

5/25/99	6/16/99	DC	KW	DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION  
- Engineering Bureau -

2360

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

MAY 25 1999

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, 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: Statement must be completed by the individual with supervisory capacity.

GARY BRINK

*[Signature]*  
Signature

Prod. Supt.  
Title

5/29/99  
Date

Print or Type Name



May 21, 1999

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

RE: Administrative Approval to Downhole Commingle  
Energen Resources Corporation  
Jicarilla 117E #3A  
1700' FNL, 800' FWL, Sec. 34, T26N, R3W, N.M.P.M.  
Rio Arriba County, New Mexico  
API # 30-039-25964

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 recently drilled direct offset well; the Jicarilla 117E #7A. 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.

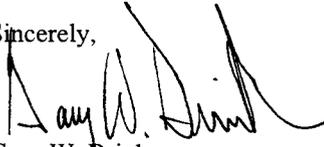
To comply with New Mexico Oil Conservation Rules, Energen Resources Corporation, is submitting the following data for your approval of the proposed commingling:

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

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 875054-6429

Form C-107-A  
New 3-12-96

APPROVAL PROCESS:

Administrative  Hearing

EXISTING WELLBORE

YES  NO

**APPLICATION FOR DOWNHOLE COMMINGLING**

<b>ENERGEN RESOURCES CORPORATION</b> Operator	<b>2198 Bloomfield Highway, Farmington, NM 87401</b> Address					
<b>Jicarilla 117E</b> Lease	<b>3A</b> Well No.	<b>0</b> Unit Ltr. - Sec	<b>34</b> Twp - Rge	<b>26N</b> 3W	<b>Rio Arriba</b> County	
OGRID NO. <b>162928</b>		Property Code <b>21928</b>		API NO. <b>30-039-25964</b>		Spacing Unit Lease Types: (check 1 or more) Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> (and/or) Fee <input type="checkbox"/>

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)	6210 - 6336'		7345 - 8109'
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: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a. (Current) Not Completed	a.	a. 770 Calc.
	b. (Original) 1008 Est. * Jicarilla 117E #7A	b.	b. 1146 Calc.
6. Oil Gravity ( <sup>o</sup> API) or Gas BTU Content)	1230 BTU Est.		47 Degrees API
7. Producing or Shut-In?	Not Completed		Producing
Production Marginal? (yes or no)	No		
* 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  * If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: Rates:	Date: Rates:	Date: Rates:
	Date: Rates: Not Completed	Date: Rates:	Date: 4/1/99 Rates: 2/11/0
8. Fixed Percentage Allocation Formula - % for each zone	Oil: See % Gas: Attached %	Oil: % Gas: %	Oil: See % Gas: Attached %

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)

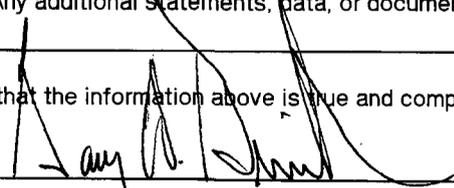
14. If this well in on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application.  Yes  No

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  TITLE Prod. Superintendent DATE 5/24/97

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

District I  
 PO Box 1980, Hobbs, NM 88241-1980  
 District II  
 PO Drawer DD, Arcoma, NM 88211-0719  
 District III  
 1000 Rio Brazos Rd., Aztec, 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 C-102  
 Revised February 21, 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

API Number 30-039-25964		Pool Code 72319/48025	Pool Name Blanco MV/NE Ojito Gallup-Dakota
Property Code 21943	Property Name JICARILLA 117E		Well Number 3A
GRID No. 162928	Operator Name TAURUS EXPLORATION U.S.A., Inc.		Elevation 7475

<sup>10</sup> Surface Location

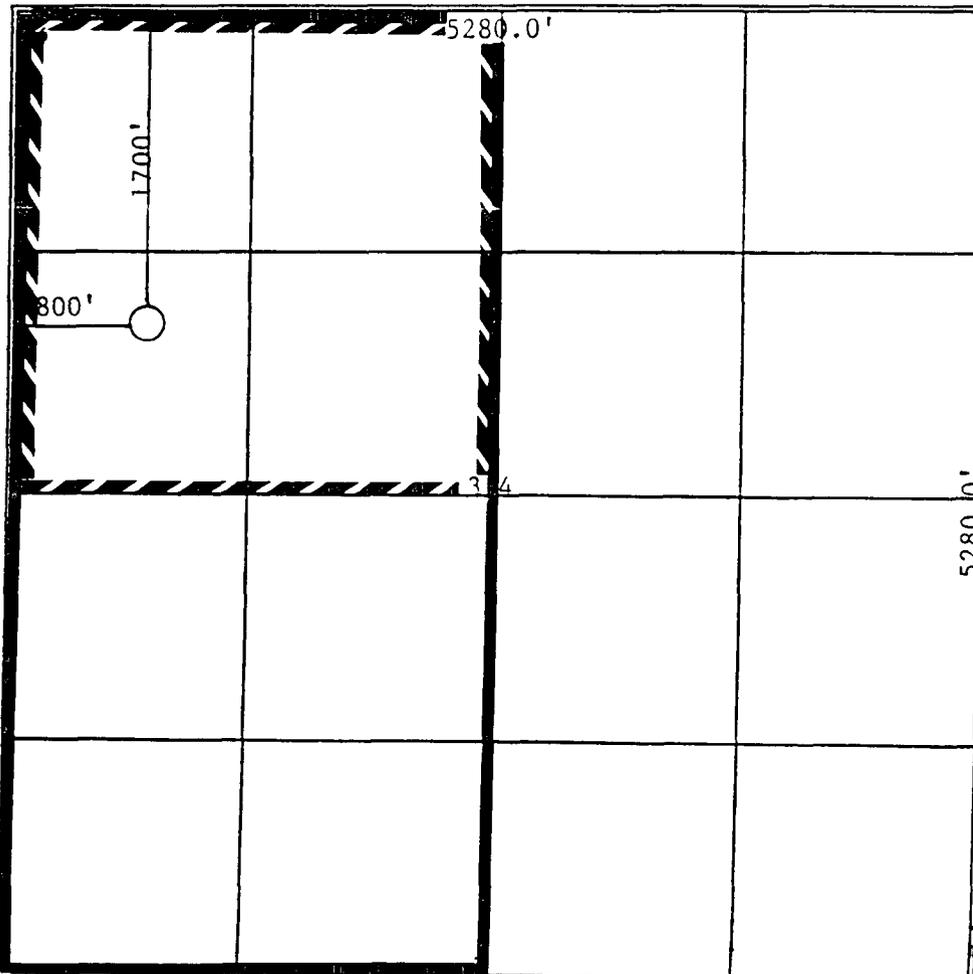
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	34	26N	3W		1700	NORTH	800	WEST	RIO ARRIBA

<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 320/160	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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



<sup>17</sup> OPERATOR CERTIFICATION

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

*[Handwritten Signature]*

Signature

Gary W. Brink  
 Printed Name

Production Superintendent  
 Title

7/13/98  
 Date

Date

<sup>18</sup> SURVEYOR CERTIFICATION

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.

6-10-98  
 Date of Survey

Date of Survey

Signature and Seal of Professional Surveyor:

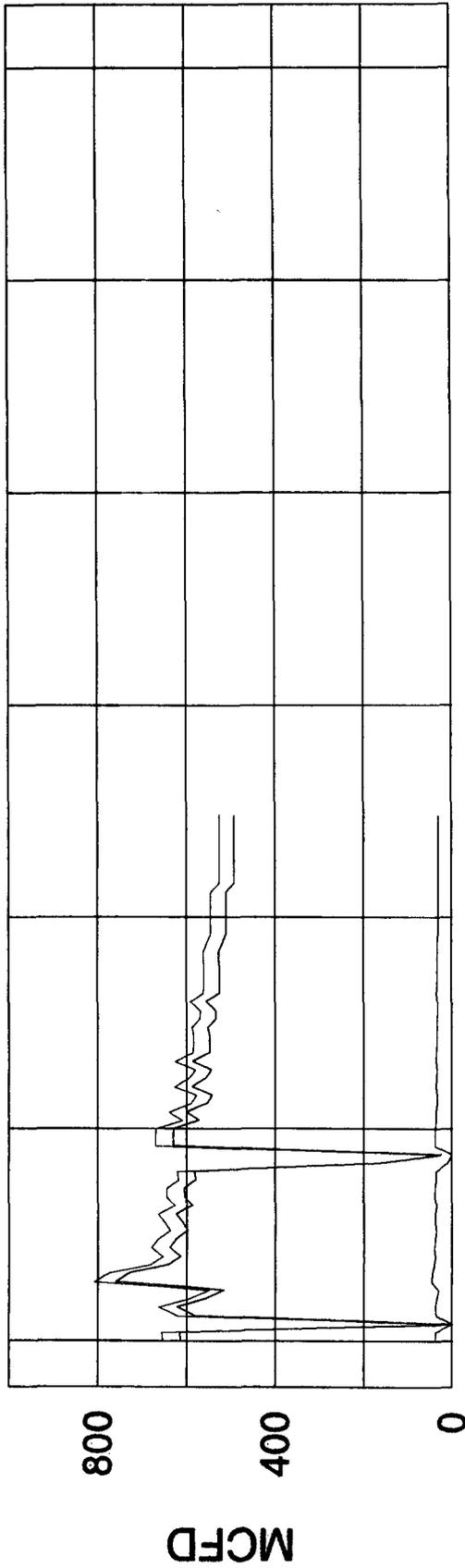
*[Handwritten Signature]*  
 Certificate Number

PROFESSIONAL SURVEYOR  
 NEW MEXICO  
 HENRY P. BROADHURST, JR.  
 11392

5280.0'

# JICARILLA 117 E 7A

## DAILY GAS PRODUCTION PLOT



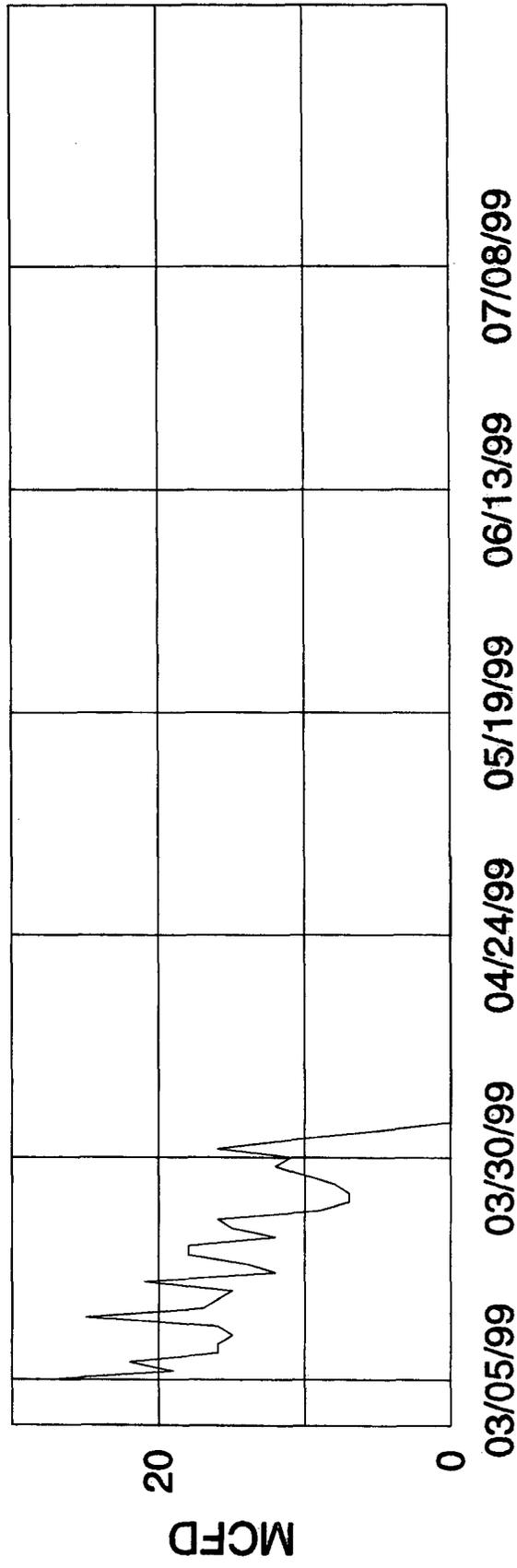
03/02/99 03/27/99 04/21/99 05/16/99 06/10/99 07/05/99 07/30/99

DATE

— MESASVERDE — PC — TOTAL

# JICARILLA 117 E 3A

## DAILY GAS PRODUCTION PLOT



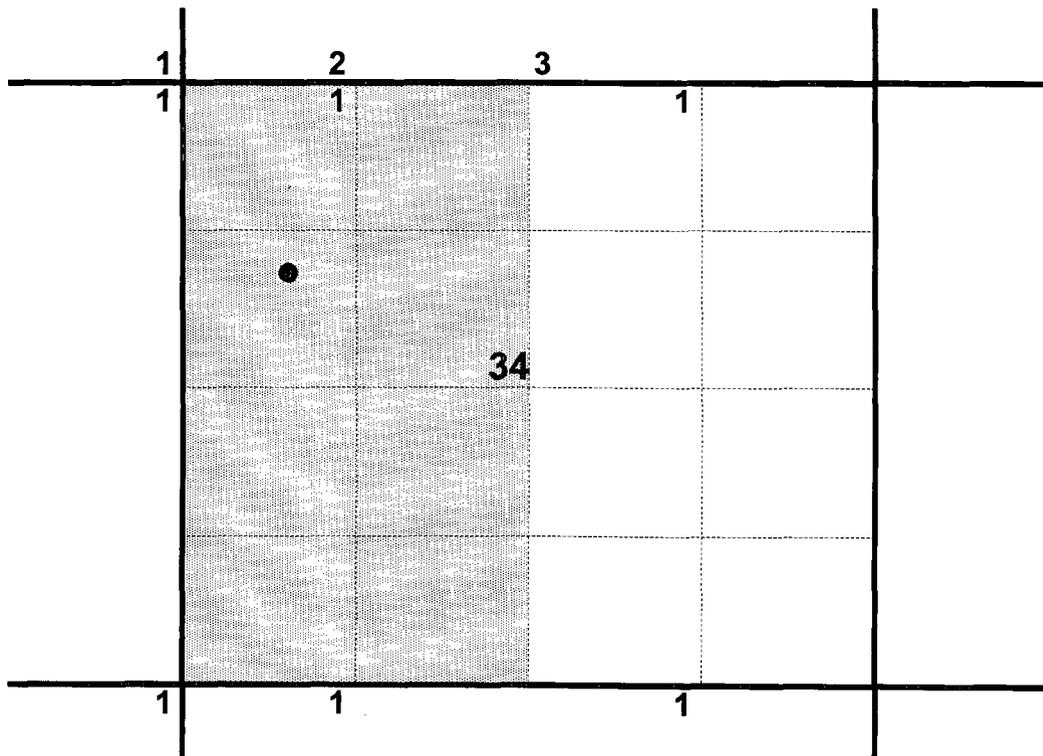
DATE

— GALLUP

# Energen Resources Corp.

Jicarilla 117E #3A  
Offset Operator / Ownership Plat  
Blanco Mesa Verde/ NE Ojito Gallup Dakota  
Downhole Commingling

Township 26 N, Range 3 W

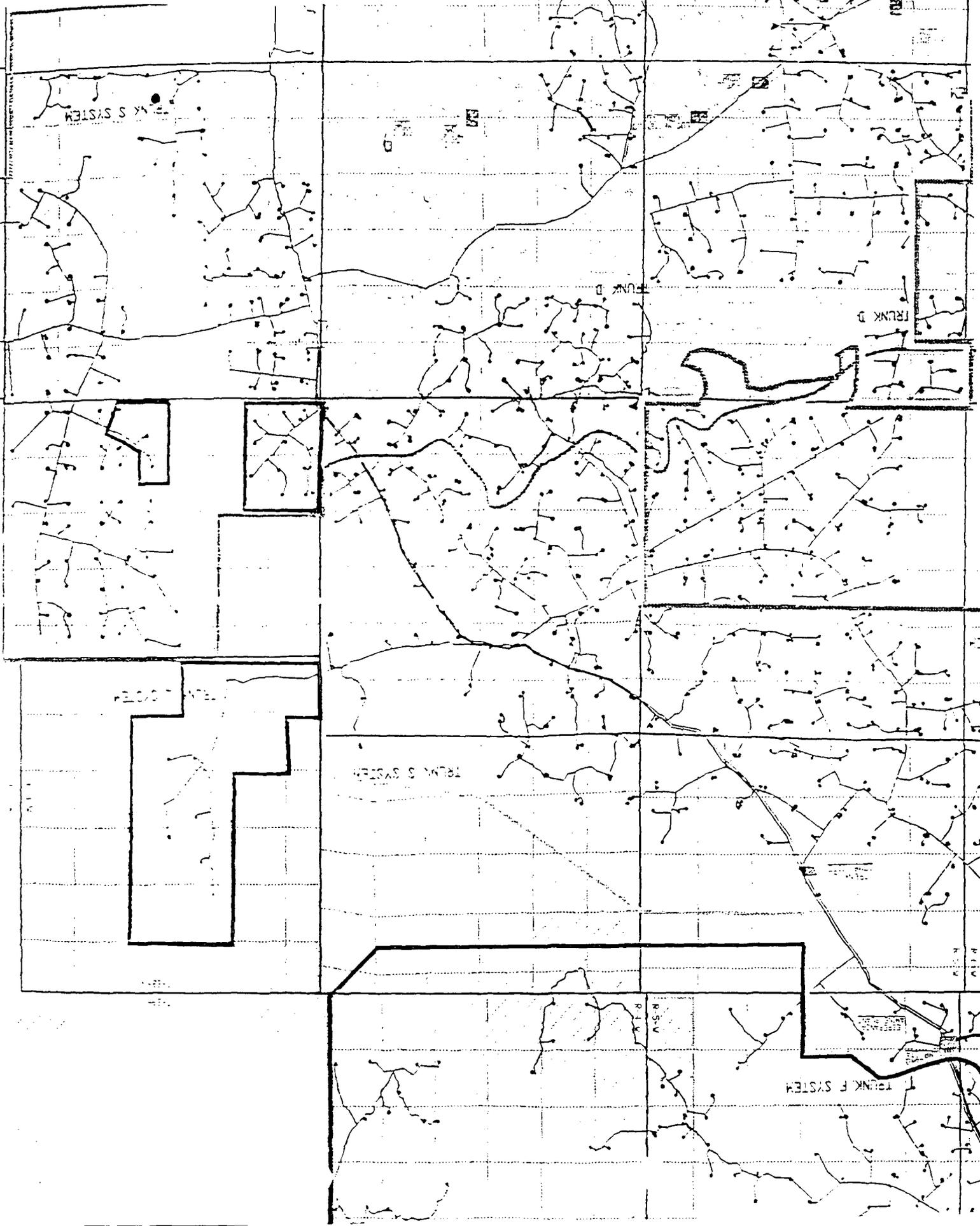


- 1) Energen Resources
- 2) Central Resources  
1775 Sherman St  
2600 Mellon Ctr.  
Denver, Colo. 80203
- 3) Dugan Production Corp.  
P.O. Box 420  
Farmington, N.M. 87401

TAURUS EXPLORATION U.S.A., INC.

Jicarilla 117 E #3A  
Pipeline & Well Map

APD Map #1A



## Jicarilla 117E #3A

Proposed Allocation Method

Produce total well stream for 30 days following Mesa Verde pay add  
Pay Add projected to add 400 MCFD to Mesa Verde flow stream

Total Stream = X

Gallup/Dakota Stabilized rate = 11 MCFD

GL/DK Allocation =  $11 / X$  as a percentage

MV Allocation =  $(X - 11) / X$  as a percentage

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

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



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

DHC-2360

OIL CONSERVATION DIVISION  
AZTEC DISTRICT OFFICE  
1000 RIO BRAZOS ROAD  
AZTEC NM 87410  
(505) 334-6178 FAX: (505) 334-6170  
<http://emnr.state.nm.us/ocd/District III/3district.htm>

GARY E. JOHNSON  
Governor

Jennifer A. Salisbury  
Cabinet Secretary

February 3, 2000

Mr. Gary Brink  
Energen Resources  
2198 Blmfld Hwy  
Farmington NM 87401

Re: Jicarilla-117E #3A, API# 30-039-25964, O-34-26N-03W, DHC

Dear Mr. Brink:

Your recommended allocation of commingled production for the referenced well is hereby accepted as follows:

	Gas	Oil
Mesaverde	91%	44%
Gallup-Dakota	9%	56%

Sincerely,

Frank T. Chavez  
District Supervisor

FTC/mk

cc: Jim Lovato, Farmington BLM  
Mark Ashley, NMOCD Santa Fe  
Well File