

2/16/00	3/7/00	DC	KV	DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

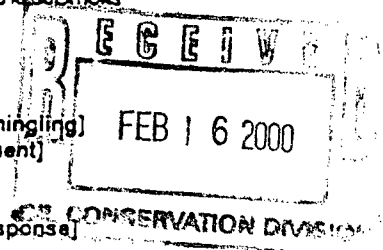
2676

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

Production Supt.

Date

2/14/00

ENERGEN
R E S O U R C E S

February 14, 2000

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

RE: Administrative Approval to Downhole Commingle
Energen Resources Corporation
Jicarilla 94 #6
990' FNL, 990' FEL, Sec. 27, T27N, R3W, N.M.P.M.
Rio Arriba County, New Mexico

Dear Ms. Wrotenberry:

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 expenditures and allow the Mesa Verde flowstream to aid in keeping the Pictured Cliffs zone unloaded and producing.

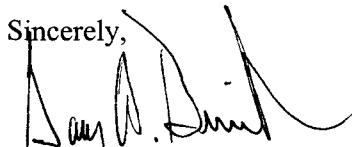
To comply with New Mexico Oil Conservation Rules, Energen Resources Corporation is submitting the following data for your approval of the proposed commingling:

1. For C107A - Application for Downhole Commingling
2. C-102 - 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, Offset Operators, BLM-Albuquerque
MONICA\PRODUCT\OCD\JC94-6 2-00.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

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, New Mexico 87401
Operator Address
Jicarilla 94 6 A Sec. 27 T27N R3W Rio Arriba
Lease Well No. Unit Ltr. - Sec - Twp - Rge County
OGRID NO. 162928 Property Code 21937 API NO. 30-039-06934 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 77360		Blanco MV 72319
2. Top and Bottom of Pay Section (Perforations)	4074-4157		5864-6344
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure	a. (Current) 548 calc.	a.	a. 289 calc.
Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	b. (Original) 1110 calc.	b.	b. 1925 calc.
6. Oil Gravity (^o API) or Gas BTU Content)	1208 BTU		1203 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	Date: Rates:	Date: Rates:	Date: Rates:
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: 2/2/00 Rates: 0/44/.3	Date: Rates:	Date: 1/27/00 Rates: .2/84/.1
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 0 % Gas: 34 %	Oil: % Gas: %	Oil: 100 % Gas: 66 %

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 2/14/00

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 30-039-06934	² Pool Code 77360/72319	³ Pool Name Gavilan PC/Blanco MV
⁴ Property Code 21937	⁵ Property Name Jicarilla 94	⁶ Well Number 6
⁷ OGRID No. 162928	⁸ Operator Name ENERGEN RESOURCES CORPORATION	⁹ Elevation 7378'

¹⁰ Surface Location

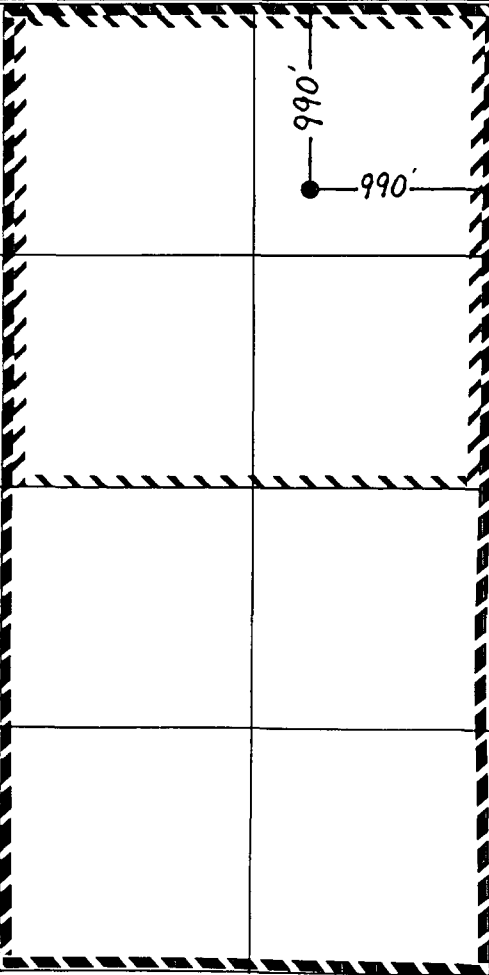
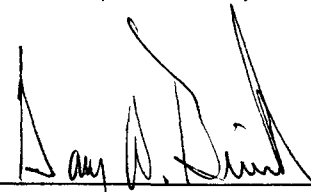
UL or lot no. A	Section 27	Township 27N	Range 3W	Lot. Idn	Feet from the 990'	North/South Line N	Feet from the 990'	East/West line E	County Rio Arriba
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
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¹² Dedicated Acres 160/320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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

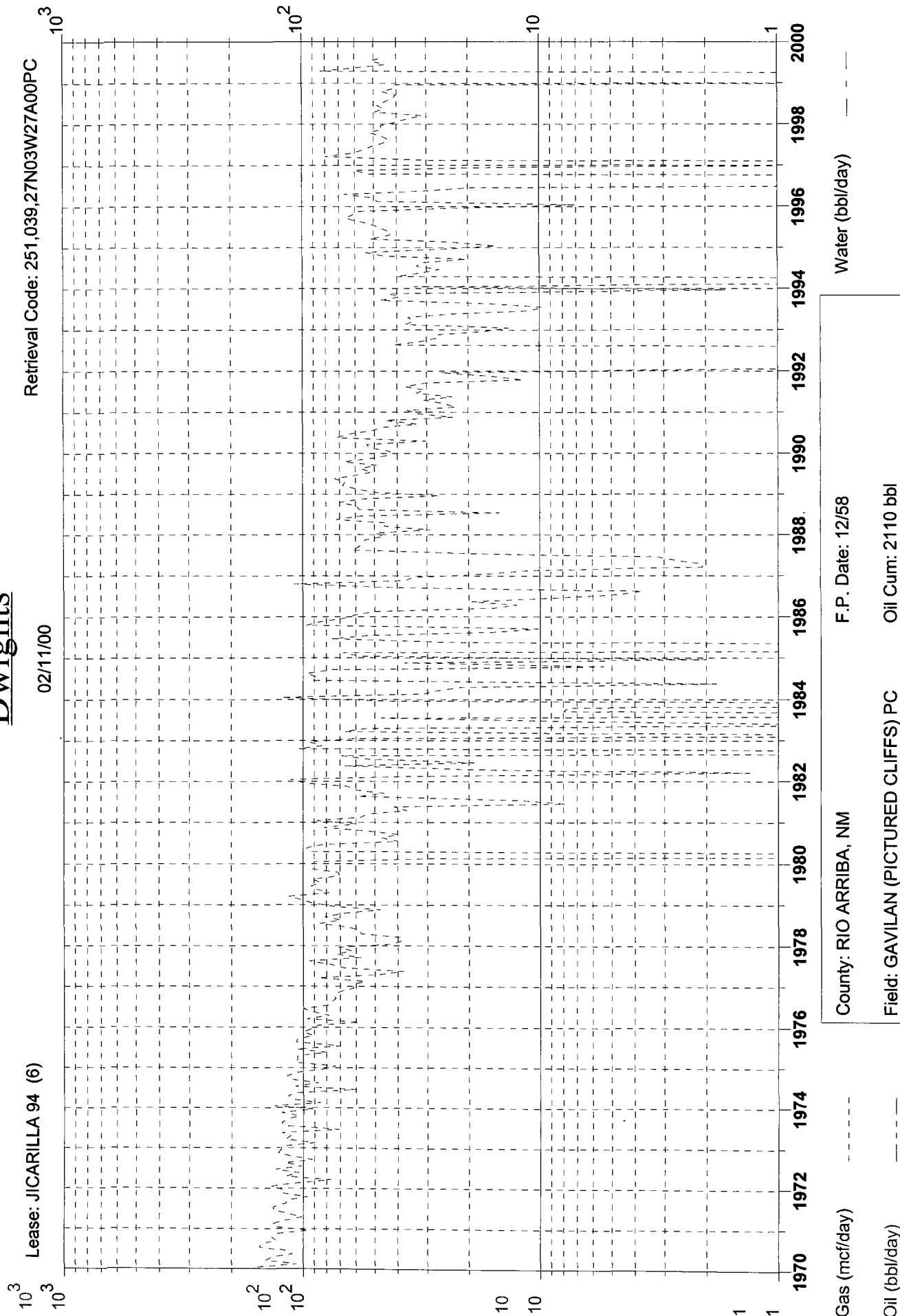
	<p>¹⁷ OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <p> Signature Gary W. Brink Printed Name Production Superintendent Title 2/14/00 Date</p>
	<p>¹⁸ SURVEYOR CERTIFICATION <i>I hereby certify that 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>8/28/56 Date of Survey Signature and Seal of Professional Surveyor: Reissue of Original Survey Certificate Number</p>

Dwights

Lease: JICARILLA 94 (6)

Retrieval Code: 251,039,27N03W27A00PC

02/11/00



F.P. Date: 12/58

County: RIO ARRIBA, NM

Field: GAVILAN (PICTURED CLIFFS) PC

Oil Cum: 2110 bbl

Reservoir: PICTURED CLIFFS

Gas Cum: 1071 mmcf

Operator: ENERGEN RESOURCES

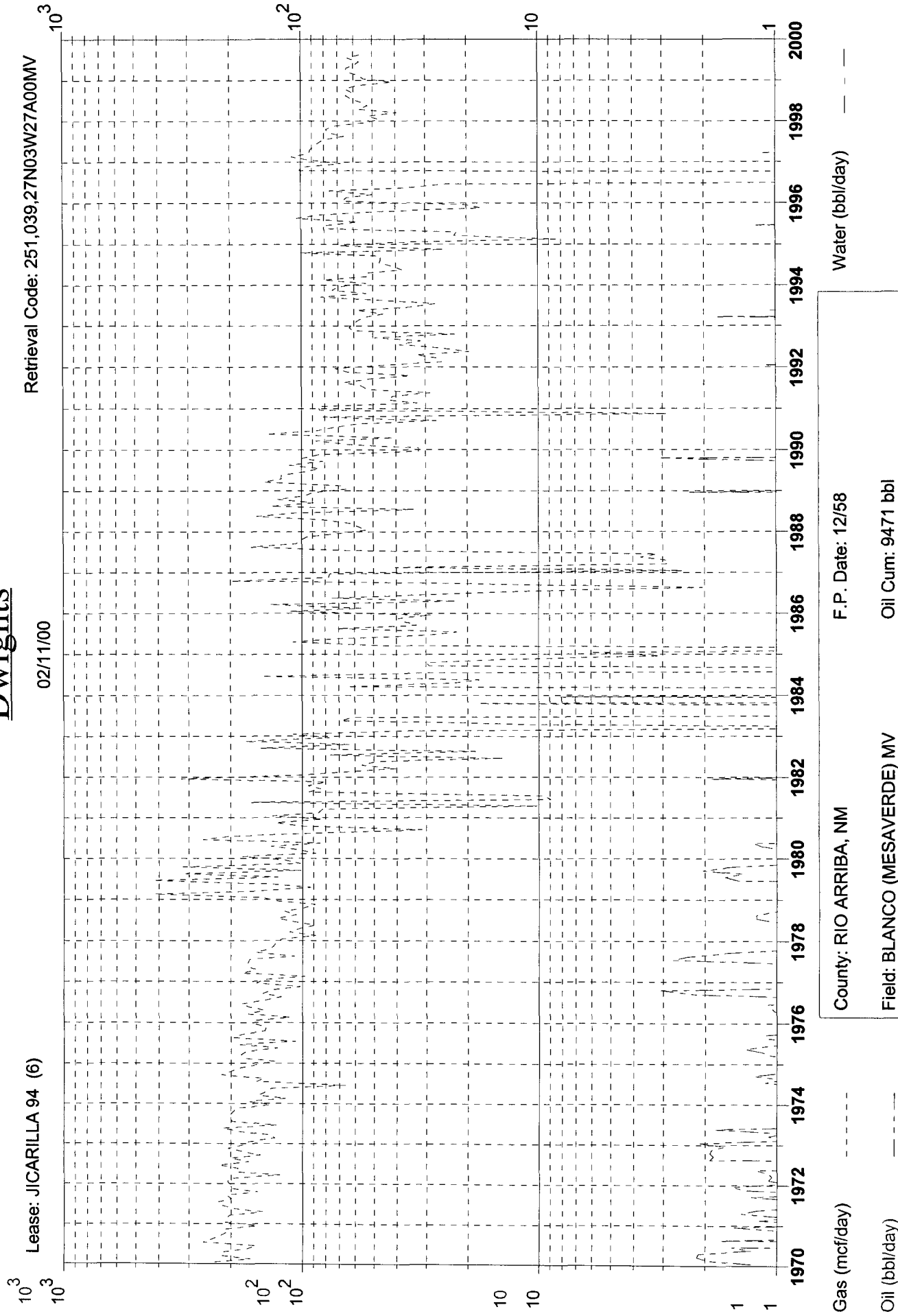
Location: 27A 27N 3W

Dwights

Lease: JICARILLA 94 (6)

Retrieval Code: 251,039,27N03W27A00MV

02/11/00



Gas (mcf/day)

Oil (bbl/day)

Water (bbl/day)

County: RIO ARriba, NM

F.P. Date: 12/58

Field: BLANCO (MESAVERDE) MV

Oil Cum: 9471 bbl

Reservoir: MESAVERDE

Gas Cum: 2000 mmcf

Operator: ENERGEN RESOURCES

Location: 27A 27N 3W

Energen Resources Corp.

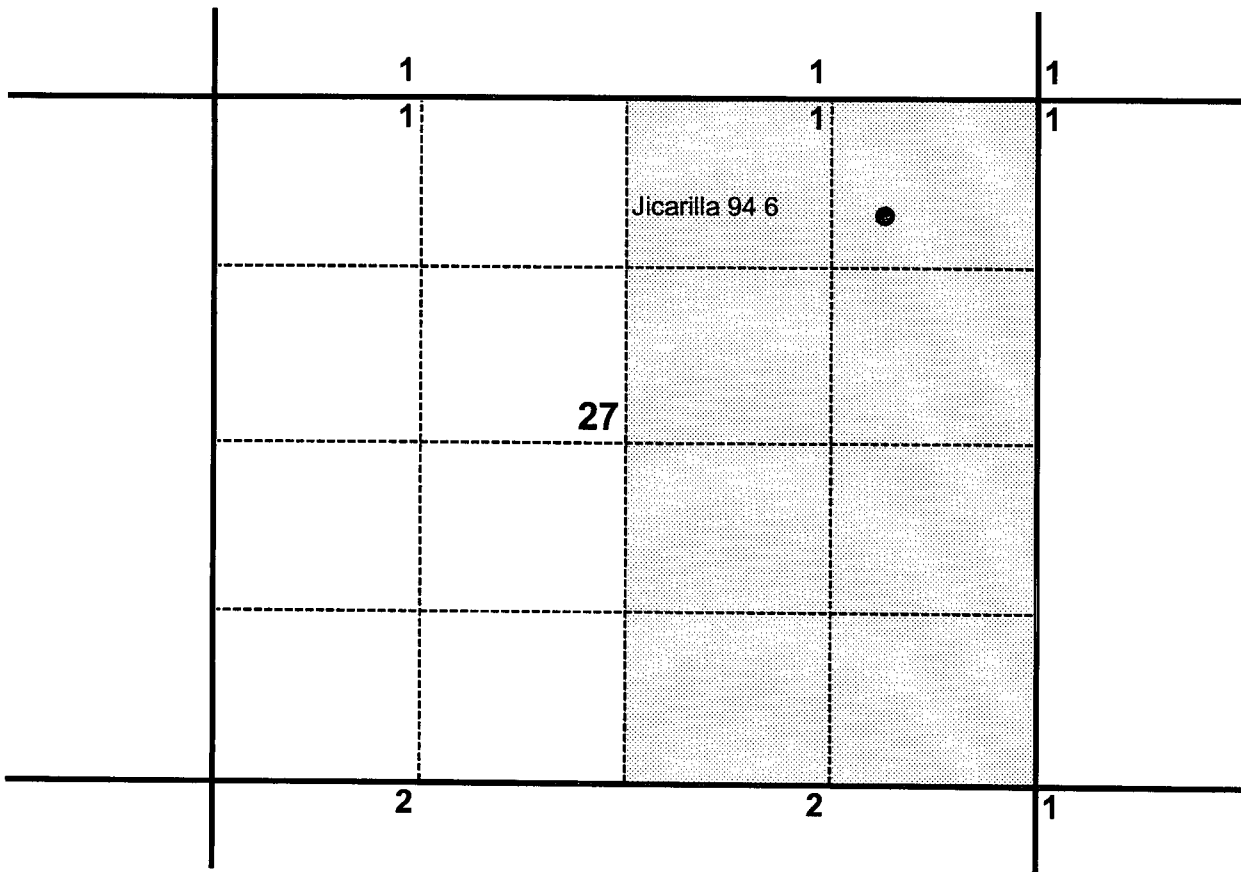
Jicarilla 94 #6

Offset Operator / Ownership Plat

Gavilan Pictured Cliffs/ Blanco Mesa Verde

Downhole Commingling

Township 27 N, Range 3 W



- 1) Energen Resources
- 2) Williams Production Co.
P.O. Box 3102
Tulsa, OK. 74101

1
Kpc
Kmv } PA.'96

16

1A
Kpc
Kmv

1
Kpc
Kmv

15

3A
Kpc
Kmv

3
Kpc-S
Kmv

2A
Kpc
Kmv

5
Kpc-S
Kmv

14

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3
Kpc
Kmv

21

1
Jm ∅ D.A.

3A
Kpc
Kmv } N.P.

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22

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KF ∅ D.A.'80
Kpc N.P. PA.'80

28

2A
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Kmv



6
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Kmv

27

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Kmv

4A
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Kmv

8
Kpc-S
Kmv

26

4
Kpc
Kmv

10
S

8A
11
Kgl
Kd-Abd.'95

3
Kmv ∅ D.A.'62

33

1
Kpc ∅ D.A.'56
Kmv ∅ D.A.

12
Kpc
Kmv

34

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5
Kpc
Kmv

4
Kpc
Kmv

3A
Kpc
Kmv

35

1
Kpc
Kmv - S

Energien Resources

Jicarilla 94 6

Unit A, Sec. 27, T 27 N, R 3 W

Rio Arriba Co., N.M.

Well Location Plat

R-3-W