

DATE IN 6/20/97	SUSPENSE 7/10/97	ENGINEER DC	LOGGED BY NW	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
- Engineering Bureau -

JUN 20 1997

**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

1617

**[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.

Jerry W. Hoover  
 Print or Type Name

*Jerry W. Hoover*  
 Signature

Sr. Conservation Coordinator 6-13-97  
 Title Date

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico  
Energy, Minerals and Natural Resources Department

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

DISTRICT II  
811 South First St., Artesia, NM 88210-2835

OIL CONSERVATION DIVISION

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

APPROVAL PROCESS:  
 Administrative  Hearing

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410-1693

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE  
 YES  NO

Operator Conoco Inc. Address 10 Desta Dr., Ste 100W, Midland, TX 79705-4500

Lease Jicarilla E Well No 10 Unit Ltr Sec Twp Rge I-22-T-26N-R4W County Rio Arriba

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 005073 Property Code 18022 API NO. 30039-20101 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 Mesa Verde 72319		Basin Dakota 71599
2. TOP and Bottom of Pay Section (Perforations)	Proposed 5743' - 5926'		7760' - 7978'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	To Flow		Flowing
5. Bottom hole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a (Current) 887 PSIA	a.	a. 1133 PSIA
	b (Original) 1458 PSIA	b.	b. 2638 PSIA
6. Oil Gravity (*API) or Gas BTU Content	1265 - BTU		1366 - BTU
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.  • If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date Rates	Date Rates	Date Rates
	Date Rates Incremental Production by subtraction - see attached data	Date Rates	Date Rates Mid-Year Average Producing Rates - See Attached Table
8. Fixed Percentage Allocation Formula - % for each zone	oil:      % Gas      %	oil:      % Gas      %	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 others  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 Jerry W. Hoover TITLE Sr. Conservation Coord. DATE 6/13/97

TYPE OR PRINT NAME Jerry W. Hoover TELEPHONE NO. (915) 686-6548

**NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACERAGE DEDICATION PLAT**

All distances must be from the outer boundaries of the Section

Operator <b>SOUTHERN UNION PRODUCTION COMPANY</b>			Range <b>JICARILLA</b>			Well No <b>E 10</b>		
Unit Letter <b>I</b>	Section <b>22</b>	Township <b>26 NORTH</b>	Range <b>4 WEST</b>	County <b>RIO ARRIBA</b>				
Actual Footage Location of Well:								
1720 feet from the <b>SOUTH</b> line			790 feet from the <b>EAST</b> line					
Ground Level Elev <b>6955.0</b>	Producing Formation <b>Pictured Cliffs</b>		Basin <b>Tapacito Pictured Cliffs</b>		Dedicated Acreage: <b>E/2 380</b> <b>SE/4 160</b> Acres			

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation Communization

If answer is "no," list the owners and tract descriptions which have actually consolidated (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communization, unitization, forced-pooling, or otherwise) or until a non standard unit, eliminating such interests, has been approved by the Commission.

————— **Dedicated Dakota Acreage**

————— **Dedicated Pictured Cliffs Acreage**

**CERTIFICATION**

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

Original signed by  
**GILBERT D. NOLAND, JR.**  
Name

**Gilbert D. Noland, Jr.**  
Position:  
**Drilling Superintendent**  
Company

**Southern Union Production Co.**  
Date

**May 23, 1968**

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 knowledge and belief.

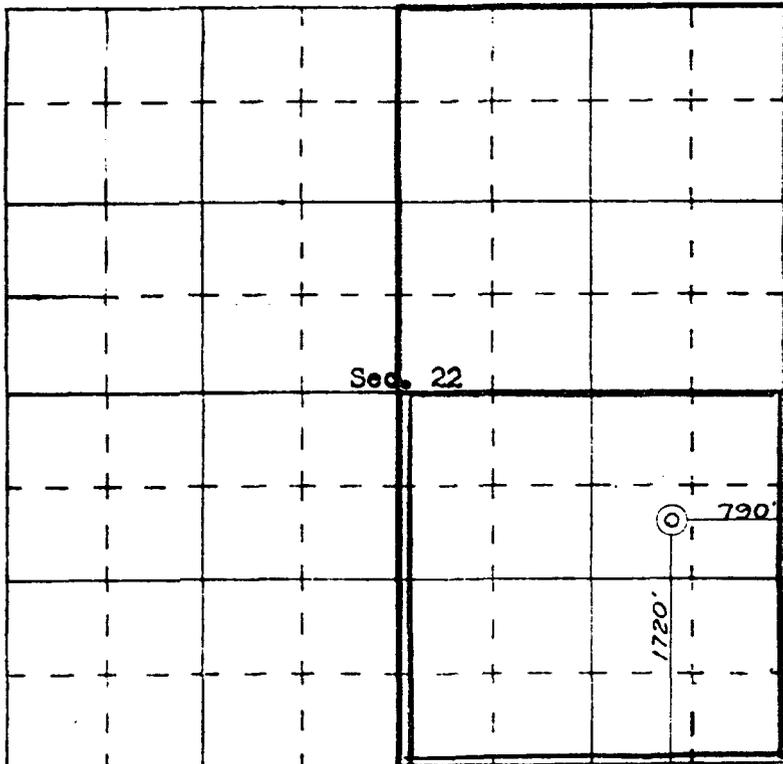
**22 May, 1968**  
Date

*James P. Lee*  
Registered Professional Engineer  
and Licensed Surveyor

**JAMES P. LEE**

**1463**

Certificate No.



SCALE—4 INCHES EQUALS 1 MILE

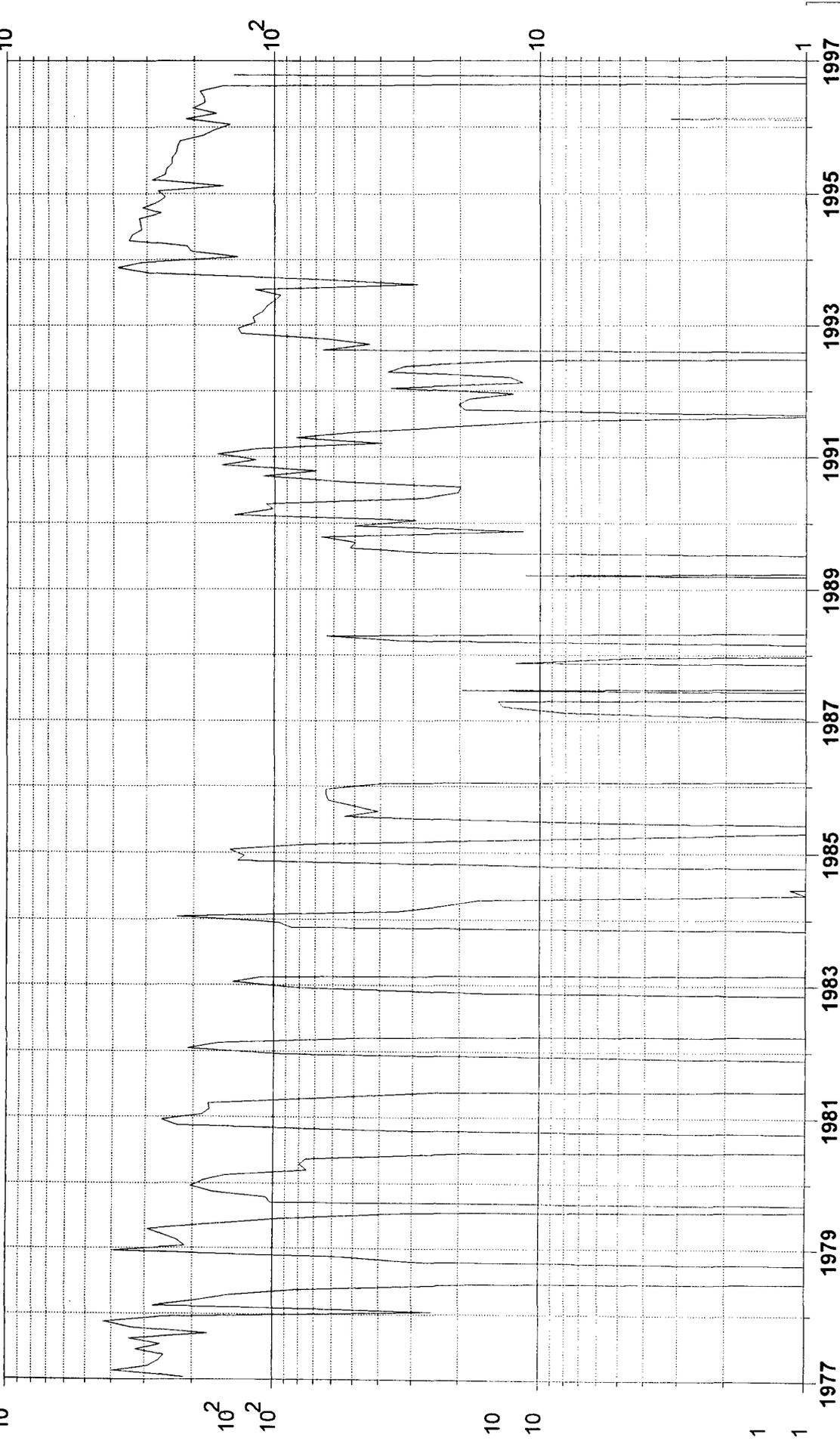
# Dwights

04/02/97

Retrieval Code: 251,039,26N04W22100PC

Lease: JICARILLA E (10)

10<sup>3</sup>  
10<sup>3</sup>



Water (bbl/day)

F.P. Date: 10/68

County: RIO ARRIBA, NM

Field: TAPACITO (PICTURED CLIFFS) P Oil Cum: 130 bbl

Reservoir: PICTURED CLIFFS Gas Cum: 2012 mmcf

Operator: CONOCO INC Location: 221 26N 4W

Gas (mcf/day)

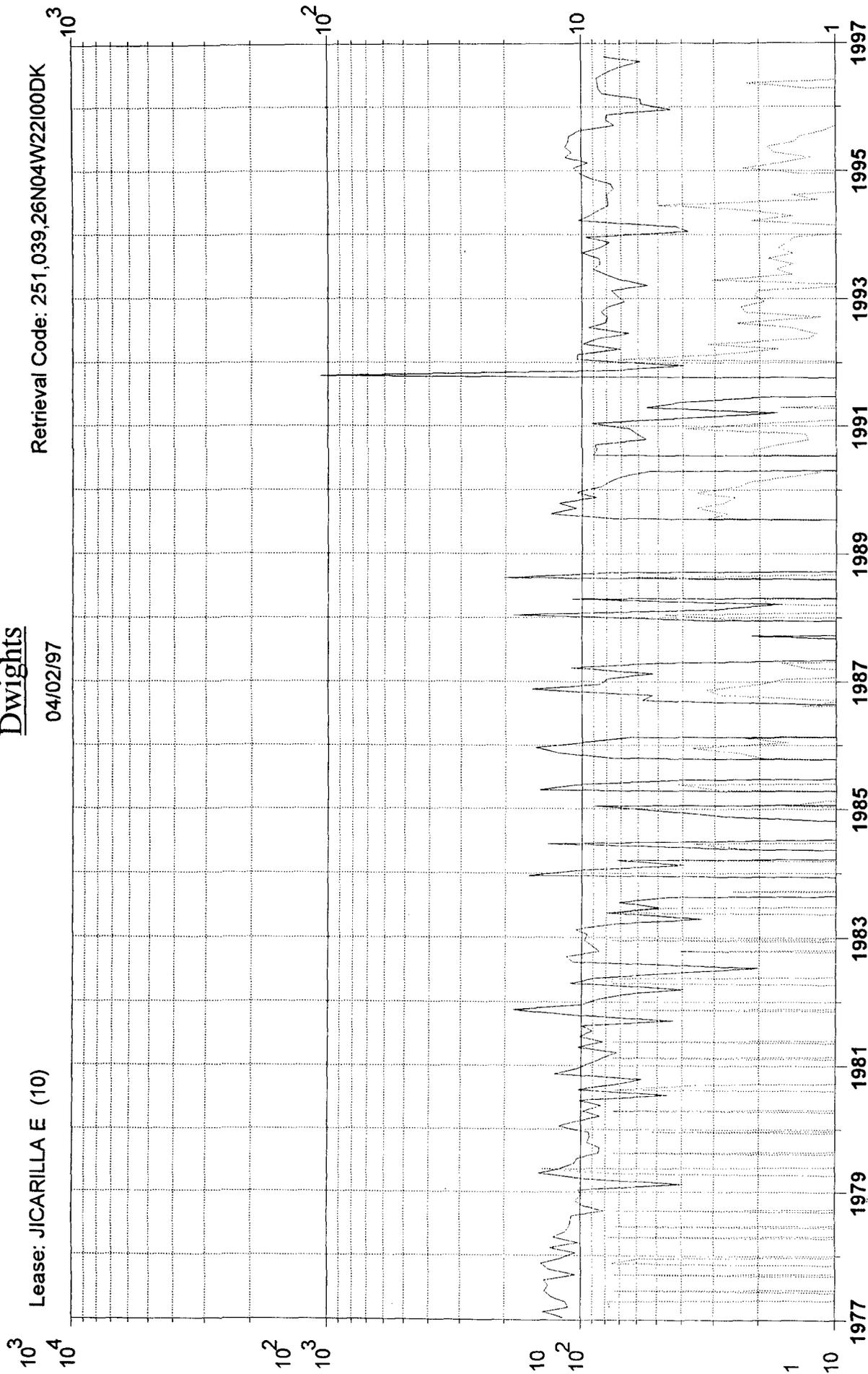
Oil (bbl/day)

# Dwights

04/02/97

Lease: JICARILLA E (10)

Retrieval Code: 251,039,26N04W22I00DK



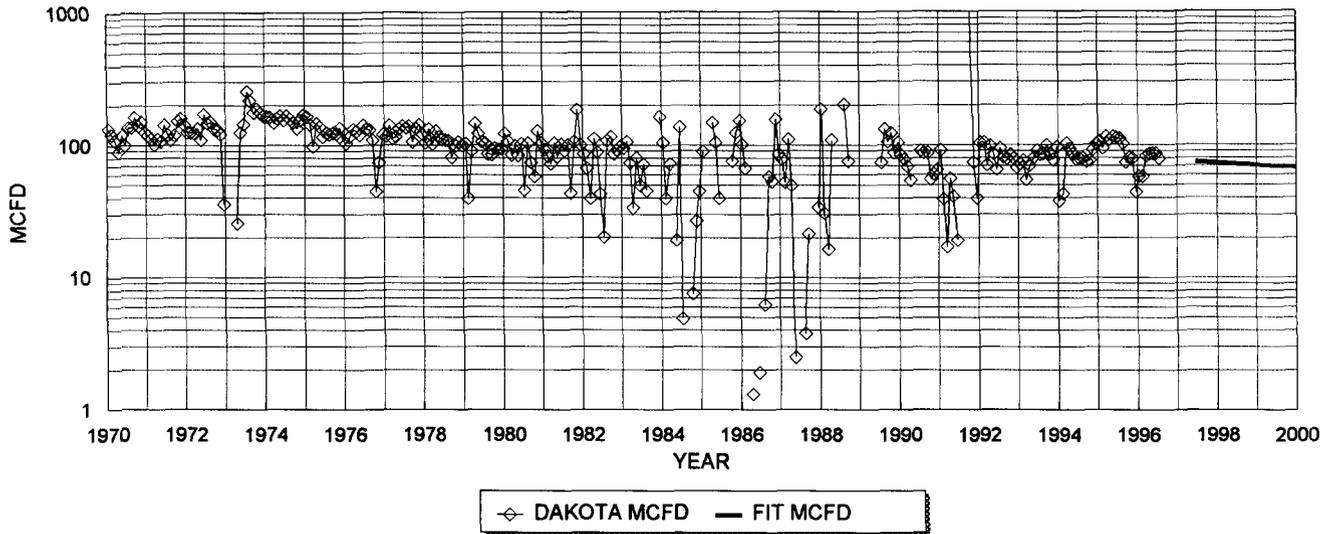
Gas (mcf/day)

Oil (bbl/day)

Water (bbl/day)

County: RIO ARRIBA, NM	F. P. Date: 10/68
Field: BASIN (DAKOTA) DK	Oil Cum: 37.06 mbbbl
Reservoir: DAKOTA	Gas Cum: 964.9 mmcf
Operator: CONOCO INC	Location: 22I 26N 4W

**JICARILLA E 10 DAKOTA PRODUCTION  
SECTION 22I-26N-04W**



<b>DAKOTA HISTORICAL DATA:</b>		<b>1ST PROD: 10/68</b>		<b>DAKOTA PROJECTED DATA</b>	
OIL CUM:	37.06 MBO	6/1/97 Qi:	75 MCFD		
GAS CUM:	964.9 MMCF	DECLINE RATE:	4.0% (EXPONENTIAL)		
CUM OIL YIELD	0.0384 BBL/MCF				
OIL YIELD:	0.0140 BBL/MCF, LAST 3 YRS				
AVG. USED:	0.0262 BBL/MCF				

YEAR	MID-YEAR AVG. MCFD	MID-YEAR AVG. BOPD
1996	74	1.9
1997	71	1.9
1998	68	1.8
1999	66	1.7
2000	63	1.6
2001	60	1.6
2002	58	1.5
2003	56	1.5
2004	53	1.4
2005	51	1.3
2006	49	1.3
2007	47	1.2
2008	45	1.2
2009	44	1.1
2010	42	1.1
2011	40	1.1
2012	39	1.0
2013	37	1.0
2014	36	0.9
2015	34	0.9
2016	33	0.9
2017	31	0.8
2018	30	0.8
2019	29	0.8
2020	28	0.7
2021	27	0.7
2022	26	0.7
2023	25	0.6
2024	24	0.6
2025	23	0.6
2026	22	0.6
2027	21	0.5
2028	20	0.5
2029	19	0.5
2030	19	0.5

PRODUCTION FORECAST FOR SUBTRACTION METHOD COMMINGLE ALLOCATION

**JICARILLA E #10  
OFFSET OPERATORS**

CONOCO, INC.  
SOUTHERN UNION EX.

**16**

CONOCO, INC.

**15**

CONOCO, INC.  
MERIT ENERGY CORP.

**14**

CONOCO, INC.  
SUPRON ENERGY CO.

**21**

CONOCO, INC.

**22**

CONOCO, INC.  
MERIT ENERGY CORP.

**23**

E #10



BURLINGTON RES.

**28**

BURLINGTON RES.

**27**

CONOCO, INC.  
SNYDER OIL CORP.  
SUPRON ENERGY CO.

**26**

**Township 26N --- Range 4W**

Conoco, Inc.  
Form C-107-A, Application for Downhole Commingling  
Filing date: June 13, 1997

Offset Operators for Wells as listed below:

Jicarilla K, Well #11  
Marathon Oil Co.  
Burlington Resources  
Amoco Production Co.

Jicarilla K, Well #17  
Burlington Resources  
Amoco Production

Jicarilla K, Well #16  
Burlington Resources  
Amoco Production

Newsom, Well #17E  
Amoco Production  
~~Snyder Oil Co.~~  
Robert R. Click

Jicarilla K, Well #15E  
Burlington Resources

Jicarilla E, Well #10  
Burlington Resources

Jicarilla E, Well #12  
Burlington Resources

Federal, Well #13E  
Burlington Resources  
Caulkins Oil Co.

AXI Apache J, Well #18A  
Amoco Production  
Elm Ridge Resources

Federal, Well #11E  
Caulkins Oil Co.  
Amoco Production  
Burlington Resources

Reames COM, Well #2  
Caulkins Oil Co.  
Burlington Resources

Conoco, Inc.  
Form C-107-A, Application for Downhole Commingling  
Filing Date: June 13, 1997  
Address List for Offset Operators

RE: Jicarilla K, Well #11, Jacarilla K, Well #17, Jicarilla K, Well #16, Newsom, Well #17E, Jicarilla K, Well #15E, Jicarilla E, Well #10, Jicarilla E, Well #12, Federal, Well 313E, AXI Apache J, Well #18A, Federal, Well #11E, Reames COM, Well #2

Marathon Oil Co., Box 552, Midland, Texas 79702

Burlington Resources, c/o Meridian Oil, Inc., Box 51810, Midland, Texas 79710-1810

Amoco Production Co., Exploration & Production Sector, Box 4891, Houston, Texas 77210

Caulkins Oil Co., Box 340, Bloomfield, NM 87413

Elm Ridge Resources, Box 3946, Farmington, NM 87499

Snyder Oil Co., no longer an operator in the New Mexico Aztec District as per District Office.

Robert R. Click, no longer an operator in the New Mexico Aztec District as per District Office.

P 497 368 595

US Postal Service  
Receipt for Certified Mail

Amoco Production Co.  
Expl. & Prod. Sector  
Box 4891  
Houston, Texas 77210

Postage	\$ 1.93
Certified Fee	1.35
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.10
Return Receipt Showing to Whom, Date, & Addressee's Address	
<b>TOTAL Postage &amp; Fees</b>	<b>\$ 4.38</b>
Postmark or Date	6-18-97

PS Form 3800, April 1995

P 497 368 594

US Postal Service  
Receipt for Certified Mail

Burlington Resources  
c/o Meridian Oil, Inc.  
Box 51810  
Midland, Texas 79710-1810

Postage	\$ 2.90
Certified Fee	1.35
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.10
Return Receipt Showing to Whom, Date, & Addressee's Address	
<b>TOTAL Postage &amp; Fees</b>	<b>\$ 5.35</b>
Postmark or Date	6-18-97

PS Form 3800, April 1995

P 497 368 593

US Postal Service  
Receipt for Certified Mail

Marathon Oil Co.  
Box 552  
Midland, Texas 79702

Postage	\$ .78
Certified Fee	1.35
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.10
Return Receipt Showing to Whom, Date, & Addressee's Address	
<b>TOTAL Postage &amp; Fees</b>	<b>\$ 3.23</b>
Postmark or Date	6-18-97

PS Form 3800, April 1995

P 497 368 597

US Postal Service  
Receipt for Certified Mail

Elm Ridge Resources  
Box 3946  
Farmington, NM 87499

Postage	\$ .78
Certified Fee	1.35
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.10
Return Receipt Showing to Whom, Date, & Addressee's Address	
<b>TOTAL Postage &amp; Fees</b>	<b>\$ 3.23</b>
Postmark or Date	6-18-97

PS Form 3800, April 1995

P 497 368 596

US Postal Service  
Receipt for Certified Mail

Caulkins Oil Co.  
Box 340  
Bloomfield, NM 87413

Postage	\$ 1.24
Certified Fee	1.35
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.10
Return Receipt Showing to Whom, Date, & Addressee's Address	
<b>TOTAL Postage &amp; Fees</b>	<b>\$ 3.69</b>
Postmark or Date	6-18-97

PS Form 3800, April 1995