



November 19, 1999

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

RECEIVED  
DEC - 1 1999

RE: Administrative Approval to Downhole Commingle  
Energen Resources Corporation  
Zachry #18E  
960' FSL, 1455' FEL, Sec. 11, T28N, R10W, N.M.P.M. 0  
San Juan County, New Mexico

OIL CON. DIV.  
DIST. 3

30-045-24105

Dear Ms. Wrotenberry:

Energen Resources Corporation requests administrative approval for downhole commingling the Otero Chacra and Basin Dakota pools in the subject well. The well is currently producing as a Chacra/Dakota dual completion. The Dakota has experienced liquid loading problems and it is felt downhole commingling will eliminate excessive swabbing expenditures to keep the 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 Chacra and Dakota
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, BLM-Farmington, Offset operators  
F:\MONICA\PRODUCT\OCD\ZACHRY 18 3-99.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

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, NM 87401  
Operator Address

Zachry 18E Unit 0 Sec. 11 T28N R10W San Juan County, NM  
Lease Well No. Unit Ltr. - Sec - Twp - Rge County

OGRID NO. 162928 Property Code 21434 API NO. 30-045-24105 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	Otero Chacra 82329		Basin Dakota 71599
2. Top and Bottom of Pay Section (Perforations)	2801 - 2910'		6196 - 6368'
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) 320 Calc.	a. DEC 1 1999	a. 537 Calc.
	b. (Original) 993 Calc.	b. OIL OPL. DIST. 9	b. 983 Calc.
6. Oil Gravity (°API) or Gas BTU Content)	1203 BTU		1309 BTU
7. Producing or Shut-in?	Producing		Shut In
Production Marginal? (yes or no)	Yes		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: 4/6/99 Rates: .1/45/.2
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: 11/12/99 Rates: 0/48/0	Date: Rates:	Date: Rates:
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 0% Gas: 52%	Oil: % Gas: %	Oil: 100% Gas: 48%

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 11/19/99

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

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DEC - 1 1999 [X] AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-045-24105		<sup>2</sup> Pool Code 82329/71599		<sup>3</sup> Pool Name Otero Chacra/Basin Dakota	
<sup>4</sup> Property Code 21434		<sup>5</sup> Property Name Zachry			<sup>6</sup> Well Number 18E
<sup>7</sup> OGRID No. 162928		<sup>8</sup> Operator Name ENERGEN RESOURCES CORPORATION			<sup>9</sup> Elevation 5594

<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
0	11	T28N	R10W		960	South	1455	East	San Juan

<sup>11</sup> Bottom Hole Location If Different From Surface

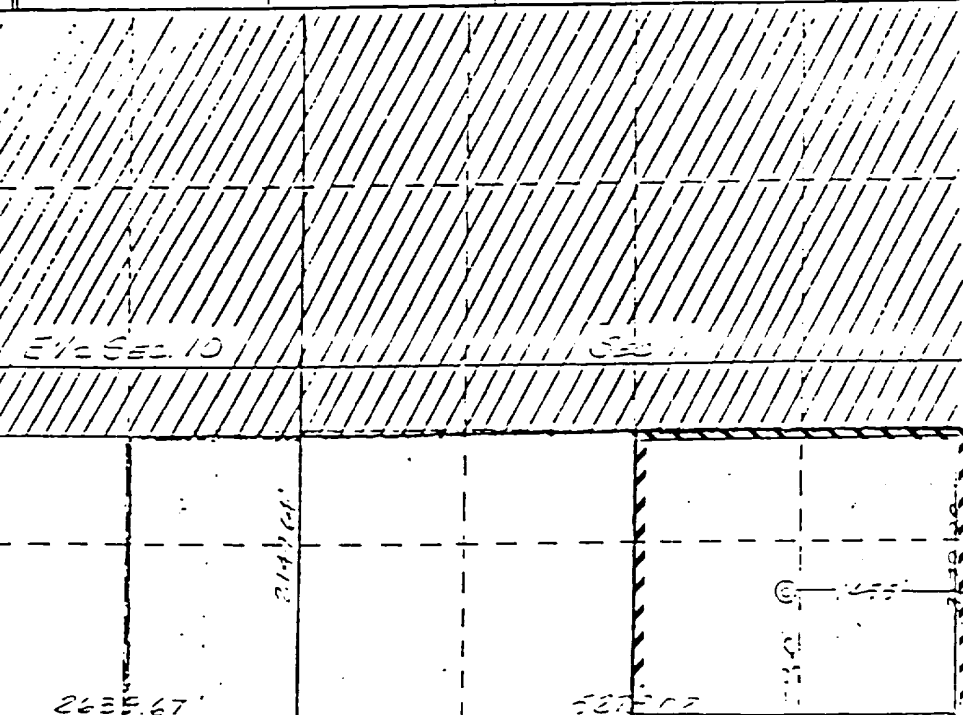
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North-South Line	Feet from the	East-West line	County

<sup>12</sup> Dedicated Acres 131.63/327.29	<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

Dedicated Acreage: 327.29 Ac. E/2 E/2 Section 10 and all of Sec. 11 Township 28-N, Range 10-W, N.M.P.M. San Juan Co. N.M.	<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.
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Signature: *Gary W. Brink*  
 Printed Name: Gary W. Brink  
 Title: Production Superintendent  
 Date: 11/29/99



<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.

July 5, 1979  
 Date of Survey

Signature and Seal of Professional Surveyor:  
 Reissue of Original Survey  
 By James Leese

Certificate Number

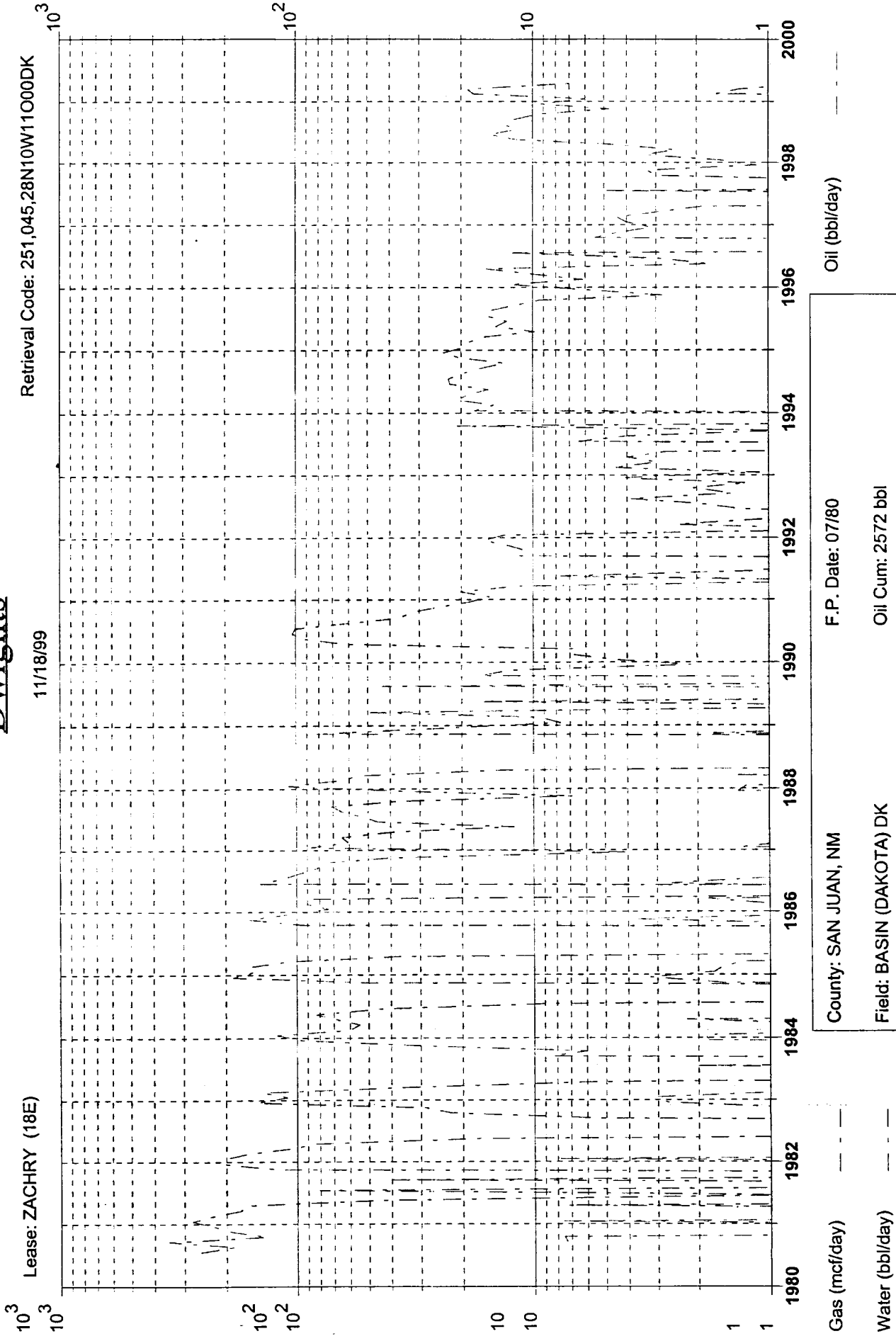
SCALE: 1" = 1/4"

# Dwights

Lease: ZACHRY (18E)

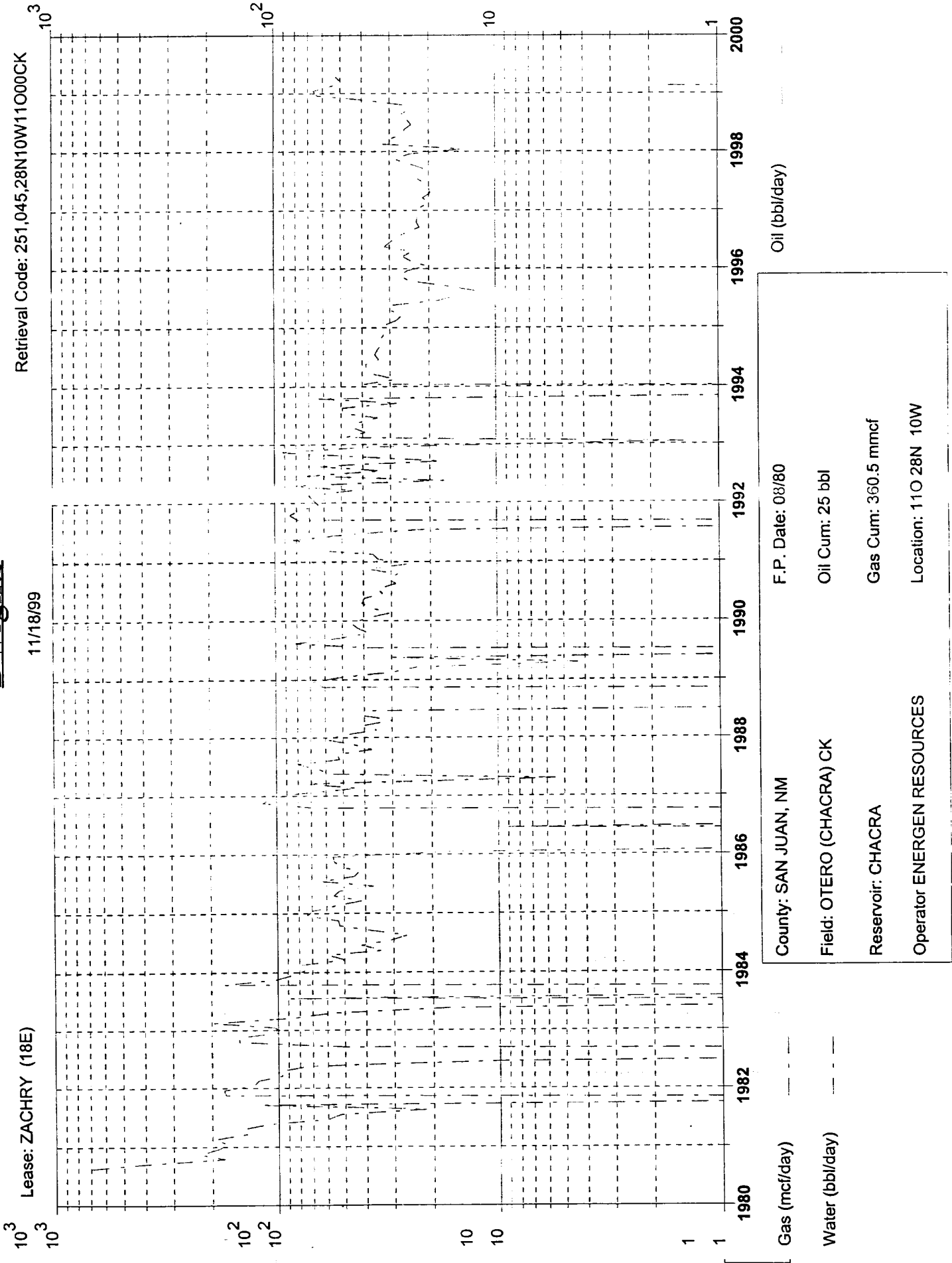
11/18/99

Retrieval Code: 251,045,28N10W11000DK



County: SAN JUAN, NM	F.P. Date: 07/80
Field: BASIN (DAKOTA) DK	Oil Cum: 2572 bbl
Reservoir: DAKOTA	Gas Cum: 262.5 mmcf
Operator: ENERGEN RESOURCES	Location: 11O 28N 10W

# Dwights

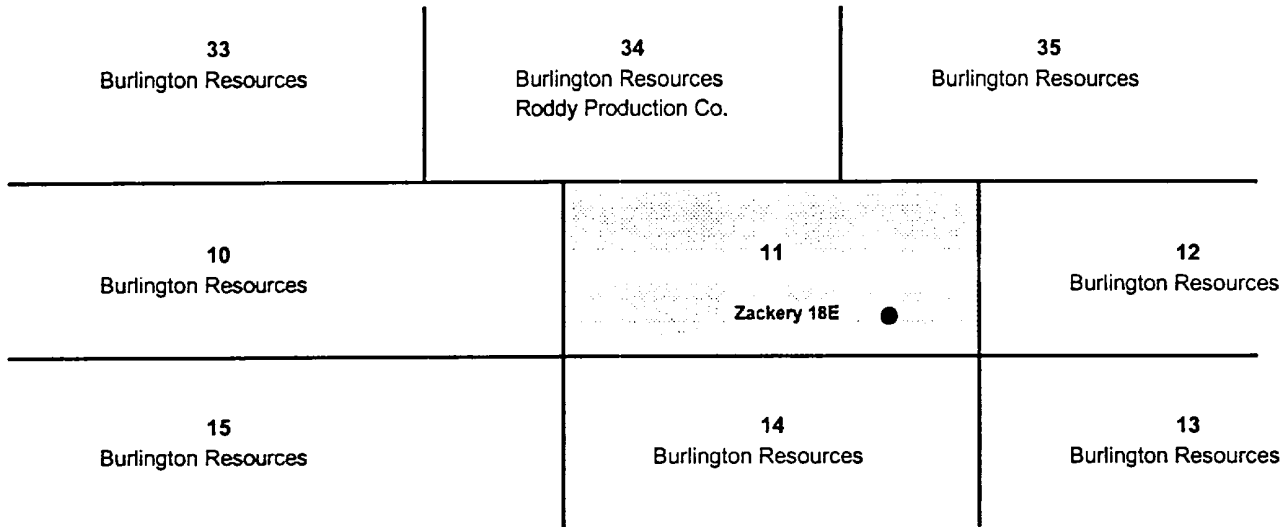


County: SAN JUAN, NM F.P. Date: 03/80  
Field: OTERO (CHACRA) CK Oil Cum: 25 bbl  
Reservoir: CHACRA Gas Cum: 360.5 mmcf  
Operator: ENERGEN RESOURCES Location: 11O 28N 10W

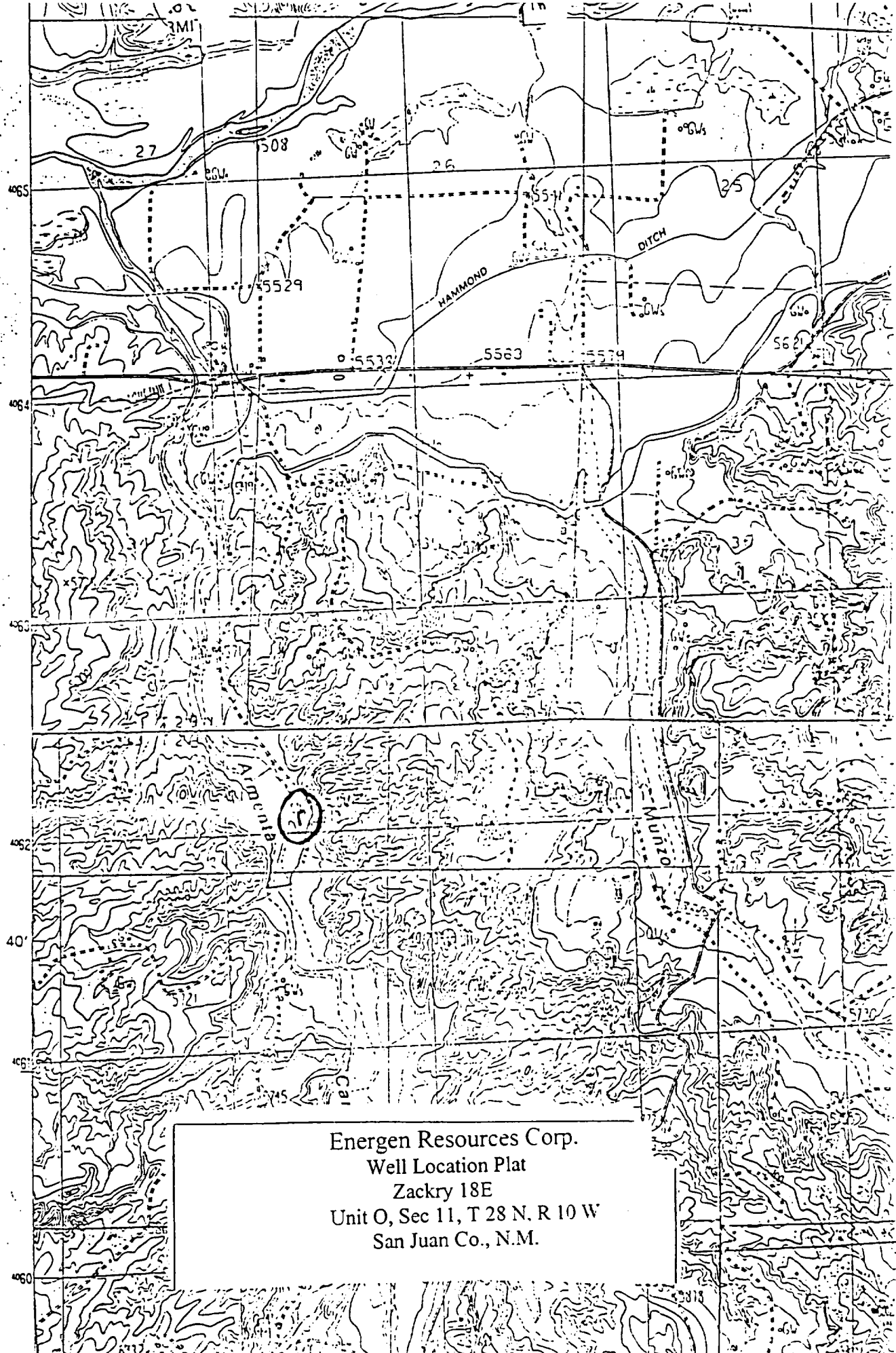
**Energen Resources Corp.**

Zachry #18E  
Offset Operator / Ownership Plat  
Otero Chacra/ Basin Dakota  
Downhole Commingling

Township 28 N, Range 10 W



- 1) Burlington Resources  
P.O. Box 4289  
Farmington, N.M. 87499-4289
- 2) Roddy Production Co., Inc.  
P.O. Box 2221  
Farmington, N.M. 87499-2221



Energen Resources Corp.  
Well Location Plat  
Zackry 18E  
Unit O, Sec 11, T 28 N. R 10 W  
San Juan Co., N.M.