

DHC

1335 8/1/96

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980
DISTRICT II
811 South 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

Form C-107-A
New 3-12-96

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

APPROVAL PROCESS:

Administrative Hearing

EXISTING WELLBORE

YES NO

APPLICATION FOR DOWNHOLE COMMINGLING

Operator Coroco Inc. Address 10 Desta Dr., Ste 100W, Midland TX 79705

Lease Jicarilla E Well No. BM K-15-26N-4W County Rio Arriba

OGRID NO. Q05073 Property Code 18022 API NO. 30-039-25423 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 Mesaverde 72319 | | Basin Dakota 71599 |
| 2. Top and Bottom of Pay Section (Perforations) | 5598' - 5676' | | 7643' - 7803' |
| 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: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original | a. (Current) 1195 psia | a. | a. 1476 psia |
| | b. (Original) 1350 psia | b. | b. 2630 psia |
| 6. Oil Gravity (°API) or Gas BTU Content | 1270 BTU | | 1290 BTU |
| 7. Producing or Shut-In? | Producing | | Shut-in |
| Production Marginal? (yes or no) | Yes | | 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 * If Producing, give date and oil/gas/water rates of recent test (within 60 days) | Date: Rates: | Date: Rates: | Date: 7/95 Rates: rates proj. to mid-yr. 1996 |
| | Date: 1996 mid-yr Rates: 134 mcf/gpd .4 bopd, 0 bwpd | Date: Rates: | Date: 1996 mid-yr Rates: 187 mcf/gpd 5 bopd, 0 bwpd |
| 8. Fixed Percentage Allocation Formula - % for each zone | Oil: 7 % Gas: 42 % | Oil: % Gas: % | Oil: 93 % Gas: 58 % |

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 is 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. NMOCD 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 Jerry W. Hoover TITLE Sr. Conservation Coordinator DATE 6/28/96

TYPE OR PRINT NAME Jerry W. Hoover TELEPHONE NO. (915) 686-6549

1988, Hobbs, NM 88241-1988

District II

District III
Drawer DD, Artesia, NM 88211-0719

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102

Revised February 10, 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

| | | | |
|----------------------------|---------------------------------------|--------------------|--------------------------------|
| API Number 30-039-25423 | | Pool Code 72319 | Pool Name Blanco Mesa Verde |
| Property Code 007691 | Property Name Jicarilla E | | Well Number 8M |
| OGRID No. 014591 | Operator Name Merit Energy Company | | Elevation 6769 GR |

10 Surface Location

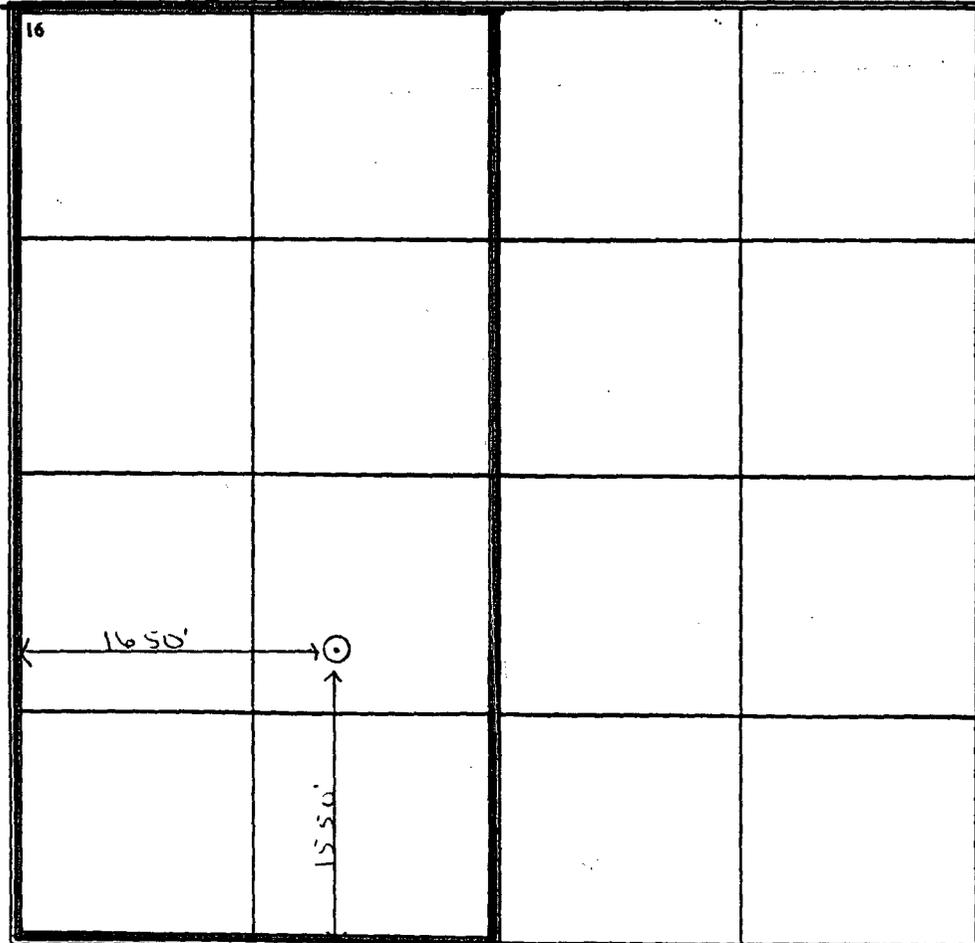
| UL or lot no. | Section | Township | Range | Lot Ida | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|------------|
| K | 15 | 26N | 4W | | 1550 | South | 1650 | West | Rio Arriba |

11 Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Ida | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |

| | | | |
|--------------------|--------------------|-----------------------|--------------|
| 12 Dedicated Acres | 13 Joint or Infill | 14 Consolidation Code | 15 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



17 OPERATOR CERTIFICATION

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

Sheryl J. Carruth
Signature
Sheryl J. Carruth
Printed Name
Regulatory Manager
Title
7-19-95
Date

18 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 of Survey
Signature and Seal of Professional Surveyer:
Certificate Number

District I
 PO Box 1980, Hobbs, NM 88241-1980
 District II
 PO Drawer DD, Artesia, NM 88211-0719
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
 Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
 PO Box 2088
 Santa Fe, NM 87504-2088

Form C-1
 Revised February 21, 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

| | | | | | |
|---|--|--|--|--|-----------------------------------|
| ¹ API Number 30-039-25423 | | ² Pool Code 71599 | | ³ Pool Name Basin Dakota | |
| ⁴ Property Code 007691 | | ⁵ Property Name Jicarilla E | | | ⁶ Well Number 8E |
| ⁷ OGRID No. 014591 | | ⁸ Operator Name Merit Energy Company | | | ⁹ Elevation 6769 GR |

¹⁰ Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|------------|
| K | 15 | 26N | 4W | | 1550 | South | 1650 | West | Rio Arriba |

¹¹ 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 |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |

| | | | |
|-------------------------------|-------------------------------|----------------------------------|-------------------------|
| ¹² Dedicated Acres | ¹³ Joint or Infill | ¹⁴ Consolidation Code | ¹⁵ 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

| | | | | | |
|----|--|--|--|--|--|
| 16 | | | | <p>¹⁷ OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <p>Signature: <u><i>Sheryl J. Carruth</i></u></p> <p>Printed Name: <u>Sheryl J. Carruth</u></p> <p>Title: <u>Regulatory Manager</u></p> <p>Date: <u>8-1-94</u></p> | |
| | | | | <p>¹⁸ SURVEYOR CERTIFICATION</p> <p><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></p> <p>Date of Survey: _____</p> <p>Signature and Seal of Professional Surveyor: _____</p> <p>Certificate Number: _____</p> | |

Dwights

Lease: JICARILLA E 008E

Retrieval Code: 251,039,0392542371599

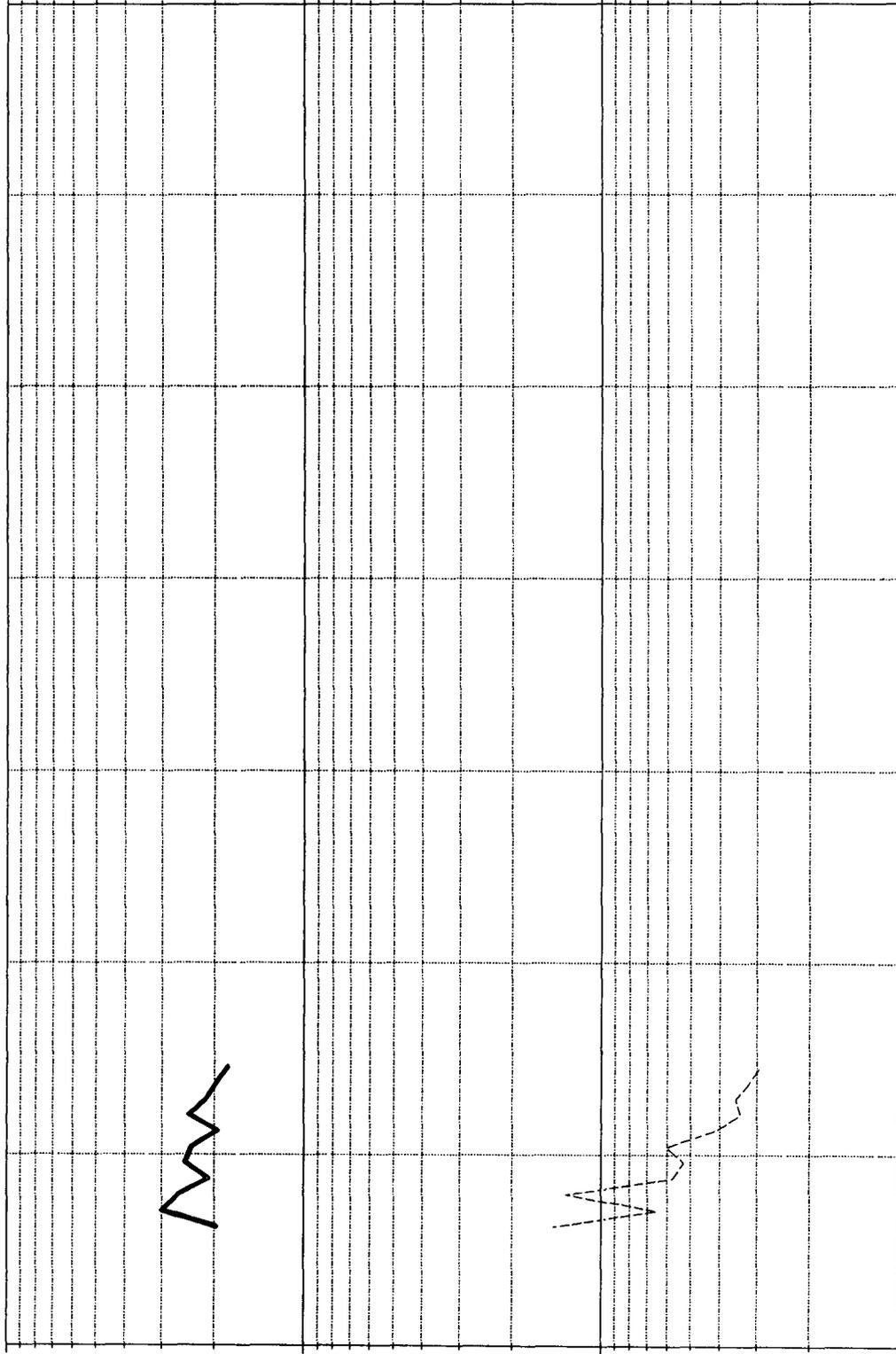
05/23/96

10^3
 10^3

10^2
 10^2

10
10

1
1



1994

1996

1998

2000

Gas (mcf/day)

Oil (bbl/day)

Water (bbl/day)

Well Count

County: RIO ARRIBA, NM
Field: BASIN (DAKOTA) DK
Reservoir: DAKOTA
Operator: CONOCO INC
F.P. Date: 08/94
Oil Cum: 2079 bbl
Gas Cum: 75.69 mmcf
Location: 15K 26N 4W

Dwights

Lease: JICARILLA E 8M

Retrieval Code: 251,039,0392542372319

05/23/96

10³
10³

10³
10³

10²
10²

10²
10²

10
10

10
10

1
1

1
1

1995

1997

1999

2001

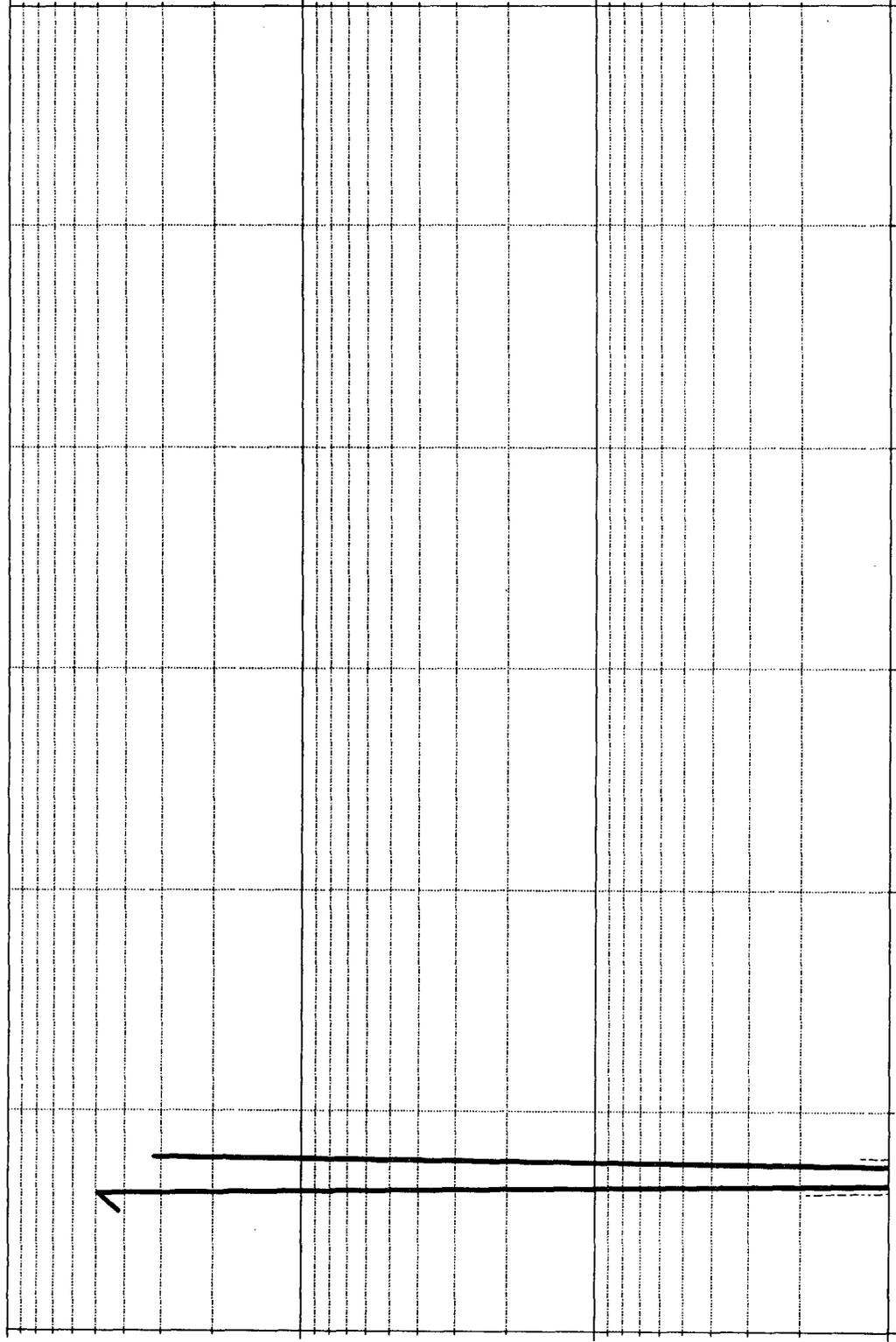
Gas (mcf/day)

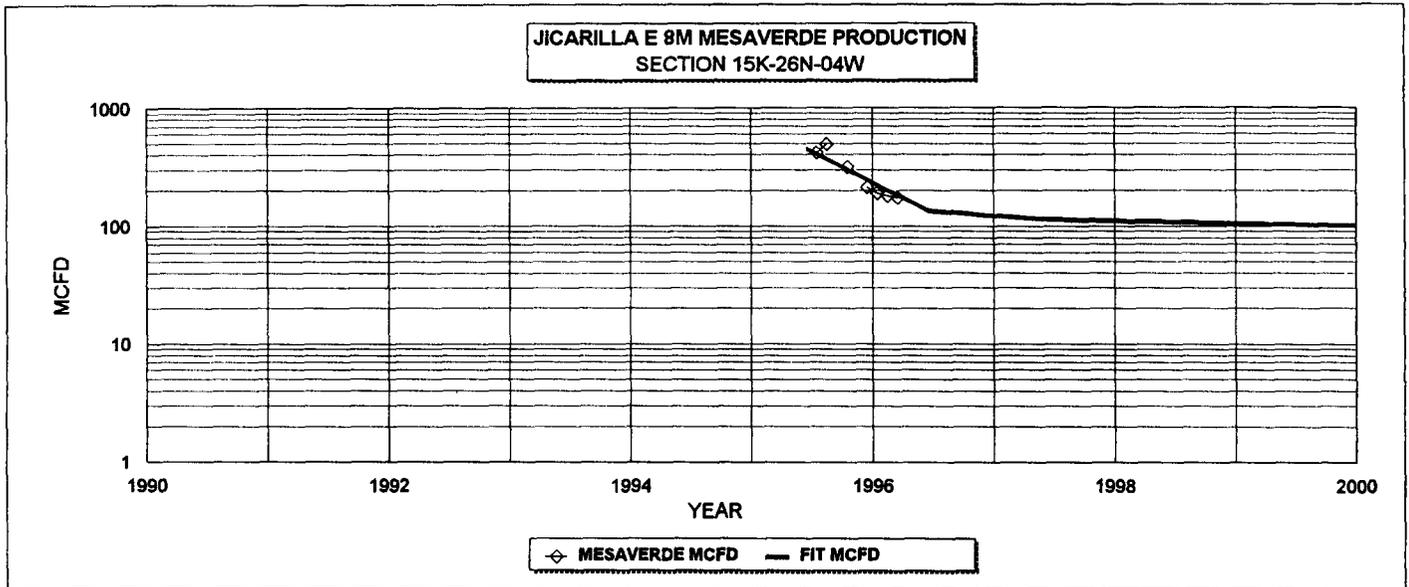
Oil (bbl/day)

Water (bbl/day)

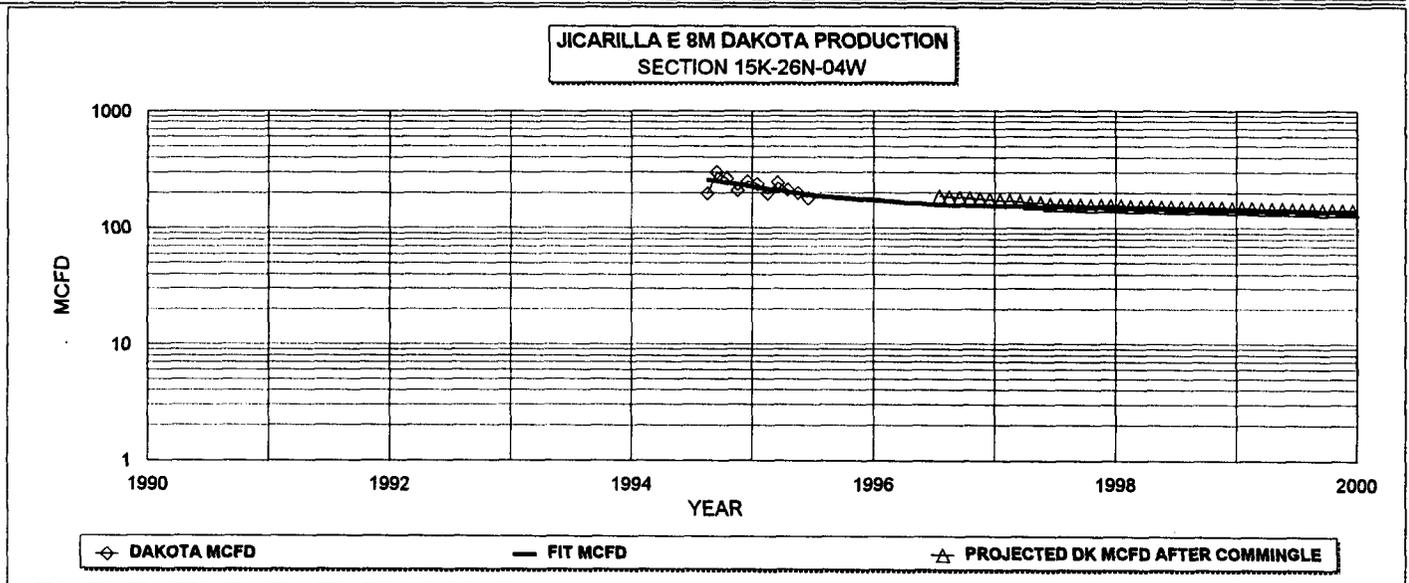
Well Count

County: RIO ARRIBA, NM
Field: BLANCO (MESAVARDE) MV
Reservoir: MESAVARDE
Operator: CONOCO INC
F.P. Date: 07/95
Oil Cum: 96 bbl
Gas Cum: 37.39 mmcf
Location: 15K 26N 4W





| | | | |
|--|----------------|---------------------------------|--------------------|
| MESAVERDE HISTORICAL DATA: 1ST PROD: 7/95 | | MESAVERDE PROJECTED DATA | |
| OIL CUM: | 0.17 MBO | 7/1/96 Qi: | 133 MCFD |
| GAS CUM: | 60.4 MMCF | DECLINE RATE: | 15.0% THROUGH 7/97 |
| OIL YIELD: | 0.0028 BBL/MCF | | 4.5% FINAL DECLINE |



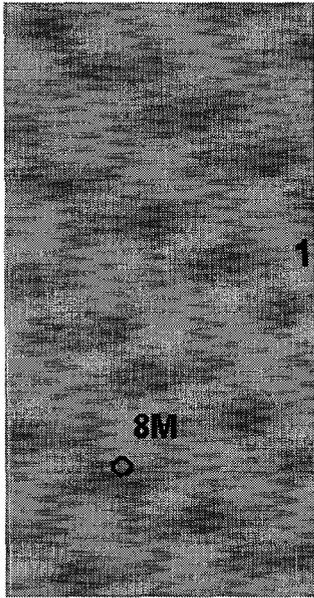
| | | | | | | | | | |
|--|----------------|------------------------------|---|-----------------|---------|-----------------|----------|----------|-----|
| DAKOTA HISTORICAL DATA 1ST PROD: 8/94 | | DAKOTA PROJECTED DATA | | YRLY AVG | | YRLY AVG | % | % | |
| OIL CUM: | 2.1 MBO | 7/1/96 Qi: | 187 MCFD | YRLY AVG: | DK MCFD | MV MCFD | DAKOTA | MV | |
| GAS CUM: | 75.7 MMCF | DECLINE RATE: | 15.0% THROUGH 7/97 | 1996 | 181 | 129 | 58% | 42% | |
| OIL YIELD: | 0.0275 BBL/MCF | | 4.5% FINAL DECLINE | 1997 | 162 | 116 | 58% | 42% | |
| FIXED COMMINGLE ALLOCATION FACTORS: | | | GAS ALLOCATION BASED ON TABLE AT RIGHT | | 1998 | 153 | 109 | 58% | 42% |
| | GAS | OIL | OIL ALLOCATION BASED ON WEIGHTED CUM OIL YIELD | | 1999 | 146 | 104 | 58% | 42% |
| DAKOTA | 58% | 93% | | | 2000 | 139 | 100 | 58% | 42% |
| MESAVERDE | 42% | 7% | | | 2001 | 133 | 95 | 58% | 42% |

NOTE: ALL PRODUCTION DATA FROM DWIGHTS ENERGY DATA

NOTE: 1996 yrly avg is for 2nd half of year only

Jicarilla "E" No. 8M

OFFSET OPERATORS

| | | |
|--------|--|--------|
| 9 | 10 | 11 |
| AMOCO | AMOCO | Conoco |
| 16 | 15 | 14 |
| Conoco |  | Conoco |
| 21 | 22 | 23 |
| Conoco | Conoco | Conoco |

Township 26N --- Range 4W