

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

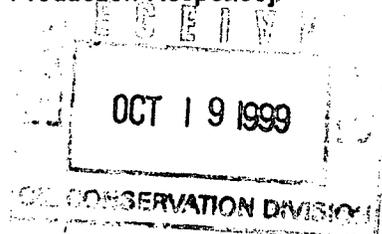
2512

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 Deborah Moore Regulatory Analyst 10/15/99
 Print or Type Name Signature Title Date

DISTRICT I

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. <u>005073</u>	Property Code <u>022398</u>	API NO. <u>30-045-08825</u>	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 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: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a. (Current) 600 est.	a.	a. 600 est.
	b. (Original) 1050 est.	b.	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) * 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)	Yes		Yes
	Date: Rates: N/A	Date: Rates:	Date: Rates: N/A
	Date: 7/15/99 Rates: 43 mcfd, .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? 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 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 Deborah Moore 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

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

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B - 9	6	29 N	10W		9901'	North	1780	East	San Juan

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

¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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

	<p>¹⁷ OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i></p> <p>Signature <u>Deborah Moore</u></p> <p>Printed Name Deborah Moore</p> <p>Title Regulatory Analyst</p> <p>Date 08/12/99</p>
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p><i>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.</i></p> <p>Date of Survey _____</p> <p>Signature and Seal of Professional Surveyer: _____</p> <p>Certificate Number _____</p>

operator

Well Location and Acreage Dedication Plat

March 24, 1961

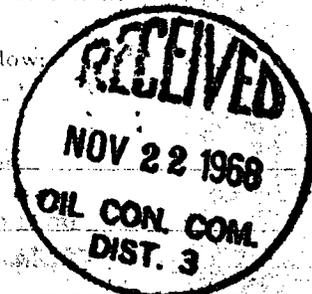
Section A.

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.

Note: All distances must be from outer boundaries of section.

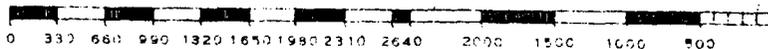
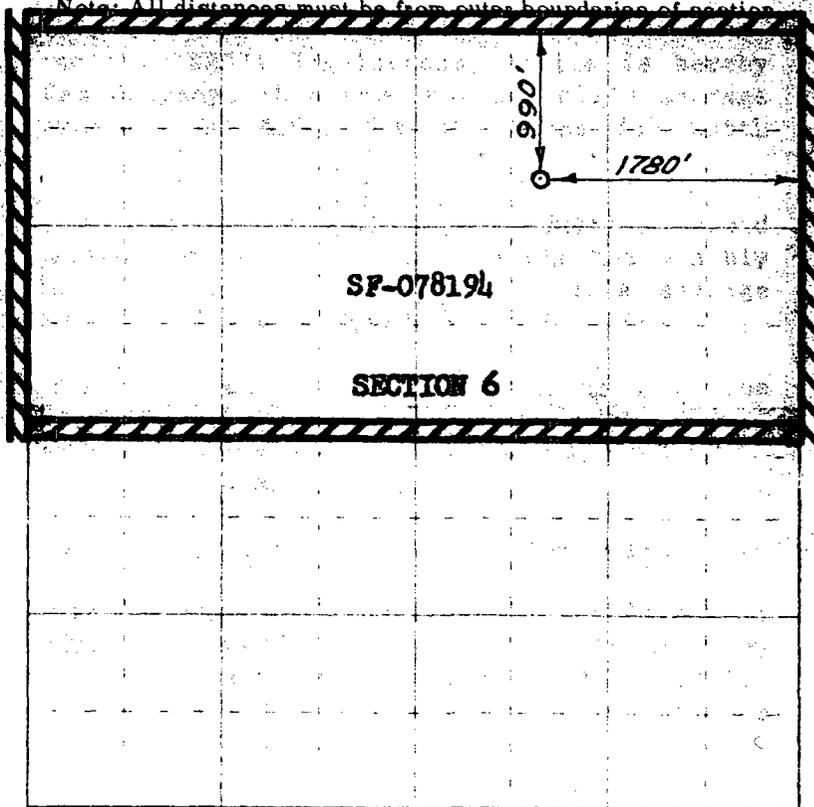
This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

El Paso Natural Gas Company

Original signed by
Carl E. Matthews
(Representative)

Box 990, Farmington, New Mexico
(Address)

November 11, 1968



Scale 4 inches equal 1 mile

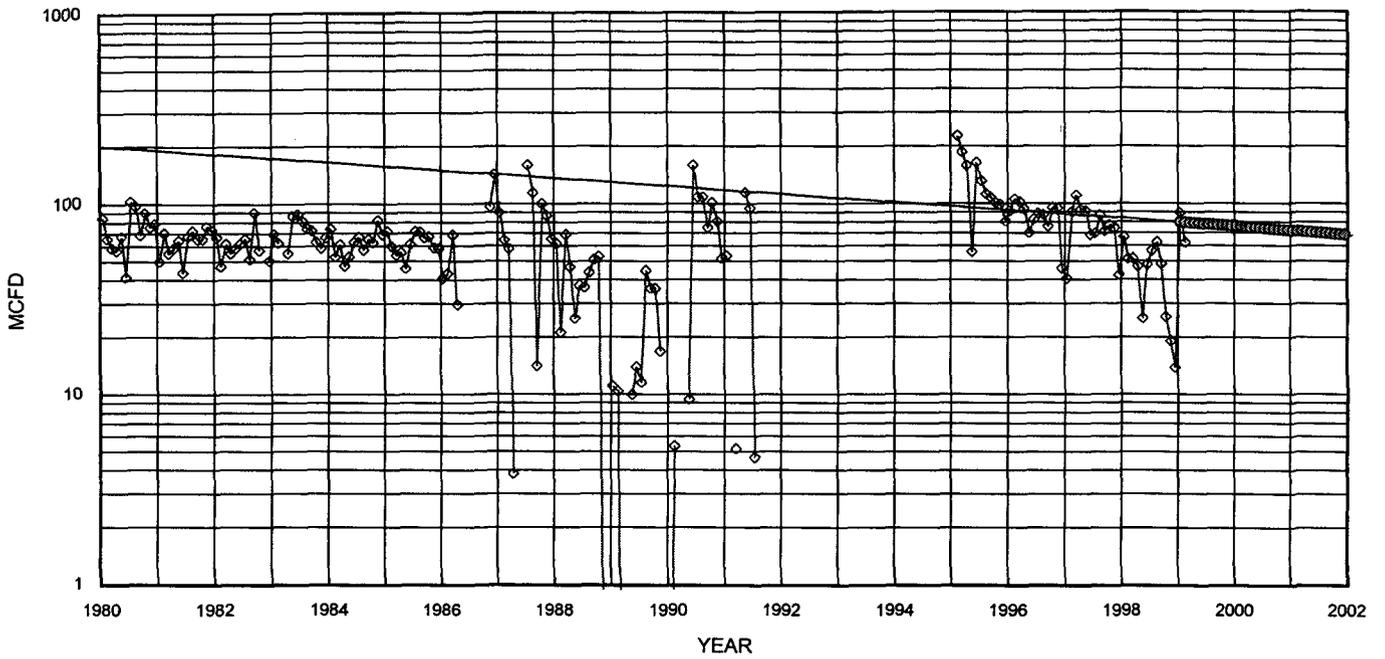
This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

(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		1/1/89 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

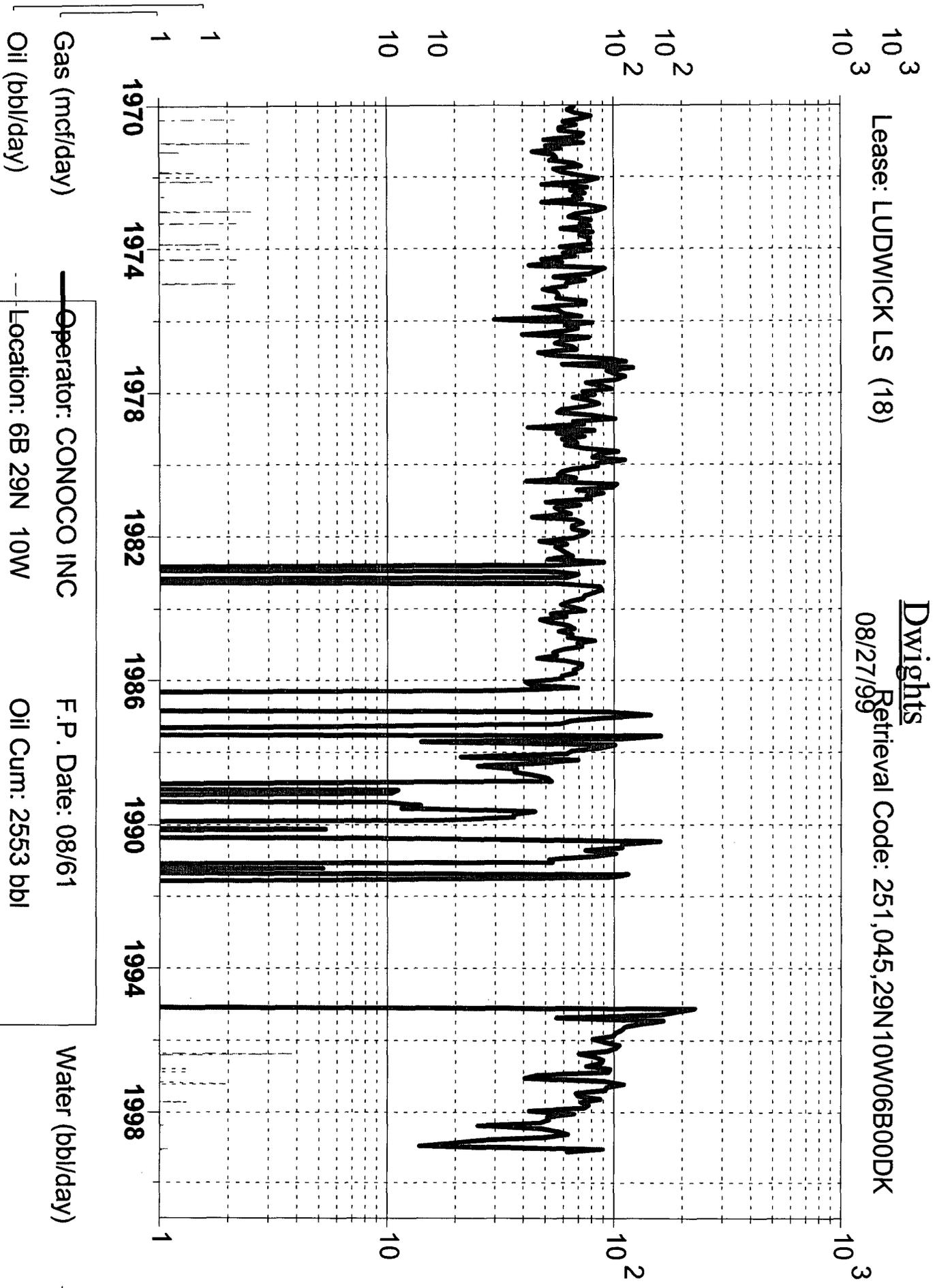
YEAR	MID-YEAR AVG MCFD	MID-YEAR AVG BOPD
1999	78	0.31
2000	74	0.29
2001	70	0.28
2002	67	0.26
2003	63	0.25
2004	60	0.24
2005	57	0.23
2006	54	0.21
2007	52	0.20
2008	49	0.19
2009	46	0.18
2010	44	0.17
2011	42	0.17
2012	40	0.16
2013	38	0.15
2014	36	0.14
2015	34	0.14
2016	32	0.13
2017	31	0.12
2018	29	0.12
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

PRODUCTION FORECAST FOR SUBTRACTION METHOD COMMINGLE ALLOCATION

Dwights

Lease: LUDWICK LS (18)

Retrieval Code: 251,045,29N10W06B00DK
08/27/99



Gas (mcf/day)

Oil (bbl/day)

Water (bbl/day)

Operator: CONOCO INC

Location: 6B 29N 10W

F.P. Date: 08/61

Oil Cum: 2553 bbl

Field: BASIN (DAKOTA) DK

Gas Cum: 925.6 mmcf

Reservoir: DAKOTA

L.P. Date: 02/99