



April 13, 1999

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

RE: Administrative Approval to Downhole Commingle  
Energen Resources Corporation  
Jicarilla 119N #4A  
1525 FSL, 1460 FEL, Sec. 6, T26N, R4W, N.M.P.M.  
Rio Arriba County, New Mexico

Dear Ms. Wrotenbery:

Energen Resources Corporation, requests to downhole commingle the Tapacito Pictured Cliffs and Blanco Mesa Verde 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 Commingle
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

Production/OCD/Jic119N4A4-99.doc

4/16/99 5/6/99 DC KW DHC

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION  
- Engineering Bureau -

2333

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

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

REGISTERED  
APR 16 1999  
CONSERVATION DIVISION

[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

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, I, 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: Statements must be completed by an individual with supervisory capacity

GARY BRINK  
Title or Type Name

*[Signature]*  
Signature

Production Dept.  
Title

4/13/99  
Date

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 119N** **4A** **J** **Sec. 6** **T26N** **R4W** **Rio Arriba**  
 Lease Well No. Unit Ltr. - Sec - Twp - Rge County  
 OGRID NO. 162928 Property Code 21944 API NO. 30-039-22980 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   | Tapacito PC<br>85920            |                   | Blanco MV<br>72319                |
| 2. Top and Bottom of Pay Section (Perforations)  | 3870 - 3928'                    |                   | 5548 - 6357'                      |
| 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>213 Calc.       | a.                | a.<br>205 Calc.                   |
|  | b. (Original)<br>311 Calc.      | b.                | b.<br>1238 Calc.                  |
| 6. Oil Gravity ( <sup>o</sup> API) or Gas BTU Content)   | 1204 BTU                        |                   | 1229 BTU                          |
| 7. Producing or Shut-In?   | Producing                       |                   | 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 | Date:<br>Rates:                 | Date:<br>Rates:   | Date:<br>Rates:                   |
| * If Producing, give date and oil/gas/water rates of recent test (within 60 days)  | Date: 3/22/99<br>Rates: 0/72/.5 | Date:<br>Rates:   | Date: 3/16/99<br>Rates: .5/133/.1 |
| 8. Fixed Percentage Allocation Formula - % for each zone   | Oil: 0% Gas: 35%                | Oil: % Gas: %     | Oil: 100% Gas: 65%                |

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 W. Brink TITLE Prod. Superintendent DATE 4/13/99  
 TYPE OR PRINT NAME Gary W. 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

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

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>30-039-22980 | <sup>2</sup> Pool Code<br>85920/72319                       | <sup>3</sup> Pool Name<br>Tapacito PC/Blanco MV |
| <sup>4</sup> Property Code<br>21944     | <sup>5</sup> Property Name<br>Jicarilla 119N                | <sup>6</sup> Well Number<br>4A                  |
| <sup>7</sup> OGRID No.<br>162928        | <sup>8</sup> Operator Name<br>ENERGEN RESOURCES CORPORATION | <sup>9</sup> Elevation<br>7152' GL              |

<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     |
|---------------|---------|----------|-------|----------|---------------|------------------|---------------|----------------|------------|
| J             | 6       | 26N      | 4W    |          | 1525'         | S                | 1460'         | E              | 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>160/322.72 | <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

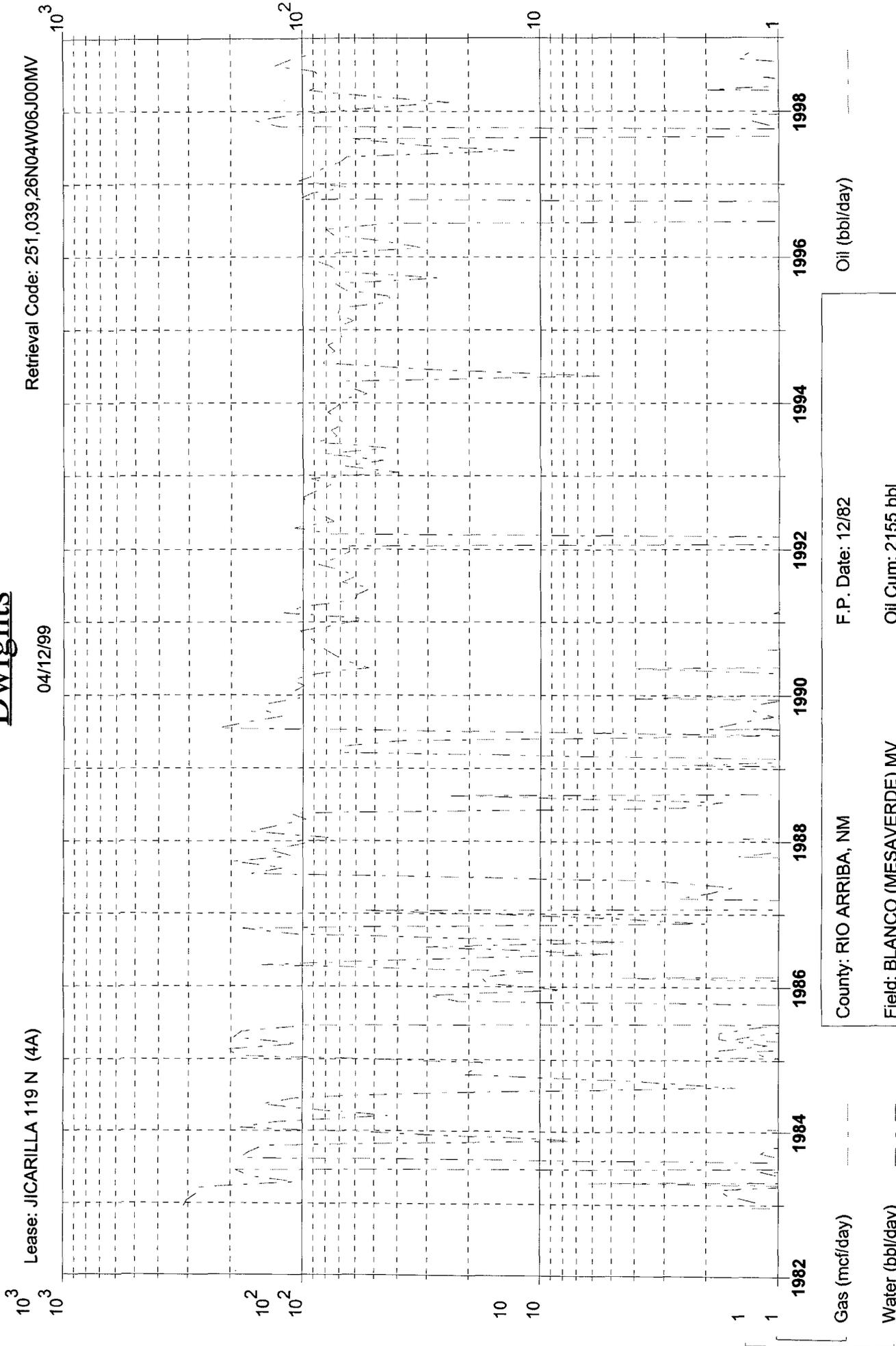
|  |   |
|--|---|
|  | <p><sup>17</sup> OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <p></p> <p>Signature<br/>Gary W. Brink<br/>Printed Name<br/>Production Superintendent<br/>Title<br/>Date<br/>4/13/99</p>  |
|  | <p><sup>18</sup> 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>3/17/82<br/>Date of Survey<br/>Signature and Seal of Professional Surveyer:<br/>Reissue of Original Survey<br/>By Fred B. Kerr</p> <p>Certificate Number</p> |

# Dwights

04/12/99

Lease: JICARILLA 119 N (4A)

Retrieval Code: 251,039,26N04W06J00MV



Gas (mcf/day) ———

Water (bbl/day) - - - -

Oil (bbl/day)

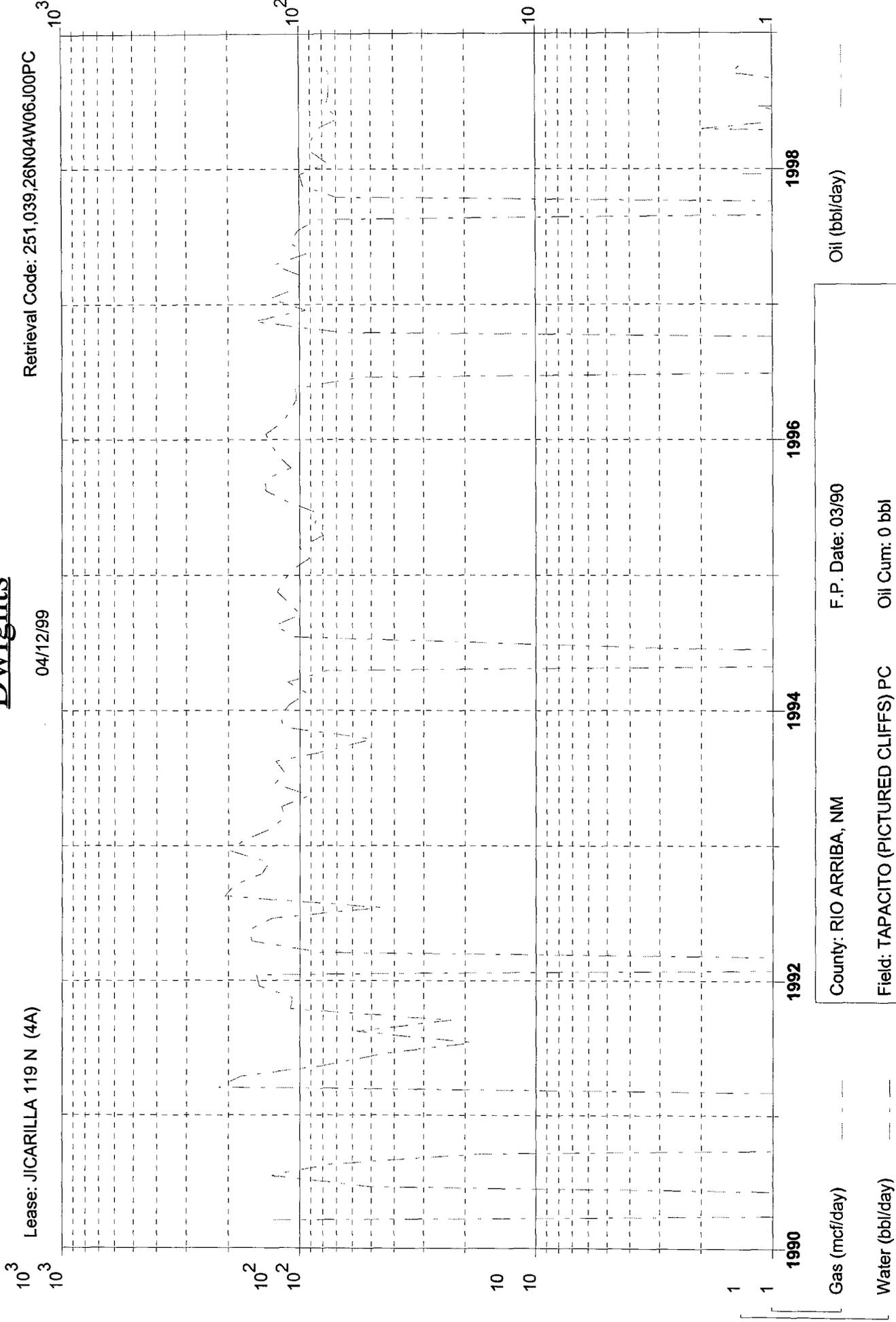
|                              |                     |
|------------------------------|---------------------|
| County: RIO ARRIBA, NM       | F.P. Date: 12/82    |
| Field: BLANCO (MESAVERDE) MV | Oil Cum: 2155 bbl   |
| Reservoir: MESAVERDE         | Gas Cum: 445.0 mmcf |
| Operator: ENERGEN RESOURCES  | Location: 6J 26N 4W |

# Dwights

Lease: JICARILLA 119 N (4A)

04/12/99

Retrieval Code: 251,039,26N04W06J00PC



Gas (mcf/day)

Water (bbl/day)

Oil (bbl/day)

County: RIO ARRIBA, NM

F.P. Date: 03/90

Field: TAPACITO (PICTURED CLIFFS) PC

Oil Cum: 0 bbl

Reservoir: PICTURED CLIFFS

Gas Cum: 291.6 mmcf

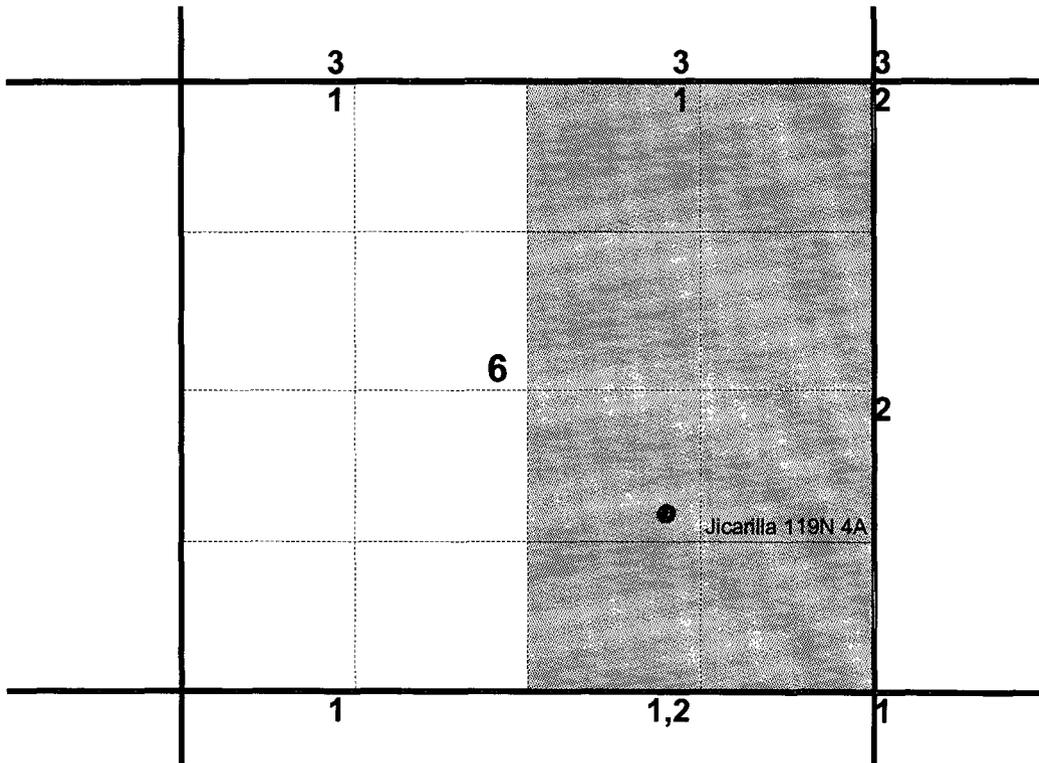
Operator: ENERGEN RESOURCES

Location: 6J 26N 4W

# Energen Resources Corp.

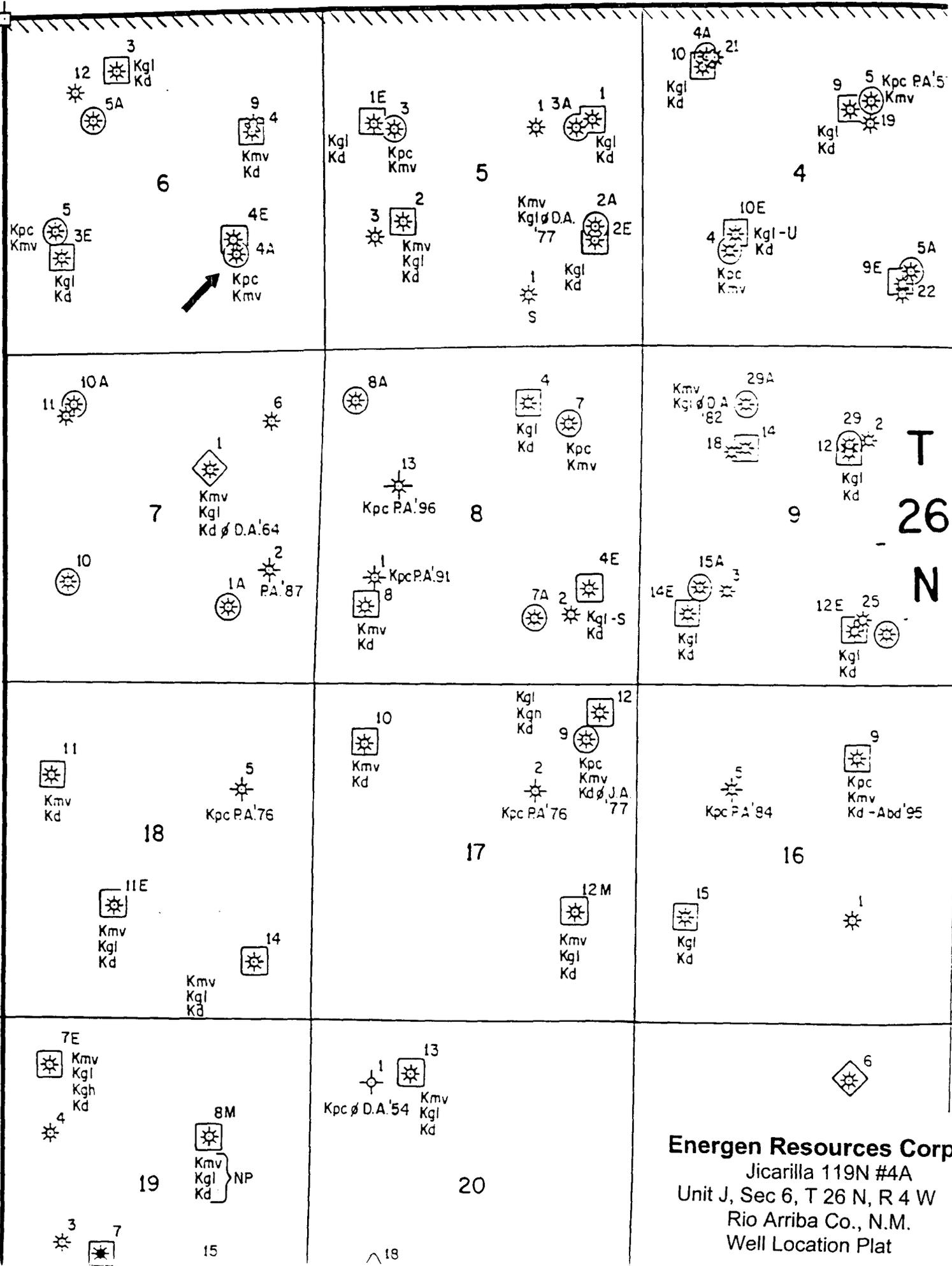
**Jicarilla 119N #4A**  
**Offset Operator / Ownership Plat**  
Tapacito Pictured Cliffs/ Blanco Mesa Verde  
Downhole Commingling

Township 26 N, Range 4 W



- 1) Energen Resources
- 2) Graystone Energy Inc.  
5802 Highway 64  
Farmington, N. M. 87401
- 3) Burlington Resources  
P.O. Box 4289  
Farmington, N.M. 87499-4289

# R-4-W



**Energen Resources Corp.**  
 Jicarilla 119N #4A  
 Unit J, Sec 6, T 26 N, R 4 W  
 Rio Arriba Co., N.M.  
 Well Location Plat