

4/14/00 5/4/00 DC NV DHC

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

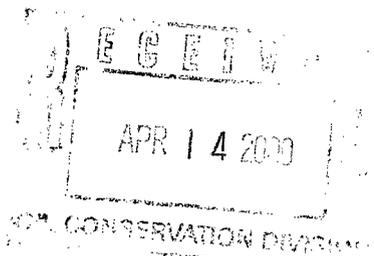
[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

- [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: Statements must be completed by an individual with supervisory capacity

GARY BRINK  
Print or Type Name

[Signature]  
Signature

Production Supv.  
Title

4/13/00  
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, 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	a.	a. 1378 meas.
	b. (Original) 1800 est.	b.	b. 2388 meas. *
6. Oil Gravity ( <sup>o</sup> 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 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  
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 Brazos 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 FLAT

*API Number 30-039-26263		*Pool Code 72319/48025		*Pool Name Blanco MV/Ojito Gallup Dakota, Northeast	
*Property Code		*Property Name JICARILLA 99		*Well Number 17	
*OGRID No 162928		*Operator Name ENERGEN RESOURCES CORPORATION		*Elevation 7272	

10 Surface Location

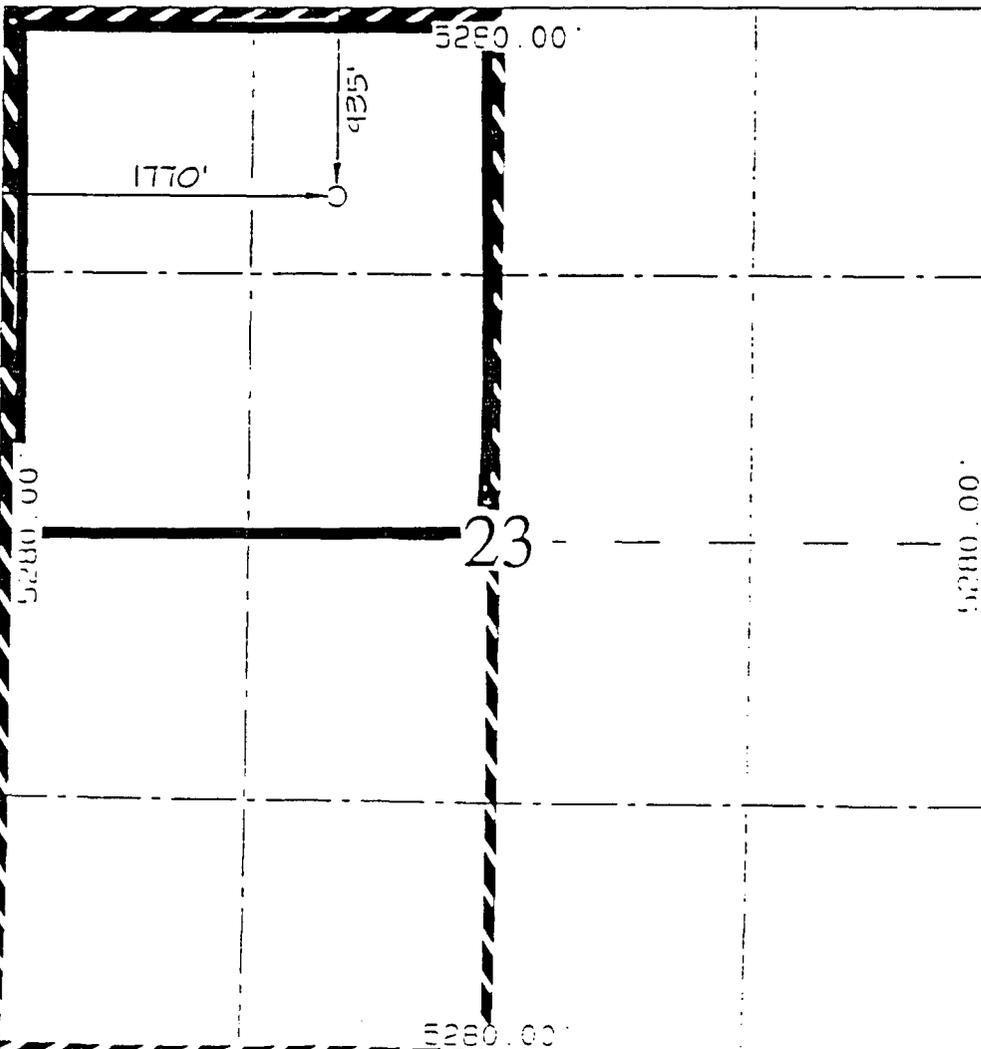
U. of 1st 10	Section	Township	Range	Lot 10	Feet from line	North-South line	Feet from line	East-West line	County
C	23	26N	3W		935	NORTH	1770	WEST	BLAQUI

11 Bottom Hole Location if Different From Surface

U. of 1st 10	Section	Township	Range	Lot 10	Feet from line	North-South line	Feet from line	East-West line	County

*Dedicated acres 320/160	*Units of 1000	*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



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.

*[Signature]*  
 Signature  
 Gary Brink  
 Printed Name  
 Production Superintendent  
 Title  
 Date 8/27/99

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.

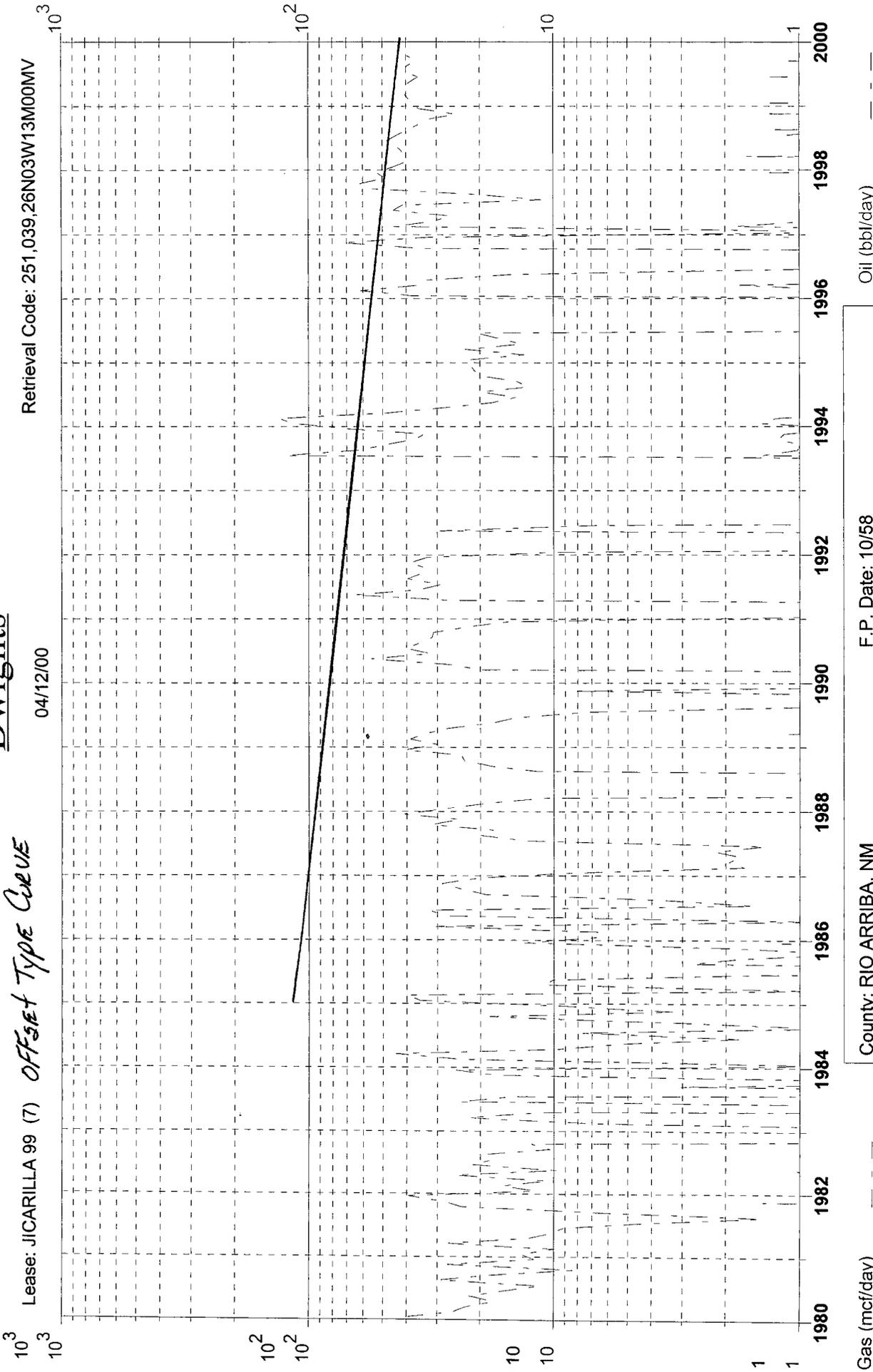
AUGUST 2, 1999  
 Date of Survey  
 Signature and Seal  
  
 Certified Professional Surveyor

# Dwights

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

04/12/00

Retrieval Code: 251,039,26N03W13M00MV



Gas (mcf/day) ---

Water (bbl/day) ---

Oil (bbl/day) ---

County: RIO ARRIBA, NM

F.P. Date: 10/58

Field: BLANCO (MESAVERDE) MV

Oil Cum: 11.39 mbbbl

Reservoir: MESAVERDE

Gas Cum: 669.2 mmcf

Operator: TAURUS EXPL USA INC

Location: 13M 26N 3W

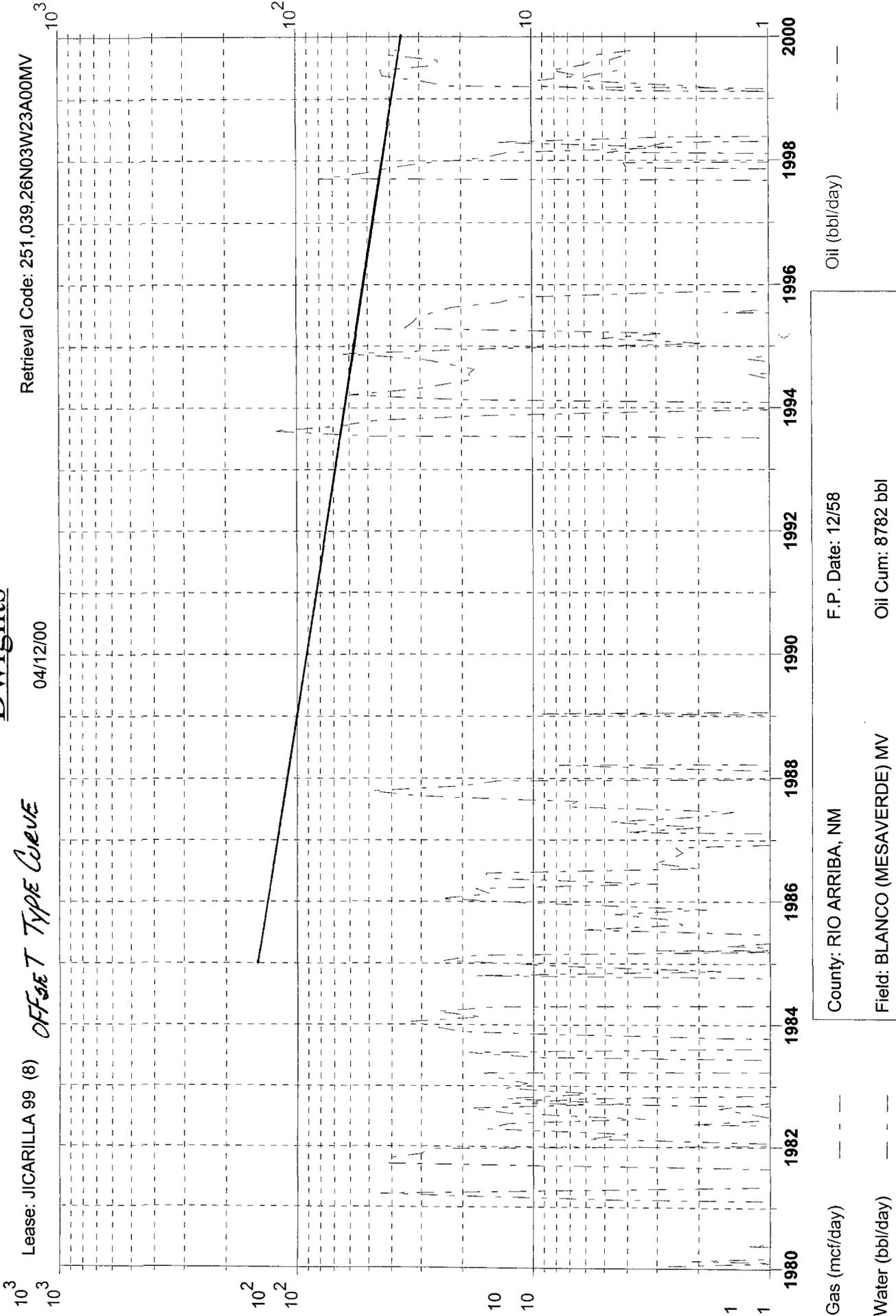
# Dwights

Lease: JICARILLA 99 (8)

*OFFSET TYPE CURVE*

04/12/00

Retrieval Code: 251,039,26N03W23A00MV



Gas (mcf/day) - - - -

Water (bbl/day) - . - .

Oil (bbl/day) - - - -

County: RIO ARRIBA, NM

F.P. Date: 12/58

Field: BLANCO (MESAVERDE) MV

Oil Cum: 8782 bbl

Reservoir: MESAVERDE

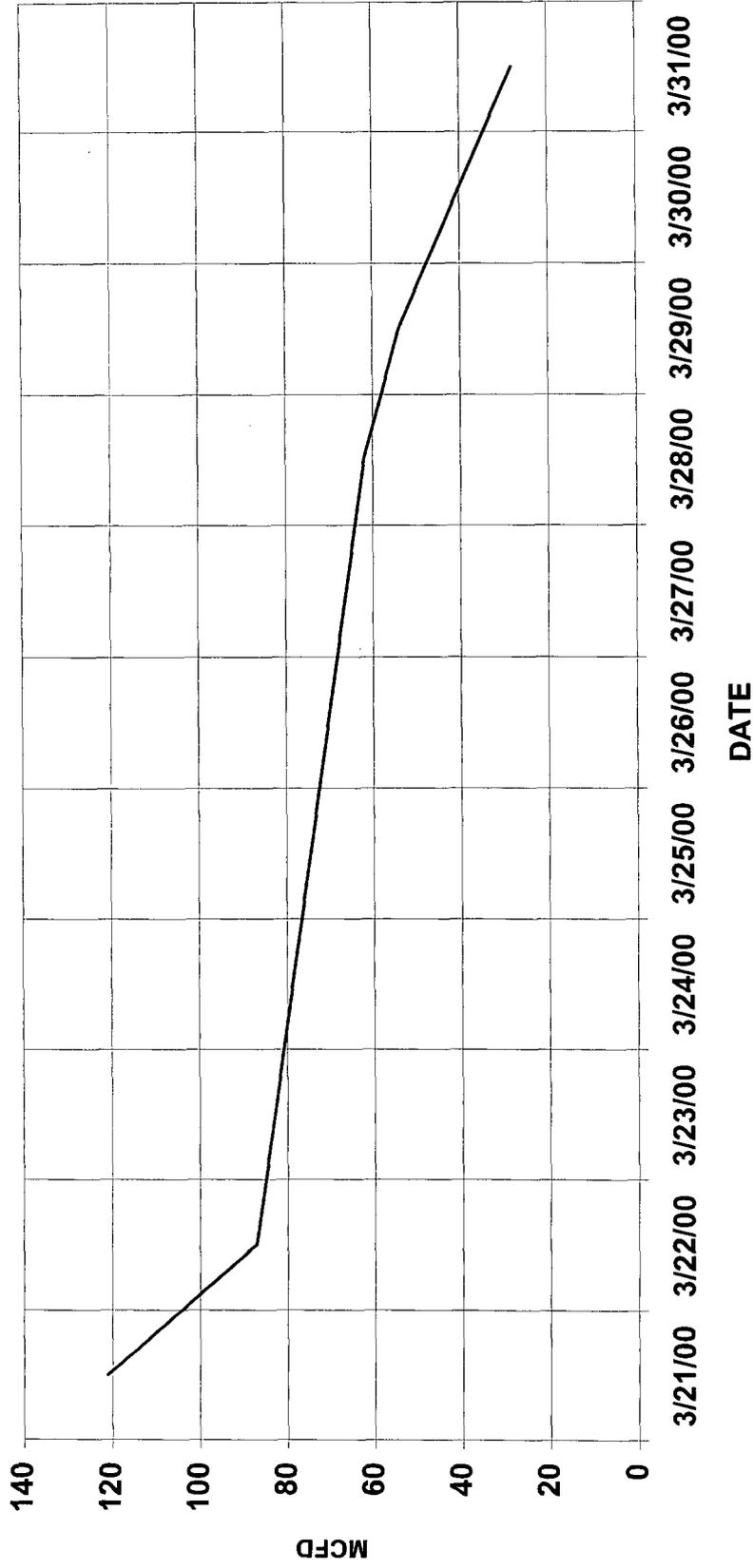
Gas Cum: 286.7 mmcf

Operator: TAURUS EXPL USA INC

Location: 23A 26N 3W

# JICARILLA 99 17

## DAILY GAS PRODUCTION PLOT



---- MESAVERDE ---- TOTAL

3  
Kmv D.A.'62

12  
Kpc  
Kmv

1995

Kpc  
Kmv

2014  
Kpc  
Kmv  
Kpc-Km (1998)  
Kpc Abd.'98

Kpc (1999)  
Kpc Abd.'99

MV

2005

95-1B  
Kmv 80

1890

36

95-6  
Kpc  
Kmv  
Lewis (1998)

6A  
Kpc  
Kmv

30

INITIAL  
BHP

115E-13R 1965

EST 2050  
3-13  
Kpc  
Kmv  
D.A.'58

JS-1A  
Lewis  
Kmv  
Kgl

2082

6A  
Kpc  
Kmv

2008

Kpc  
Kmv

2012

96-7  
Kpc  
Kmv  
Lewis (1999)

1862

Kmv P.A.'95

7A 11  
Kpc P.A.'56

2-10  
Kpc  
Kmv  
D.A.'83

2030

14  
Kpc  
Kmv

9-10  
Kpc  
Kmv  
D.A.'59

115E-14A

Lewis (2000)

96-5A  
Kpc (2000)

2027

1  
Kpc  
Kmv

8A  
Kmv  
Kd D.A.'77

3  
Kpc  
Kmv  
P.A.'83

1-10  
Kpc  
Kmv  
D.A.'63

5  
Kpc  
Kmv

1909

10  
S  
Kpc  
Kmv

8  
Kpc  
Kmv

3A  
Kpc  
Kmv  
Abd.'98

1  
Kpc  
Kmv  
Kgl  
D.A.'58

2  
Kmv P.A.'79

CF-B2  
Kmv Abd.'00  
Lewis (2000)

2026

2  
P.A.'73  
w P.A.'71

11-15  
Kpc  
Kmv  
P.A.'83  
Kd D.A.'58

2006

2  
Kpc  
Kmv  
P.A.

1847 (2000)  
99-7A  
Lewis  
Kmv

3  
Kpc  
Kmv  
P.A.'77

4  
Kpc  
Kmv  
P.A.'85

5  
Kpc  
Kmv  
P.A.'98

5  
Kpc  
Kmv  
T.A.'57  
Kmv P.A.'75

11

7  
Kpc  
Kmv

1868

4  
S

2  
S

EST 1800  
99-17  
Lewis  
Kmv  
Kgl

8  
Kpc  
Kmv

10

6  
Kpc  
Kmv  
Abd.'97

1  
Kpc  
Kmv

1A  
Kpc  
Kmv

2  
Kpc  
Kmv  
D.A.'82

16  
Kgl  
Kd D.A.'87

15

1867

1  
Kpc  
Kmv  
Abd.'97

12

1  
Kpc  
Kmv

2  
Kpc  
D.I.

7  
Kpc  
Kmv

3  
S

Kgl  
Kd D.A.'87

Kpc  
Kmv  
Kd } D.A.'58

5

3

2145

1  
Kmv P.A.'97

3  
Kpc  
P.A.'97

1  
Kpc  
P.

117E-7A  
Kpc  
Kmv

1404  
2  
Kpc  
Kmv

1  
Kgl  
Kd D.A.'88

16  
Kgl  
Kd D.A.'85

1

Kpc P.A.'95  
Kgl  
Kd D.A.'86

7

2

1

1

Kpc  
P.

1982  
2  
Kpc  
Kmv

117E-3A

10

14  
Kpc  
Kmv

2

21

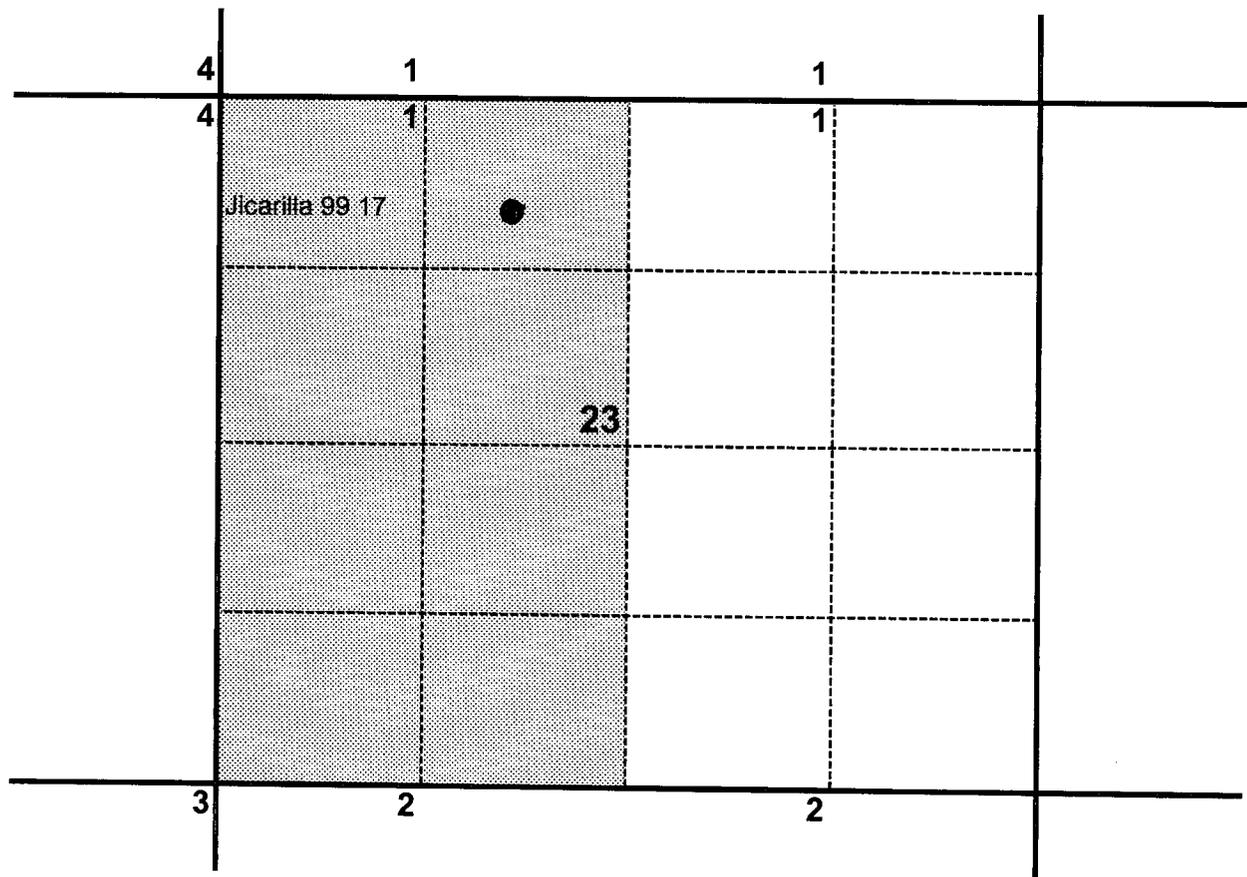
# Energen Resources Corp.

Jicarilla 99 17

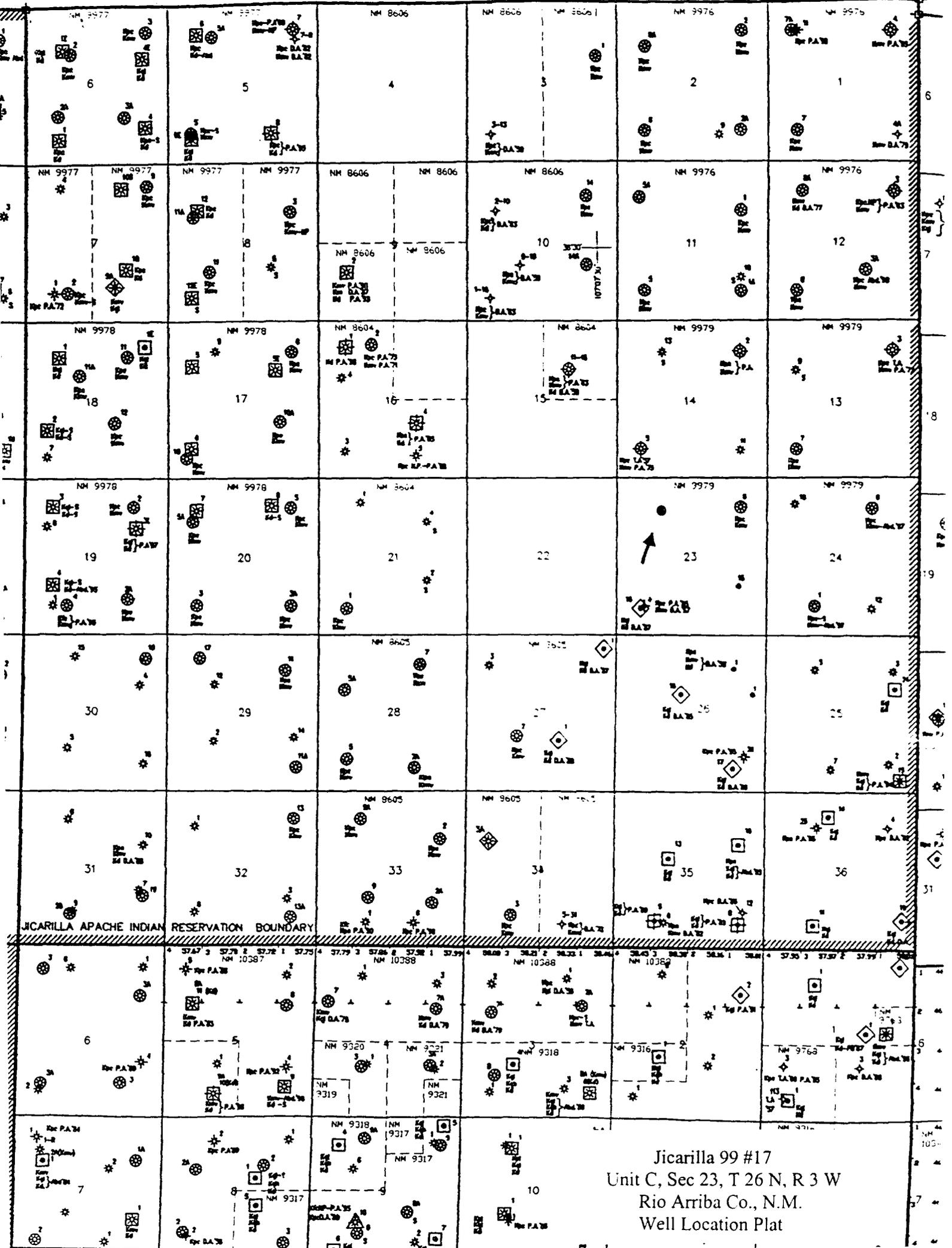
Offset Operator / Ownership Plat

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