

DATE IN <u>2/19/98</u>	SUSPENSE <u>3/11/98</u>	ENGINEER <u>DC</u>	LOGGED BY <u>MV</u>	TYPE <u>DHC</u>
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1866

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

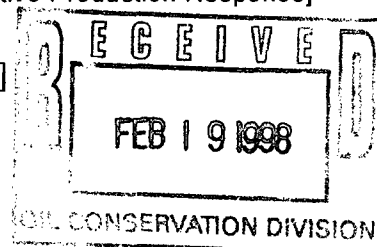
Check One Only for [B] and [C]

[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.

Kay Maddox
Print or Type Name

Kay Maddox
Signature

Regulatory Agent
Title

2/16/98
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

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

Jicarilla K 14 Section 11, T-25-N, R-5-W, O Rio Arriba
Lease Well No Unit Ltr Sec Twp Rge County

OGRID NO. 005073 Property Code 18023 API NO. 30-039-20392 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	Blanco Pictured Cliffs South 72439	Otero Chacra 82329	Blanco Mesaverde 72319
2. TOP and Bottom of Pay Section (Perforations)	3064-3114'	3950-3980'	5075-5510'
3. Type of production (Oil or Gas)	Gas	Gas	Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing	Flowing	To Flow
5. Bottomhole Pressure	a. (Current)	a.	a.
Oil Zones - Artificial Lift: Estimated Current	378	503	560
Gas & Oil - Flowing: Measured Current	b. (Original)	b.	b.
All Gas Zones: Estimated Or Measured Original	1140	1012	1317
6. Oil Gravity (°API) or Gas BT Content	1225	1204	1324
7. Producing or Shut-In?	Producing	Shut-in	To Be Completed
Production Marginal? (yes or no)	Yes	Yes	Yes
• If Shut-In give date and oil/gas/water rates of last production	Date Rates	Est 7/98 24 MCFD, 0 BOPD, 0 BWPD 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, date and oil/gas/water rates of recent test (within 60 days)	Est 7/98 14 MCFD, 0 BOPD, 0 BWPD Date Rates	Date Rates	Production to be allocated by subtraction - See attached table Date Rates
8. Fixed Percentage Allocation Formula - % or 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). DHC Order # 806

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 Kay Maddox TITLE Regulatory Agent DATE February 16, 1998

TYPE OR PRINT NAME Kay Maddox TELEPHONE NO. (915) 686-5798

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 I First St. Artesia NM 88210 2835

OIL CONSERVATION DIVISION

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

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

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APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

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

Jicarilla K 14 Section 11, T-25-N, R-5-W, O Rio Arriba
Lease Well No Unit Ltr Sec Twp Rge County

OGRID NO. 005073 Property Code 18023 API NO. 30-039-20392 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	Lowest Zone
1. Pool Name and Pool Code			Basin Dakota 71599
2. TOP and Bottom of Pay Section (Perforations)			7262-7278'
3. Type of production (Oil or Gas)			Gas
4. Method of Production (Flowing or Artificial Lift)			Flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a (Current) b(Original)	a. b.	a. 949 b. 2804
6. Oil Gravity (*API) or Gas BT Content			1275
7. Producing or Shut-in?			Shut-in
Production Marginal? (yes or no)			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	Date Rates	Est 7/98 47 MCFD, 0.7 BOPD, 0 BWPD
• If Producing, date and oil/gas/ water rates of recent test (within 60 days)	Date Rates	Date Rates	Date Rates
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)

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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). DHC # 806

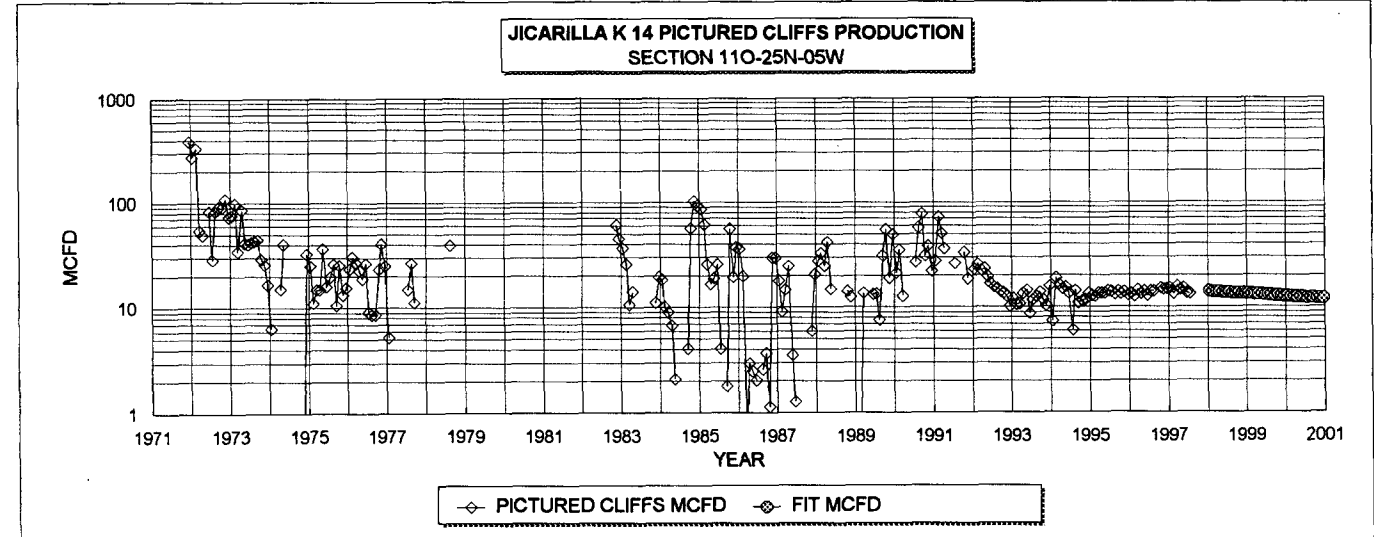
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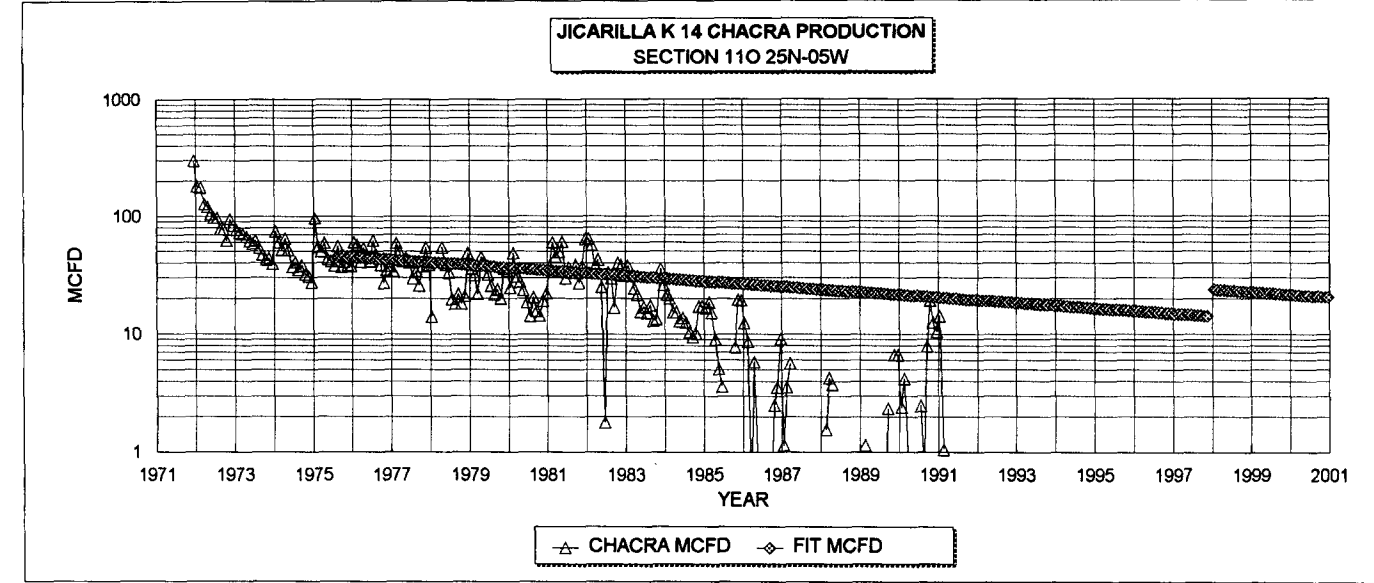
I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Kay Maddox TITLE Regulatory Agent DATE February 16, 1998

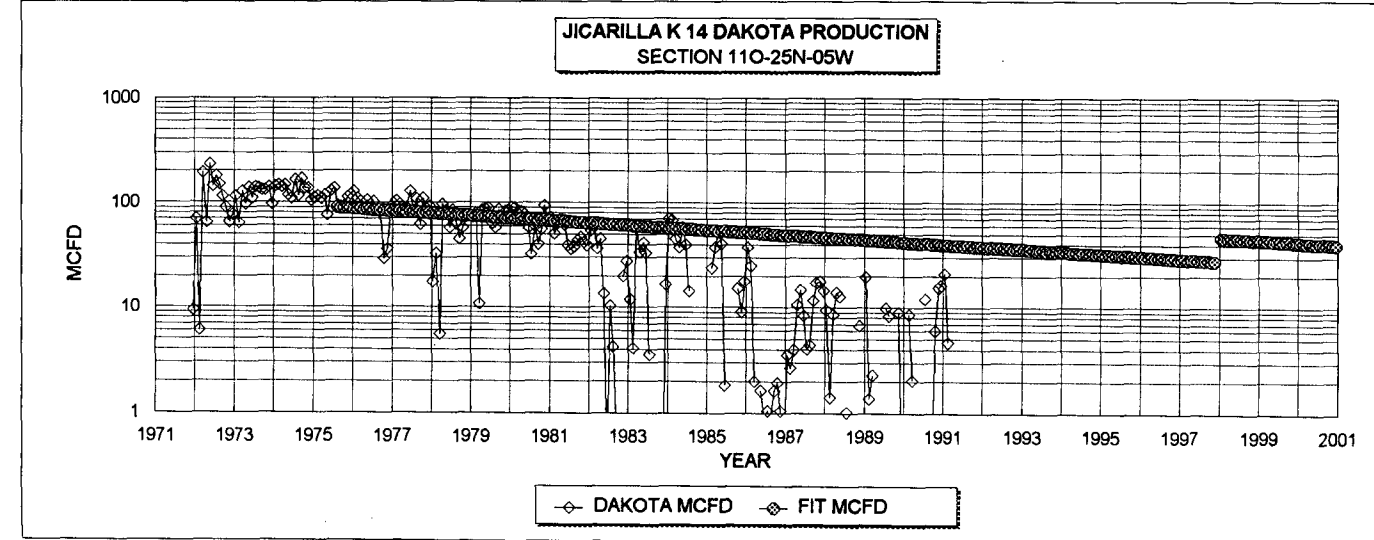
TYPE OR PRINT NAME Kay Maddox TELEPHONE NO. (915) 686-5798



PICTURED CLIFFS HISTORICAL DATA: 1ST PROD: 12/71		PIC. CLIFFS	PROJECTED DATA
OIL CUM:	0.11 MBO	7/1/98 Q1:	14 MCFD
GAS CUM:	179.8 MMCF	DECLINE RATE:	5.1% (EXPONENTIAL)
OIL YIELD:	0.0006 BBL/MCF		



CHACRA HISTORICAL DATA: 1ST PROD: 12/71		CHACRA	PROJECTED DATA
OIL CUM:	0.0 MBO	7/1/98 Q1:	24 MCFD
GAS CUM:	214.3 MMCF	DECLINE RATE:	5.1% (EXPONENTIAL)
OIL YIELD:	0.0000 BBL/MCF		



DAKOTA HISTORICAL DATA		1ST PROD: 12/71	DAKOTA	PROJECTED DATA
OIL CUM:	5.8 MBO		7/1/98 Q1:	47 MCFD
GAS CUM:	374.0 MMCF		DECLINE RATE:	5.1% (EXPONENTIAL)
OIL YIELD:	0.0156 BBL/MCF			

FIXED COMMINGLE ALLOCATION FACTORS:			
	GAS	OIL	
PIC. CLIFFS	17%	0%	GAS ALLOCATION BASED ON PROJECTED 1998 RATES
CHACRA	28%	0%	OIL ALLOCATION BASED ON WEIGHTED CUM OIL YIELDS
DAKOTA	55%	100%	NOTE: ALL PRODUCTION DATA FROM DWIGHTS ENERGYDATA

PREPARE

JICARILLA K 14: PICTURED CLIFFS, CHACRA, AND DAKOTA FORECAST FOR SUBTRACTION COMMINGLE WITH MESAVERDE

110-25N-05W

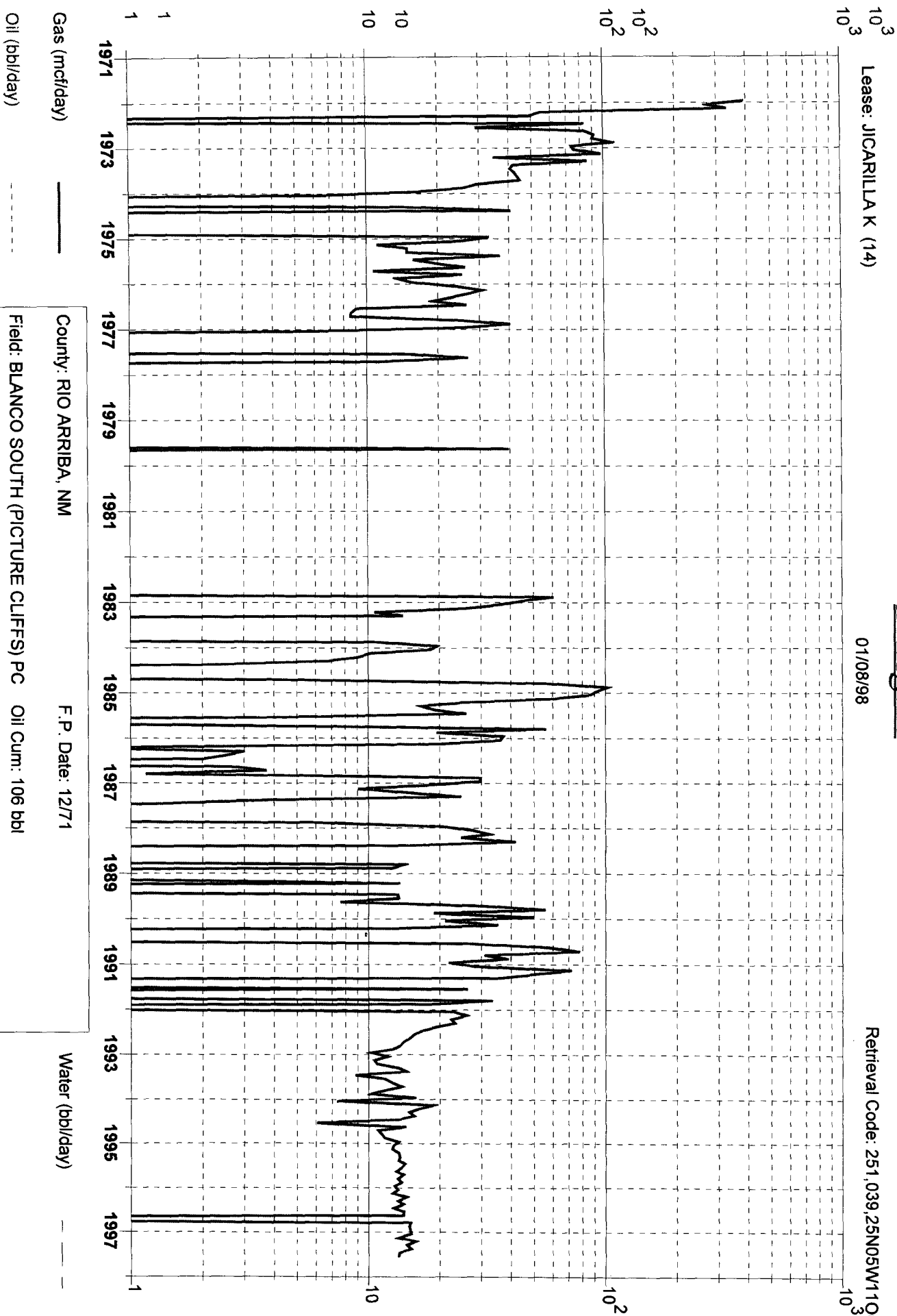
YEAR	PICT. CLIFFS	CHACRA	DAKOTA	TOTAL	PICT. CLIFFS	CHACRA	DAKOTA
	MCFD	MCFD	MCFD	MCFD	OIL; BOPD	OIL; BOPD	OIL; BOPD
1998	14	23	46	83	0.0	0.0	0.7
1999	13	23	44	80	0.0	0.0	0.7
2000	13	21	42	76	0.0	0.0	0.7
2001	12	20	40	72	0.0	0.0	0.6
2002	11	19	38	68	0.0	0.0	0.6
2003	11	18	38	65	0.0	0.0	0.6
2004	10	17	34	62	0.0	0.0	0.5
2005	10	16	32	59	0.0	0.0	0.5
2006	9	16	31	56	0.0	0.0	0.5
2007	9	15	29	53	0.0	0.0	0.5
2008	8	14	28	50	0.0	0.0	0.4
2009	8	13	28	47	0.0	0.0	0.4
2010	7	13	25	45	0.0	0.0	0.4
2011	7	12	24	43	0.0	0.0	0.4
2012	7	11	22	41	0.0	0.0	0.3
2013	6	11	21	38	0.0	0.0	0.3
2014	6	10	20	37	0.0	0.0	0.3
2015	6	10	19	35	0.0	0.0	0.3
2016	5	9	18	33	0.0	0.0	0.3
2017	5	9	17	31	0.0	0.0	0.3
2018	5	8	16	30	0.0	0.0	0.3
2019	5	8	16	29	0.0	0.0	0.2
2020	4	8	15	27	0.0	0.0	0.2
2021	4	7	14	25	0.0	0.0	0.2
2022	4	7	13	24	0.0	0.0	0.2
2023	4	6	13	23	0.0	0.0	0.2
2024	4	6	12	22	0.0	0.0	0.2
2025	3	6	11	21	0.0	0.0	0.2
2026	3	5	11	19	0.0	0.0	0.2
2027	3	5	10	18	0.0	0.0	0.2
2028	3	5	10	18	0.0	0.0	0.2
2029	3	5	9	17	0.0	0.0	0.1
2030	3	4	9	16	0.0	0.0	0.1
2031	2	4	8	15	0.0	0.0	0.1
2032	2	4	8	14	0.0	0.0	0.1
2033	2	4	7	14	0.0	0.0	0.1
2034	2	4	7	13	0.0	0.0	0.1
2035	2	3	7	12	0.0	0.0	0.1
2036	2	3	6	12	0.0	0.0	0.1
2037	2	3	6	11	0.0	0.0	0.1
2038	2	3	6	10	0.0	0.0	0.1
2039	2	3	5	10	0.0	0.0	0.1
2040	2	3	5	9	0.0	0.0	0.1
2041	1	3	5	9	0.0	0.0	0.1
2042	1	2	5	8	0.0	0.0	0.1
2043	1	2	4	8	0.0	0.0	0.1
2044	1	2	4	8	0.0	0.0	0.1
2045	1	2	4	7	0.0	0.0	0.1
2046	1	2	4	7	0.0	0.0	0.1
2047	1	2	4	6	0.0	0.0	0.1
2048	1	2	3	6	0.0	0.0	0.1
2049	1	2	3	6	0.0	0.0	0.1
2050	1	2	3	6	0.0	0.0	0.0

Dwights

Lease: JICARILLA K (14)

01/08/98

Retrieval Code: 251,039,25N05W11Q00PC



County: RIO ARriba, NM

F.P. Date: 12/71

Field: BLANCO SOUTH (PICTURE CLIFFS) PC

Oil Cum: 106 bbl

Reservoir: PICTURE CLIFFS

Gas Cum: 179.8 mmcf

Operator: CONOCO INC

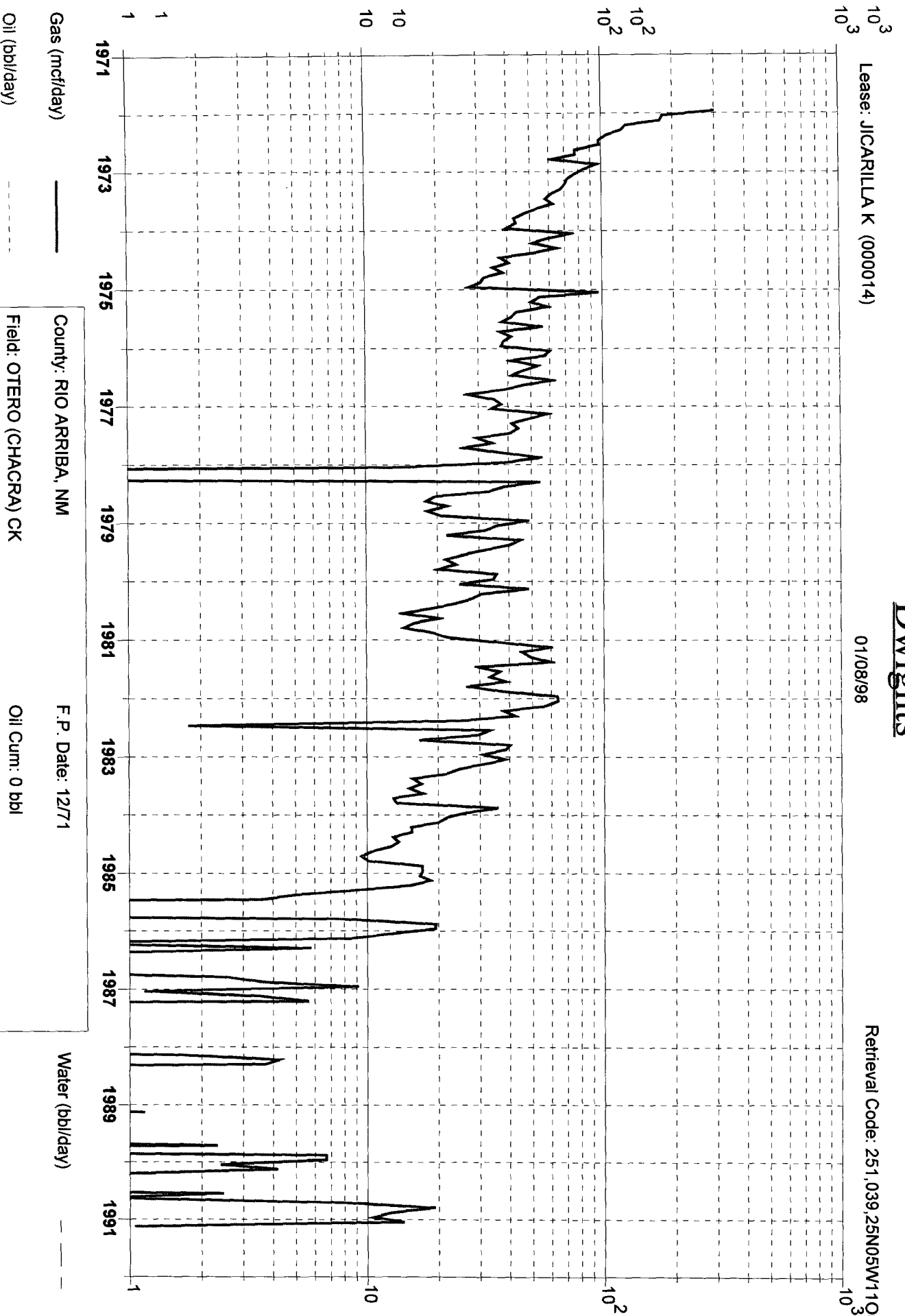
Location: 11O 25N 5W

Dwights

Lease: JICARILLA K (000014)

01/08/98

Retrieval Code: 251,039,25N05W11O00CK



County: RIO ARriba, NM

F.P. Date: 12/71

Field: OTERO (CHACRA) CK

Oil Cum: 0 bbl

Reservoir: CHACRA

Gas Cum: 214.3 mmcf

Operator: MERIT ENERGY CORP

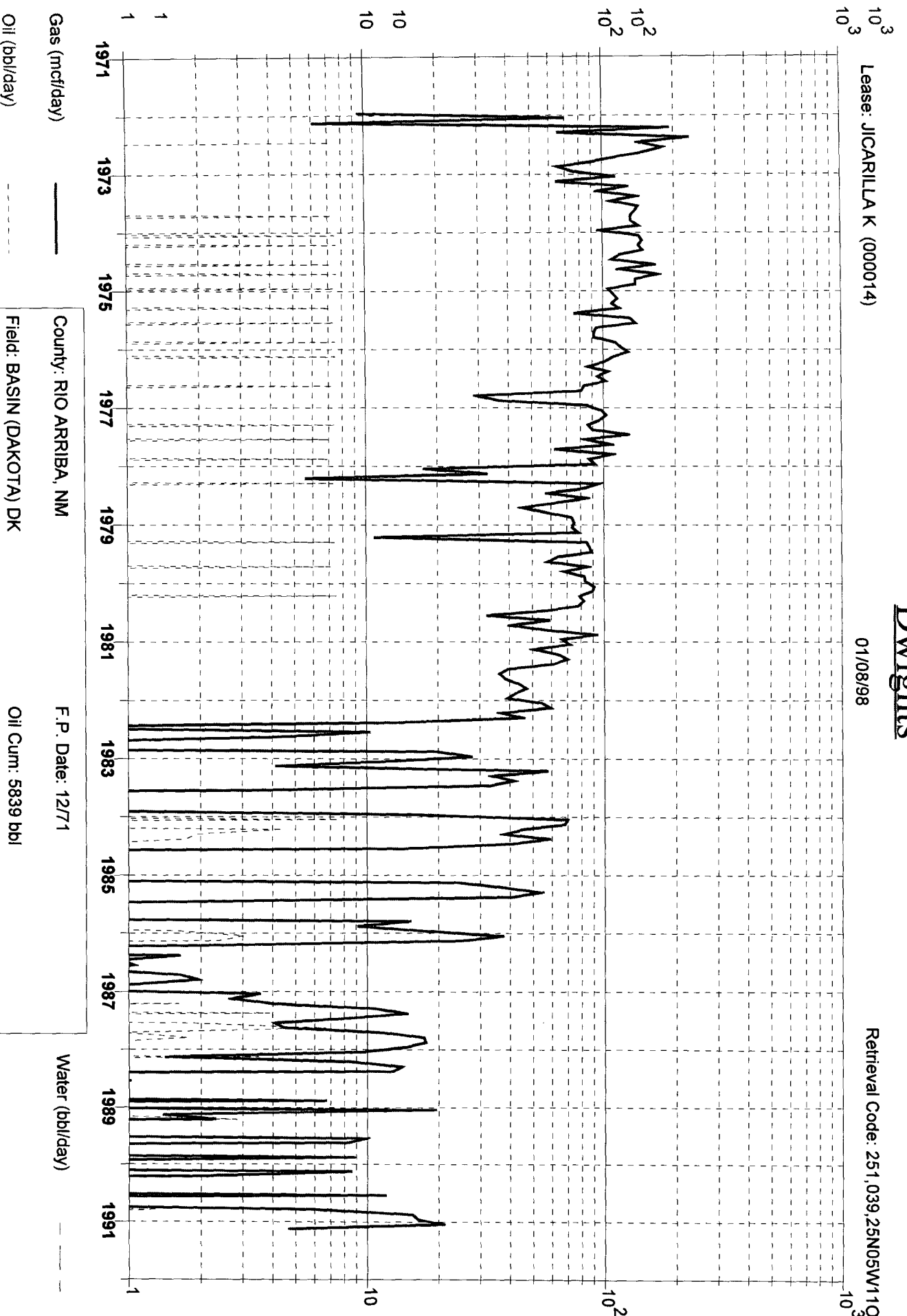
Location: 11O 25N 5W

Dwights

Lease: JICARILLA K (000014)

01/08/98

Retrieval Code: 251,039,25N05W11Q00DK



County: RIO ARRIBA, NM

F.P. Date: 12/71

Field: BASIN (DAKOTA) DK

Oil Cum: 5839 bbl

Reservoir: DAKOTA

Gas Cum: 374.0 mmcf

Operator: MERIT ENERGY CORP

Location: 11O 25N 5W

District I
PO Box 1980, Hobbs, NM 88241-1980

State of New Mexico
Energy, Minerals & Natural Resources Department

Revised February 21, 1994

District II
PO Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION

instructions on back

District III
1000 Rio Brazos Rd. Aztec, NM 87410

PO Box 2088
Santa Fe, NM 87504-2088

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

District IV
PO Box 2088, Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-039-20392		2 Pool Code 72319		3 Pool Name Blanco Mesaverde	
4 Property Code 18023		5 Property Name Jicarilla K			6 Well Number 14
7 OGRID No. 005073		8 Operator Name Conoco Inc., 10 Desta Drive, Ste. 100W, Midland, TX 79705-4500			9 Elevation 6798'KB

10 Surface Location

UL or lot no. O	Section 11	Township 25N	Range 5W	Lot Idn	Feet from the 975	North/South line South	Feet from the 1640	East/West line East	County Rio Arriba
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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
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

16							17 OPERATOR CERTIFICATION		
							I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief		
							Signature <i>Kay Maddox</i> Kay Maddox		
							Printed Name Regulatory Agent		
						Title 2/16/98			
						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:			
						Certificate Number			

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-16,
Supersedes O-15
Effective 1-1-68

All distances must be from the outer boundaries of the Section

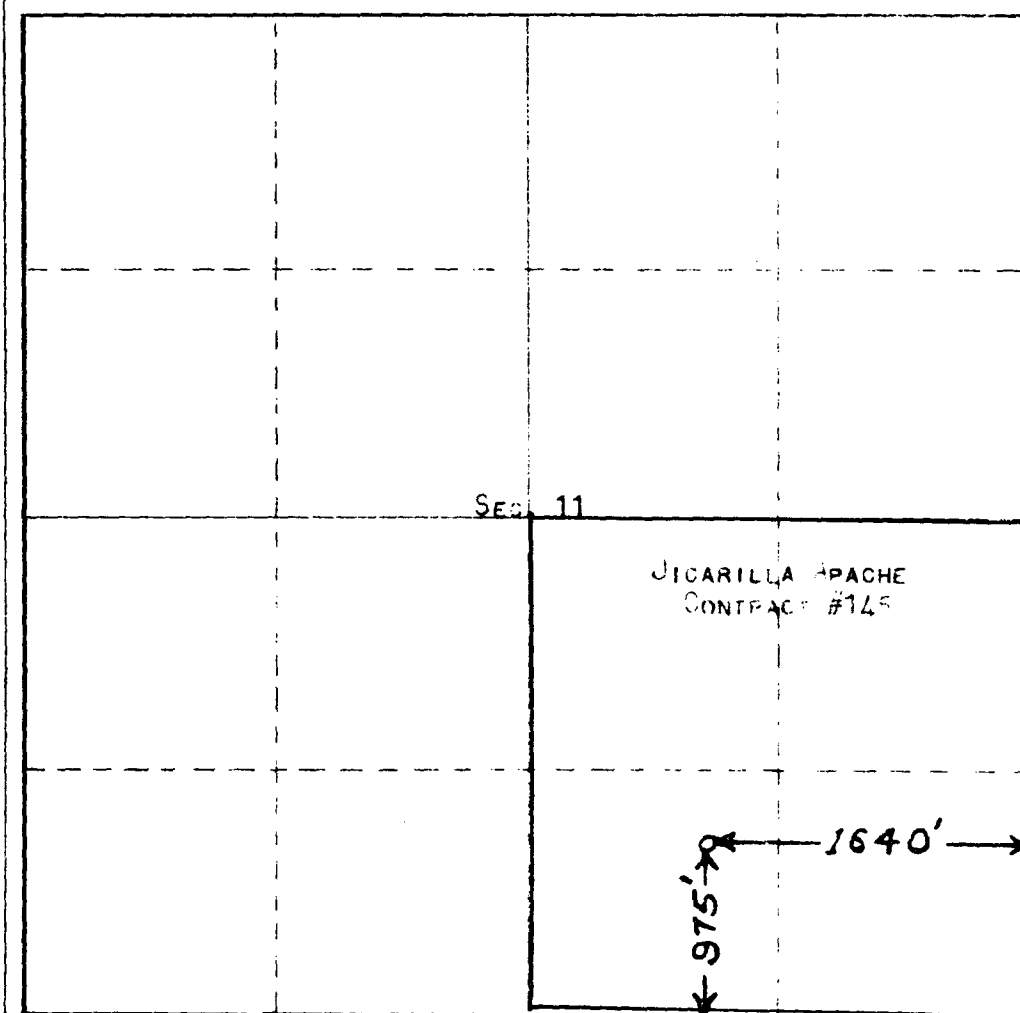
Operator SOUTHERN UNION PRODUCTION COMPANY		Well Name JICARILLA "B"		Well No. 14
East Corner 0	Section 11	Township 25 NORTH	Range 5 WEST	County TRIO, NEW MEXICO
Annual Production of Well 975 feet from the SOUTH line and 1640 feet from the EAST line				
Ground Level Elev. 6787.0	Producing Formation CHACRA	Well Name OTERO CHACRA EXT.		

1. Outline the acreage dedicated to the subject well by colored pencil or ballpoint marker 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 communitization, 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 been consolidated (fill in reverse side of this form if necessary.) _____

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



CERTIFICATION

I hereby certify that the well location and acreage shown on this plat were determined by me or by a person under my knowledge and belief.

Gilbert D. Norland Jr.

Gilbert D. Norland Jr.

Drilling Superintendent

For me,
SOUTHERN UNION PRODUCTION

Date
NOVEMBER 3, 1977

I hereby certify that the well location and acreage shown on this plat were determined by me or by a person under my supervision, and that this plat is true and correct to the best of my knowledge and belief.

18th JUNE, 1977

JAMES P. [unclear]

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

All distances must be from the outer boundaries of the Section

Operator **SOUTHERN UNION PRODUCTION COMPANY** JICARILLA 14
 Unit Number Section **11** Township **25 NORTH** Range **5 WEST** Meridian **RIO ARIZONA**
 Actual Well Location of Well 1640 EAST
 Gross Acreage 1987.0 **PICTURED CLIFFS DAKOTA** **SOUTH BLANCO BASIN DAKOTA** **PICTURED CLIFFS SE 1/4 160 E 1/2 320 DAKOTA**

- Outline the acreage dedicated to the subject well by colored pencil or hardy pen on the plat below
- If more than one lease is dedicated to the well, outline each and name 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 communitization, unitization, force-pooling, etc?

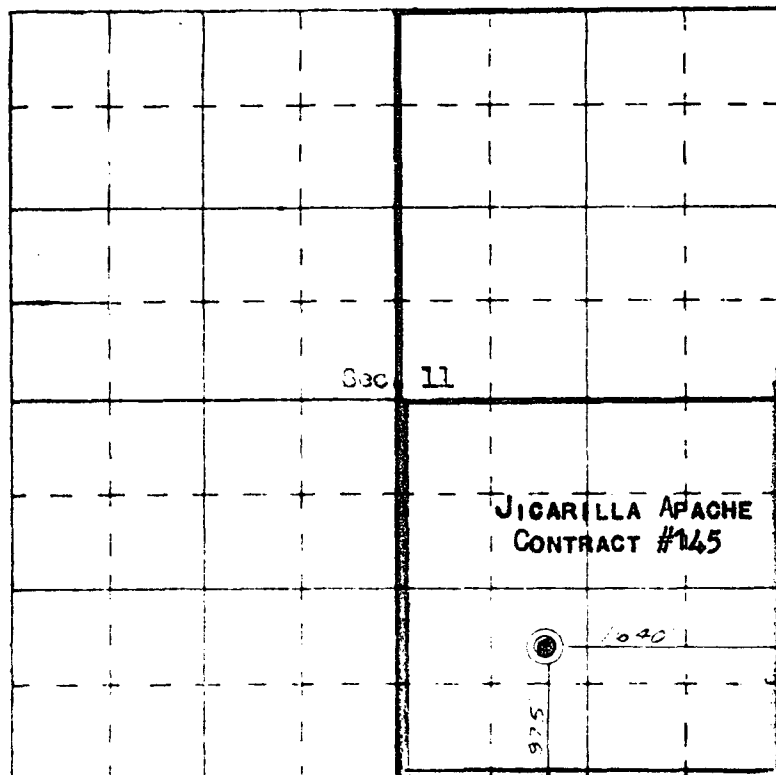
1. Yes 2. No If answer is "yes," type of consolidation _____

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

No dilutable will be assigned to the well until all interests have been consolidated (by communitization, 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



SCALE—1 INCHES EQUALS 1 MILE

SAN JUAN ENGINEERING COMPANY, FARMINGTON, N. M.

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.

Position
GILBERT D. NOLAND, JR.
DRILLING SUPERINTENDENT
SOUTHERN UNION PRODUCTION

JUNE 23, 1971

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.

10 June, 1971
 Signed by *[Signature]*
 State Engineer
 State of New Mexico

1402

Conoco, Inc.
Jicarilla K #14
Section 11, T-25-N, R-5-W, O
Rio Arriba County, New Mexico

RE: Application for Downhole Commingling

Offset Operators:

Conoco, Inc. Is the only offset operator