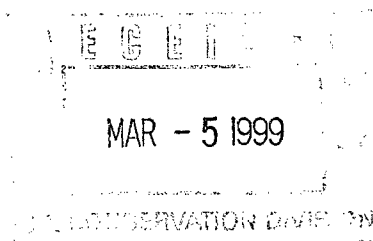




DHC 3/25/99



2251

March 2, 1999

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

RE: Administrative Approval to Downhole Commingle  
Energen Resources Corporation  
Jicarilla 96 #1  
1650' FNL, 990' FEL, Sec. 11, T26N, R3W, N.M.P.M.  
Rio Arriba County, New Mexico

Dear Ms. Wrotenbery:

Energen Resources Corporation requests administrative approval for downhole commingling the Gavilan Pictured Cliffs and Blanco Mesaverde pools in the subject well. The well is currently producing as a Pictured Cliffs/Mesaverde dual completion. The Pictured Cliffs zone has experienced liquid loading problems and it is felt downhole commingling will eliminate excessive operational problems and allow the Mesaverde flow stream to aid in keeping the Pictured Cliffs zone unloaded and producing.

To comply with New Mexico Oil Conservation Rules, Energen Resources Corporation is submitting the following data for your approval of the proposed commingling:

1. For C107A – Application for Downhole Commingling
2. C102 – Location plat showing each spacing unit and dedicated acreage
3. Production curves for both the Pictured Cliffs and Mesaverde
4. Offset operator plat
5. Well location plat

In accordance to 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, BLM – Albuquerque, Offset Operators

Energen Resources Corporation, an Energen Company 2198 Bloomfield Highway, Farmington, New Mexico 87401 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<br>30-039-06601 | <sup>2</sup> Pool Code<br>77360/72319                       | <sup>3</sup> Pool Name<br>Gavilan Pictured Cliffs/Blanco Mesaverde |
| <sup>4</sup> Property Code<br>007165    | <sup>5</sup> Property Name<br>Jicarilla 96                  | <sup>6</sup> Well Number<br>1                                      |
| <sup>7</sup> OGRID No.<br>162928        | <sup>8</sup> Operator Name<br>ENERGEN RESOURCES CORPORATION | <sup>9</sup> Elevation<br>7062'                                    |

<sup>10</sup> Surface Location

|                    |               |                 |             |          |                        |                       |                       |                     |                      |
|--------------------|---------------|-----------------|-------------|----------|------------------------|-----------------------|-----------------------|---------------------|----------------------|
| UL or lot no.<br>H | Section<br>11 | Township<br>26N | Range<br>3W | Lot. Idn | Feet from the<br>1650' | North/South Line<br>N | Feet from the<br>990' | East/West line<br>E | County<br>Rio Arriba |
|--------------------|---------------|-----------------|-------------|----------|------------------------|-----------------------|-----------------------|---------------------|----------------------|


<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<br>160/320 | <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

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<sup>17</sup> OPERATOR CERTIFICATION  
*I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.*

  
Signature  
Gary Brink  
Printed Name  
Production Superintendent  
Title  
3/2/99  
Date

<sup>18</sup> 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 Surveyor:  
Reissue of Original Survey  
\_\_\_\_\_  
Certificate Number

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

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

OIL CONSERVATION DIVISION

2040 S. Pacheco  
Santa Fe, New Mexico 875054-6429

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

ENERGEN RESOURCES CORPORATION 2198 Bloomfield Highway, Farmington, NM 87401  
Operator Address

Jicarilla 96 1 H 11 26N 3W Rio Arriba  
Lease Well No. Unit Ltr. - Sec - Twp - Rge County

OGRID NO. 162928 Property Code 007165 API NO. 30-039-06601  
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  | Gavilan PC<br>77360              |                   | Blanco MV<br>72319                 |
| 2. Top and Bottom of Pay Section (Perforations)   | 3585 - 3676                      |                   | 5386 - 5882                        |
| 3. Type of production (Oil or Gas)  | Gas                              |                   | Gas                                |
| 4. Method of Production (Flowing or Artificial Lift)  | Flowing                          |                   | Flowing                            |
| 5. Bottomhole Pressure<br>Oil Zones - Artificial Lift:<br>Estimated Current<br>Gas & Oil - Flowing:<br>Measured Current<br>All Gas Zones:<br>Estimated Or Measured Original   | a. (Current)<br>414 Meas.        | a.                | a.<br>531 Meas.                    |
|   | b. (Original)<br>1170 Calc.      | b.                | b.<br>2018 Calc.                   |
| 6. Oil Gravity ( <sup>o</sup> API) or Gas BTU Content)  | 1222 BTU                         |                   | 1247 BTU                           |
| 7. Producing or Shut-In?  | Shut In                          |                   | Producing                          |
| Production Marginal? (yes or no)  | Yes                              |                   | No                                 |
| * If Shut-In, give date and oil/gas/ water rates of last production<br>Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data<br>* If Producing, give date and oil/gas/ water rates of recent test (within 60 days) | Date: 5/96<br>Rates:<br>.2/30/.5 | Date:<br>Rates:   | Date:<br>Rates:                    |
|   | Date:<br>Rates:                  | Date:<br>Rates:   | Date: 2/16/99<br>Rates:<br>1/180/0 |
| 8. Fixed Percentage Allocation Formula - % for each zone  | Oil: 17 % Gas: 14 %              | Oil: % Gas: %     | Oil: 83 % Gas: 86 %                |

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. 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 Gary Brink TITLE Prod. Superintendent DATE 3/2/99

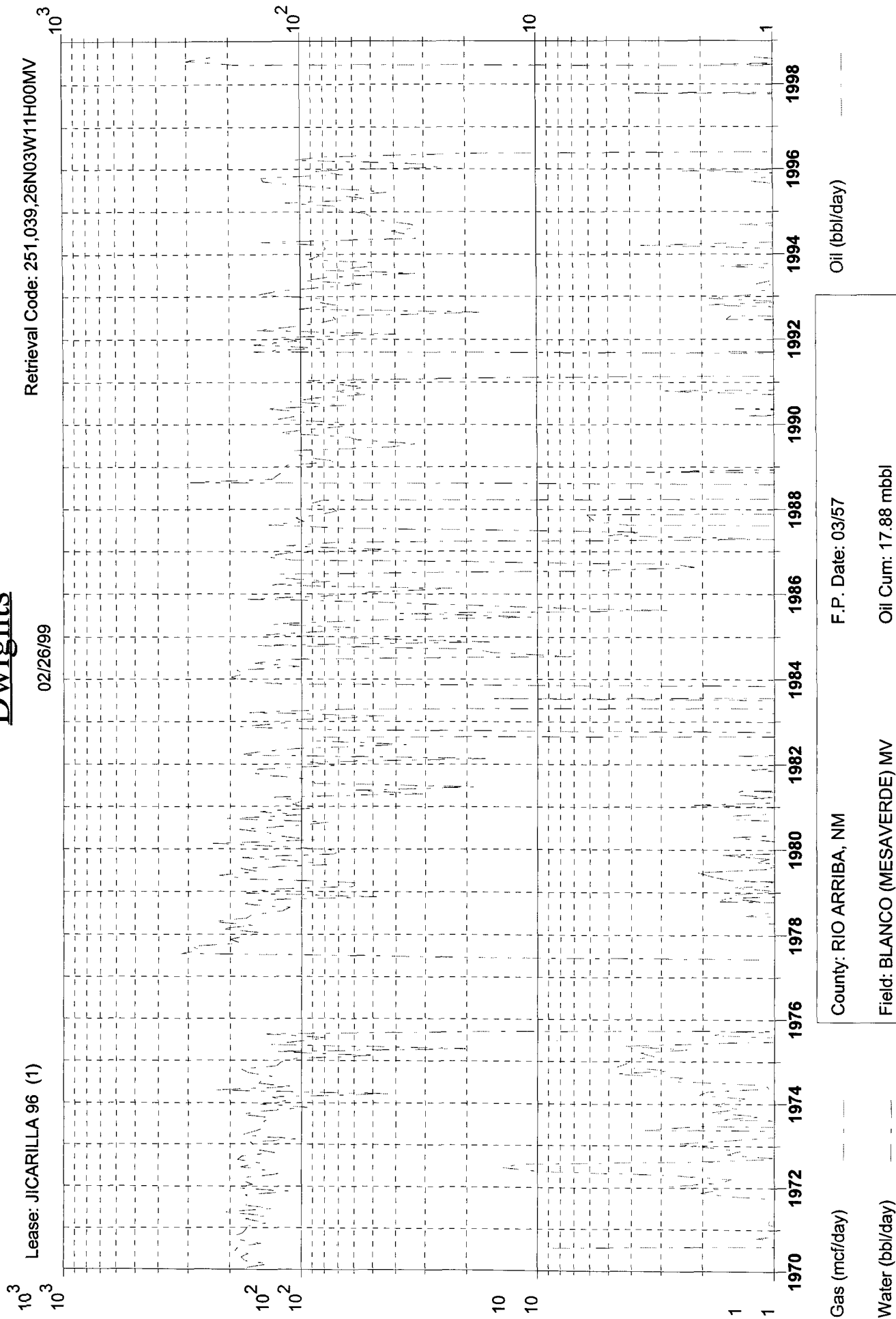
TYPE OR PRINT NAME Gary Brink TELEPHONE NO. ( 505 ) 325-6800

# Dwights

Lease: JICARILLA 96 (1)

02/26/99

Retrieval Code: 251,039,26N03W11H00MV



Gas (mcf/day)

Water (bbl/day)

Oil (bbl/day)

County: RIO ARRIBA, NM

F.P. Date: 03/57

Field: BLANCO (MESAVARDE) MV

Oil Cum: 17.88 mbbl

Reservoir: MESAVARDE

Gas Cum: 1864 mmcf

Operator: ENERGEN RESOURCES

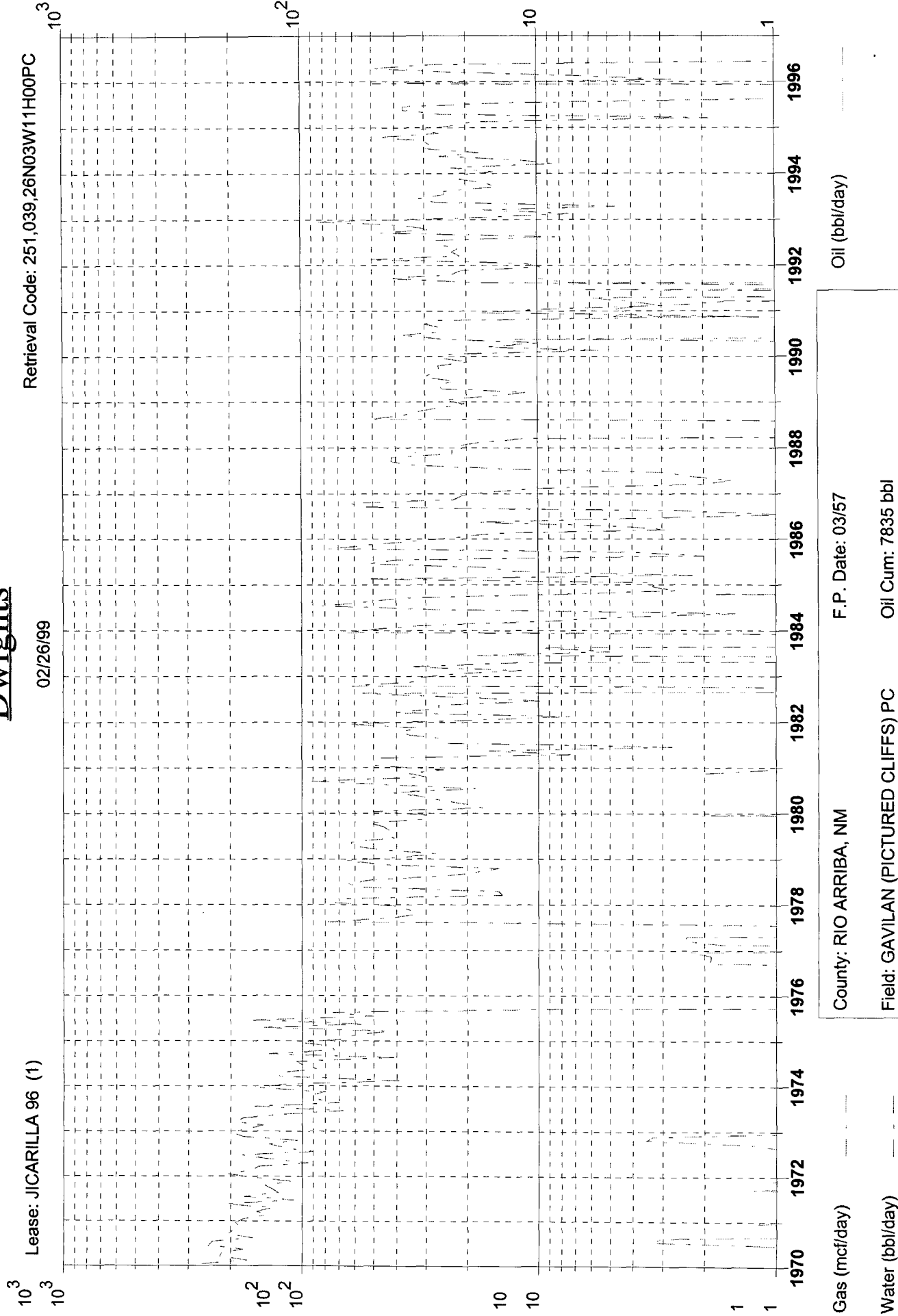
Location: 11H 26N 3W

# Dwights

Lease: JICARILLA 96 (1)

02/26/99

Retrieval Code: 251,039,26N03W11H00PC



Gas (mcf/day)

Water (bbl/day)

Oil (bbl/day)

F.P. Date: 03/57

County: RIO ARRIBA, NM

Field: GAVILAN (PICTURED CLIFFS) PC

Oil Cum: 7835 bbl

Reservoir: PICTURED CLIFFS

Gas Cum: 1408 mmcf

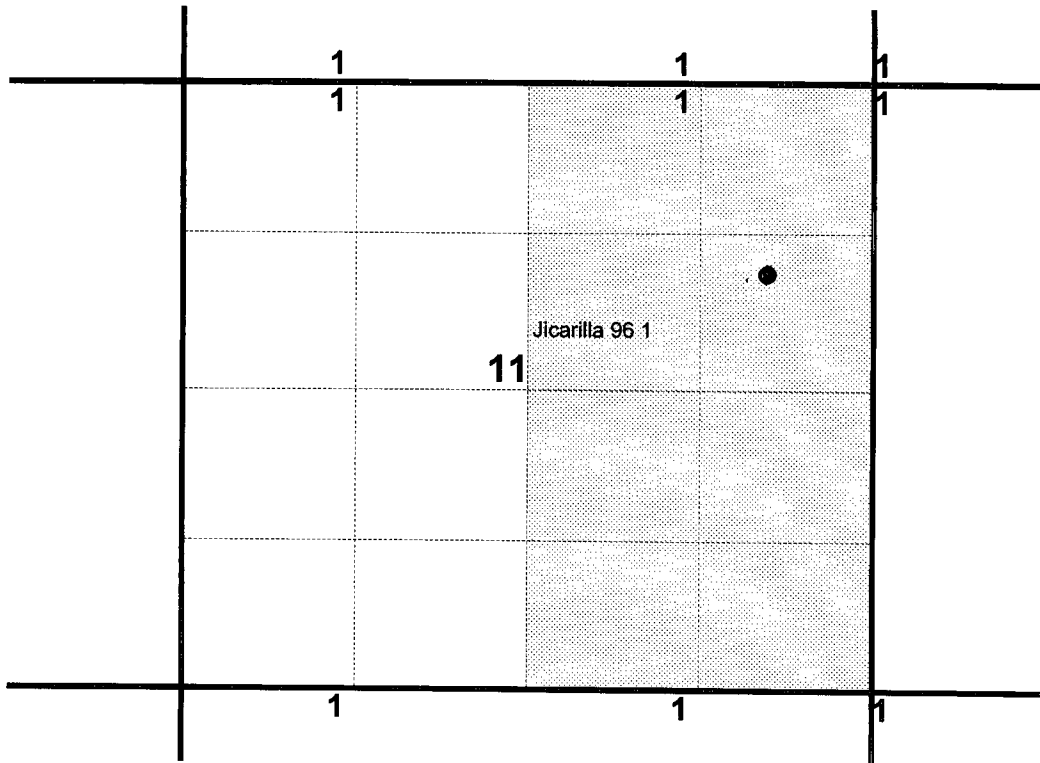
Operator: ENERGEN RESOURCES

Location: 11H 26N 3W

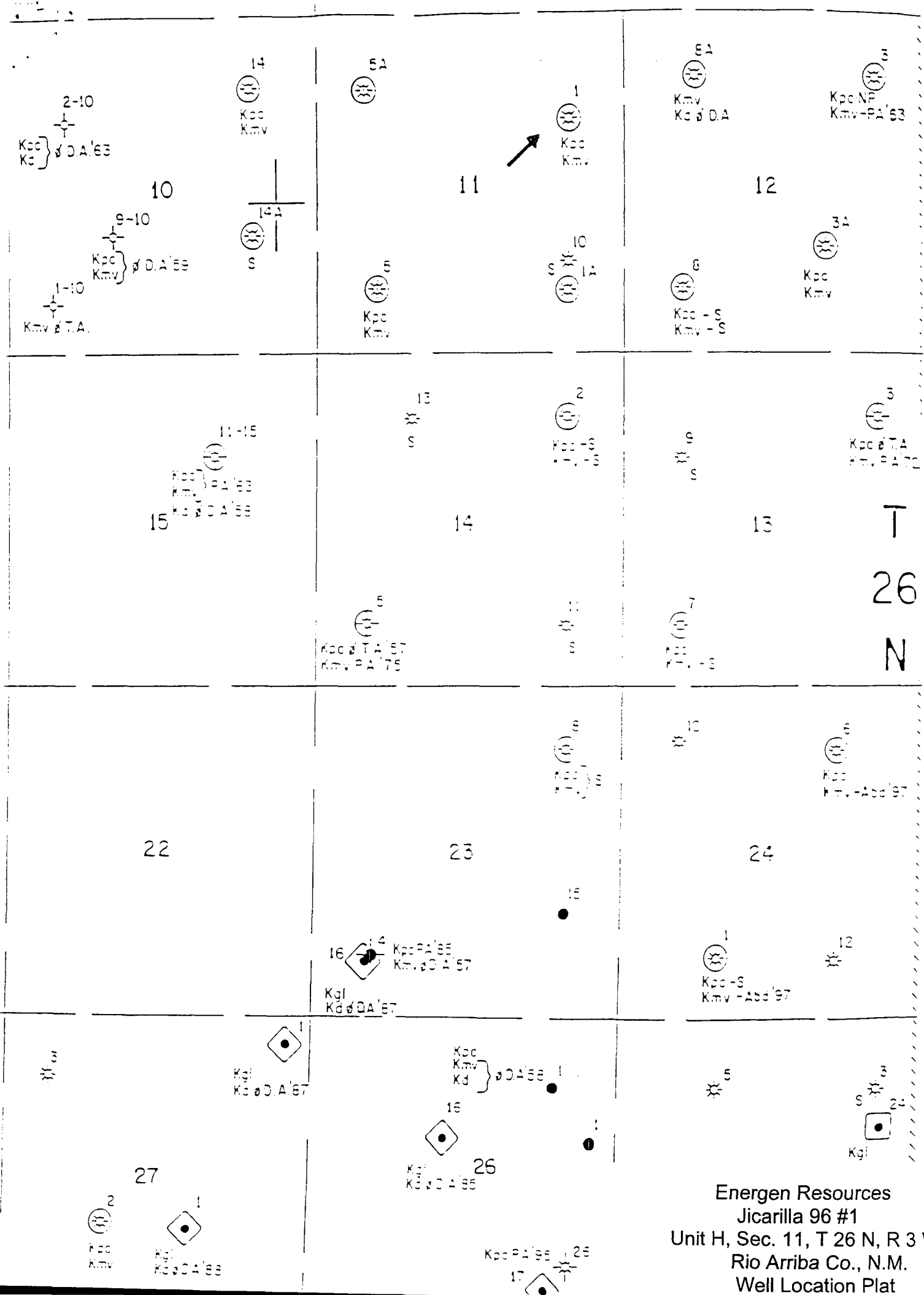
## ENERGEN RESOURCES

**Jicarilla 96 #1**  
**Offset Operator / Ownership Plat**  
Gavilan Pictured Cliffs/ Blanco Mesa Verde  
Downhole Commingling

Township 26 N, Range 3 W



1) Energen Resources



Energen Resources  
 Jicarilla 96 #1  
 Unit H, Sec. 11, T 26 N, R 3 W  
 Rio Arriba Co., N.M.  
 Well Location Plat