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|---------|----------|----|----|-----|
| 10/4/99 | 10/25/99 | DC | KN | DHC |
|---------|----------|----|----|-----|

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

2500

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]

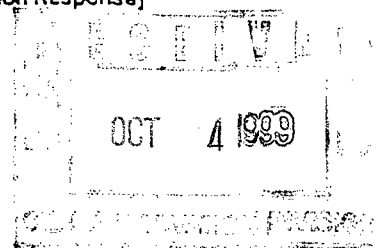
[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

- [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



[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, RI, ORRI) 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 BRINK
Print or Type Name

Signature

Title

Date

10/1/99



October 1, 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 152W #5
1810 FNL, 1570 FEL, Sec. 7, T26N, R5W, N.M.P.M.
Rio Arriba County, New Mexico

Dear Ms. Wrotenbery:

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

A handwritten signature in black ink, appearing to read "Gary W. Brink", written over a horizontal line.

Gary W. Brink
Production Superintendent

GWB/mt

cc: NMOCD – Aztec, BLM – Albuquerque, Offset Operators

Jic152W 5.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

ENERGEN RESOURCES CORPORATION 2198 Bloomfield Highway, Farmington, New Mexico 87401
Operator Address
Jicarilla 152 W 5 G Sec. 7 T26N 5W Rio Arriba
Lease Well No. Unit Ltr. - Sec - Twp - Rge County
OGRID NO. 162928 Property Code 21949 API NO. 30-039-22274 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 | S Blanco Pictured Cliffs 72439 | | Blanco Mesaverde 72319 |
| 2. Top and Bottom of Pay Section (Perforations) | 3519-3640 | | 5258-6142 |
| 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) 450 calc. b. (Original) 1148 calc. | a. b. | a. 454 calc. b. 1142 calc. |
| 6. Oil Gravity (^o API) or Gas BTU Content) | 1219 BTU | | 1185 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: 9/27/99 Rates: 0/100/.2 | Date: Rates: | Date: 9/14/99 Rates: .5/62/.3 |
| 8. Fixed Percentage Allocation Formula - % for each zone | Oil: 0 % Gas: 62 % | Oil: % Gas: % | Oil: 100 % Gas: 38 % |

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 _____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

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

| | | |
|---|---|--|
| ¹ API Number 30-039-22274 | ² Pool Code 72439/72319 | ³ Pool Name S. Blanco Pictured Cliffs/Blanco Mesaverde |
| ⁴ Property Code 21949 | ⁵ Property Name Jicarilla 152 W | ⁶ Well Number 5 |
| ⁷ OGRID No. 162928 | ⁸ Operator Name ENERGEN RESOURCES CORPORATION | ⁹ Elevation 6968 GL |

¹⁰ Surface Location

| | | | | | | | | | |
|--------------------|--------------|-----------------|-------------|----------|-----------------------|---------------------------|-----------------------|------------------------|----------------------|
| UL or lot no. G | Section 7 | Township 26N | Range 5W | Lot. Idn | Feet from the 1810 | North/South Line North | Feet from the 1570 | East/West line East | County 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 160/320 | 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

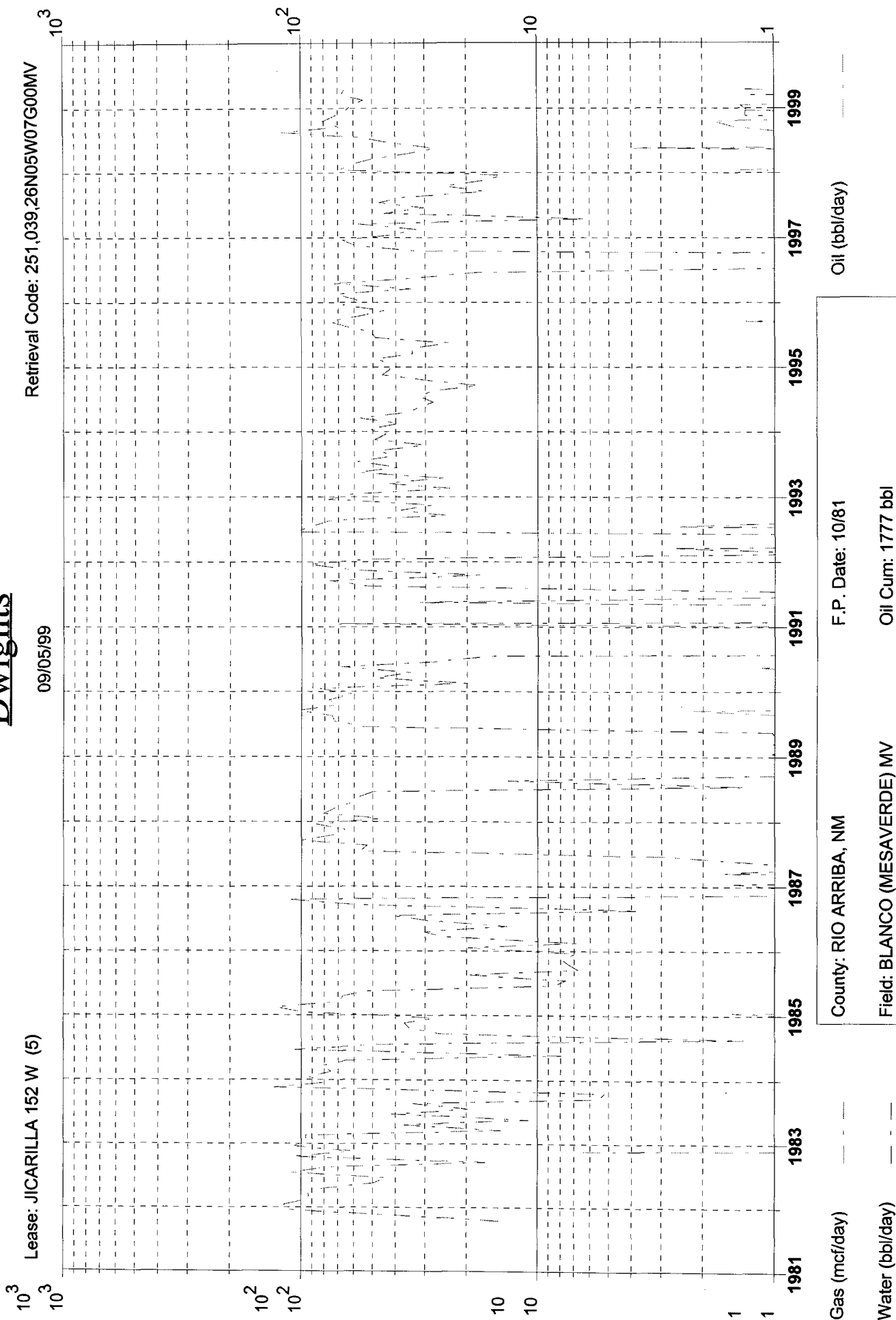
| | |
|--|--|
| | <p>¹⁷ OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <p>Signature Gary W. Brink</p> <p>Printed Name Production Superintendent</p> <p>Title 10/1/99</p> <p>Date</p> |
| | <p>¹⁸ SURVEYOR 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></p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p>Reissue of Original Survey By Fred B. Kerr</p> <p>Certificate Number</p> |
| | |

Dwights

Lease: JICARILLA 152 W (5)

Retrieval Code: 251,039,26N05W07G00MV

09/05/99



Gas (mcf/day)

Water (bbl/day)

Oil (bbl/day)

F.P. Date: 10/81

Oil Cum: 1777 bbl

Gas Cum: 274.7 mmcf

Location: 7G 26N 5W

County: RIO ARRIBA, NM

Field: BLANCO (MESAVERDE) MV

Reservoir: MESAVERDE

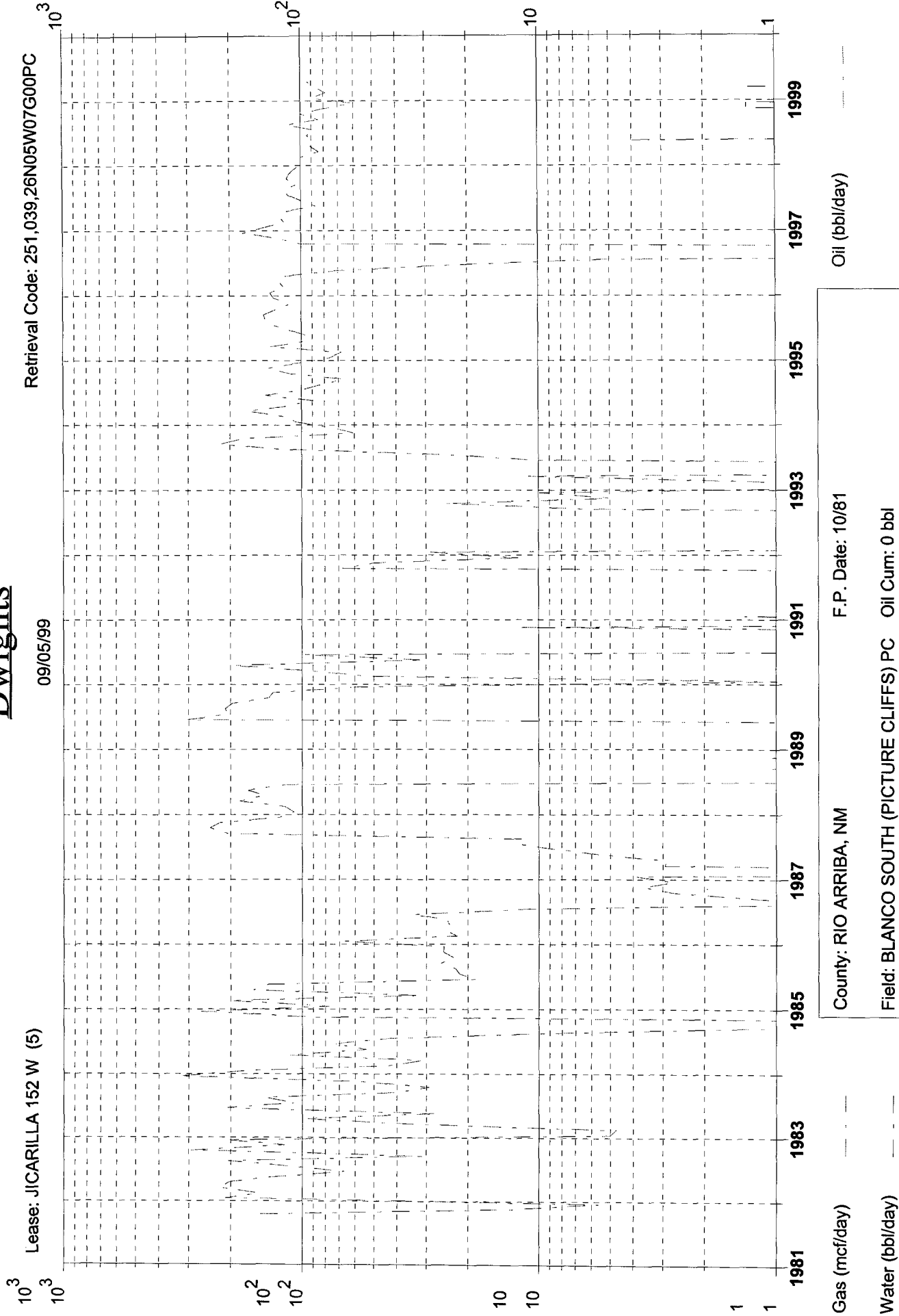
Operator: ENERGEN RESOURCES

Dwights

Lease: JICARILLA 152 W (5)

09/05/99

Retrieval Code: 251,039,26N05W07G00PC



Gas (mcf/day)

Water (bbl/day)

Oil (bbl/day)

F.P. Date: 10/81

County: RIO ARriba, NM

Field: BLANCO SOUTH (PICTURE CLIFFS) PC Oil Cum: 0 bbl

Reservoir: PICTURE CLIFFS Gas Cum: 483.5 mmcf

Operator: ENERGEN RESOURCES Location: 7G 26N 5W

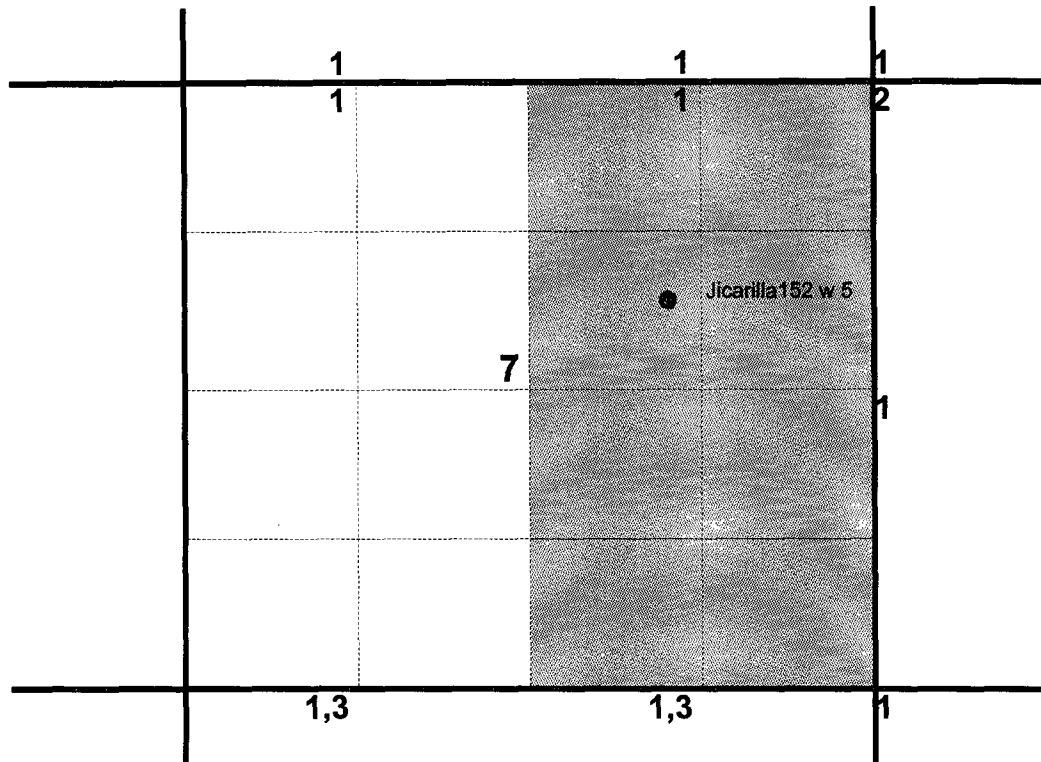
Energen Resources Corp.

Jicarilla 152W #5

Offset Operator / Ownership Plat

S. Blanco Pictured Cliffs/ Blanco Mesa Verde
Downhole Commingling

Township 26 N, Range 5 W



- 1) Energen Resources
- 2) Graystone Energy Inc.
5802 Highway 64
Farmington, N. M. 87401
- 3) Amoco Production Co.
P.O. Box 3092
Houston, Tx. 77253-3092

The map displays a 4x4 grid of well locations. Each section contains various well symbols and labels:

- Section 1 (Top Left):** 9A Kc-NP'79 Kmv, 8 Kmv Kd, 6 Kmv-S PA'82 Kd, 5 Kmv-S PA'82 Kd, 3 Kmv-S PA'82 Kd, 2 Kmv Kd.
- Section 2 (Top Middle):** 6 Kpc Kmv, 4A Kpc Kmv, 2 Kpc Kmv Kd PA'67, 5, 4 Kpc Kmv, 2A Kpc Kmv.
- Section 3 (Top Right):** 7E Kpc PA'96, 4A Kpc PA'96, 7 Kpc PA'96, 4, 3E Kpc, 2A Kpc Kmv.
- Section 4 (Middle Left):** 3 Kgl-S Kd, 1A Kpc Kmv-S, 5 Kpc Kmv, 3E Kpc Kmv, 7, 5A Kpc Kmv, 1 Kpc Kmv -Abd Kd.
- Section 5 (Middle Middle):** 4 Kpc Kmv, 3E Kgl Kd, 3 Kpc Kd, 4A Kpc Kd, 8, 4 Kpc Kmv, 7A Kmv Kd, 1 Kmv Kd.
- Section 6 (Middle Right):** 5E Kpc Kmv, 8 Kpc Kmv, 6 Kpc Kmv, 3 Kpc Kmv, 9, 5 Kpc Kmv, 8A Kpc Kmv, 2 Kpc Kmv, 6 Kpc Kmv, 6A Kpc Kmv, 6E Kpc Kmv.
- Section 7 (Bottom Left):** 14 Kc Kd, 1E Kc Kd, 2 Kgl-Abd'95 Kd, 18, 1 Kmv Kd, 9 Kmv Kd, 2E Kgl Kd, 10 Kgl Kd.
- Section 8 (Bottom Middle):** 7E Kc Kd, 15 Kc Kd, 16 Kc Kd, 8 Kgl Kc, 17, 7 Kc Kd, 12 Kc Kd, 13 Kc Kd, 8E Kgl Kc.
- Section 9 (Bottom Right):** 7E Kc Kd, 13 Kc Kd, 14 Kmv Kgl Kd, 7 Kmv Kgl Kd, 16 Kgl PA'70, 9 Kgl PA'70, 11 Kpc PA'88, 2E Kc Kd, 12 Kpc Kd, 2 Kpc Kd.
- Section 10 (Far Bottom Left):** 4E Kgl Kd, 4 Kgl Kd, 5 Kgl Kd, 3 Kgl Kd, 19, 4 Kgl Kd.
- Section 11 (Far Bottom Middle):** 9 Kc Kmv, 6 Kc Kmv, 6E Kc Kmv, 2 Kgl Kc, 5 Kgl Kc, 20.
- Section 12 (Far Bottom Right):** 3 Kpc Kd, 5E Kpc Kd, 5 Kpc Kd, 4 Kpc Kd, 20.

Energen Resources Corp
Jicarilla 152 W #5

Jicarilla 152 W #5
Unit G, Section 7, T 26 N, R 5 W
Rio Arriba Co., N.M.
Well Location Plat