

11/13/98	12/3/98	DC	KW	DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

# NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

2137

## ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

### Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]  
 [DD-Directional Drilling] [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 - Directional Drilling

☐ NSL ☐ NSP ☐ DD ☐ SD

NOV 13 1998

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

### [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,

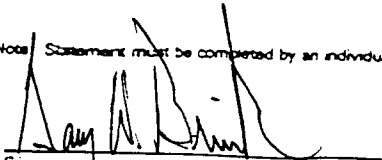
[F] ☐ Waivers are Attached

### [3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, J, ORRJ) is common. I further verify that all applicable API Numbers are included. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity

GARY W. BRINK  
 Print or Type Name

  
 Signature

Production Supt.  
 Title

11/12/98  
 Date



**TAURUS EXPLORATION, INC.**  
2198 Bloomfield Highway  
Farmington, New Mexico 87401  
Telephone (505) 325-6800

November 12, 1998

Ms. Lori Wrotenberry  
New Mexico Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505

RE: Administrative Approval to Downhole Commingle  
Taurus Exploration U.S.A., Inc.  
Culpepper Martin 5  
1748' FNL, 1773' FWL, Sec. 31, T32N, R12W, N.M.P.M.  
San Juan County, New Mexico

Dear Ms. Wrotenberry:

Taurus Exploration U.S.A., Inc. requests administrative approval for downhole commingling the Blanco Mesa Verde and Basin Dakota pools in the subject well. The well is currently producing as a Mesa Verde/Dakota dual completion. Additional potential has been identified in the Upper Mesa Verde/Lewis Shale in this wellbore and it is planned to add this pay to the Mesa Verde flowstream. Since the Dakota zone has experienced liquid loading problems, it is felt downhole commingling would improve the overall producing efficiency of the well. It is intended to add the additional pay and downhole commingle at the same time.

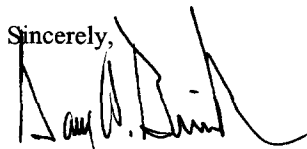
To comply with New Mexico Oil Conservation Rules, Taurus Exploration U.S.A., Inc. is submitting the following data for your approval of the proposed commingling:

1. For C-107A - Application for Downhole Commingling
2. C-102 - Location plat showing each spacing unit and dedicated acreage
3. Production curves for both the Mesa Verde and Dakota
4. Offset operator plat
5. Well location plat.
6. Allocation method.

In accordance with New Mexico Oil Conservation Division Rule 303C, all offset operators are being notified of this application by certified mail. As an offset operator, if you have no objection to this application, you do not have to respond to this notification.

If additional information is needed, please contact me.

Sincerely,



Gary W. Brink  
Production Superintendent

GWB/mt

cc: NMOCD - Aztec, Offset operators  
F:\MONICA\PRODUCT\OCD\FEE 8 9-98.DOC

## DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

## DISTRICT II

811 S. First St., Artesia, NM 88210-2835

## DISTRICT III

1000 Rio Brazos Rd, Aztec, NM 87410-1693

State of New Mexico  
Energy, Minerals and Natural Resources Department

## OIL CONSERVATION DIVISION

2040 S. Pacheco  
Santa Fe, New Mexico 875054-6429Form C-107-A  
New 3-12-96

## APPROVAL PROCESS:

☒ Administrative ☐ Hearing

## EXISTING WELLBORE

☒ YES ☐ NO

## APPLICATION FOR DOWNHOLE COMMINGLING

Taurus Exploration U.S.A., Inc.

2198 Bloomfield Highway, Farmington, NM 87401

Operator

Address

Culpepper Martin

5

F

Sec. 31 T32N

R12W

San Juan

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

OGRID NO. 162928

Property Code 21197

API NO. 30-045-24301

Spacing Unit Lease Types: (check 1 or more)

Federal ☐ State ☐ (and/or) Fee ☒

The following facts are submitted in support of downhole commingling	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Blanco Mesa Verde 72319		Basin Dakota 71599
2. Top and Bottom of Pay Section (Perforations)	4498-4774		6729-6838
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a. (Current) 618 CaLc b. (Original) 1133 CaLc	a.  b.	a. 1100 CaLc b. 1668 CaLc
6. Oil Gravity (°API) or Gas BTU Content)	1170 BTU		1170 BTU
7. Producing or Shut-In?	Producing		Producing
Production Marginal? (yes or no)	No		Yes
* If Shut-In, give 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: Rates:	Date: Rates:	Date: Rates:
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: 10/10/98 Rates: .1/116/.1	Date: Rates:	Date: 10/30/98 Rates: 0/27/.5
8. Fixed Percentage Allocation Formula - % for each zone	Oil: % Gas: %	Oil: See % Gas: Attached %	Oil: % Gas: %

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones? ☒ Yes ☐ No  
If not, have all working, overriding, and royalty interests been notified by certified mail? ☒ Yes ☐ No  
Have all offset operators been given written notice of the proposed downhole commingling? ☒ Yes ☐ No

11. Will cross-flow occur? ☐ Yes ☒ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. ☐ Yes ☐ No (If No, attach explanation)

12. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ☐ No

13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)

14. If this well in on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☒ Yes ☐ No

15. NMOC Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). \_\_\_\_\_

## 16. 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 all offset operators.
- \* Notification list of working, overriding, and royalty interests for uncommon interest cases.
- \* Any additional statements, data, or documents required to support commingling.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE

TITLE Prod. Superintendent DATE 11/12/98

TYPE OR PRINT NAME Gary Brink

TELEPHONE NO. ( 505 ) 325-6800

District I  
PO Box 1980, Hobbs, NM 88241-1980  
District II  
811 S. 1st Street, Artesia, NM 88210-2834  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

Form C-102  
Revised October 18, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-035-24301	<sup>2</sup> Pool Code 72319/71599	<sup>3</sup> Pool Name Blanco Mesa Verde/Basin Dakota
<sup>4</sup> Property Code 21197	<sup>5</sup> Property Name Culpepper Martin	<sup>6</sup> Well Number 5
<sup>7</sup> OGRID No. 162928	<sup>8</sup> Operator Name Taurus Exploration U.S.A., Inc.	<sup>9</sup> Elevation 5820'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
F	31	32N	12W		1748	North	1773	West	San Juan

<sup>11</sup> 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
<sup>12</sup> Dedicated Acres 310.2/310.2	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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

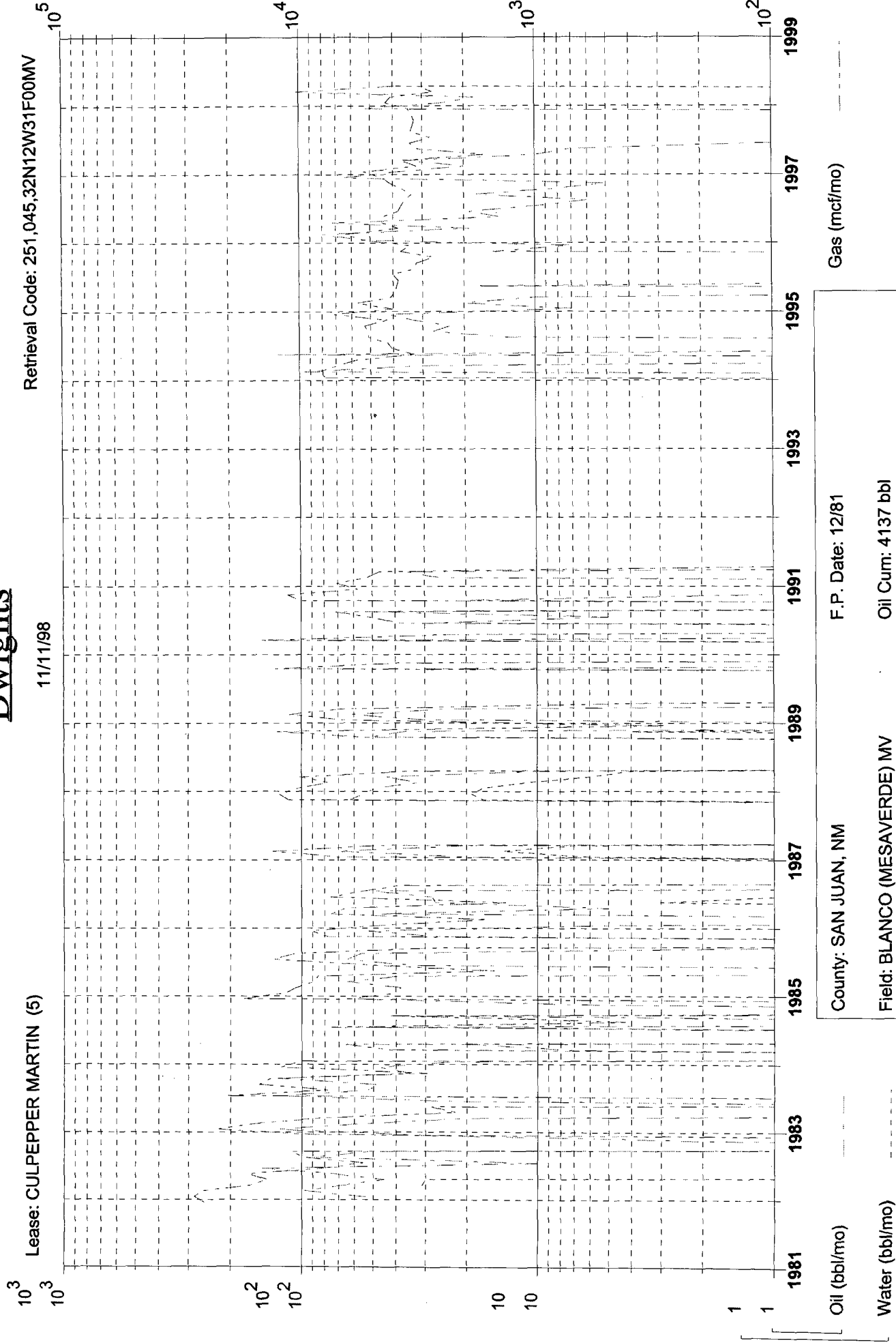
	<sup>17</sup> OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i>  Signature Gary Brink Printed Name Production Superintendent Title November 13, 1998 Date
	<sup>18</sup> SURVEYOR CERTIFICATION <i>I hereby certify 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>  June 16, 1998 Date of Survey Signature and Seal of Professional Surveyer: Reissue of Original Survey by Fred B. Kerr  Certificate Number

# Dwights

Lease: CULPEPPER MARTIN (5)

11/11/98

Retrieval Code: 251,045,32N12W31F00MV



Gas (mcf/mo)

F.P. Date: 12/81

Oil Cum: 4137 bbl

Gas Cum: 910.5 mmcf

Location: 31F 32N 12W

County: SAN JUAN, NM

Field: BLANCO (MESAVERDE) MV

Reservoir: MESAVERDE

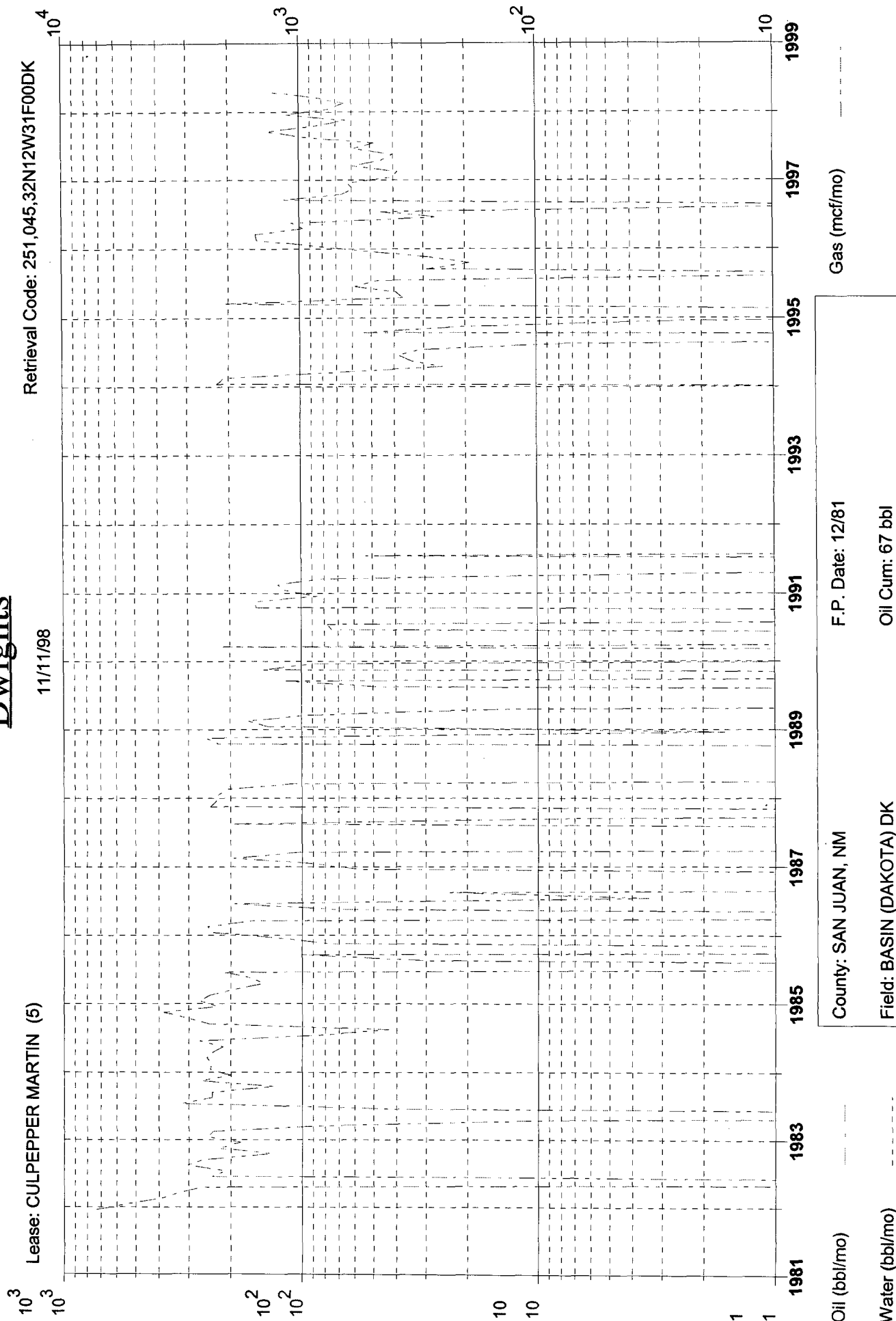
Operator TAURUS EXPLORATION U.S.A.

# Dwights

Lease: CULPEPPER MARTIN (5)

11/11/98

Retrieval Code: 251,045,32N12W31F00DK



Oil (bbl/mo)

Water (bbl/mo)

Gas (mcf/mo)

F.P. Date: 12/81

Oil Cum: 67 bbl

Gas Cum: 185.6 mmcf

Location: 31F 32N 12W

County: SAN JUAN, NM

Field: BASIN (DAKOTA) DK

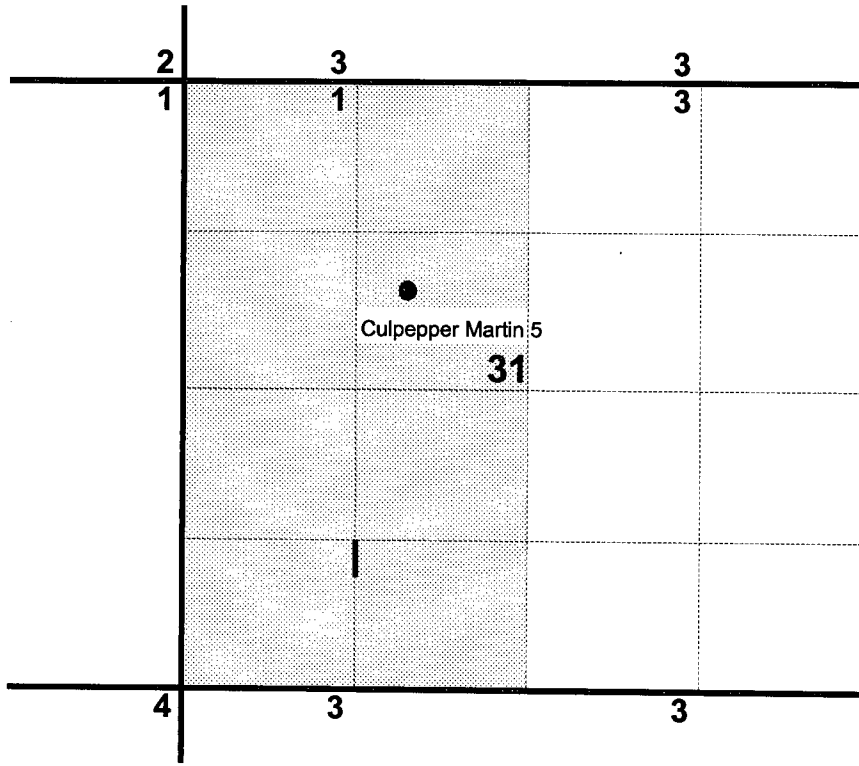
Reservoir: DAKOTA

Operator TAURUS EXPLORATION U.S.A.

# **Taurus Exploration U.S.A., Inc**

**Culpepper Martin # 5**  
**Offset Operator / Ownership Plat**  
Blanco Mesa Verde/ Basin Dakota  
Downhole Commingling

Township 32 N, Range 12 W



- 1) Taurus Exploration U.S.A., Inc
- 2) Cross Timbers  
6001 U.S. Hwy 64  
Farmington, N.M. 87401
- 3) Burlington Resources  
P.O. Box 4289  
Farmington, N.M. 87499-4289
- 4) Chateau Oil & Gas, Inc.  
5802 U.S. Hwy 64  
Farmington, N.M. 87401

# Taurus Exploration U.S.A., Inc.

Well location Plat

Culpepper Martin #5

Unit F, Section 31, T 32 N, R 12 W

San Juan Co., N.M.

23

19

T.D.72:9  
Jm-WW



3  
Kac Ø D.A.  
Kd Ø D.A.'91

2  
Kfc  
Kd-Abd.'93

5  
Kfc PA'94  
Kmv  
Kd Abd.'97



26



Kfc

1M  
Kmv  
Kd

25



1  
Kfc  
Kmv  
Kd



30



2  
Kmv  
Kd Ø D.A.'91

T  
32  
N

2  
Kfc  
Kmv  
Kd PA'94

2A  
Kmv  
Kd



1  
Kmv  
Kd PA'94



36



1  
Kmv  
Kd

Kd  
Kd



5  
Kmv  
Kd

1  
Kmv  
Kd

31

7  
Kmv  
Kd

1E  
Kmv  
Kd

T  
31  
N

2E  
Kd PA'93  
1A



H2-2

2  
Kd PA'94



1A



1  
Kmv PA'92

1



1  
Kmv  
Kd

1M  
Kmv  
Kd

6

1  
Kmv  
Kd

4M

5  
Kmv  
Kd

1M

1-R

R 13 W

12



## **Culpepper Martin #5**

### **Proposed Allocation Method**

Produce total well stream for 30 days following upper Mesa Verde pay add  
Pay Add projected to add 70 MCFD to Mesa Verde flow stream

Total Stream = X

Dakota Stabilized rate = 27 MCFD

DK Allocation =  $27 / X$  as a percentage

MV Allocation =  $(X - 27) / X$  as a percentage

Oil Allocation = 100% to Mesa Verde Zone

Rates will be reported to NMOCD- Aztec for final allocation percentage determination