

4/14/00	5/4/00	DC	NV	DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

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]

2732

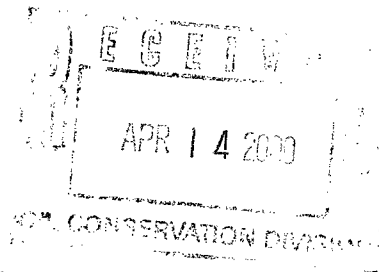
[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

- [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

4/13/00

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 99 17 C Sec. 23 T26N R3W Rio Arriba County, NM
Lease Well No. Unit Ltr. - Sec - Twp - Rge County
OGRID NO. 162928 Property Code 21941 API NO. 30-039-26263 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 MV 72319		NE Ojito GL-DK 48025
2. Top and Bottom of Pay Section (Perforations)	5440-6050		6916-7635
3. Type of production (Oil or Gas)	gas		oil
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) not completed b. (Original) 1800 est.	a. b.	a. 1378 meas. b. 2388 meas. *
6. Oil Gravity (^o API) or Gas BTU Content)	1248 BTU est.		47 degrees API
7. Producing or Shut-In?	not completed		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: not completed Rates:	Date: Rates:	Date: 3/29/00 Rates: 2/54/1
8. Fixed Percentage Allocation Formula - % for each zone	Oil: see % Gas: attached %	Oil: % Gas: %	Oil: % Gas: %

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.

* Johnston Shear 1A SE/4, Sec. 3, T26N, R3W, N.M.P.M.

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

SIGNATURE [Signature] TITLE Prod. Superintendent DATE 3/13/00

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



April 13, 2000

Ms. Lori Wrotenbery
NMOCD
2040 South Pacheco
Santa Fe, New Mexico 87505

RE: Administrative Approval to Downhole Commingle
Energen Resources Corporation
Jicarilla 99 #17
935' FNL, 1770' FWL, Sec. 23, T26N, R3W, N.M.P.M.
Rio Arriba County, New Mexico
API # 30-039-26263

Dear Ms. Wrotenbery:

Energen Resources Corporation requests Administrative Approval to add the Blanco Mesaverde and downhole commingle it with the NE Ojito Gallup-Dakota Pool in the subject well.

This well was drilled at the request of the Bureau of Land Management to protect drainage from offset leases in the Gallup-Dakota Pool. Open Hole Log results showed marginal development in the Gallup-Dakota and production results confirmed the log analysis. The Mesaverde Zone appears productive on the log and has similar characteristics to our direct offset wells. It is felt that completing the Mesaverde in this wellbore would improve the economic life of the well by utilizing the Mesaverde flowstream to lift the Gallup-Dakota fluids and prevent premature abandonment of the Gallup-Dakota pool.

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 type curves for both the Mesaverde and Gallup-Dakota
4. Offset operator plat
5. Well location plat
6. Proposed allocation method

In accordance with 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
Jic117E 3A 5-99.doc

District I
PO Box 1990, Hobbs, NM 88241-1990

District II
PO Drawer CD, Artesia, NM 88211-0719

District III
1030 Rio Chazos Rd., Artesia, 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 O-102
Revised February 21, 1990
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 30-039-26263	*Pool Code 72319/45025	*Pool Name Blanco MV/Cerro Gallup Dakota, Northeast
*Property Code	*Property Name JICARILLA 99	*Well Number 17
*OGFID No 162928	*Operator Name ENERGEN RESOURCES CORPORATION	*Elevation 7272

10 Surface Location

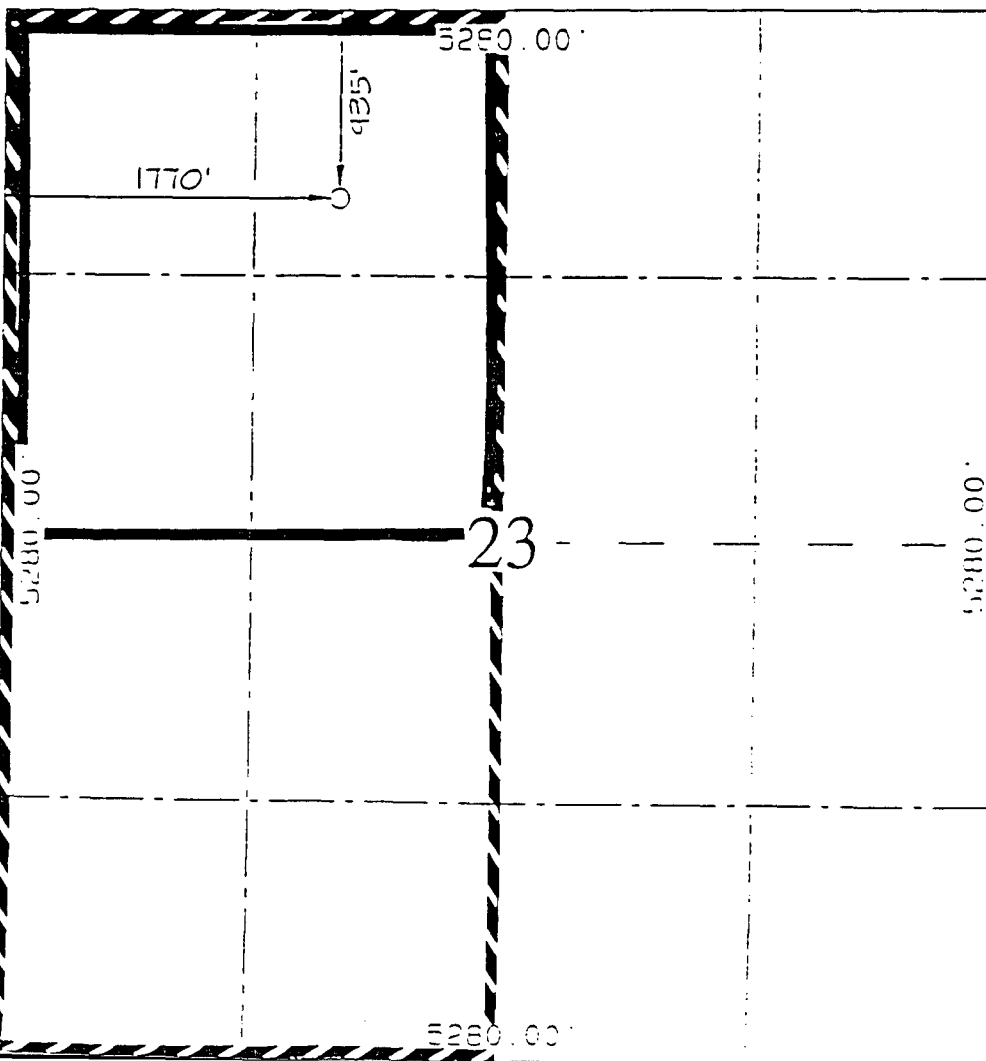
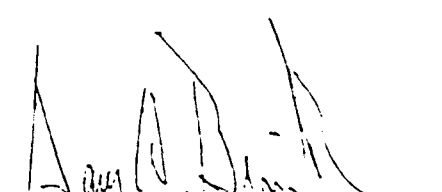
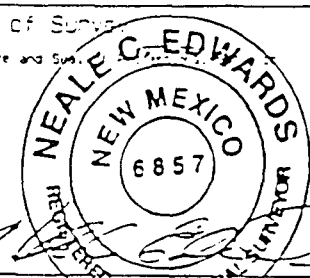
UL or Lot No C	Section 23	Township 26N	Range 3W	Lot 121	Feet from line 935	North/South line NORTH	Feet from line 1770	East/West line WEST	County RIO ARriba
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11 Bottom Hole Location If Different From Surface

UL or Lot No	Section	Township	Range	Lot 121	Feet from line	North/South line	Feet from line	East/West line	County
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*Dedicated Acres 320/160	*County or District	*Consolidation Code	*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

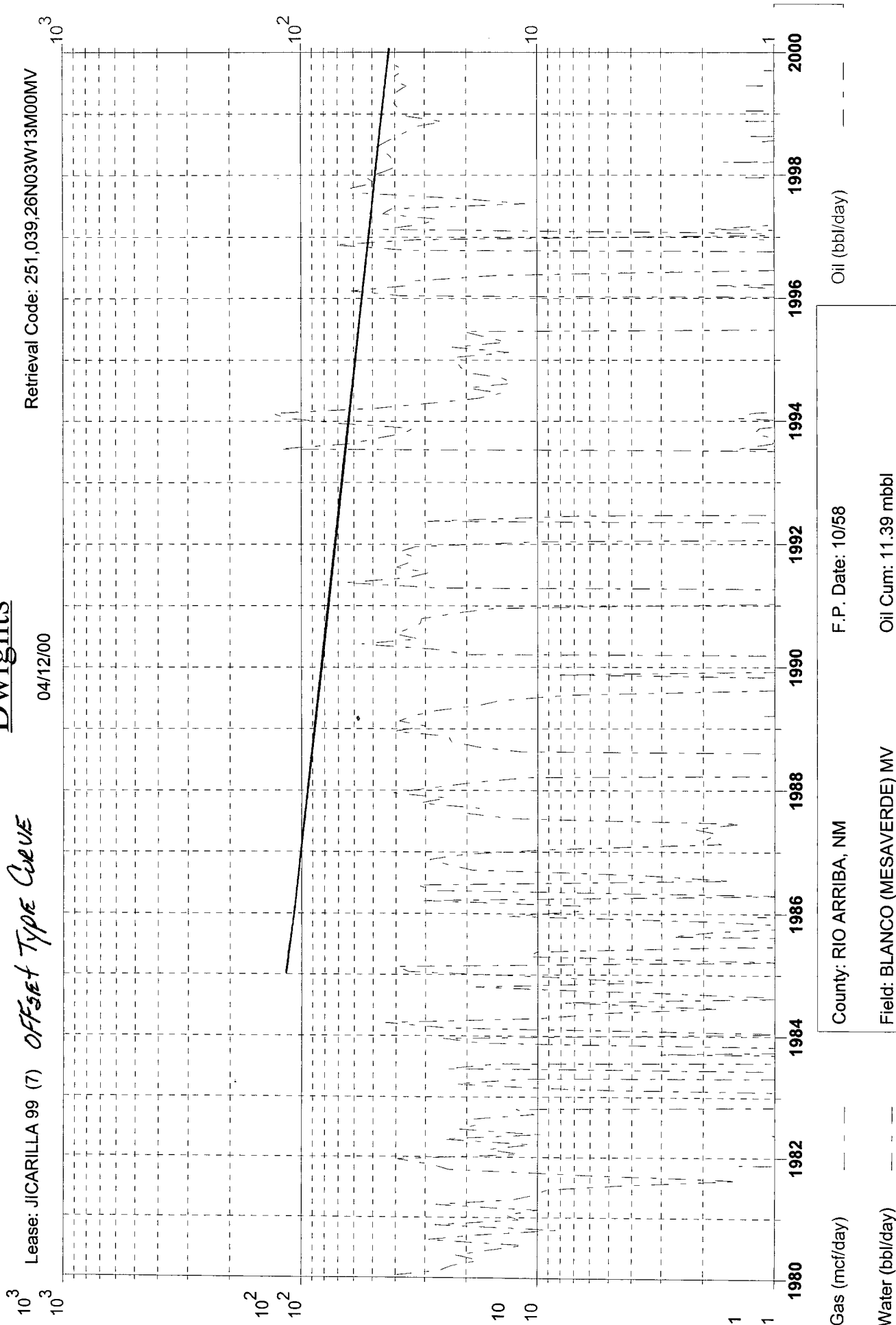
	<p>12 OPERATOR CERTIFICATION I hereby certify that the information contained on this plat is true and complete to the best of my knowledge and belief.</p> <p> Signature Gary Brink Printed Name Production Superintendent Title Date 9/27/99</p> <p>13 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes or actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>AUGUST 2, 1999 Date of Survey Signature and Seal  Certification 6857</p>
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Dwights

Lease: JICARILLA 99 (7) *OFFSET TYPE CURVE*

04/12/00

Retrieval Code: 251,039,26N03W13M00MV



County: RIO ARRIBA, NM	F.P. Date: 10/58
Field: BLANCO (MESAVERDE) MV	Oil Cum: 11.39 mbbl
Reservoir: MESAVERDE	Gas Cum: 669.2 mmcf
Operator: TAURUS EXPL USA INC	Location: 13M 26N 3W

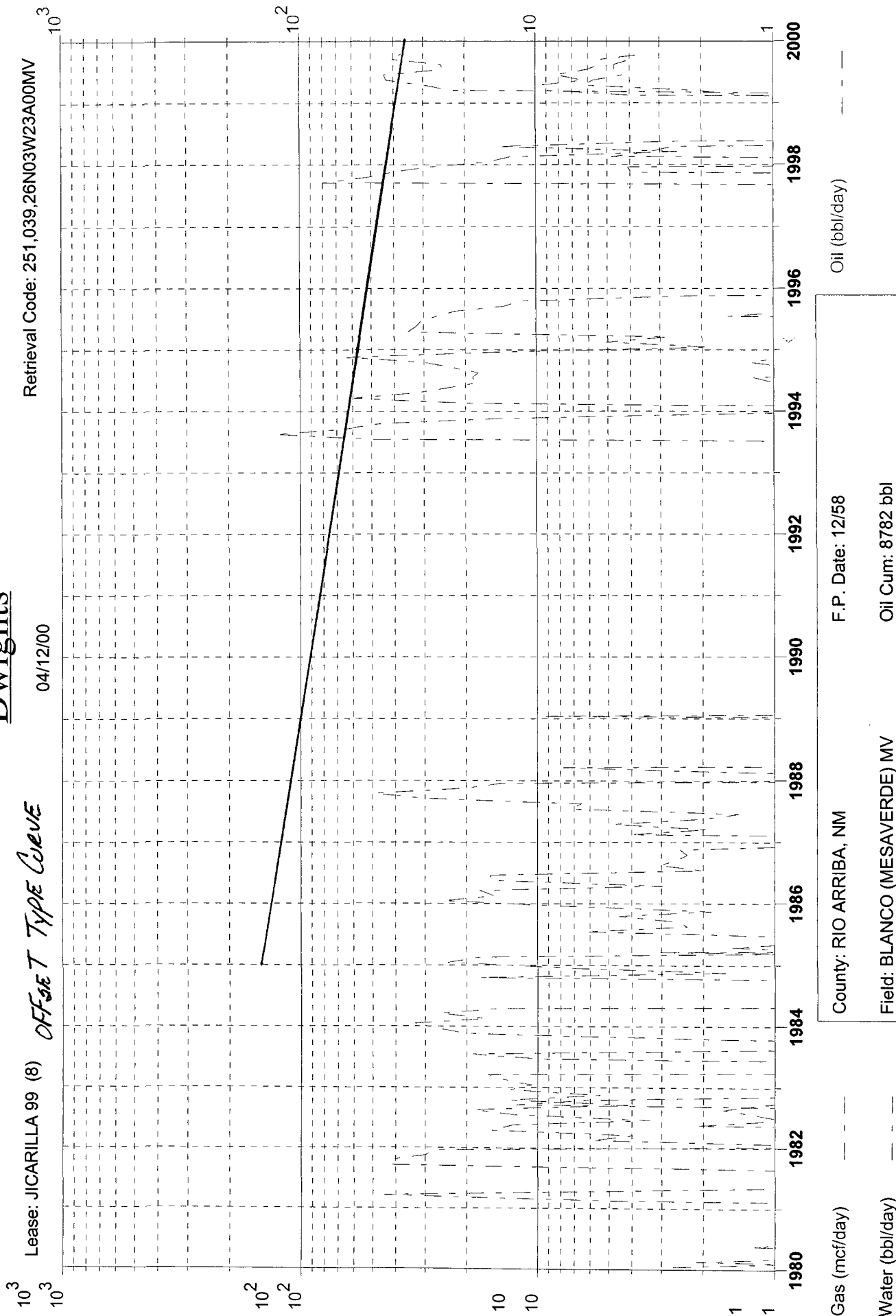
Dwights

Lease: JICARILLA 99 (8)

OFFSET TYPE CURVE

04/12/00

Retrieval Code: 251,039,26N03W23A00MV



Gas (mcf/day)

Water (bbl/day)

Oil (bbl/day)

F.P. Date: 12/58

Oil Cum: 8782 bbl

Gas Cum: 286.7 mmcf

Location: 23A 26N 3W

County: RIO ARRIBA, NM

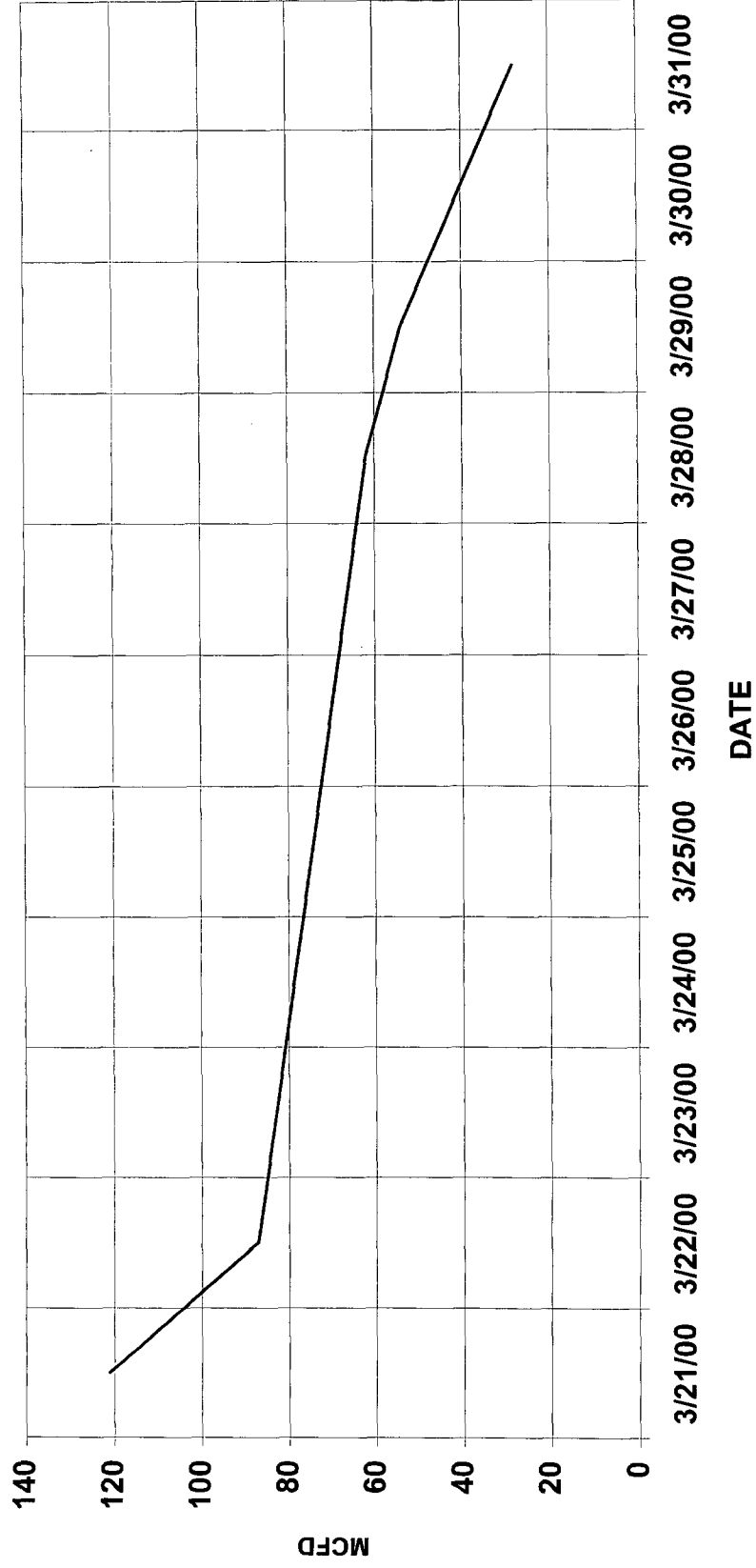
Field: BLANCO (MESAVERDE) MV

Reservoir: MESAVERDE

Operator: TAURUS EXPL USA INC

JICARILLA 99 17

DAILY GAS PRODUCTION PLOT



---- MESAVERDE ---- TOTAL

3

Energen Resources Corp.

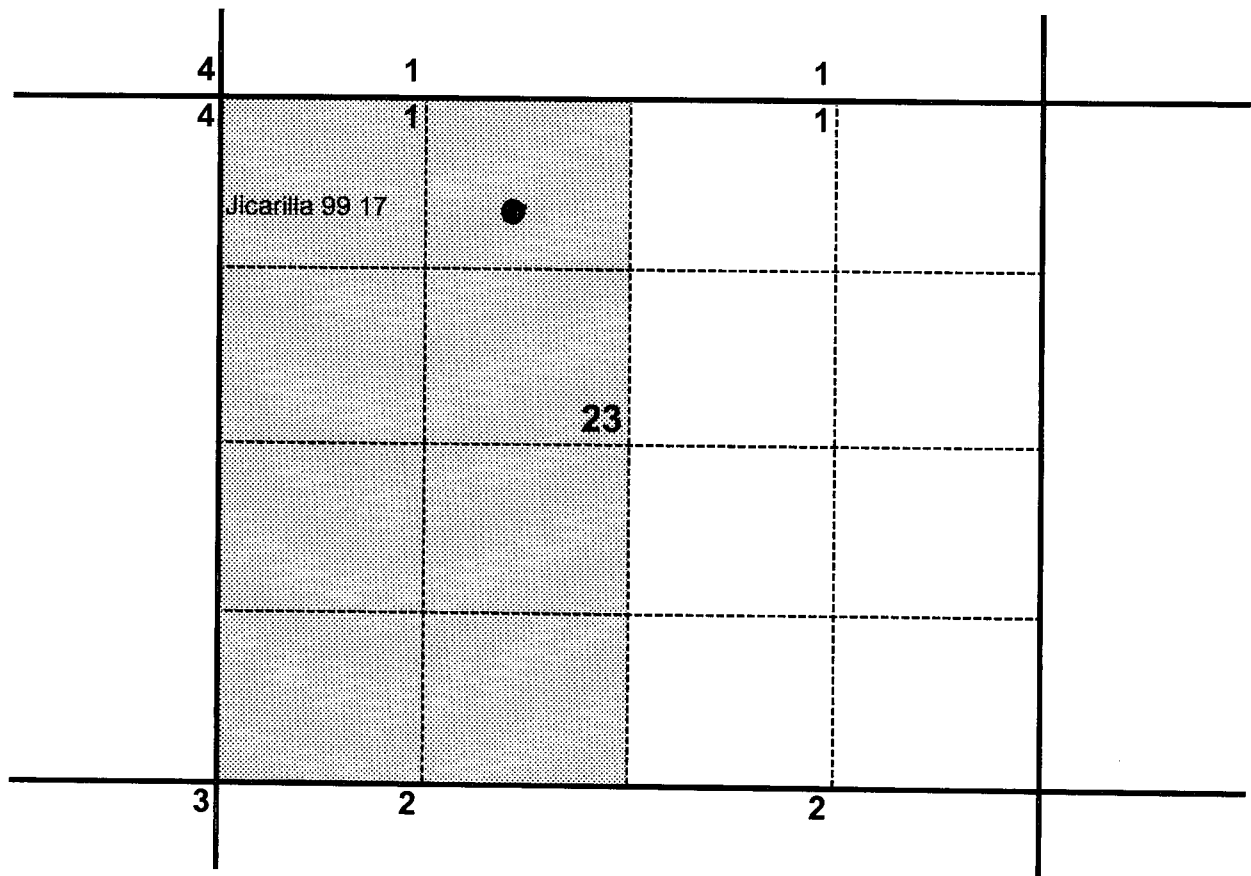
Jicarilla 99 17

Offset Operator / Ownership Plat

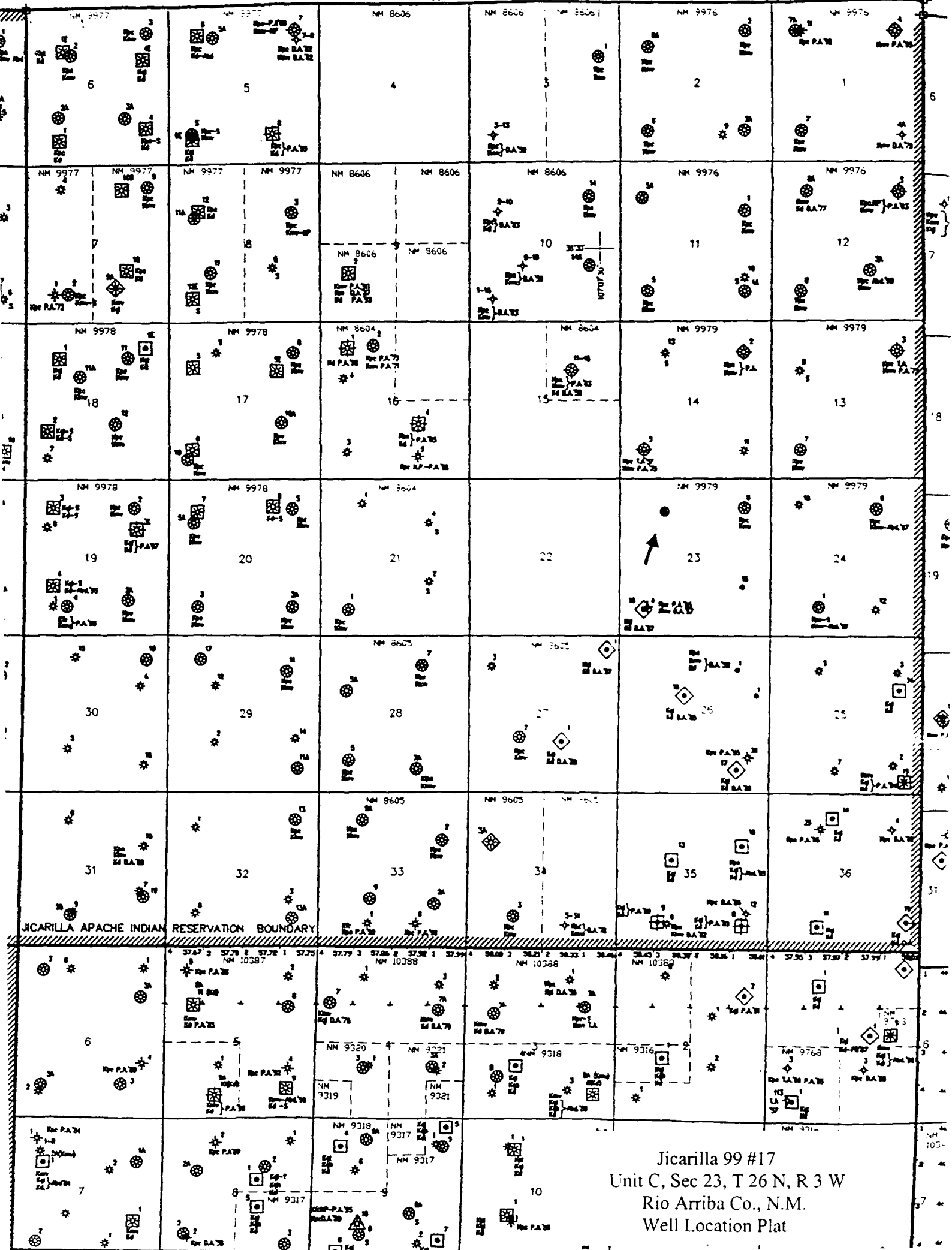
Blanco Mesa Verde/ NE Ojito Gallup -Dakota

Downhole Commingling

Township 26 N, Range 3 W



- 1) Energen Resources
- 2) Apache Corp.
2000 Post Oak Blvd, Suite 100
Houston, Tx. 77056
- 3) Rio Chama
P.O. Box 3027
Pagosa Springs, Co. 81147
- 4) Unkown



Jicarilla 99 #17
 Unit C, Sec 23, T 26 N, R 3 W
 Rio Arriba Co., N.M.
 Well Location Plat

Jicarilla 99 #17

Proposed Allocation Method

Produce total well stream for 30 days following Mesa Verde pay add
Pay add projected to add 120 MCFD from Mesa Verde

Total Stream = X

Gallup/Dakota flow rate = 54 MCFD

GL/DK Allocation = $54 / X$ as a percentage

MV allocation = $(X - 54) / X$ as a percentage

MV Oil Allocation = Total stream - 2 BOPD to Gallup/Dakota as a percentage of total Production

Rates will be reported to NMOCD- Aztec for final allocation percentage determination