

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-Quallified 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 _____



marbob
energy corporation

FAX TRANSMITTAL SHEET

DATE: 4/26/05

TO: Will Jones

FAX #: 505-476-3462

FROM: Debbie

TOTAL # OF PAGES (INCLUDING COVER SHEET): 8

COMMENTS: Downhole Coring App
AAD Fed # 7

IF YOU HAVE ANY TROUBLE RECEIVING THIS FAX, PLEASE CONTACT ME.

PHONE: 505/746-3308

FAX: 505/746-2823

District I
1637 N. French Drive, Hobbs, NM 88240
District II
1341 W. Grand Avenue, Artesia, NM 88210
District III
1600 E. Brown Road, Aztec, NM 87410
District IV
1224 S. S. 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

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE
 Yes No

DHC-3443

MARBOB ENERGY CORPORATION P O BOX 227 **ARTESIA, NM 88211-0227**
Operator Address
AAO FEDERAL #7 **G-1-T18S-R27E** **EDDY COUNTY**
Lease Well No. Unit Letter-Section-Township-Range County
OGRID No. 14049 Property Code **29793** API No. **30-015-33473** Lease Type: Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	RED LAKE Q-GB-SA		RED LAKE GLORIETA YESO NE
Pool Code	51300		96836
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2133-3296' PERF'D		3577-3856' PERF'D
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)	EST. 50 PSI PRODUCING BHP		EST. 100 PSI PRODUCING BHP
Oil Gravity or Gas BTU (Degree API or Gas BTU)	38.5°		41.8°
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: JANUARY 2005 Rates: 60 BOPD 80 MCFD 250 BWPD
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil 71 % Gas 68 %	Oil % Gas %	Oil 29 % Gas 32 %

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 communized 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
NMOSD Reference Case No. applicable to this well: R-11363 PRE-APPROVED POOL

- 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 03/15/05
TYPE OR PRINT NAME BRIAN COLLINS TELEPHONE NO. (505) 748-3303
E-MAIL ADDRESS engineering@marbob.com

DISTRICT I
P.O. Box 1889, Hobbs, NM 88241-1889

State of New Mexico
Geology, 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 22, Arroyo, NM 88211-0712

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

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

JUL 23 2003

DISTRICT IV
P.O. BOX 2042, SANTA FE, N.M. 87504-2042

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Well Code	Well Name
	96836	RED LAKE; GLORIETA-YESO, NE
Property Code	Property Name	Well Number
29793	AAO FEDERAL	7
GRM No.	Operator Name	Elevation
14049	MARBOB ENERGY CORPORATION	3645'

Surface Location

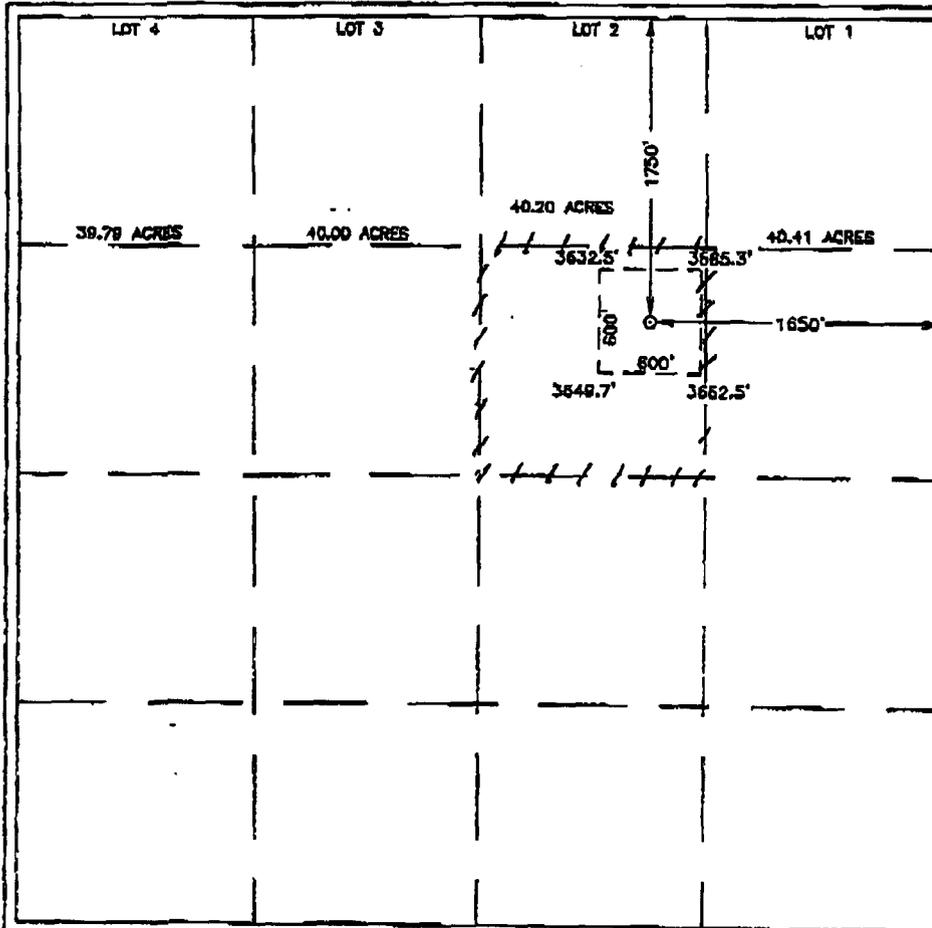
UL or lot No.	Section	Township	Range	Lot 1/2	Feet from the	North/South line	Feet from the	East/West line	County
G	1	18 S	27 E		1750	NORTH	1650	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot 1/2	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or InM	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 that the information contained herein is true and complete to the best of my knowledge and belief.

Melanie J. Parker
Signature

Melanie J. Parker
Printed Name

Land Department
Title

04/26/04
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.

JULY 18, 2003

Date Surveyed

Signature of Seal of Professional Surveyor
Richard J. Eidson

Richard J. Eidson LMP
05-11-06 SA
Certification No. 12541

Engineering Summary
Form C-107A
Application for Downhole Commingling

Marbob Energy Corporation
AAO Federal No. 7 (Unit G, Sec. 1-T18S-R27E)

Marbob Energy proposes to downhole commingle the San Andres (Red Lake Q-GB-SA 51300) and the Yeso (Red Lake Glorieta Yeso, NE 96836) in the captioned well. This proposal is identical to the downhole comminglings that Devon Energy has done offsetting the captioned wells (Orders R-11363, DHC-2390, DHC-2685, DHC-2701).

No crossflow will occur because this well will be rod pumped in a pumped down condition. The MJ State No. 1, when completed in the Yeso, will be used as a "typical" Yeso well. The MJ State No. 2, when completed in the San Andres, will be used as a "typical" San Andres well. The proposed zonal allocation is described below.

Yeso: Production declines exponentially at 84%/yr. for one year, followed by 35%/yr. for oil and 32%/yr. for gas. (Best engineering estimate using the production history of nearby Devon wells.)

Qi = 90 bopd d=84%/yr.
 Q1yr = 14 bopd d=35%/yr.
 Qel = 1.5 bopd assumed

$$EUR = \frac{-365(90-14)}{\ln(1-.84)} + \frac{-365(14-1.5)}{\ln(1-.35)} = 25.7 \text{ MBO}$$

Qi = 140 mcf/d d=84%/yr.
 Q1yr = 22 mcf/d d=32%/yr.
 Qel = 5 mcf/d assumed

$$EUR = \frac{-365(140-22)}{\ln(1-.84)} + \frac{-365(22-5)}{\ln(1-.32)} = 39.6 \text{ MMCF}$$

San Andres: Production declines exponentially at 80%/yr. for one year, followed by 24%/yr. for oil and 20%/yr. for gas. (Best engineering estimate using the production history of nearby Devon wells.)

$$\begin{aligned} Q_i &= 145 \text{ bopd} & d &= 80\%/yr. \\ Q_{1yr} &= 29 \text{ bopd} & d &= 24\%/yr. \\ Q_{el} &= 1.5 \text{ bopd} & & \text{assumed} \end{aligned}$$

$$EUR = \frac{-365 (145-29)}{\ln (1-.80)} + \frac{-365 (29-1.5)}{\ln (1-.24)} = 62.9 \text{ MBO}$$

$$\begin{aligned} Q_i &= 180 \text{ mcf/d} & d &= 80\%/yr. \\ Q_{1yr} &= 36 \text{ mcf/d} & d &= 20\%/yr. \\ Q_{el} &= 5 \text{ mcf/d} & & \text{assumed} \end{aligned}$$

$$EUR = \frac{-365 (180-36)}{\ln (1-.80)} + \frac{-365 (36-5)}{\ln (1-.20)} = 83.4 \text{ MMCF}$$

$$\text{Yeso Oil} = \frac{25.7 \text{ MBO}}{25.7 + 62.9} = .29 = 29\%$$

$$\text{San Andres Oil} = 1-.29 = .71 = 71\%$$

$$\text{Yeso Gas} = \frac{39.6 \text{ MMCF}}{39.6 + 83.4} = .32 = 32\%$$

$$\text{San Andres Gas} = 1-.32 = .68 = 68\%$$

MONTH: APRIL 2002

CO 26 A

ELK HORN

GPM

TP

LP

Gas
PREV

Gas
EST

TOTAL

OIL

WTR

MJ STATE

CO 26 A	ELK HORN	GPM	TP	LP	Gas PREV	Gas EST	TOTAL	OIL	WTR	
	124		—	219	94	92	17474	30	—	1
	130		—	245	96	90	17570	30	—	2
	126		—	247	95	90	17666	32	—	3
	130		—	247	96	103	17771	32	—	4
	130		—	231	95	94	17862	28	—	5
	126		—	25	94	93	17952	28	—	6
	126		—	25	94	92	18043	26	—	7
	126		—	253	95	93	18150	32	—	8
	124			242	151	115	18302	85	—	9
	124			251	189	203	18443	106	—	10
	124			252	220	229	18114	140	—	11
	120			259	233	234	18051	110	—	12
	140			255	236	240	19193	98	—	13
	134			245	238	249	19422	118	—	14
	128			251	258	351	19686	127	—	15
	130			247	266	264	19948	172	—	16
	135			251	265	274	20224	182	—	17
	135			260	264	265	20478	175	—	18
	135			253	263	255	20752	177	—	19
	135			240	257	229	20999	161	—	20
	126			250	247	202	21236	174	—	21
	135			255	250	241	21493	175	—	22
	130			260	276	273	21781	174	540	23
	130			260	282	272	22053	173	—	24
										25
										26
										27
										28
										29
										30
										31

MJ St. #1
↕
Yeso Only (MJ St. #1)

Yeso (MJ-1) + S. Andros (MJ St. #2)

MJ St. #2 San Andros IP $\approx 175 + 30 = 145$ BOPD
 $\approx 275 - 95 = 180$ MCFD

MJ St. #1 Yeso IP ≈ 90 BOPD
 ≈ 140 MCFD (January 2002)

WFO 0410 01-2004-2005

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.
30-015-33473
5. Indicate Type of Lease
STATE FEE
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name
AAO Federal
8. Well Number 7
9. OGRID Number
14049
10. Pool name or Wildcat
RED LAKE GLORIETA/YESO NE

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 [X] 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 G : 1750 feet from the NORTH line and 1650 feet from the EAST line
Section 1 Township 18S Range 27E NMPM EDDY County NM
11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3645' GR

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 [X]
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
DIVISION ORDER #R-11363 PRE-APPROVED POOLS

THE PROPOSED ALLOCATION IS: REDLAKE Q-GR-SA 51300 - OIL 71% - GAS 68%
REDLAKE GLORIETA/YESO NE 96836 - OIL 29% - GAS 32%

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 [Signature] TITLE ENGINEER DATE 03/15/05

Type or print name BRIAN COLLINS E-mail address: engineering@marbob.com Telephone No. 505-748-3303
For State Use Only

APPROVED BY: TITLE DATE
Conditions of Approval (if any):



marbob
energy corporation

March 15, 2005

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

Attn: Mr. Armando Lopez

Re: Downhole Commingling Application
AAO Federal #7, Unit G, Sec. 1-T18S-R27E
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

TRANSACTION REPORT

P. 01

APR-26-2005 TUE 09:12 AM

FOR:

RECEIVE

DATE	START	SENDER	RX TIME	PAGES	TYPE	NOTE	M#	DP
APR-26	09:11 AM	15057462523	1' 12"	8	RECEIVE	OK		
