

|                     |          |                      |                       |                    |                           |
|---------------------|----------|----------------------|-----------------------|--------------------|---------------------------|
| DATE IN<br>12-30-08 | SUSPENSE | ENGINEER<br>W. Jones | LOGGED IN<br>12-30-08 | TYPE<br>DHC<br>444 | APP NO.<br>DKAA0836542654 |
|---------------------|----------|----------------------|-----------------------|--------------------|---------------------------|

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION  
- Engineering Bureau -  
1220 South St. Francis Drive, Santa Fe, NM 87505



RECEIVED  
APL 30-015-26308  
FOSTER EDDY #10  
MARBOB  
14049

## 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.

|  |  |  |                         |
|--|--|--|-------------------------|
| <u>BRIAN COLLINS</u><br>Print or Type Name | <u><i>Brian Collins</i></u><br>Signature | <u>PETROLEUM ENGINEER</u><br>Title           | <u>12/19/08</u><br>Date |
|  |  | <u>bcollins@marbob.com</u><br>e-mail Address |                         |

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

District II  
1391 W. Grand Avenue, Artesia, NM 88210

District III  
1088 Rio Hrazza 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**

**DAC-4191**

MARBOB ENERGY CORPORATION

P O BOX 227

ARTESIA, NM 88210

Operator

Address

FOSTER EDDY

10

F - 17 - T17S - R31E

EDDY

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 14049 Property Code 6514 API No. 30-015-26308 Lease Type:  Federal  State  
Fee

| DATA ELEMENT  | UPPER ZONE<br><input checked="" type="checkbox"/> | INTERMEDIATE ZONE                    | LOWER ZONE<br><b>UNDES</b>                |
|---|---|--------------------------------------|---|
| Pool Name   | Grayburg Jackson 7R-Q-GB-SA                       |                                      | Cedar Lake Yeso                           |
| Pool Code   | 28509   |                                      | 96831                                     |
| Top and Bottom of Pay Section<br>(Perforated or Open-Hole Interval)   | 2882-3845' Perf<br>3484-3513' Sqzd                |                                      | 4756-5484' Perf                           |
| Method of Production<br>(Flowing or Artificial Lift)  | A/L   |                                      | A/L                                       |
| Bottomhole Pressure<br>(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.)   | ~100 psi producing BHP well is pumped off         |                                      | ~100 psi producing BHP well is pumped off |
| Oil Gravity or Gas BTU<br>(Degree API or Gas BTU)   | 35.1° API   |                                      | 37.9° API                                 |
| Producing, Shut-In or New Zone  | Producing   |                                      | Producing                                 |
| Date and Oil/Gas/Water Rates of Last Production.<br>(Note: For new zones with no production history, applicant shall be required to attach product on estimates and supporting data.) | Date: see engineering summary<br>Rates:           | Date:<br>Rates:                      | Date: see engineering summary<br>Rates:   |
| Fixed Allocation Percentage<br>(Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)                  | Oil            Gas<br>27 %        5 %             | Oil            Gas<br>%            % | Oil            Gas<br>73 %        95 %    |

**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: N/A

**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 PETROLEUM ENGINEER DATE 12/19/08

TYPE OR PRINT NAME BRIAN COLLINS TELEPHONE NO. (575) 748-3303

Submit to Appropriate District Office  
 State Lease - 4 copies  
 Fee Lease - 3 copies

State of New Mexico  
 Energy, Minerals and Natural Resources Department

Form C-102  
 Revised 1-1-89

**OIL CONSERVATION DIVISION**

DISTRICT I  
 P.O. Box 1980, Hobbs, NM 88240

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT II  
 P.O. Drawer DD, Artesia, NM 88210

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

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

All Distances must be from the outer boundaries of the section

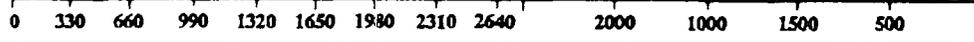
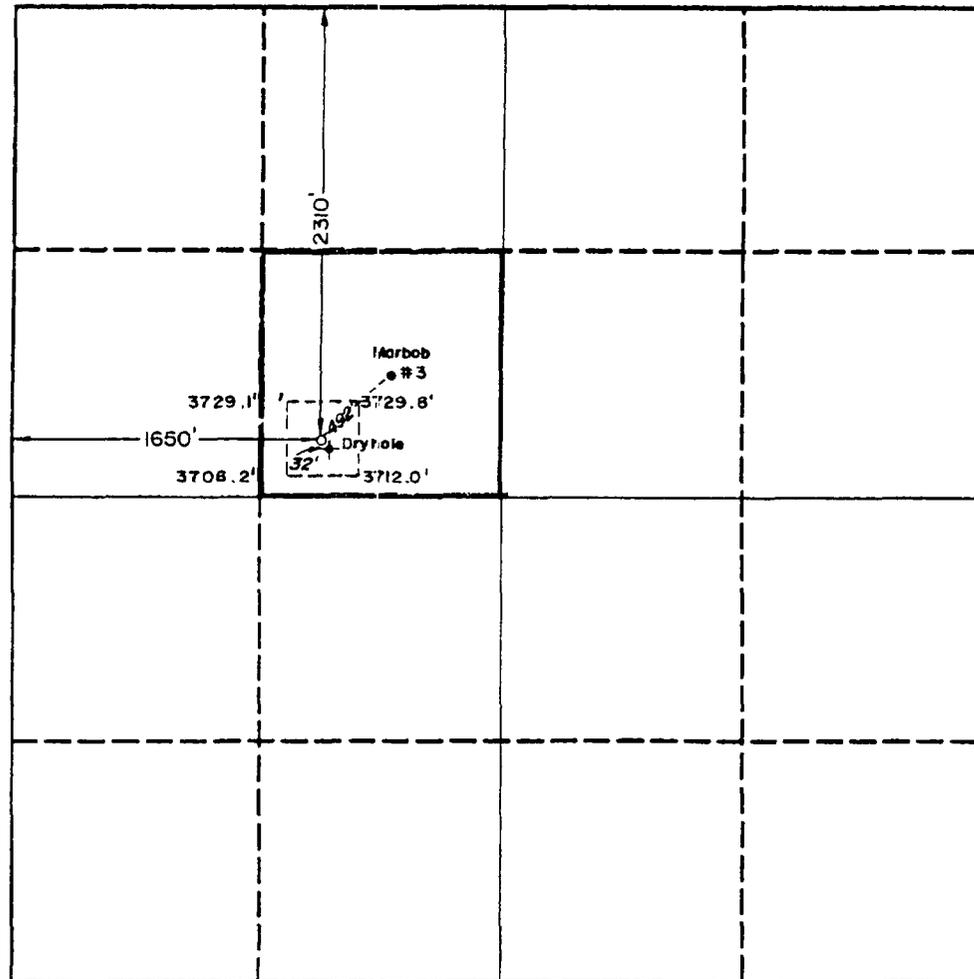
|  |                                   |                      |                                   |                                |                |
|--|-----------------------------------|----------------------|-----------------------------------|--------------------------------|----------------|
| Operator<br>Marbob Energy Corp.  |                                   |                      | Lease<br>Foster Eddy              |                                | Well No.<br>10 |
| Unit Letter<br>F   | Section<br>17                     | Township<br>17 South | Range<br>31 East                  | County<br>Eddy                 |                |
| Actual Footage Location of Well:<br>1650 feet from the West line and 2310 feet from the North line |                                   |                      |                                   |                                |                |
| Ground level Elev.<br>3718.6   | Producing Formation<br>San Andres |                      | Pool<br>Grbg Jackson SR Q Grbg SA | Dedicated Acreage:<br>40 Acres |                |

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?
 

Yes     No    If answer is "yes" type of consolidation \_\_\_\_\_

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to this well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, 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.

Signature  
*Rhonda Nelson*

Printed Name  
 Rhonda Nelson

Position  
 Production Clerk

Company  
 Marbob Energy Corporation

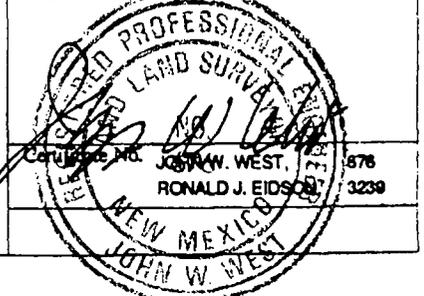
Date  
 August 10, 1989

**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 knowledge and belief.

Date Surveyed  
 August 2, 1989

Signature & Seal of Professional Surveyor



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

Marbob Energy Corporation  
 Foster Eddy 6 (C-17-17S-31E)  
 Foster Eddy 7 (B-17-17S-31E)  
 Foster Eddy 8 (C-17-17S-31E)  
 Foster Eddy 9 (J-17-17S-31E)  
 Foster Eddy 10 (F-17-17S-31E)  
 Foster Eddy 11 (J-17-17S-31E)

Marbob Energy proposes the following zonal allocation between the Grayburg San Andres (Grayburg Jackson 7R-Q-GB-SA 28509) and the Yeso (Cedar Lake Yeso 96831) in the captioned wells. We propose to use the same zonal allocation for each well for simplicity, since the Grayburg San Andres and Yeso were commingled on the initial completion without separate zonal testing. No zonal crossflow has occurred because these wells have been rod pumped in a pumped down condition.

To determine the zonal allocation, we calculated the estimated ultimate recoveries (EUR) for the nearby Grayburg San Andres wells and our nearby Yeso wells and used the EUR ratios to calculate the percentage allocations for oil and gas.

Grayburg San Andres: (Production plots with calculations attached)

| Relative Location         | No. Wells | EUR Oil  | EUR Gas  |
|---------------------------|-----------|----------|----------|
| East, West, South Offsets | 16        | 919 MBO  | 484 MMCF |
| North Offsets             | 7         | 339 MBO  | 205 MMCF |
| Total                     | 23        | 1258 MBO | 689 MMCF |

EUR/well = 55 MBO / 30 MMCF

Yeso: (Production plots with calculations attached)

| Lease          | Relative Location | No. Wells | EUR Oil   | EUR Gas    |
|----------------|-------------------|-----------|-----------|------------|
| Tony Federal   | East, Southeast   | 29        | 4428 MBO  | 15558 MMCF |
| Lee Federal    | South             | 29        | 4500 MBO  | 19482 MMCF |
| Coffee Federal | East              | 9         | 1267 MBO  | 3151 MMCF  |
| Total          |                   | 67        | 10195 MBO | 38191 MMCF |

EUR/well = 152 MBO / 570 MMCF

Zonal Allocation:

Grayburg San Andres Oil :  $\frac{55 \text{ MBO}}{55 + 152 \text{ MBO}}$  = .266 say 27%

Yeso Oil : 100 - 27 = 73%

Grayburg San Andres Gas :  $\frac{30 \text{ MMCF}}{30 + 570 \text{ MMCF}}$  = .05 say 5%

Yeso Gas : 100 - 5 = 95%

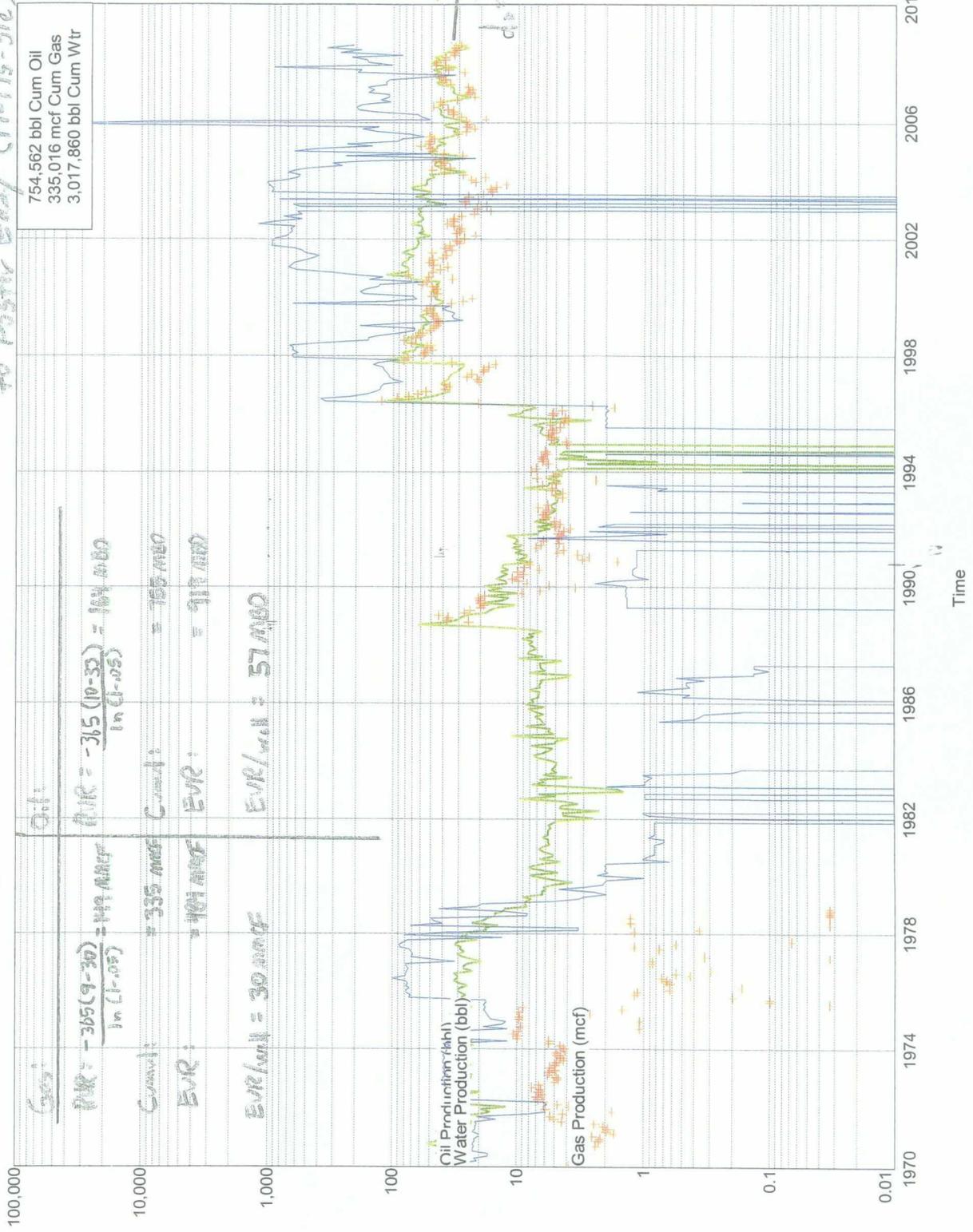
Lease Name: MULTIPLE  
 County, State: EDDY, NM  
 Operator: MULTIPLE  
 Field: MULTIPLE  
 Reservoir: SEVEN RIVERS QUEEN-G  
 Location:

16 Wells

Grayburg San Andres  
 (Sec. 17-17s-31e)

Direct Grayburg San Andres Offsets  
 to Foster Eddy (17-17s-31e)

MULTIPLE



Production Rates (bpd, mcf)

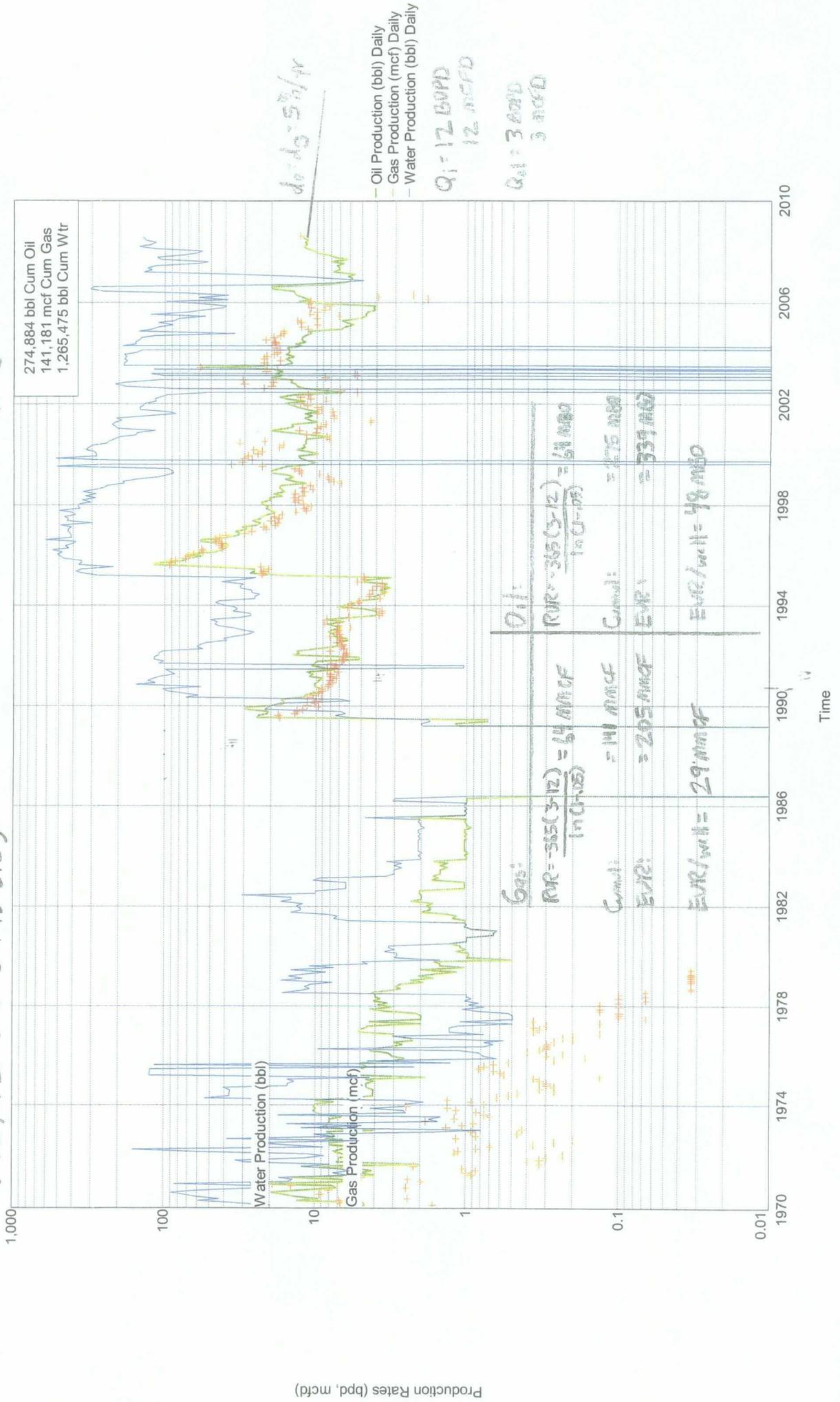
Lease Name: J L KEEL B  
 County, State: EDDY, NM  
 Operator: MERIT ENERGY COMPANY  
 Field: GRAYBURG JACKSON  
 Reservoir: SEVEN RIVERS QUEEN-G  
 Location:

7 Wells

Grayburg San Andres  
 (512, 512 Sec. 8-17s-31e)

North Offset Wells to Foster Eddy  
 from Grayburg San Andres

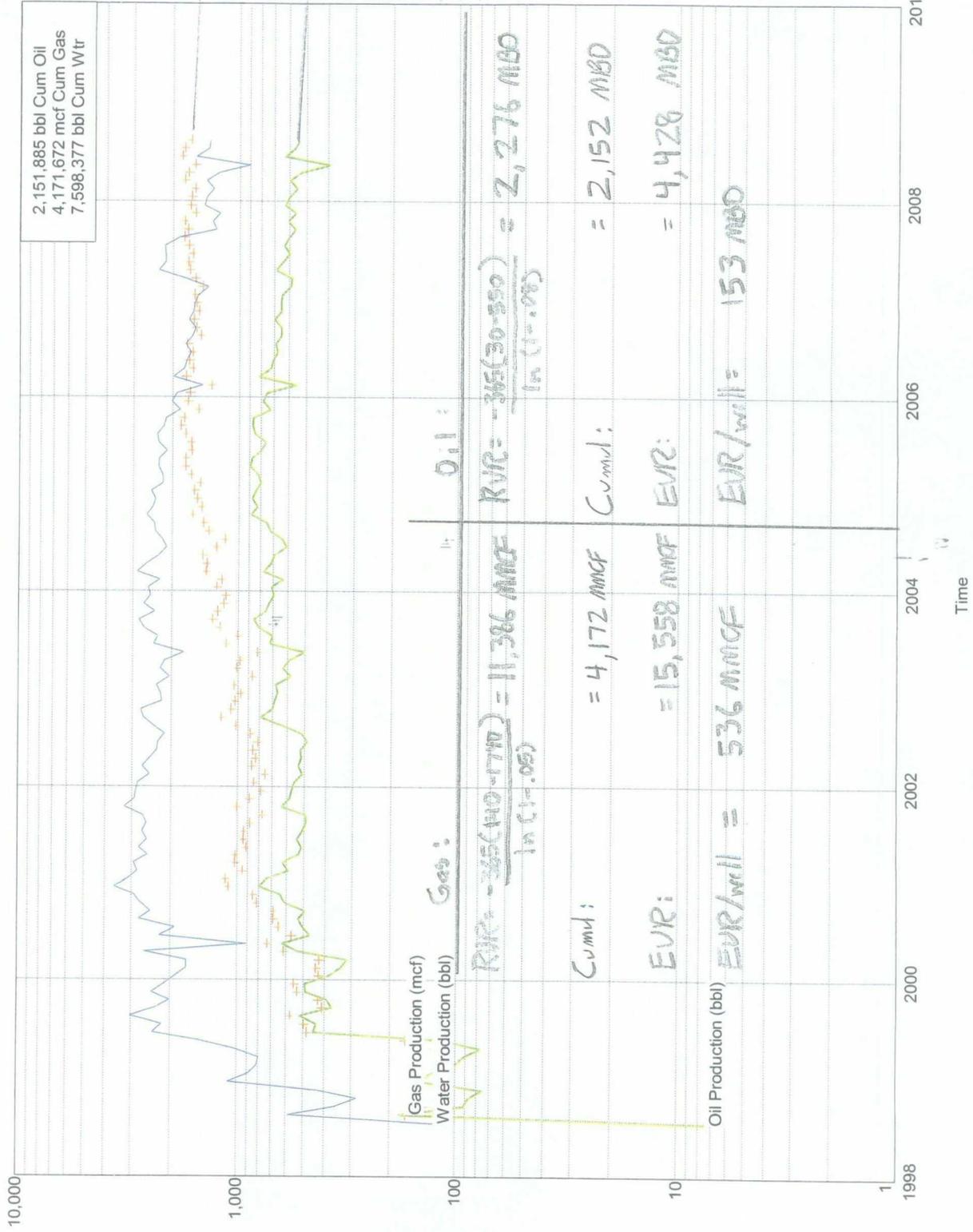
J L KEEL B



Lease Name: TONY FEDERAL  
 County, State: EDDY, NM  
 Operator: MARBOB ENERGY CORPORATION  
 Field: MULTIPLE  
 Reservoir: MULTIPLE  
 Location:

29 Wells

TONY FEDERAL Yeso (Sec 18+19, 17s-3/e)

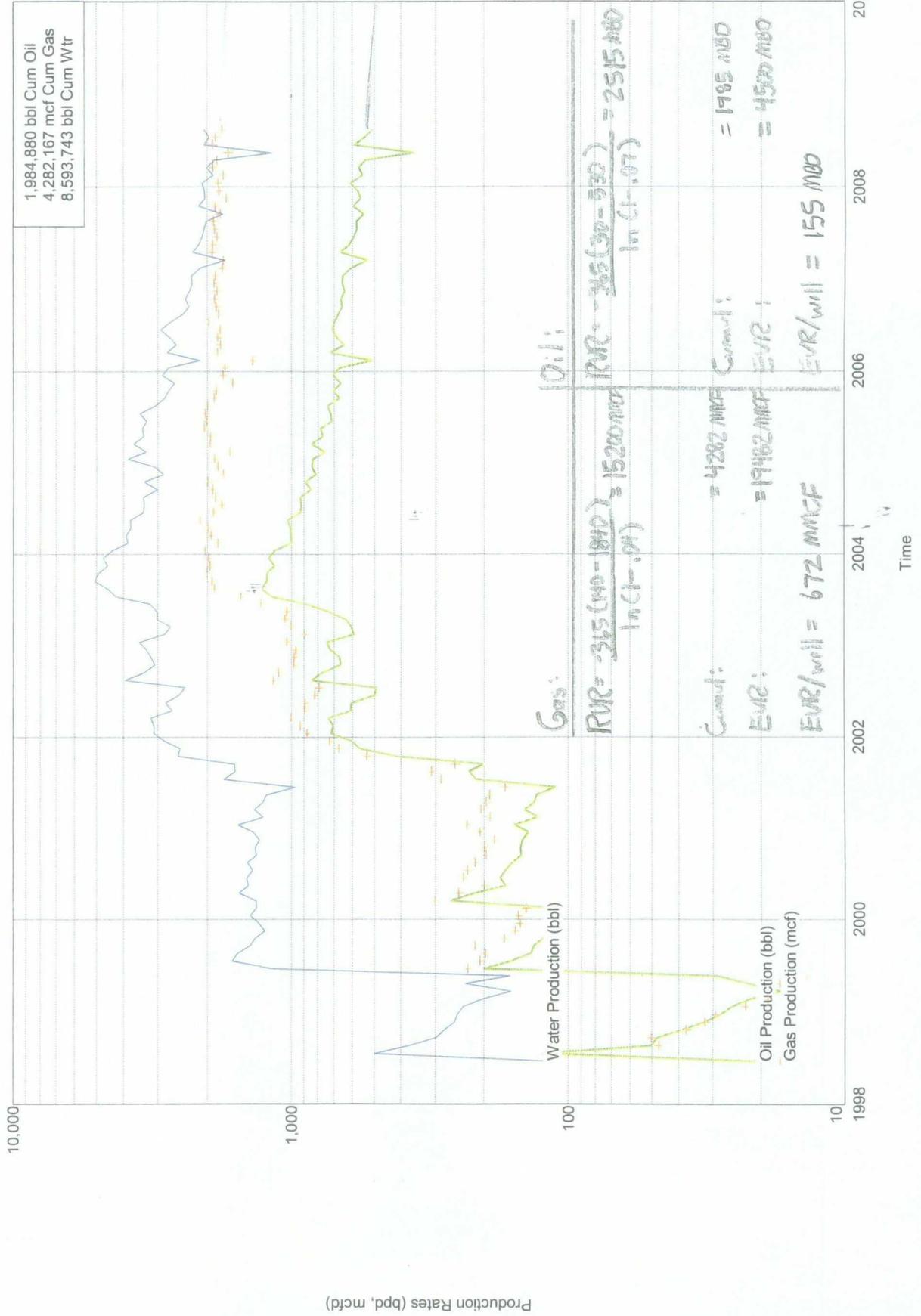


Production Rates (bpd, mcf)

Lease Name: LEE FEDERAL  
 County, State: EDDY, NM  
 Operator: MARBOB ENERGY CORPORATION  
 Field: MULTIPLE  
 Reservoir: MULTIPLE  
 Location:

29 Wells

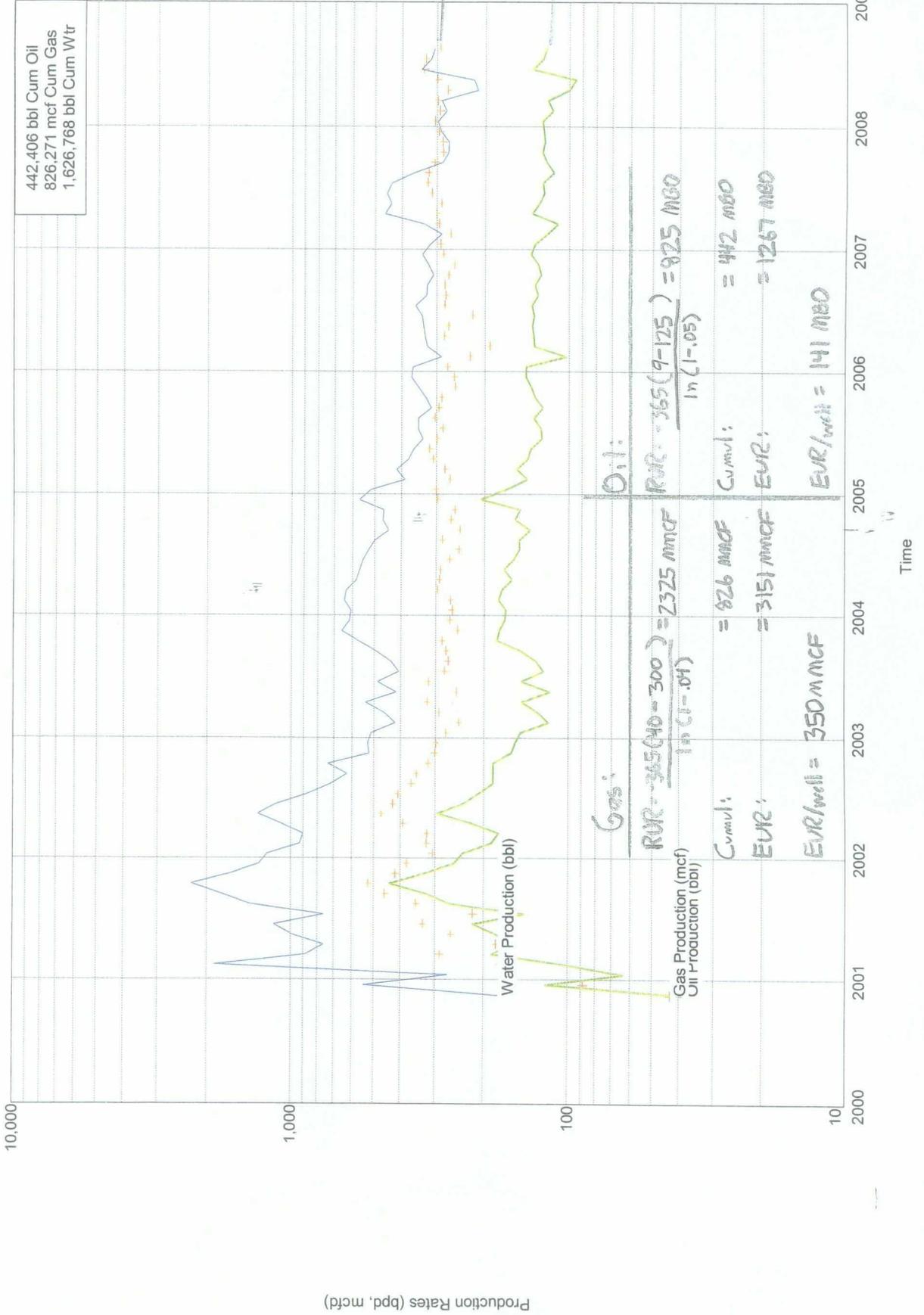
LEE FEDERAL Yeso (Sec 17+20, 17s-31e)



Lease Name: COFFEE FEDERAL  
 County, State: EDDY, NM  
 Operator: MARBOB ENERGY CORPORATION  
 Field: CEDAR LAKE  
 Reservoir: YESO  
 Location:

9 Wells

COFFEE FEDERAL YESO (Sec. 18-17s-31e)



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  
 June 19, 2008

OIL CONSERVATION DIVISION  
 1220 South St. Francis Dr.  
 Santa Fe, NM 87505

|  |  |  |
|--|--|--|
| SUNDRY NOTICES AND REPORTS ON WELLS<br>(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.)<br>1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> |  | WELL API NO.<br>30-015-26308<br>5. Indicate Type of Lease<br>STATE <input type="checkbox"/> FEE <input type="checkbox"/><br>6. State Oil & Gas Lease No. |
| 2. Name of Operator<br>MARBOB ENERGY CORPORATION   |  | 7. Lease Name or Unit Agreement Name<br>FOSTER EDDY<br>8. Well Number 10   |
| 3. Address of Operator P O BOX 227<br>ARTESIA NM 88211-0227  |  | 9. OGRID Number<br>14049<br>10. Pool name or Wildcat<br>GRAYBURG JACKSON; SR-Q-G-SA  |
| 4. Well Location<br>Unit Letter <u>F</u> : <u>2310</u> feet from the <u>NORTH</u> line and <u>1650</u> feet from the <u>WEST</u> line<br>Section <u>17</u> Township <u>17S</u> Range <u>31E</u> NMPM <u>EDDY</u> County  |  |  |
| 11. Elevation (Show whether DR, RKB, RT, GR, etc.)<br>3718.6' GR   |  |  |

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

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

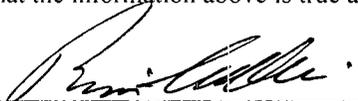
13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

SEE ATTACHED C-107A APPLICATION FOR DOWNHOLE COMMINGLING

THE PROPOSED ALLOCATION IS: GRAYBURG JACKSON 7R-Q-GB-SA 28509 - OIL 27% - GAS 5%  
 CEDAR LAKE YESO 96831 - OIL 73% - GAS 95%

NEW ALLOCATIONS WILL BE SUBMITTED IF ACTUAL WILL 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.

SIGNATURE  TITLE PETROLEUM ENGINEER DATE 12/19/08

Type or print name BRIAN COLLINS E-mail address: bcollins@marbob.com PHONE: 575-748-3303

**For State Use Only**

APPROVED BY: \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

Conditions of Approval (if any):

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

5. Lease Serial No.  
NMLC049998 (A)

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE** - Other instructions on page 2.

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well

Oil Well     Gas Well     Other

8. Well Name and No.  
FOSTER EDDY #9

2. Name of Operator  
MARBOB ENERGY CORPORATION

9. API Well No.  
30-015-26273

3a. Address  
P O BOX 227  
ARTESIA NM 88211-0227

3b. Phone No. (include area code)  
575-748-3303

10. Field and Pool or Exploratory Area  
GRAYBURG JACKSON; SR-Q-GRBG-SA

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
SEC. 17-T17S-R30E  
2310 FSL 1650 FEL. UNIT J

11. Country or Parish, State  
EDDY COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

| TYPE OF SUBMISSION                                   | TYPE OF ACTION                                |   |  |   |
|--|---|---|--|---|
| <input checked="" type="checkbox"/> Notice of Intent | <input type="checkbox"/> Acidize              | <input type="checkbox"/> Deepen           | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off                   |
| <input type="checkbox"/> Subsequent Report           | <input type="checkbox"/> Alter Casing         | <input type="checkbox"/> Fracture Treat   | <input type="checkbox"/> Reclamation               | <input type="checkbox"/> Well Integrity                   |
| <input type="checkbox"/> Final Abandonment Notice    | <input type="checkbox"/> Casing Repair        | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete                | <input checked="" type="checkbox"/> Other <u>DOWNHOLE</u> |
|  | <input type="checkbox"/> Change Plans         | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon       | <u>COMMINGLING</u>  |
|  | <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back        | <input type="checkbox"/> Water Disposal            |   |

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

SEE ATTACHED C-107A APPLICATION FOR DOWNHOLE COMMINGLING

THE PROPOSED ALLOCATION IS: GRAYBURG JACKSON 7R-Q-GB-SA 28509 - OIL 27% - GAS 5%  
CEDAR LAKE YESO 96831 - OIL 73% - GAS 95%

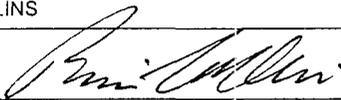
NEW ALLOCATIONS WILL BE SUBMITTED IF ACTUAL WELL PRODUCTION IS SIGNIFICANTLY DIFFERENT THAN THAT ABOVE.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

BRIAN COLLINS

Title PETROLEUM ENGINEER

Signature



Date 12/19/2008

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.