

DATE IN 10/19/99	SUSPENSE 11/8/99	ENGINEER DC	LOGGED BY KW	TYPE 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]

#### [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] and [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 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.

Deborah Moore (281) 293-1005  
 Print or Type Name

Signature

Regulatory Analyst  
 Title

Date

10/15/99

1625 N. French Dr., Hobbs, NM 88240

DISTRICT II

811 South First St., Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd. Aztec, NM 87410

DISTRICT IV

2040 S. Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

## OIL CONSERVATION DIVISION

2040 S. Pacheco  
Santa Fe, New Mexico 87505-6429

## APPLICATION FOR DOWNHOLE COMMINGLING

Form C-107-A  
Revised March 17, 1999

**APPROVAL PROCESS:**

☒ Administrative  
Hearing

### EXISTING WELLBORE

YES NO

Conoco Inc.

P.O. Box 2197 DU 3066 Houston, TX 77252-2197

Operator

Ludwick LS

#18

Address

B-9. Sec. 6, T-29N, R-10W

San Juan

Lease

Well No. \_\_\_\_\_

Unit Ltr. - Sec - Twp - Rge

County \_\_\_\_\_  
Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 005073 Property Code 022398 API NO. 30-045-08825 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 Mesaverde 72319		Blanco Dakota 71599
2. Top and Bottom of Pay Section (Perforations)	4380' - 4655' proposed		6702' - 6847'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	To flow		Flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a. (Current) 600 est. b. (Original) 1050 est.	a. b.	a. 600 est. b. 2479
6. Oil Gravity (EAPI) or Gas BTU Content	1230		1212
7. Producing or Shut-In?	To be completed		Producing
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: N/A	Date: Rates:	Date: Rates: N/A
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: 7/15/99 Rates: 43 mcf/d, .2 bopd, 0 bwpd	Date: Rates:	Date: Rates: N/A
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Subtraction method; see attachment Oil: Gas:	Oil: % Gas: %	Subtraction method; see Attachment 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?  
If not, have all working, overriding, and royalty interests been notified by certified mail?  
Have all offset operators been given written notice of the proposed downhole commingling?

<u>  X  </u>	Yes	<u>      </u>	No
<u>  X  </u>	Yes	<u>      </u>	No
<u>      </u>	Yes	<u>      </u>	No

11. Will cross-flow occur? X 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. X Yes \_\_\_ No (If No, attach explanation)

12. Are all produced fluids from all commingled zones compatible with each other?  X  Yes   No

13. Will the value of production be decreased by commingling?      Yes   X   No (If Yes, attach explanation)

14. If this well is 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 Robert J. J. Jr. TITLE Regulatory Analyst DATE 08/12/99

TYPE OR PRINT NAME Deborah Moore TELEPHONE NO. (281) 293-1005

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 South First, Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

Form C-102  
Revised March 17, 1999

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-039-08825		<sup>2</sup> Pool Code 71599, 72319		<sup>3</sup> Pool Name Blanco Mesaverde/Blanco Dakota	
<sup>4</sup> Property Code 22398		<sup>5</sup> Property Name Ludwick LS			<sup>6</sup> Well Number #18
<sup>7</sup> OGRID No. 005073		<sup>8</sup> Operator Name Conoco Inc.			<sup>9</sup> Elevation 5907'

<sup>10</sup> Surface Location

UL or lot no. B - 9	Section 6	Township 29 N	Range 10W	Lot Idn	Feet from the 9901'	North/South line North	Feet from the 1780	East/West line East	County San Juan
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<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		<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<sup>15</sup> Order No.			

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

<div data-bbox="87 947 1047 1438"> </div>	<p><sup>17</sup> OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p>Signature <i>Deborah Moore</i></p> <p>Printed Name Deborah Moore</p> <p>Title Regulatory Analyst</p> <p>Date 08/12/99</p>
	<p><sup>18</sup> SURVEYOR CERTIFICATION</p> <p>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.</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyer:</p> <p>Certificate Number</p>

## Well Location and Acreage Dedication Plat

March 24, 1961

Section A.

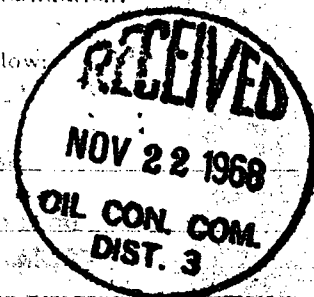
Date

Operator **EL PASO NATURAL GAS COMPANY** Lease **LUDWICK** SF **078194**  
 Well No. **18** Unit Letter **B** Section **6** Township **29-N** Range **10-W** NMPM  
 Located **990** Feet From **NORTH** Line **1780** Feet From **EAST** Line  
 County **SAN JUAN** G. L. Elevation **5897** Dedicated Acreage **313.00** Acres  
 Name of Producing Formation **DAKOTA** Pool **BASIN DAKOTA**

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below?  
 Yes \_\_\_\_\_ No \_\_\_\_\_
2. If the answer to question one is "no", have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes \_\_\_\_\_ No \_\_\_\_\_. If answer is "yes", Type of Consolidation \_\_\_\_\_
3. If the answer to question two is "no", list all the owners and their respective interests below:

Owner

Land Description



NOTE: THIS PLAT REISSUED TO SHOW CORRECTED ACREAGE. 11-11-68

Section B.

This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

**El Paso Natural Gas Company**

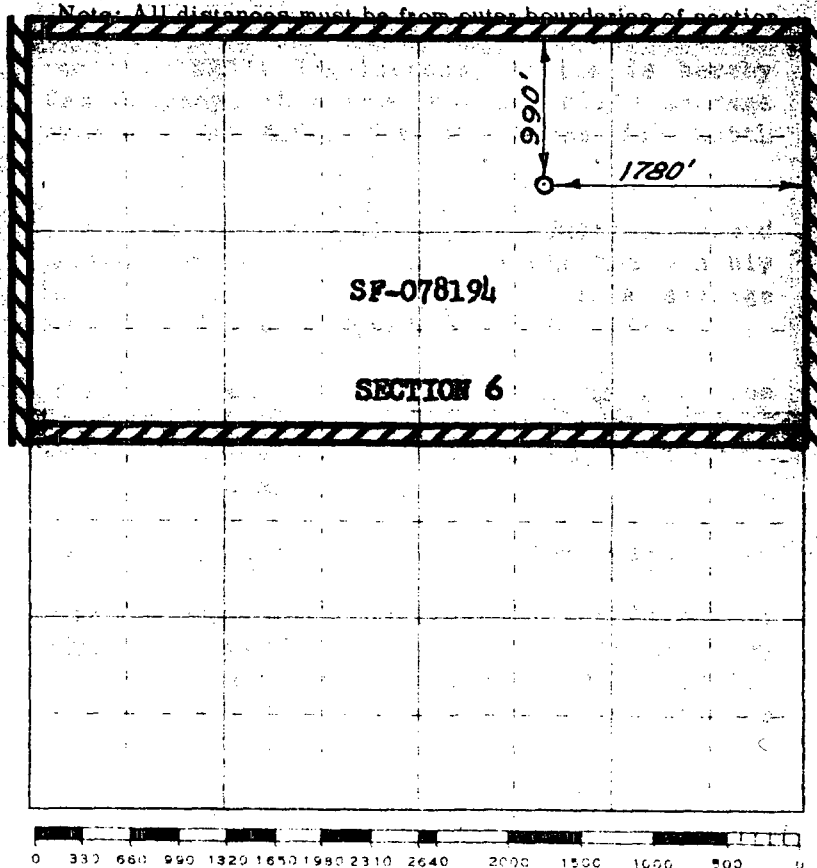
Original signed by

**Carl E. Matthews**

(Representative)

**Box 990, Farmington, New Mexico**

(Address)

**November 13, 1968**

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

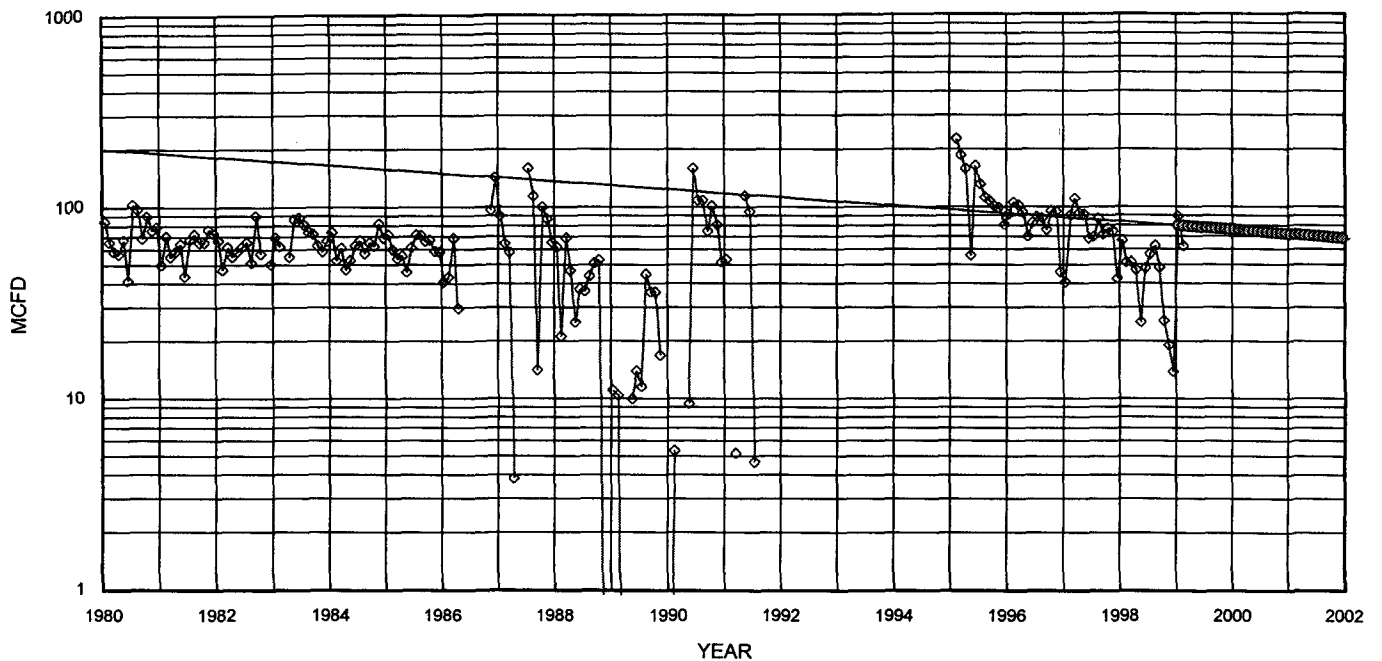
(Seal)

Date Surveyed **March 22, 1961**

*David O. Kilmer*  
 Registered Professional Engineer and/or Land Surveyor

Farmington, New Mexico

**LUDWICK LS #18 DAKOTA PRODUCTION  
SECTION 6B-29N-10W**



—◇— DK Mcfd —○— FIT MCFD — Historical Fit

DAKOTA HISTORICAL DATA		1ST PROD: 8/61	DAKOTA PROJECTED DATA	
OIL CUM:	2.6	MBO	1/1/99 Qi:	80 MCFD
GAS CUM:	925.6	MMCF	DECLINE RATE:	5.00% (EXPONENTIAL)
OIL YIELD:	0.0028	BBL/MCF	OIL YIELD:	0.0040 BBL/MCF, LAST 3 YEARS

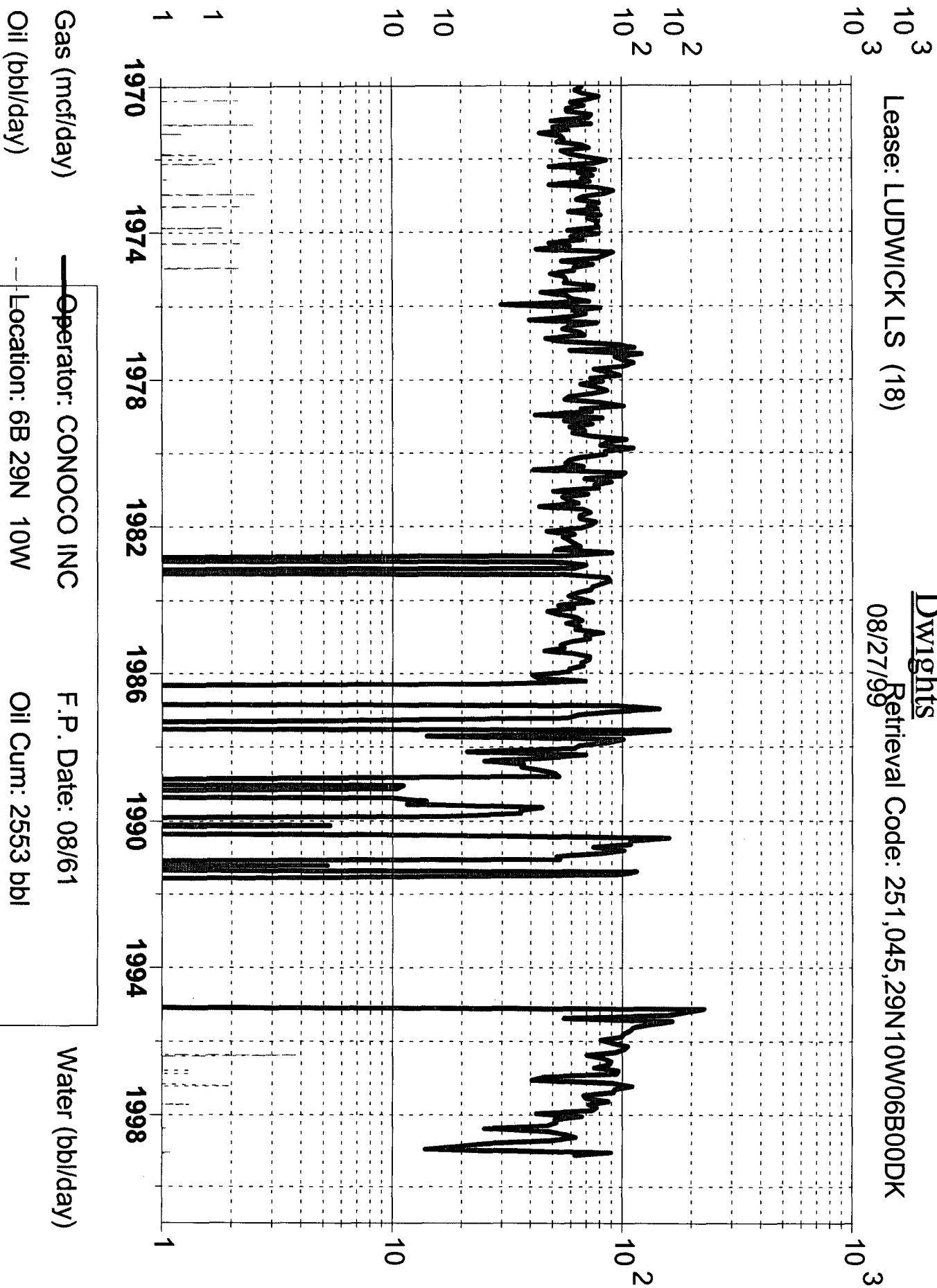
**PRODUCTION FORECAST FOR SUBTRACTION METHOD COMMINGLE ALLOCATION**

YEAR	MID-YEAR AVG MCFD	MID-YEAR AVG BOPD
1999	78	0.31
2000	74	0.29
2001	70	0.28
2002	67	0.26
2003	63	0.25
2004	60	0.24
2005	57	0.23
2006	54	0.21
2007	52	0.20
2008	49	0.19
2009	46	0.18
2010	44	0.17
2011	42	0.17
2012	40	0.16
2013	38	0.15
2014	36	0.14
2015	34	0.14
2016	32	0.13
2017	31	0.12
2018	29	0.12
2019	28	0.11
2020	26	0.10
2021	25	0.10
2022	24	0.09
2023	23	0.09
2024	22	0.09
2025	20	0.08
2026	19	0.08
2027	18	0.07
2028	18	0.07

Lease: LUDWICK LS (18)

Dwights  
08/27/99

Retrieval Code: 251,045,29N10W06B00DK



Gas (mcf/day)

Oil (bbl/day)

Water (bbl/day)

Operator: CONOCO INC

F.P. Date: 08/61

Location: 6B 29N 10W

Oil Cum: 2553 bbl

Field: BASIN (DAKOTA) DK

Gas Cum: 925.6 mmcf

Reservoir: DAKOTA

L.P. Date: 02/99