

DATE IN 6/27/97	SUSPENSE 7/17/97	ENGINEER DC	LOGGED BY <i>[Signature]</i>	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]

1643

[1] **TYPE OF APPLICATION - Check Those Which Apply for [A]**

[A] Location - Spacing Unit - Directional Drilling

☐ NSL ☐ NSP ☐ DD ☐ SD

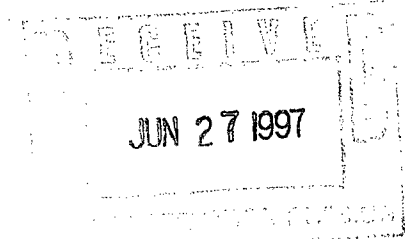
Check One Only for [B] and [C]

[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.

Jerry W. Hoover
 Print or Type Name

[Signature]
 Signature

Sr. Conservation Coordinator
 Title

6/19/97
 Date

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980
DISTRICT II
811 South 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 87505-6429

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

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

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

Jicarilla K 10 D-1-T25N-R5W Rio Arriba
Lease Well No Unit Ltr Sec Twp Rge County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 005073 Property Code 18023 API NO. 30-039-20260 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	So. Blanco Pictured Cliffs 72439	Blanco Mesaverde 72319	Basin Dakota 71599
2. TOP and Bottom of Pay Section (Perforations)	3214'-3284'	4120'-5590'	7414'-7610'
3. Type of production (Oil or Gas)	Gas	Gas	Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing	Flowing	Flowing
5. Bottom hole Pressure	a (Current)	a.	a.
Oil Zones - Artificial Lift: Estimated Current	268 psia	756 psia	628 psia
Gas & Oil - Flowing: Measured Current	b (Original)	b.	b.
All Gas Zones: Estimated Or Measured Original	1089 psia	1096 psia	2786 psia
6. Oil Gravity (°API) or Gas BTU Content	1274 BTU	1250 BTU	1277 BTU
7. Producing or Shut-In?	Producing	To be Completed	Producing
Production Marginal? (yes or no)	Yes	Yes	Yes
• If Shut-In give date and oil/gas/water rates of last production	Date Rates	Date Incremental Production by Subtraction --- Use attached Table	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 Rates Mid-Year Average Producing Rates -- See attached Table	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 _____

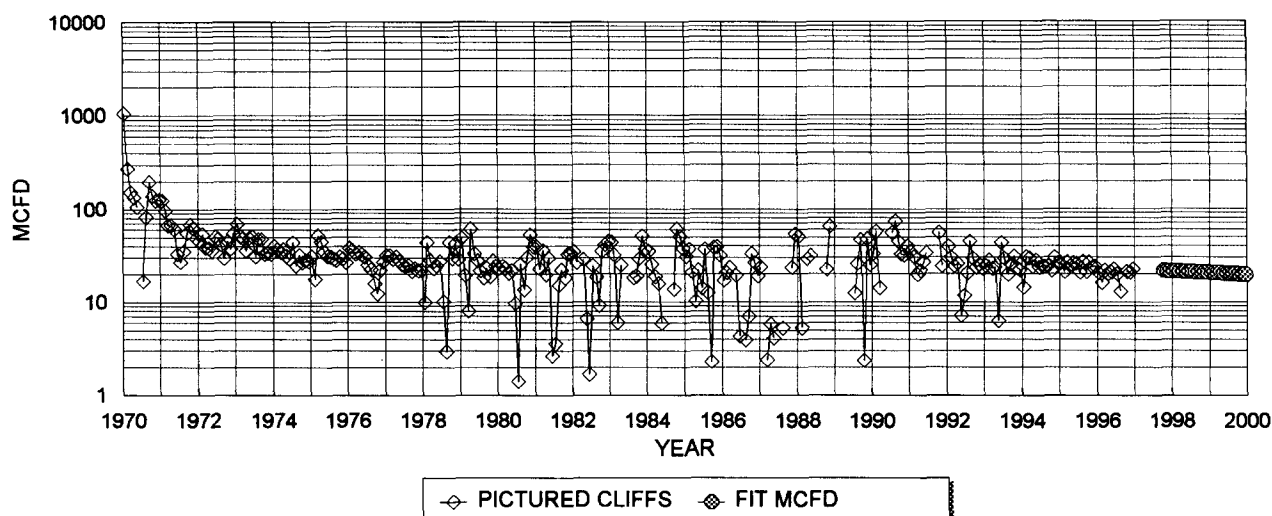
TYPE OR PRINT NAME Jerry W. Hoover TELEPHONE NO. (915) 686-6548

PREPARED BY: PDB

JICARILLA K 10 DAKOTA/PICTURED CLIFFS COMMINGLED PRODUCTION FOR SUBTRACTION METHOD

YEAR	PC MID-YEAR MCFD	DAKOTA MID-YEAR MCFD	DAKOTA MID-YEAR BOPD	TOTAL MID-YEAR AVG. MCFD	TOTAL MID-YEAR AVG. BOPD
1997	21.3	80	0.5	102	0.5
1998	20.8	78	0.5	99	0.5
1999	20	75	0.5	95	0.5
2000	19	72	0.5	91	0.5
2001	18	69	0.5	88	0.5
2002	18	67	0.4	84	0.4
2003	17	64	0.4	81	0.4
2004	16	61	0.4	78	0.4
2005	16	59	0.4	75	0.4
2006	15	57	0.4	72	0.4
2007	14	54	0.4	69	0.4
2008	14	52	0.3	66	0.3
2009	13	50	0.3	63	0.3
2010	13	48	0.3	61	0.3
2011	12	46	0.3	58	0.3
2012	12	44	0.3	56	0.3
2013	11	43	0.3	54	0.3
2014	11	41	0.3	52	0.3
2015	10	39	0.3	50	0.3
2016	10	38	0.3	48	0.3
2017	10	36	0.2	46	0.2
2018	9	35	0.2	44	0.2
2019	9	33	0.2	42	0.2
2020	8	32	0.2	40	0.2
2021	8	31	0.2	39	0.2
2022	8	29	0.2	37	0.2
2023	7	28	0.2	36	0.2
2024	7	27	0.2	34	0.2
2025	7	26	0.2	33	0.2
2026	7	25	0.2	32	0.2
2027	6	24	0.2	30	0.2
2028	6	23	0.2	29	0.2
2029	6	22	0.1	28	0.1
2030	6	21	0.1	27	0.1
2031	5	20	0.1	26	0.1

**JICARILLA K 10 PICTURED CLIFFS PRODUCTION
SECTION 1D-25N-05W**



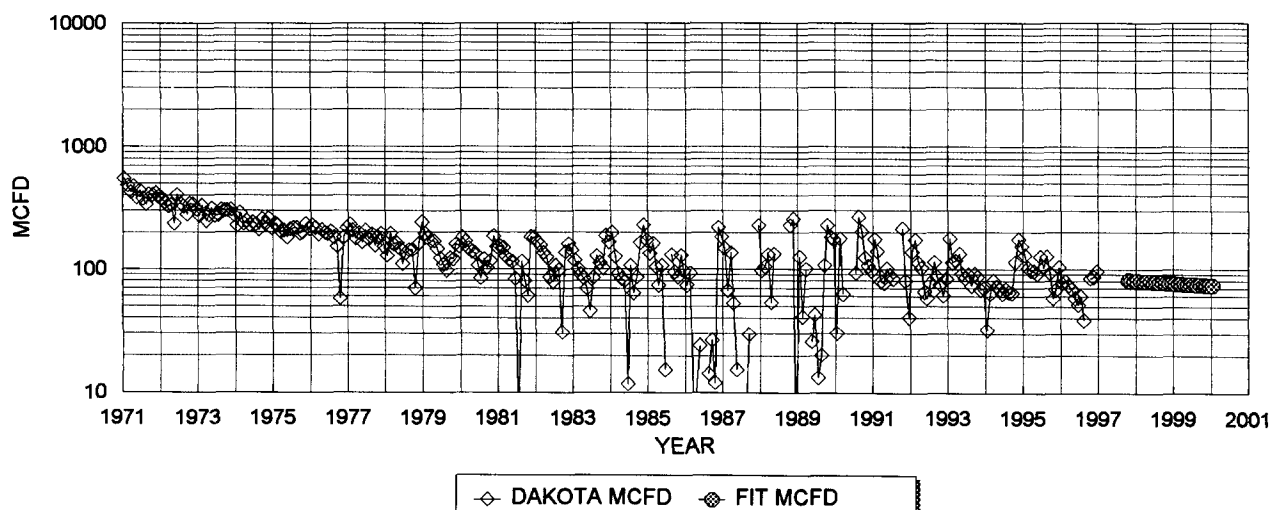
PICTURED CLIFFS HISTORICAL DATA 1ST PROD: 01/70

OIL CUM: 0.22 MBO
GAS CUM: 322.0 MMCF
OIL YIELD: 0.0007 BBL/MCF

PICTURED CLIFFS PROJECTED DATA

10/1/97 Qi: 21 MCFD
DECLINE RATE: 4.0% (EXPONENTIAL)

**JICARILLA K 10 DAKOTA PRODUCTION
SECTION 1D-25N-5W**



DAKOTA HISTORICAL DATA 1ST PROD: 01/70

OIL CUM: 10.5 MBO
GAS CUM: 1566.7 MMCF
OIL YIELD: 0.0067 BBL/MCF

DAKOTA PROJECTED DATA

10/1/97 Qi: 81 MCFD
DECLINE RATE: 4.0% (EXPONENTIAL)

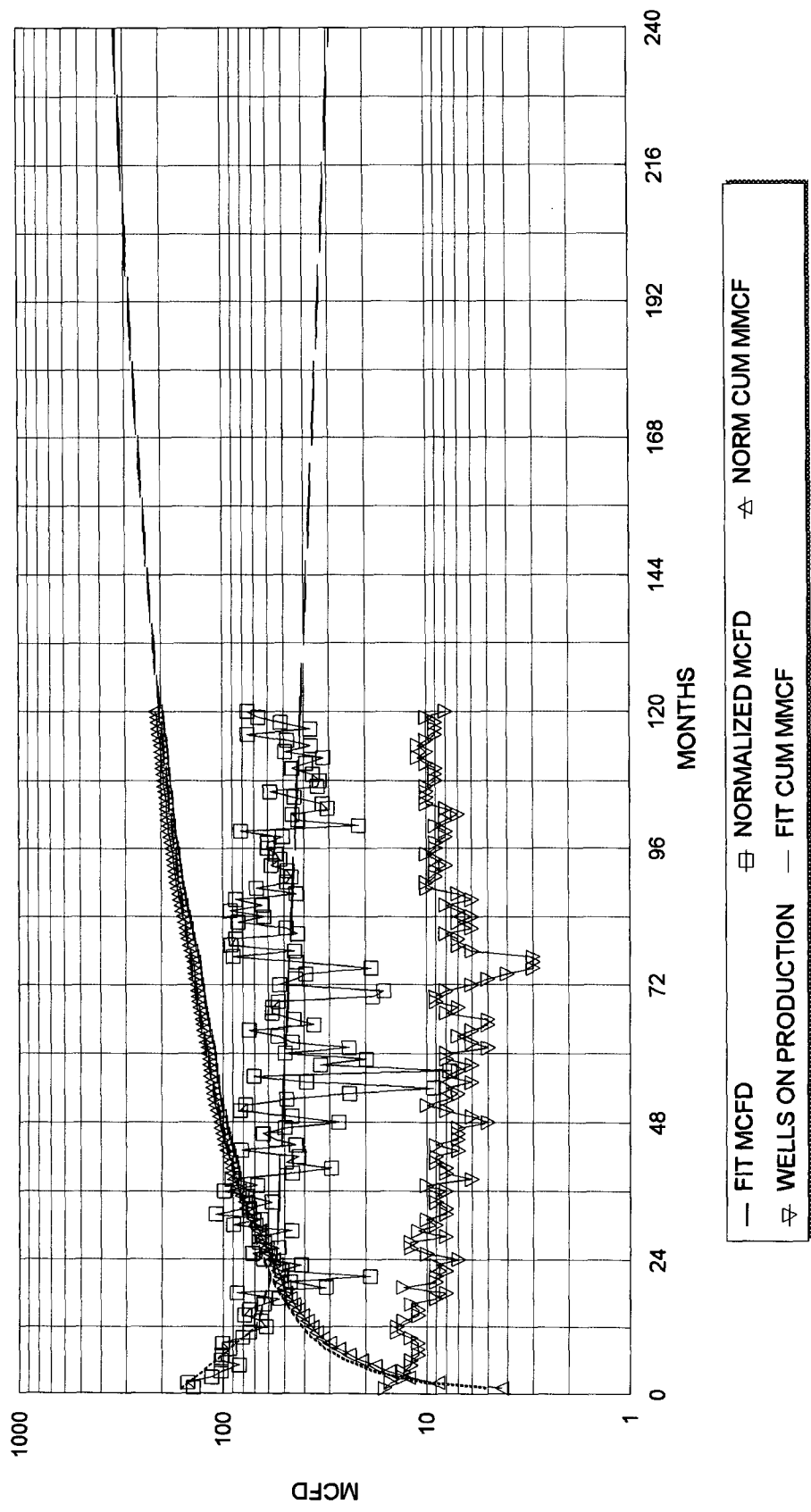
FIXED COMMINGLE ALLOCATION FACTORS:

	GAS	OIL
PIC. CLIFFS	21%	3%
DAKOTA	79%	97%

GAS ALLOCATION BASED ON PROJECTED 1997 RATES
OIL ALLOCATION BASED ON WEIGHTED CUM OIL YIELDS

NOTE: ALL PRODUCTION DATA FROM DWIGHTS ENERGY DATA

NORMALIZED MESAVERDE PRODUCTION
17 WELLS SINCE 1982; OFFSET TO JIC. K LEASE (25N-5W)



NORMALIZED AVG:	
423 MMCF EUR	172 MCFD IP
331 MMCF IN 20 YRS	60.0% DECLINE, 1ST 12 MONTHS
20 MCFD E.L.	20.0% DECLINE, NEXT 12 MONTHS
0.05 BBL/MCF OIL	3.5% FINAL DECLINE

NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND AVERAGE DEDICATION PLAT

All distances must be from the corner boundaries of the section.

Operator SOUTHERN UNION PRODUCTION COMPANY		Lease JICARILLA #1		Well No. 10
Unit/Lot B	Section 3	Township 25 NORTH	Range 8 WEST	County ELKO, ARIZONA
Actual Footing Location of Well: 790 feet from the NORTH line and 1190 feet from the WEST line				
Ground Level Elev. 6690.0	Productive Formation San Juan U1120 Dakota	Pool South Elmore Dakota	Dedicated Average 160 P.G. Dakota 019.69 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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?

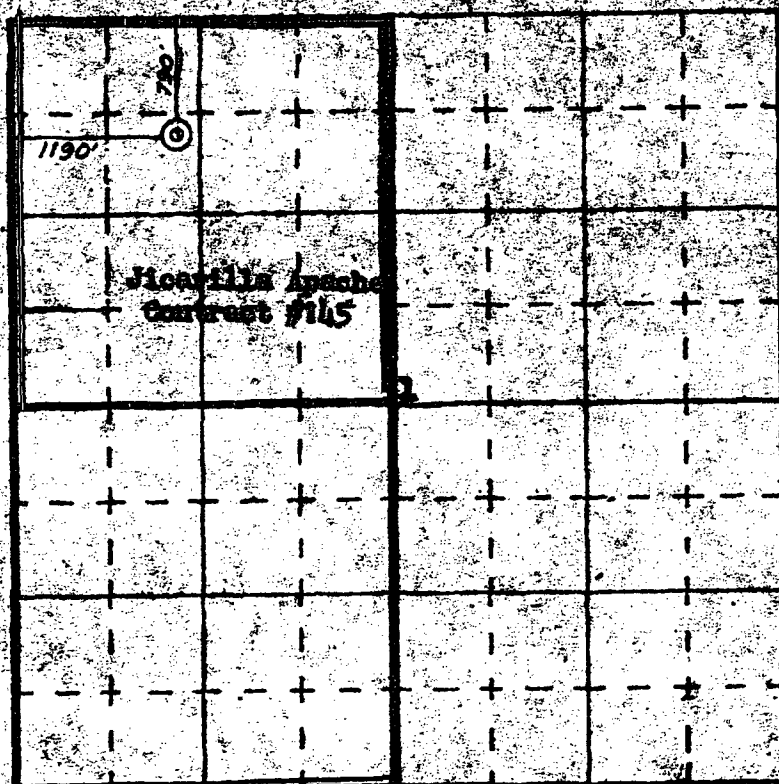
() Yes () No If answer is "yes," type of consolidation _____

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.

Indicated Pictorial Grid/Acreage

Dedicated Dakota Acreage



SCALE - 4 INCHES EQUALS 1 MILE

CERTIFICATION

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

ORIGINAL SIGNED BY

Name B. R. VANDERSLICE

Position Bill Vanderslice

Company Area Superintendent

Date Southern Union Production

August 8, 1969

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.

6 August 1969

Date Surveyed

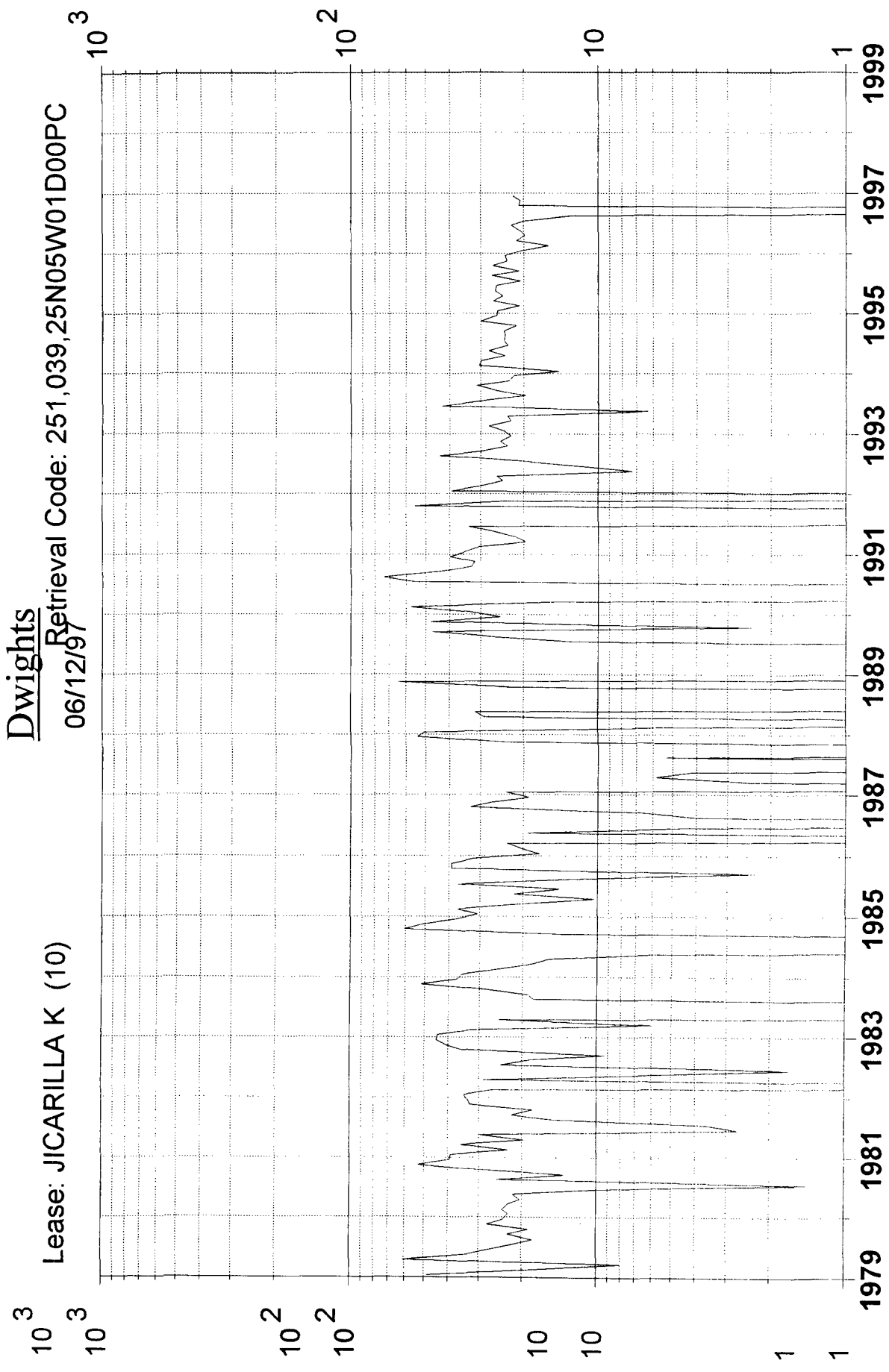
Registered Professional Engineer and/or Land Surveyor

Certificate No. 1463

Dwights

Lease: JICARILLA K (10) Retrieval Code: 251,039,25N05W01D00PC

06/12/97



Gas (mcf/day) Water (bbl/day)

Oil (bbl/day)

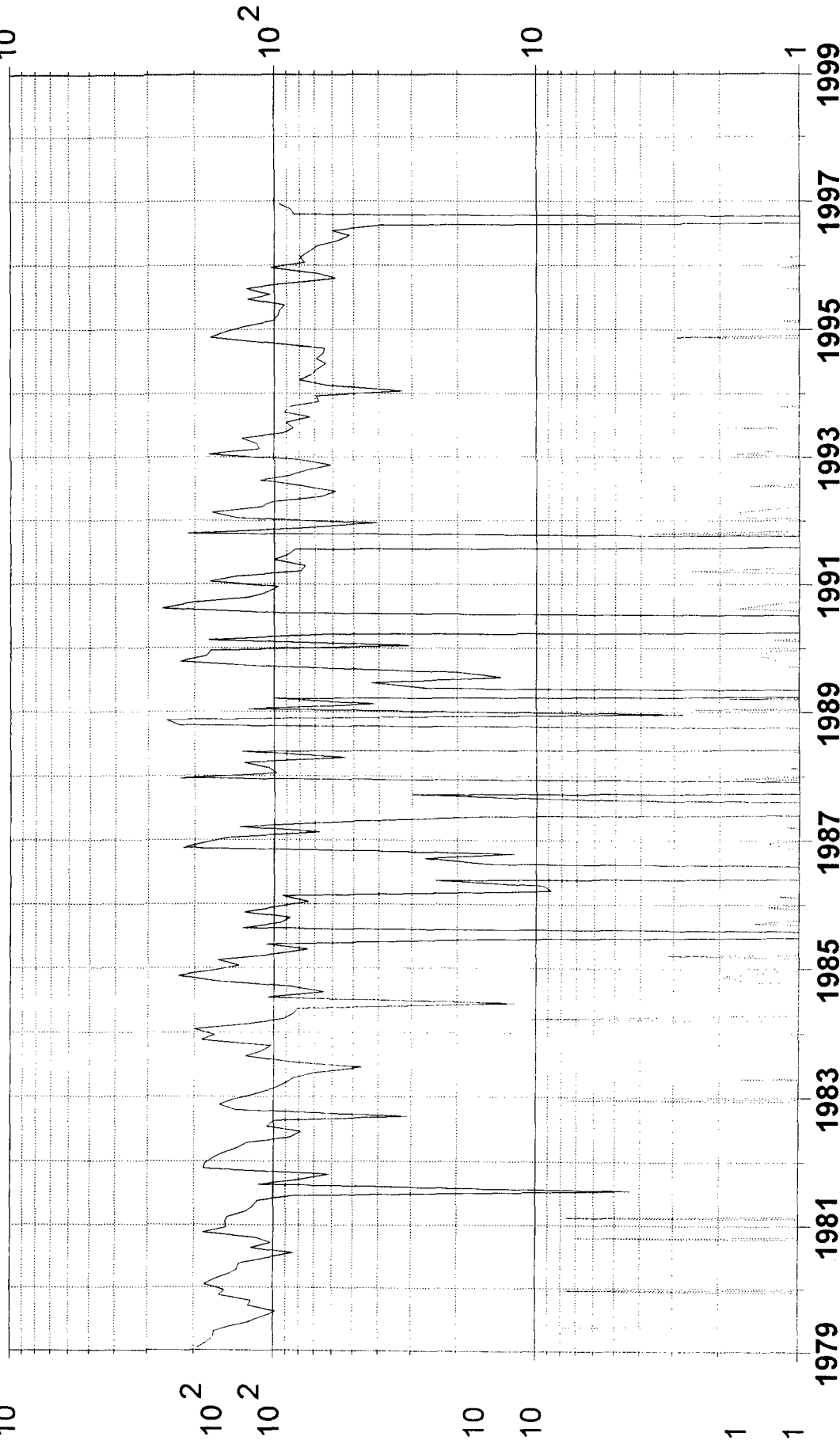
County: RIO ARRIBA, NM	F.P. Date: N/A
Field: BLANCO SOUTH (PICTU	Oil Cum: 217 bbl
Reservoir: PICTURE CLIFFS	Gas Cum: 322.0 mmcf
Operator: CONOCO INC	Location: 1D 25N 5W

Lease: JICARILLA K (10)

Dwights

Retrieval Code: 251,039,25N05W01D00DK

06/12/97



Gas (mcf/day)

Oil (bbl/day)

Water (bbl/day)

County: RIO ARriba, NM

F.P. Date: 02/70

Field: BASIN (DAKOTA) DK

Oil Cum: 10.45 mbbbl

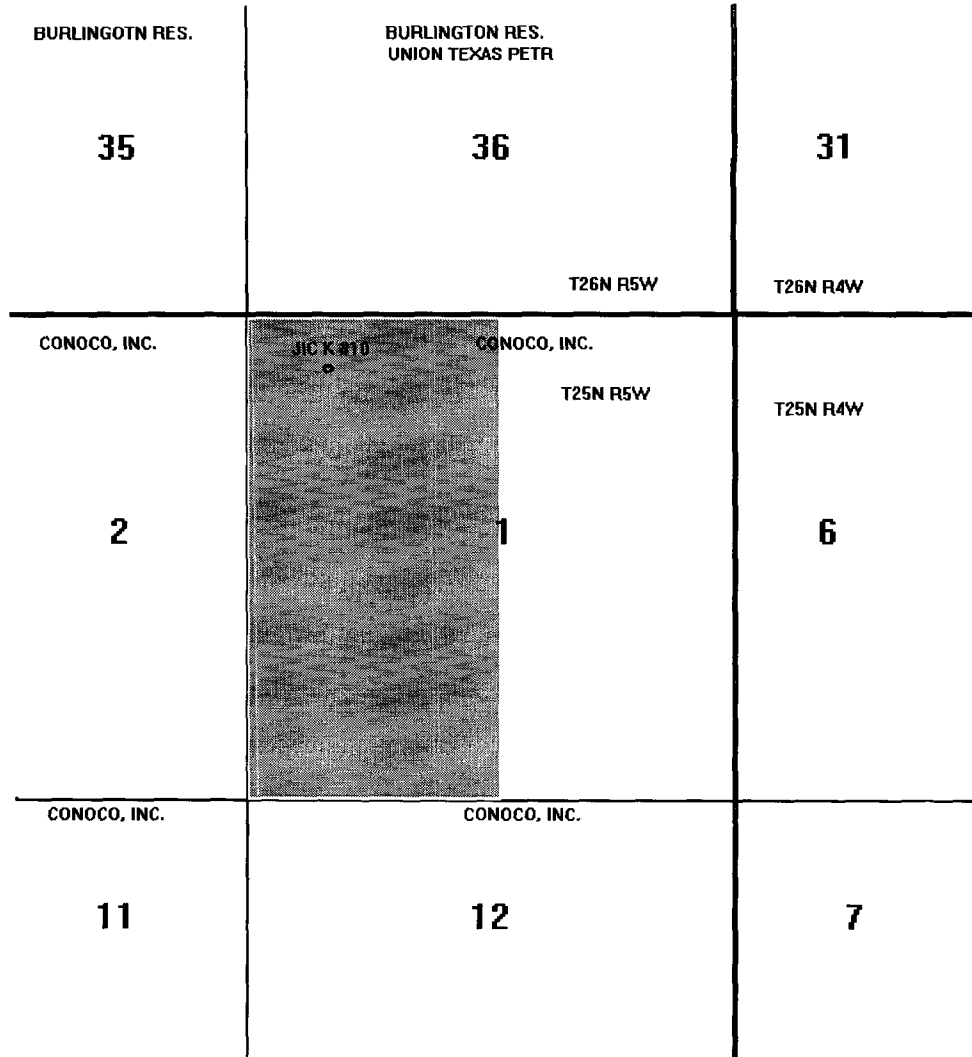
Reservoir: DAKOTA

Gas Cum: 1567 mmcf

Operator: CONOCO INC

Location: 1D 25N 5W

JICARILLA K #10
OFFSET OPERATORS



Township 25N -- Range 5W