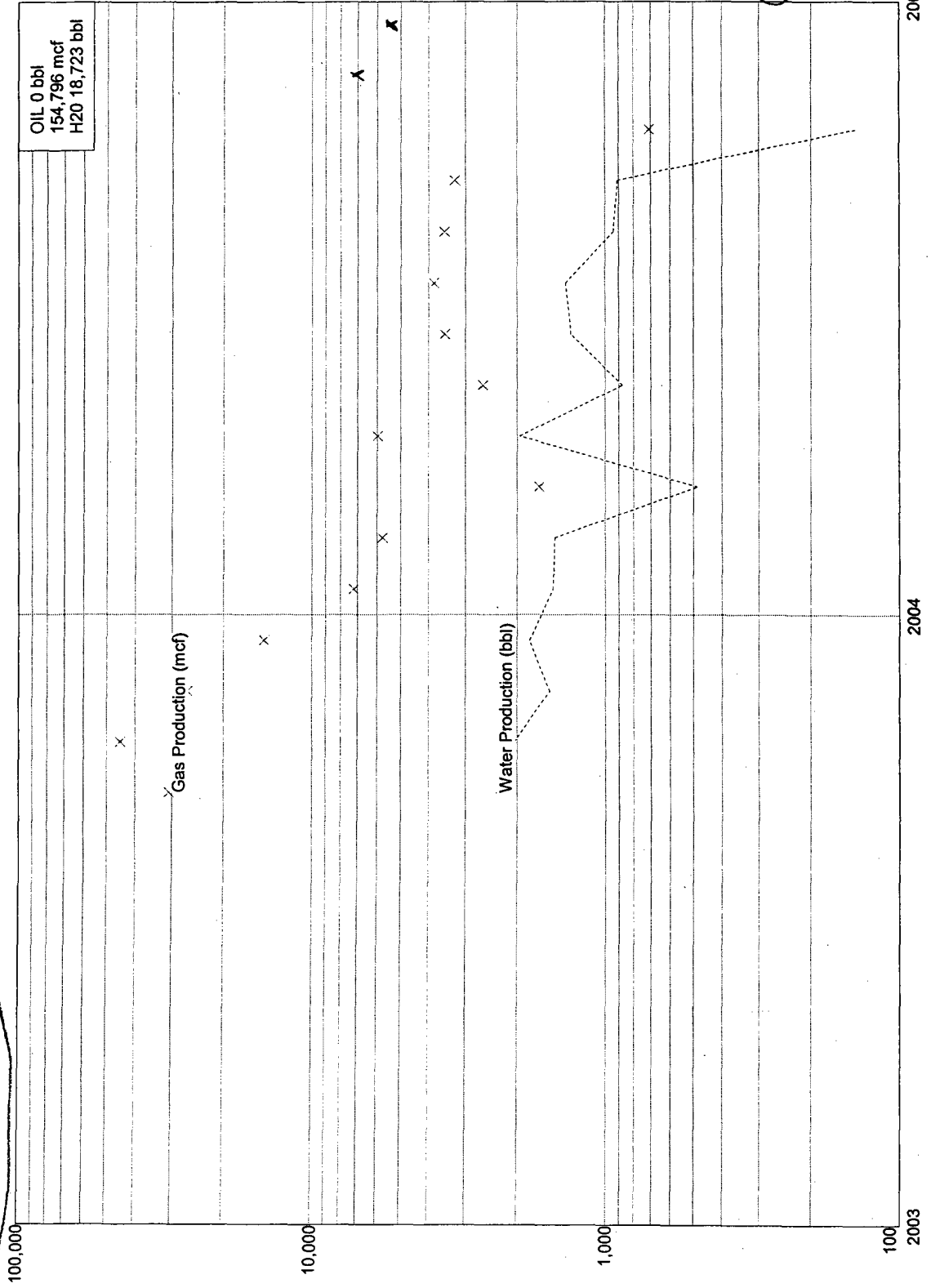
$$\text{Morrow Gas/Oil} \quad \frac{37 \text{ MMCF}}{37+227 \text{ MMCF}} = 14\%$$

$$\text{Atoka Gas/Oil} \quad 100-14 = 86\%$$

Lease Name: EDELS WAND WAVER FEE
 County, State: EDDY, NM
 Operator: MARBOB ENERGY CORPORATION
 Field: BLACK RIVER
 Reservoir: MORROW
 Location: 6 24S 28E N2 SW NW

Remaining Morrow
 Reserves

EDELS WAND WAVER FEE - [1 MORROW



Production Rates

Time

$d = 70\%/yr$
 \times Oil Production (bbl)
 \times Gas Production (mcf)
 \times Water Production (bbl)

$Q_1 = 130 mcf/d$
 $Q_{11} = 10 mcf/d$
 $d = 70\%/yr$

$RR = -365 (130-10)$
 $\ln(1-0.7)$

$= 36.4 mcf$

Say 37 mcf

EDDY NM
 EDELS WAND WAVER FEE 1
 MARBOB ENERGY CORPORATION
 ACTIVE

Detailed Production Report

Lease Name:	EDELS WAND WAVER FEE	Well Number:	1
Lease Number:		Cum Oil:	
Operator Name:	MARBOB ENERGY CORPORATIO	Cum Gas:	154,796
State:	NEW MEXICO	Cum Water:	18,723
County:	EDDY	First Production Date:	SEP 2003
Field:	BLACK RIVER	Last Production Date:	OCT 2004
Sec Twn Rng:	6 24S 28E	Spot:	N2 SW NW
Latitude/Longitude:		Lat/Long Source:	
Regulatory #:		Completion Date:	SEP 10, 2003
API:	30015328180000	Total Depth:	
Production ID:	2300220153281872170	Upper Perforation:	
Reservoir Name:	MORROW	Lower Perforation:	
Prod Zone:	MORROW	Gas Gravity:	
Prod Zone Code:	402MRRW	Oil Gravity:	
Basin Name:	PERMIAN BASIN	Temp Gradient:	
Gas Gatherer:		N Factor:	
Liquid Gatherer:		GOR:	
Status:	ACTIVE		GAS

Annual Production

Year	Oil BBLs	Gas MCF	Water BBLs
<hr/>			
Beginning			
Cum:			
2003		116,707	7,754
2004		38,089	10,969
Totals:		154,796	18,723

Monthly Production

Date MO/YR	Oil BBLs	Gas MCF	Water BBLs	Cond Yld BBLs/MCF	% Water	# of Wells	Days on
<hr/>							
SEP 2003		30,632	2,352			1	21
OCT 2003		44,945	2,049			1	31
NOV 2003		26,604	1,548			1	25
DEC 2003		14,526	1,805			1	30
Totals:							
2003		116,707	7,754				
<hr/>							
JAN 2004		7,198	1,505			1	31
FEB 2004		5,758	1,485			1	29

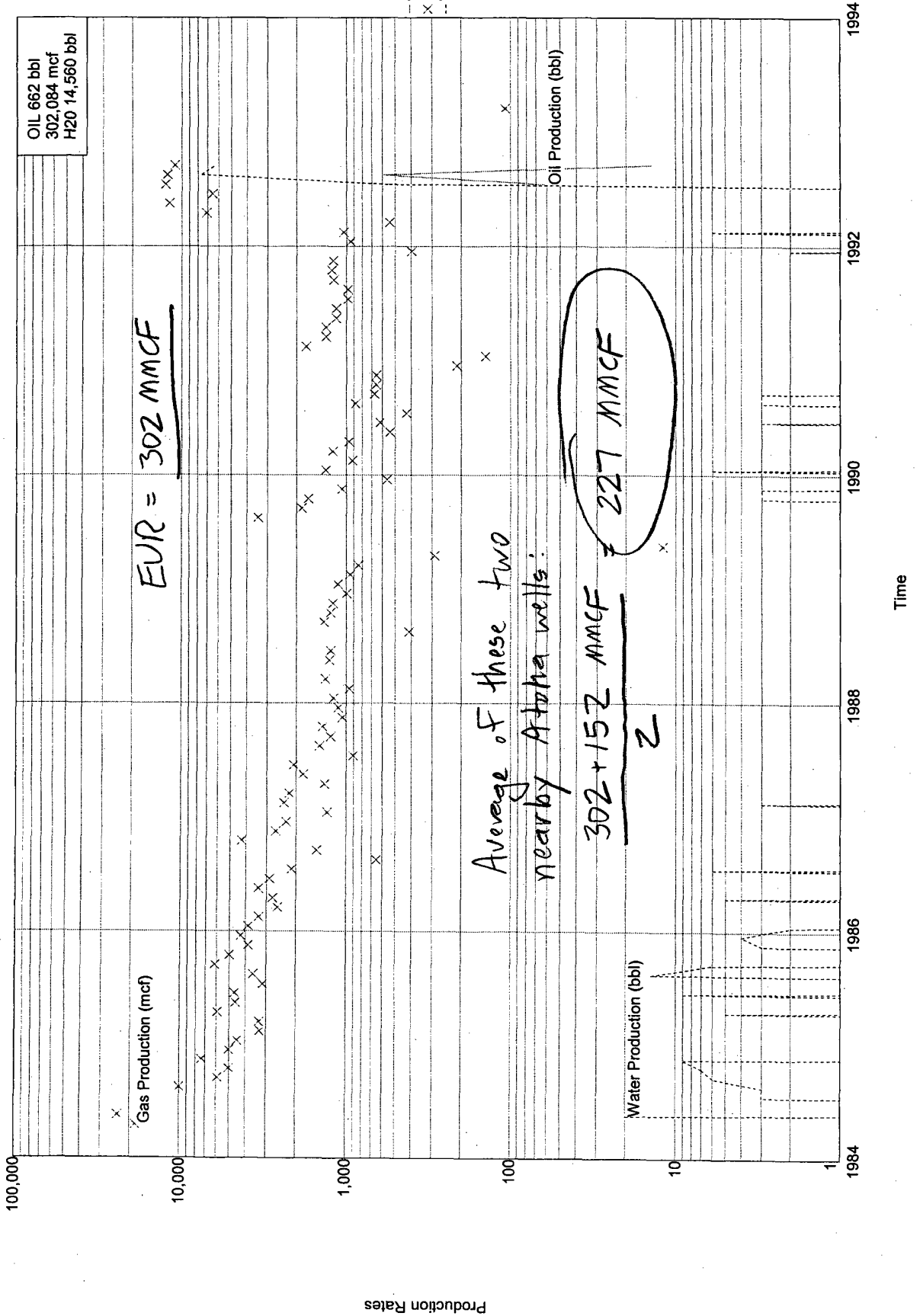
MAR 2004	1,675	484	1	13
APR 2004	5,984	1,960	1	23
MAY 2004	2,622	875	1	14
JUN 2004	3,519	1,307	1	30
JUL 2004	3,830	1,364	1	28
AUG 2004	3,530	939	1	31
SEP 2004	3,265	909	1	30
OCT 2004	708	141	1	5
Totals:				
2004	38,089	10,969		

Nov 7073
 Dec 5378
 Jan 4382
 Feb 130 MCFD

Lease Name: LOVING 36 STATE
 County, State: EDDY, NM
 Operator: EOG RESOURCES INCORPORATED
 Field: LOVING SOUTHEAST
 Reservoir: ATOKA
 Location: 36 23S 27E SE SW

Nearby Atoka Well #1

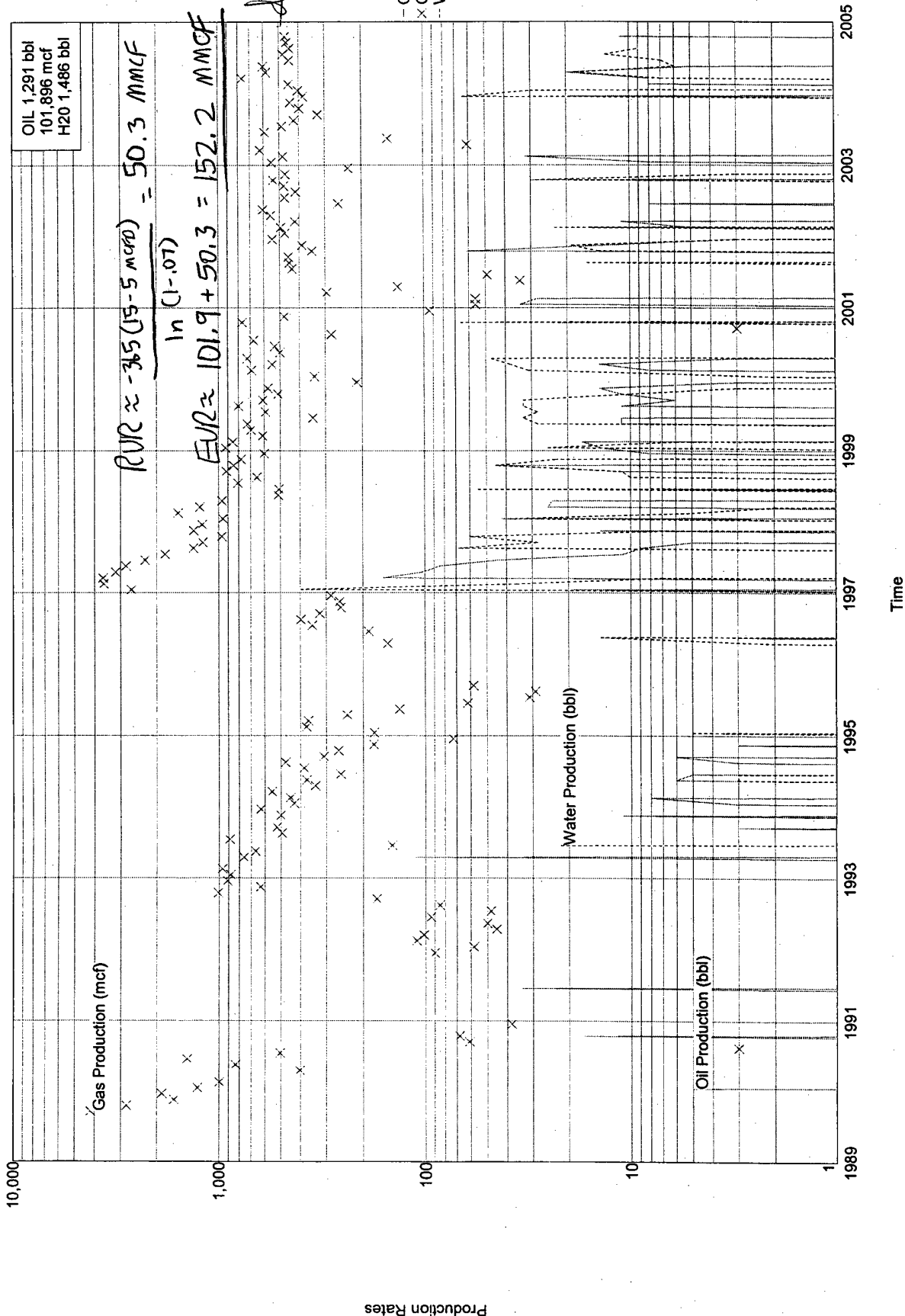
LOVING 36 STATE - [1 ATOKA



Lease Name: STATE MS GAS COM
 County, State: EDDY, NM
 Operator: MEWBOURNE OIL COMPANY
 Field: LOVING SOUTHEAST
 Reservoir: ATOKA
 Location: 12 24S 27E NE NW

Nearby Atoka Well #2

STATE MS GAS COM - [1 ATOKA



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. 30-015-32818
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No. FEE
7. Lease Name or Unit Agreement Name EDSEL'S WAND WAVER FEE
8. Well Number 1
9. OGRID Number 14049
10. Pool name or Wildcat BLACK RIVER MORROW

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3096' 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 _____

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 : 1650 feet from the NORTH line and 660 feet from the WEST line
Section 6 Township 24S Range 28E NMPM EDDY County NM

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3096' 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 ☐

SUBSEQUENT REPORT OF:
REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: DOWNHOLE COMMINGLE

☒

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: BLACK RIVER MORROW 72170 - OIL 14% - GAS 14%
LOVING SOUTHEAST ATOKA 80705 - OIL 86% - GAS 86%

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 02/15/05

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): _____



marbob
energy corporation

February 15, 2005

Bureau of Land Management
2909 W. 2nd St.
Roswell, NM 88201

Attn: Mr. Armando Lopez

Re: Downhole Commingling Application
Edsel's Wand Waver Fee #1
Eddy County, New Mexico

Dear Mr. Lopez:

Enclosed is a copy of the downhole commingling application submitted to the NMOCD for the captioned well.

Please contact me at 505-748-3303 if you have any questions.

Sincerely,

Brian Collins
Petroleum Engineer

BC/dlw
enclosure