

3/22/99	4/12/99	DC	MN	DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

2271

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

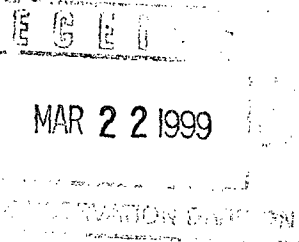
Check One Only for [B] or [C]

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

GARY W. BRINK
Print or Type Name

Signature

Title

Production Dept.

3/19/99
Date



March 19, 1999

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
Zachry #18
794' FNL, 805' FWL, Sec. 11, T28N, R10W, N.M.P.M.
San Juan County, New Mexico

Dear Ms. Wrotenberry:

Energen Resources Corporation requests administrative approval for downhole commingling the Aztec Pictured Cliffs and Basin Dakota pools in the subject well. The well is currently producing as a Pictured Cliffs/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 Pictured Cliffs 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,

A handwritten signature in black ink, appearing to read "Gary W. Brink".

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

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, NM 87401

Operator

Address

Zachry

18

Unit M Sec. 11 T28N

R10W

San Juan County, NM

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

OGRID NO. 162928

Property Code 007654

API NO. 30-045-07581

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	Aztec PC 71280		Basin Dakota 71599
2. Top and Bottom of Pay Section (Perforations)	1844 - 1880'		6230 - 6412'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure	a. (Current)	a.	a.
Oil Zones - Artificial Lift: Estimated Current	93 Calc.		277 Calc.
Gas & Oil - Flowing: Measured Current	b. (Original)	b.	b.
All Gas Zones: Estimated Or Measured Original	312 Calc.		2327 Calc.
6. Oil Gravity ($^{\circ}$ API) or Gas BTU Content)	1158 BTU		1314 BTU
7. Producing or Shut-In?	Producing		Producing
Production Marginal? (yes or no)	No		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: 3/16/98 Rates: 0/77/0	Date: Rates:	Date: 3/12/99 Rates: .2/52/0
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 0 % Gas: 60 %	Oil: % Gas: %	Oil: 100 % Gas: 40 %

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 ☐ No11. 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 ☐ No13. 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 3/19/99

TYPE OR PRINT NAME Gary 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

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		² Pool Code 712800/71599		³ Pool Name Aztec Pictured Cliffs/Basin Dakota	
⁴ Property Code 007654		⁵ Property Name Zachery			⁶ Well Number 18
⁷ OGRID No. 162928		⁸ Operator Name ENERGEN RESOURCES CORPORATION			⁹ Elevation 5640

¹⁰ Surface Location

UL or lot no. M	Section 11	Township T28N	Range R10W	Lot. Idn	Feet from the 794	North/South Line N	Feet from the 805	East/West line W	County San Juan
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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 195.08/327.29	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

**Dedicated Acreage: 327.29 Acres. E/2 E/2
Section 10 and all of Sec. 11,
Township 28-N, Range 10-W,
N.M.P.M. San Juan County,
New Mexico.**

¹⁷ OPERATOR CERTIFICATION

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



Signature
Gary W. Brink

Printed Name
Production Superintendent

Title
3/19/99

Date

¹⁸ 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.

Date of Survey

Signature and Seal of Professional Surveyor:

Reissue of original Survey
by Michael Daly

5992

Certificate Number

E/2 E/2
Sec. 10

All Sec. 11

794'
805'

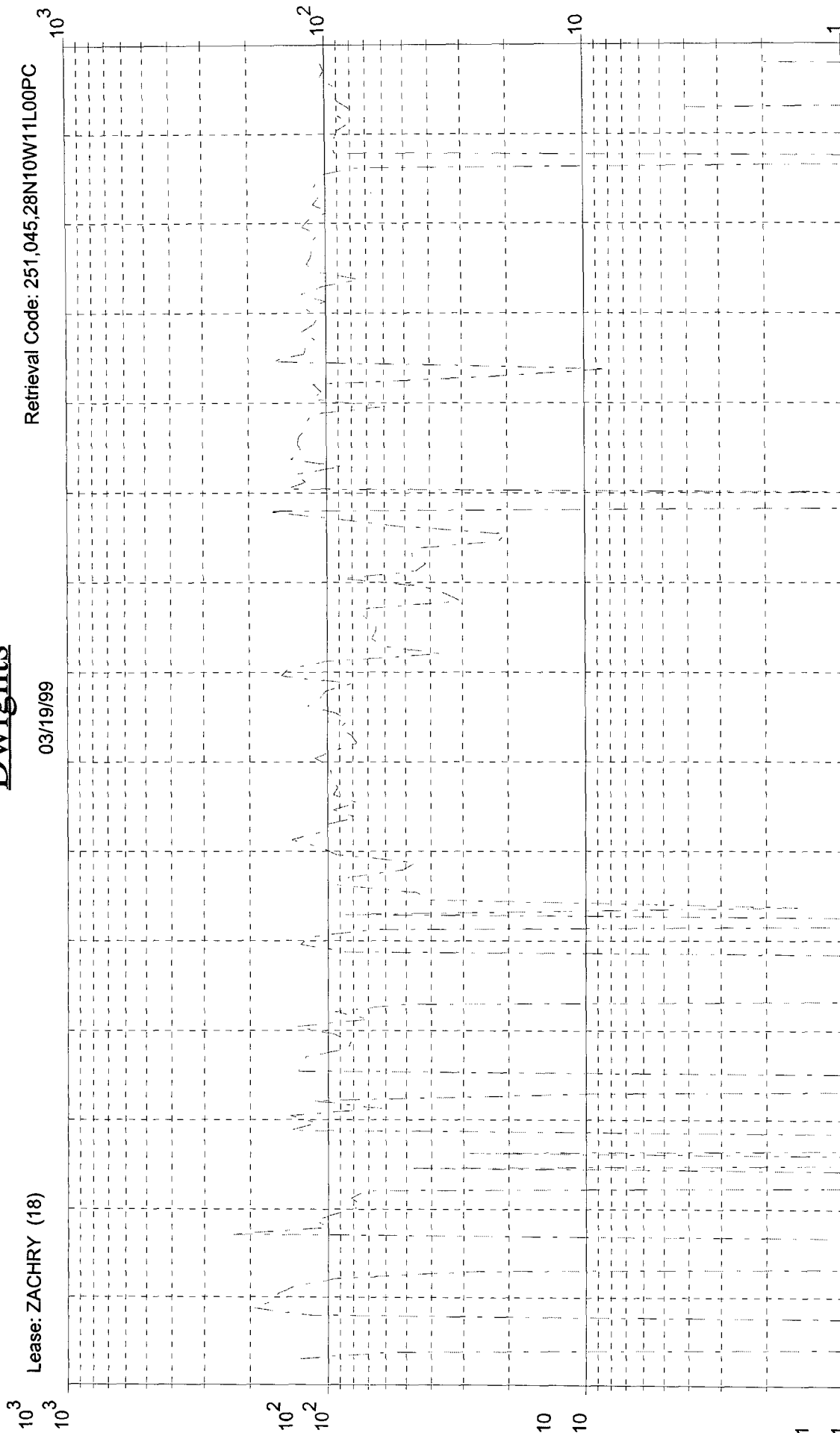
Scale 4" = 1 Mile

Dwights

Lease: ZACHRY (18)

Retrieval Code: 251,045,28N10W11L00PC

03/19/99



Gas (mcf/day)

Water (bbl/day)

Oil (bbl/day)

County: SAN JUAN, NM

F.P. Date: 04/84

Field: AZTEC (PICTURED CLIFFS) PC

Oil Cum: 0 bbl

Reservoir: PICTURED CLIFFS

Gas Cum: 431.4 mmcf

Operator: ENERGEN RESOURCES

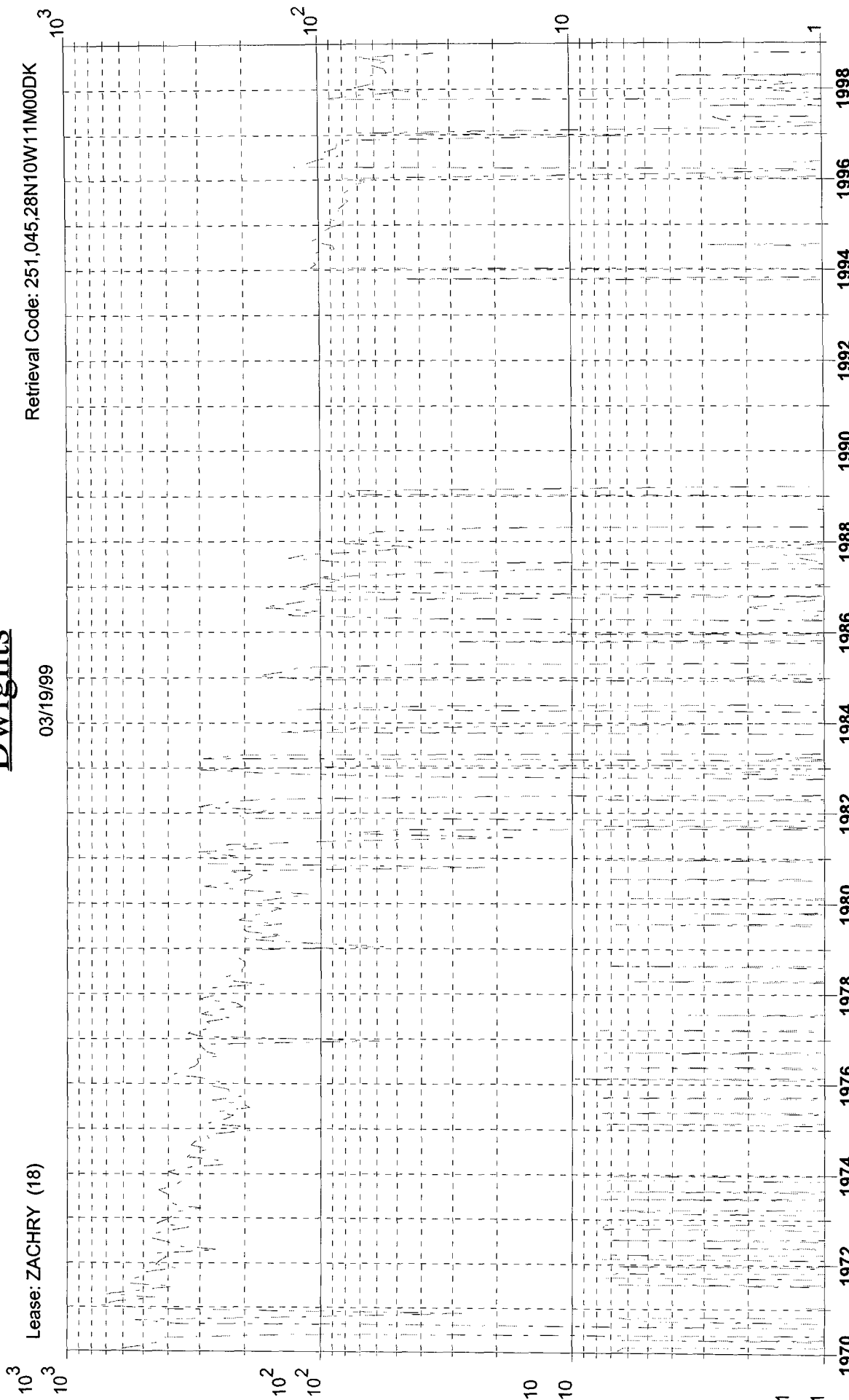
Location: 11L 28N 10W

Dwights

Lease: ZACHRY (18)

Retrieval Code: 251,045,28N10W11M00DK

03/19/99



Gas (mcf/day)

Water (bbl/day)

County: SAN JUAN, NM

Field: BASIN (DAKOTA) DK

Reservoir: DAKOTA

Operator: ENERGEN RESOURCES

F.P. Date: 03/62

Oil Cum: 24.92 mmbbl

Gas Cum: 2624 mmcf

Location: 11M 28N 10W

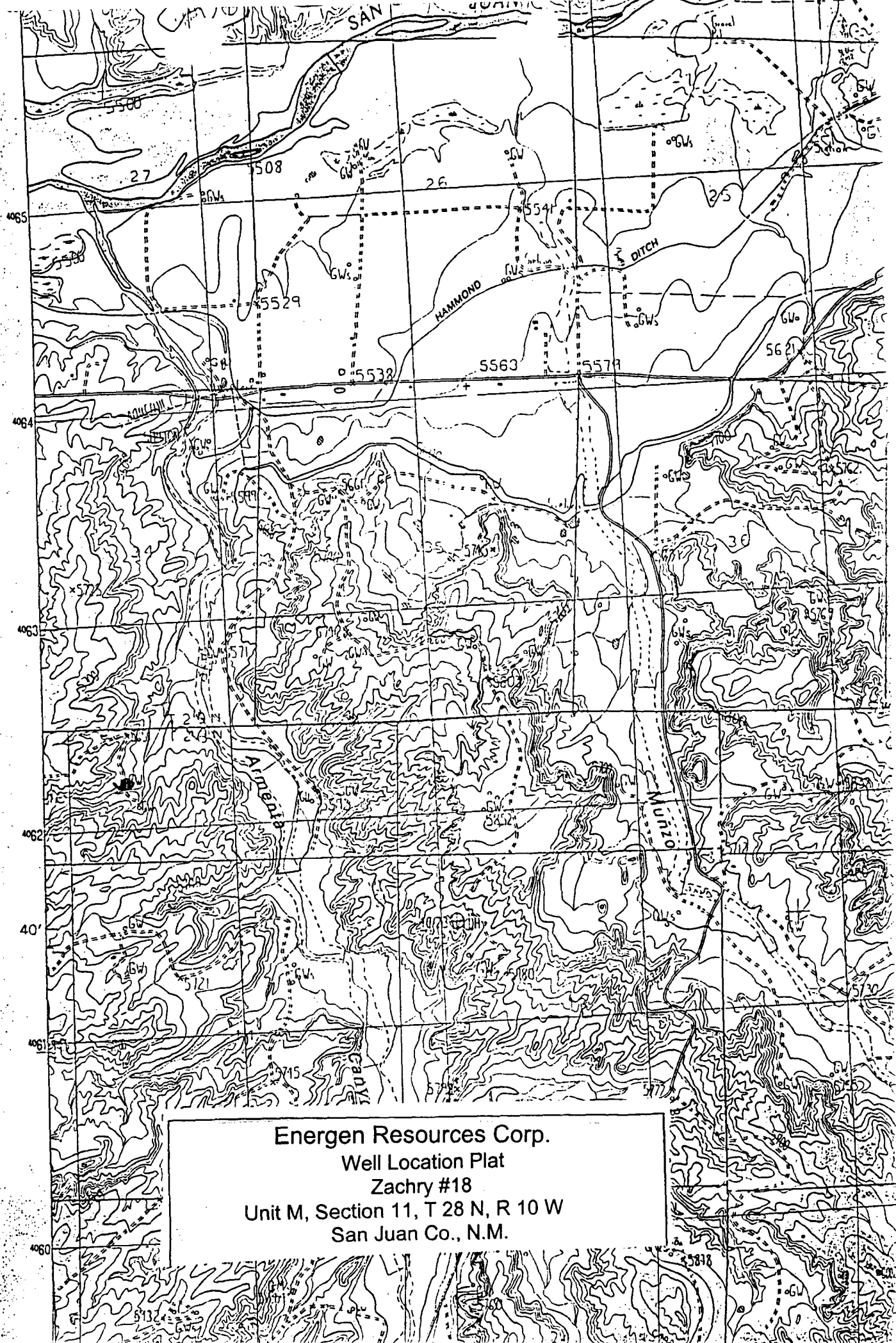
Energen Resources Corp.

Zachry #18
Offset Operator / Ownership Plat
Aztec Pictured Cliffs/ Basin Dakota
Downhole Commingling

Township 28 N, Range 10 W

33 Burlington Resources	34 Burlington Resources Southwest Production, Inc	35 Burlington Resources
10 Burlington Resources	Zachry 18 11	12 Burlington Resources
15 Burlington Resources	14 Burlington Resources	13 Burlington Resources

- 1) Burlington Resources
P.O. Box 4289
Farmington, N.M. 87499-4289
2) Southwest Production, Inc.
777 South Central Expwy. Suite 7E
Richardson, Tx. 75080



Energen Resources Corp.
Well Location Plat
Zachry #18
Unit M, Section 11, T 28 N, R 10 W
San Juan Co., N.M.