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MAR 11 1996

OIL CONSERVATION DIV.
SANTA FE

Southern

Rockies

Business

Unit

March 7, 1996

Mr. William J. LeMay, Director
New Mexico Oil Conservation Division
2040 S. Pacheco Street
P. O. Box 6429
Santa Fe, NM 87505

Application for Exception to Rule 303-C

Downhole Commingling

Florance #64/Florance D10A Well

970 FSL & 2370' FEL, Unit O Section 17-T27N-R8W

Blanco Mesaverde (Pool IDN 72319) and Basin Dakota (Pool IDN 71599) Pools

San Juan County, New Mexico

Amoco Production Company hereby requests administrative approval to downhole commingle production from the Blanco Mesaverde and Basin Dakota Pools in the Florance #64/Florance D10A well referenced above. The Florance #64 is currently completed in the Dakota formation. We plan to recomplate the well in the Mesaverde with both the Mesaverde and Dakota formations being downhole commingled in the wellbore. The two zones are expected to produce at a total commingled rate of about 260 MCFD with less than 1 BCPD. The ownership (WI, RI, ORI) of these pools is common in this wellbore. Downhole commingling will offer an economical method of production while protecting against reservoir damage, waste of reserves and violation of correlative rights. Offset operators to this well will receive a copy of this application by certified mail.

The allocation method that we plan to use for this commingled well is as follows. The Dakota formation has been on production in this well for some time and the Mesaverde production has been well established in this area. We recommend that the Dakota formation gas and condensate be allocated based on current rates from the area while production for the Mesaverde be allocated from offset information. The Dakota is currently producing 35 MCFD with 0.48 BCPD while the Mesaverde offsets are averaging 68 MCFD with 0.39 BCPD. The recommended allocation percentages after downhole commingling would be set as a percentage of the total rate with the Mesaverde attributing 70% of gas production and 46 % of condensate production. The Dakota would be allocated at 30% of gas production and 53 % of condensate production. The actual commercial value of the commingled production will not be less than the sum of the values of the production from each of the common sources of supply.

Attached to aid in your review are plats showing the location of the well and offset wells in the same formation, a historical production plot and a C-102 for each formation. This spacing unit is located on a federal lease (NM-03380) and we will send a copy of the application to the BLM as their notice.

Should you have questions concerning this matter, please contact me at (303) 830-5344.

Sincerely,



Pamela W. Staley

Enclosures

cc: Mark Rothenberg
Patty Haefele
Wellfile
Proration file

Frank Chavez, Supervisor
NMOCD District III
1000 Rio Brazos Road
Aztec, NM 87410

Duane Spencer
Bureau of Land Management
1235 La Plata Hwy.
Farmington, NM 87401

Application for Exception to Rule 303: SEGREGATION OF PRODUCTION FROM POOLS

Requirements

- (1) Name and address of the operator:

Amoco Production Company
P.O. Box 800
Denver, CO 80201

- (2) Lease name, well number, well location, name of the pools to be commingled:

Lease Name: Florance

Well Number: #64

Well Location: 970' FSL & 2370' FEL
Unit O Section 17-T27N-R8W
San Juan County, New Mexico

Pools Commingled: Blanco Mesaverde Pool
Basin Dakota Pool

- (3) A plat of the area showing the acreage dedicated to the well and the ownership of all offsetting leases.

Attached

- (4) A current (within 30 days) 24-hour productivity test on Division Form C-116 showing the amount of oil, gas and water produced from each zone.

The Blanco Mesaverde offsets produced an average stabilized rate of 69 MCFD and 0.39 BCPD over the past 12 months. The Basin Dakota zone produced at an average rate of about 35 MCFD and 0.48 BCPD over the same period.

- (5) A production decline curve for both zones showing that for a period of at least one year a steady rate of decline has been established for each zone which will permit a reasonable allocation of the commingled production to each zone for statistical purposes.

Basin Dakota Completion:

Blanco Mesaverde Completion:

Historical production curve attached.

Offset production curves attached.

- (6) Estimated bottomhole pressure for each zone. A current (within 30 days) measured bottom hole pressure for each zone capable of flowing.

Bottomhole pressures were estimated from 7-day shut-in pressures for the Dakota and from post frac pressure buildup tests on offset Mesaverde wells for the Mesaverde. Estimated bottomhole pressure in the Dakota formation is 700 PSI while the estimated bottomhole pressure in the Mesaverde is 580 PSI.

- (7) A description of the fluid characteristics of each zone showing that the fluids will not be incompatible in the wellbore.

The two formations do not produce any fluids that are expected to prohibit commingling, or promote the creation of emulsions or scale.

- (8) A computation showing that the value of the commingled production will not be less than the sum of the values of the individual streams:

Since the BTU content of the produced gasses are very similar, we would expect the commingled production to have a similar value as the sum of the individual streams.

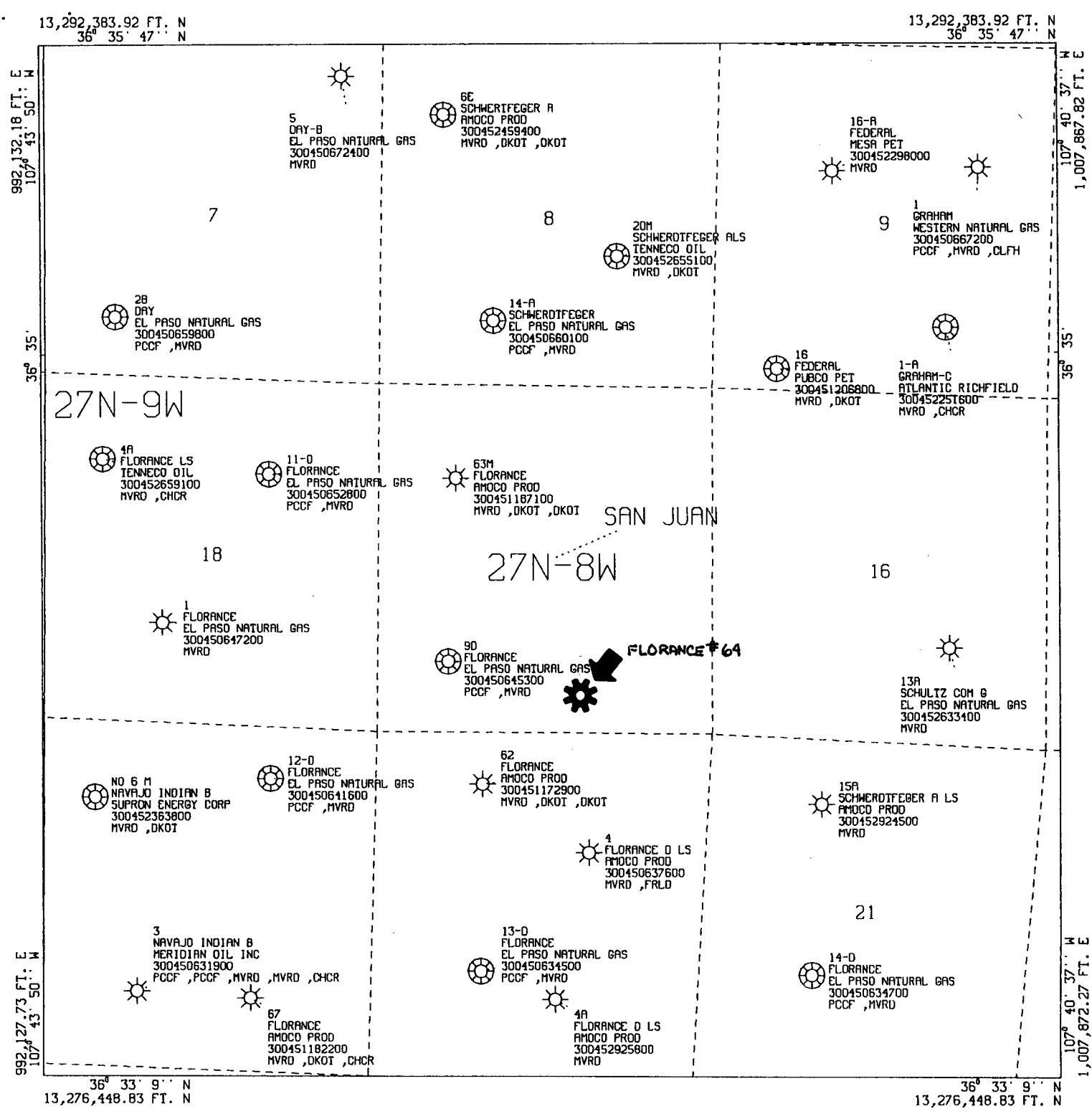
- (9) A formula for the allocation of production to each of the commingled zones and a description of the factors or data used in determining such formula:

The allocation method that we plan to use for this commingled well is as follows. The Dakota formation has been on production in this well for some time and the Mesaverde production has been well established in this area. We recommend that the Dakota formation gas and condensate be allocated based on current rates from the area while production for the Mesaverde be allocated from offset information. The Dakota is currently producing 35 MCFD with 0.48 BCPD while the Mesaverde offsets are averaging 68 MCFD with 0.39 BCPD. The recommended allocation percentages after downhole commingling would be set as a percentage of the total rate with the Mesaverde attributing 70% of gas production and 46 % of condensate production. The Dakota would be allocated at 30% of gas production and 53 % of condensate production. The actual commercial value of the commingled production will not be less than the sum of the values of the production from each of the common sources of supply.

- (10) A statement that all offset operators and, in the case of a well on federal land, the United States Bureau of Land Management, have been notified in writing of the proposed commingling.

BLM will receive a copy of this application by certified mail. The offsetting operators listed on the attached sheet will receive a copy of this application by certified mail.

12.45.30 TUES 19 DEC, 1995 JOB-P1123202, ISSCO DISSPLA 10.0



All geological and geophysical data, including the interpretation thereof, appearing on this map is the private and confidential property of Amoco Production Company. The publication or reproduction thereof without the written permission of said Company is strictly prohibited.

AMOCO PRODUCTION COMPANY
PLAT MAP
Florance #64
Mesaverde

SCALE 1 IN. = 2,000 FT. DEC 19, 1995

POLYCONIC CENTRAL MERIDIAN - 107° 42' 13'' W LON
SPHEROID - 6

RUN=95353123649

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACERAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section

Operator TENNECO OIL COMPANY			Lease FLORANCE		Well No. 64
Unit Letter 0	Section 17	Township 27 North	Range 8 West	County San Juan	

Actual Footage Location of Well:
970 feet from the **South** line and **2370** feet from the **East** line
 Ground Level Elev. **6771' ungraded** Producing Formation **Basin Dakota** Pool **Basin Dakota** Dedicated Acreage: **320** **5/2** Acres

- Outline the acreage dedicated to the subject well by colored pencil or hachure 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 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 consolidated. (Use 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 information contained herein is true and complete to the best of my knowledge and belief.

Harold C. Nichols
Name

Harold C. Nichols

Position
Senior Production Clerk

Company
Tenneco Oil Company

Date
June 28, 1966

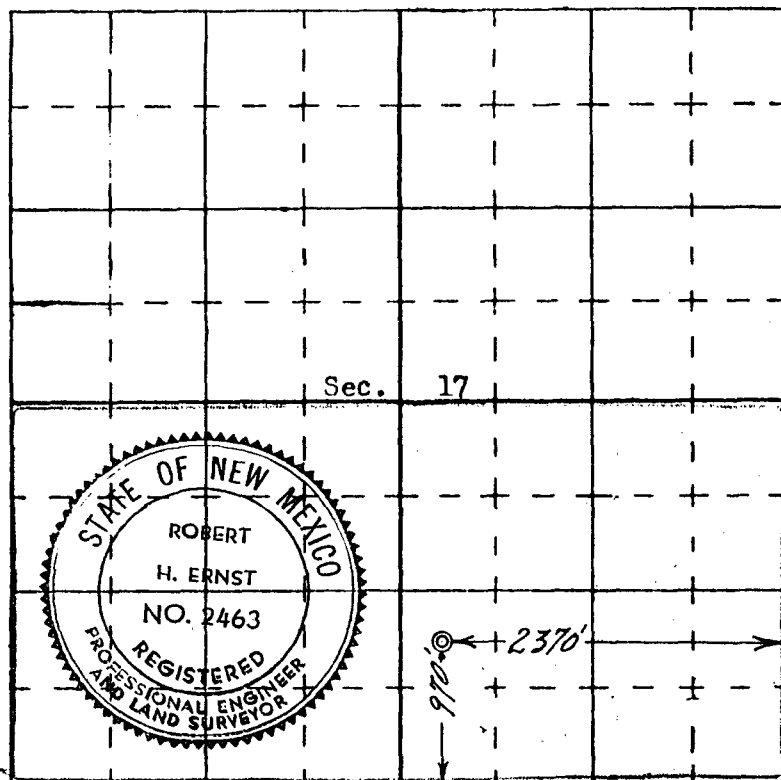
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

4 June 1966

Date Surveyed
Robert H. Ernst
Registered Professional Engineer
and/or Land Surveyor

Robert H. Ernst
N. Mex. PE & LS 2463

Certificate No.



ERNST ENGINEERING CO.
DURANGO, COLORADO

NM 88241-1980

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102

Revised October 18, 1994

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

Artesia, NM 88210

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

RECEIVED MAIL ROOM

District IV

2040 South Pacheco, Santa Fe, NM 87505

96 JAN 10 PM 12:39

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-11872	¹ Pool Code 72319	¹ Pool Name Blanco Mesaverde
⁴ Property Code 518	⁴ Property Name Florance	⁴ Well Number 64
¹ OGRID No. 000778	¹ Operator Name Amoco Production Company	¹ Elevation 6771' GR

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
0	17	27N	8W		970	South	2370	East	San Juan

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 320	¹² Joint or Infill	¹² Consolidation Code	¹² Order No.
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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 <u>Patty Haefele</u> Patty Haefele Printed Name Staff Assistant Title Date 12/19/95
				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 6/4/66 Signature and Seal of Professional Surveyer: Certificate Number 2463

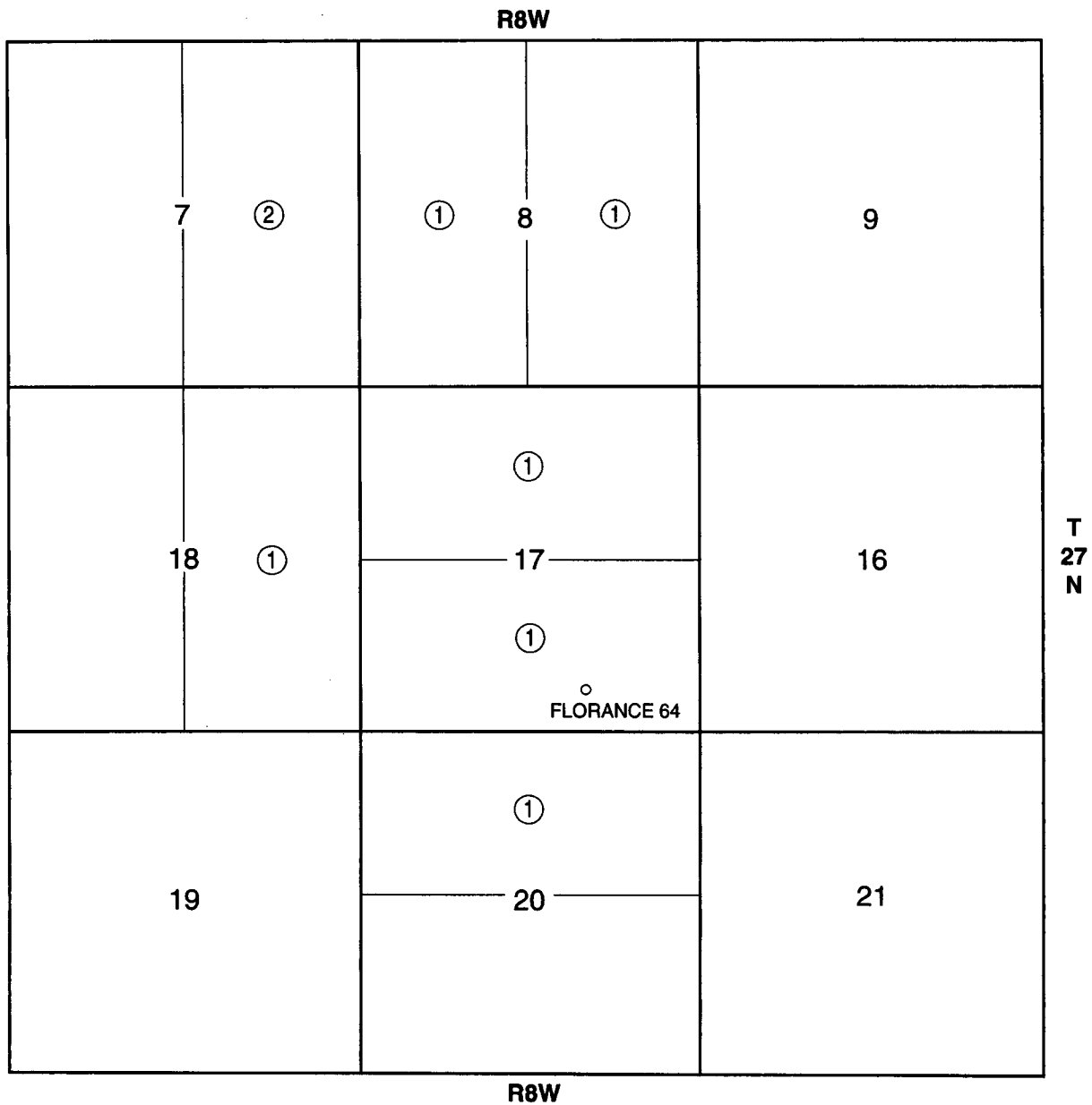
Amoco Production Company

Offset Operator Plat

Florance 64

T27N-R8W Sec. 17

Dakota Formation



① Amoco Production Company

② Meridian Oil Production Inc.

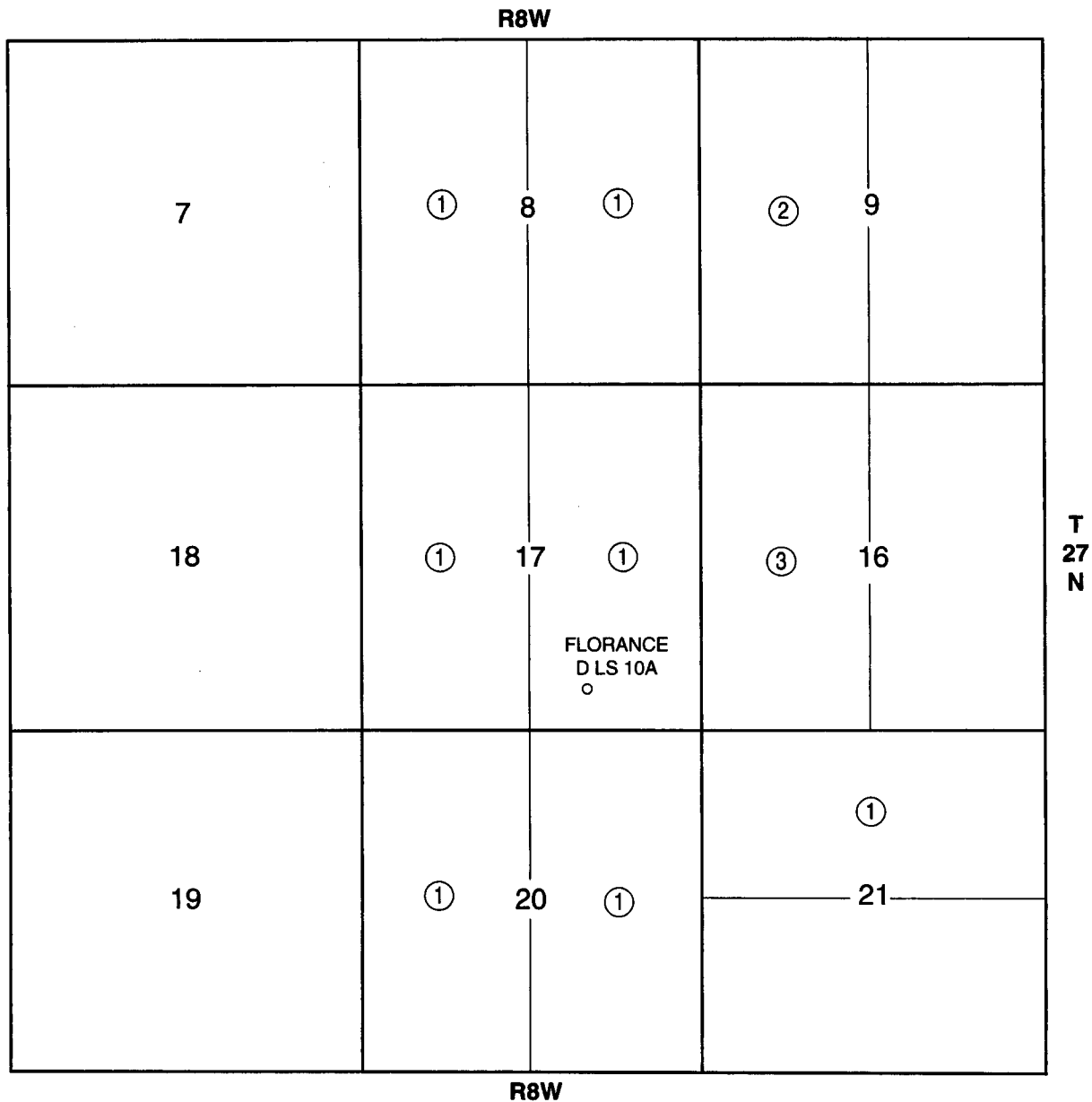
Amoco Production Company

Offset Operator Plat

Florance D LS 10A

T27N-R8W Sec. 17

Mesaverde Formation



① Amoco Production Company

② Conoco Inc.

③ Meridian Oil Production Inc.

LIST OF ADDRESSES FOR OFFSET OPERATORS
Florance #64/Florance D 10A

- 1 Meridian Oil, Inc.
P.O. Box 4289
Farmington, NM 87499
- 2 Conoco, Inc.
10 Desta Drive West
Midland, Texas 79705

Current Production and Estimated Production Based on Offsets

<u>WELLNAME</u>	<u>LOCATION</u>	<u>CURRENT MCFD</u>	<u>LAST 12MO AVE MCFD</u>	<u>12 MO BOPD</u>
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DAKOTA

FLORANCE 64	017-27-08	35	32	0.48
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OFFSETS IN MESAVERDE

FLORANCE LS 4A	D18-27-08	40	53	0.56
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FLORANCE DLS 11	G18-27-08	75	79	0.78
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FLORANCE LS 4	K18-27-08	40	82	0.50
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MARRON 42A	C22-27-08	66	77	0.23
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FEDERAL D#1	G 22-27-08	39	48	0.03
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MARRON #42	M22-27-08	61	69	0.26
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<u>AVERAGE</u>		<u>53</u>	<u>68</u>	<u>0.39</u>
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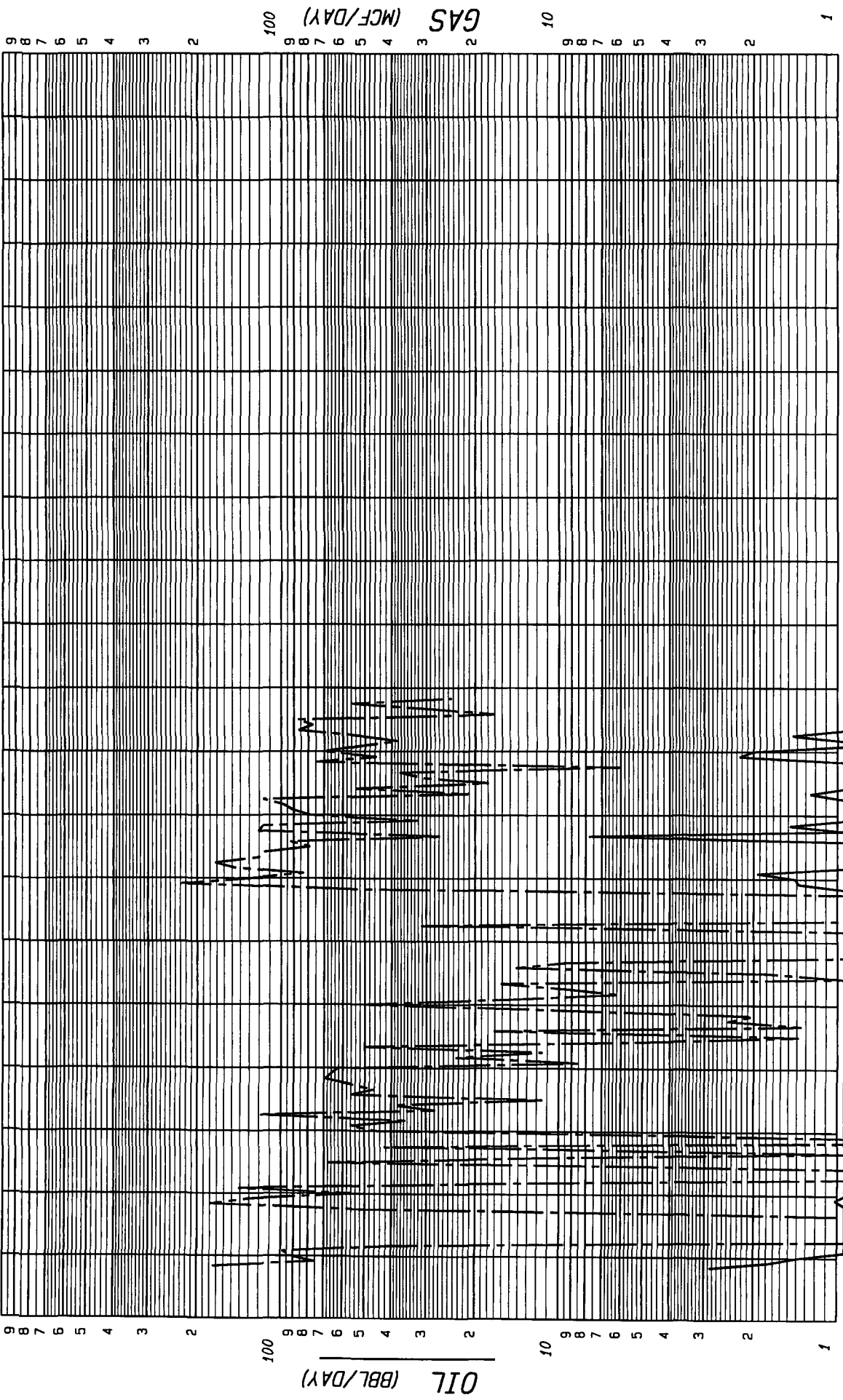
1000 Lease: FLORANCE LS

00004A

Dwights

Retrieval Code: 251, 045, 27N08W18D000MV

1000



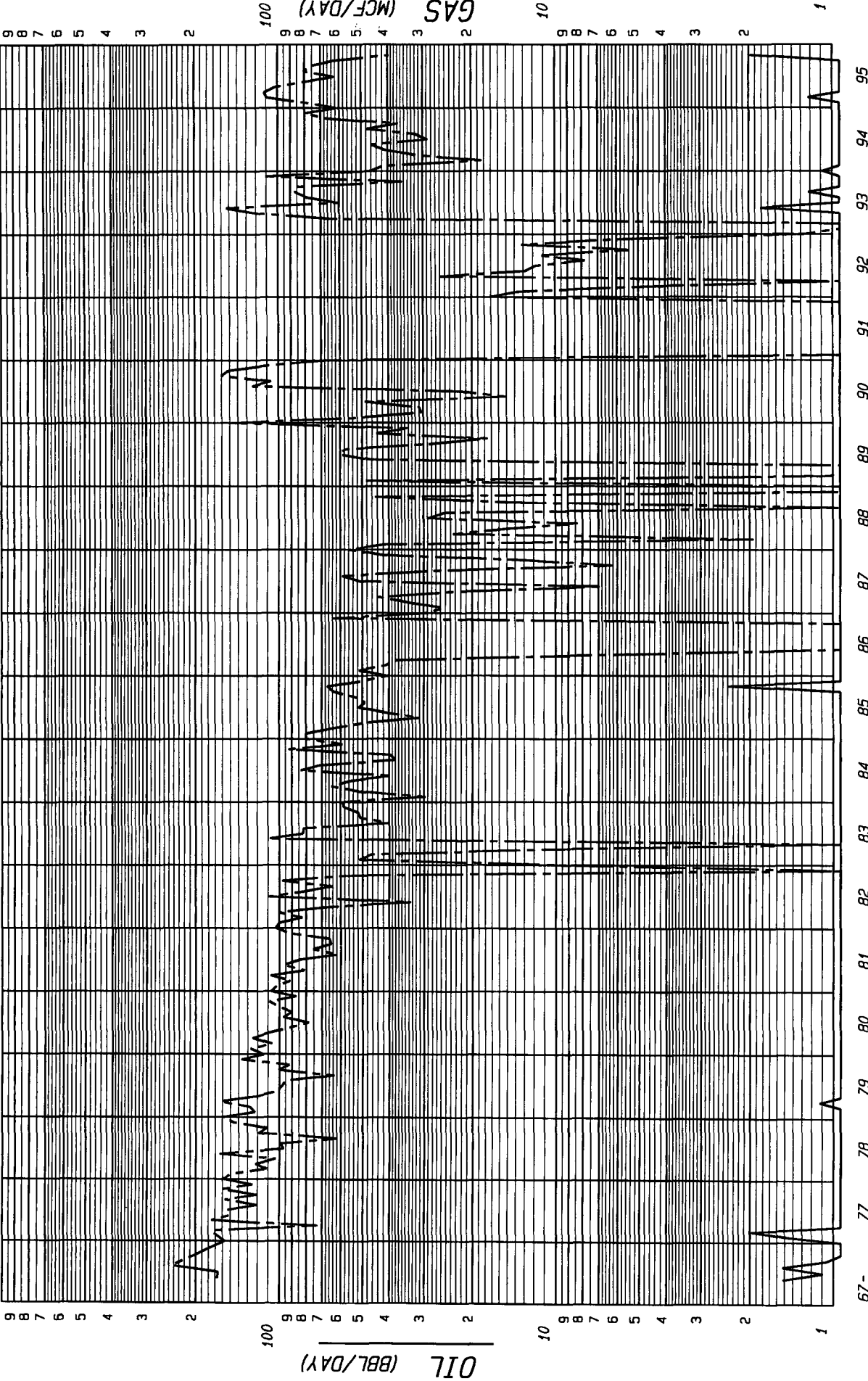
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County: SAN JUAN
Field: BLANCO (MESAVERT) MV
Reservoir: MESAVERT
Operator: AMOCO PRODUCTION CO
Oil Cum: 1102
Gas Cum: 149984
Location: 18D 27N 8W
State: NM

F.P. Date 10-86

Date: 03-01-96

1000 Lease: FLORANCE D LS 000011 Dwigths Retrieval Code: 251, 045, 27N08W18G00MV 1000



County: SAN JUAN State: NM
Field: BLANCO (MESAVERT) MV
Reservoir: MESAVERT
Operator: AMOCO PRODUCTION CO
Oil Cum: 8372 Gas Cum: 1786961
Location: 18G 27N 8W

F.P. Date 07-58

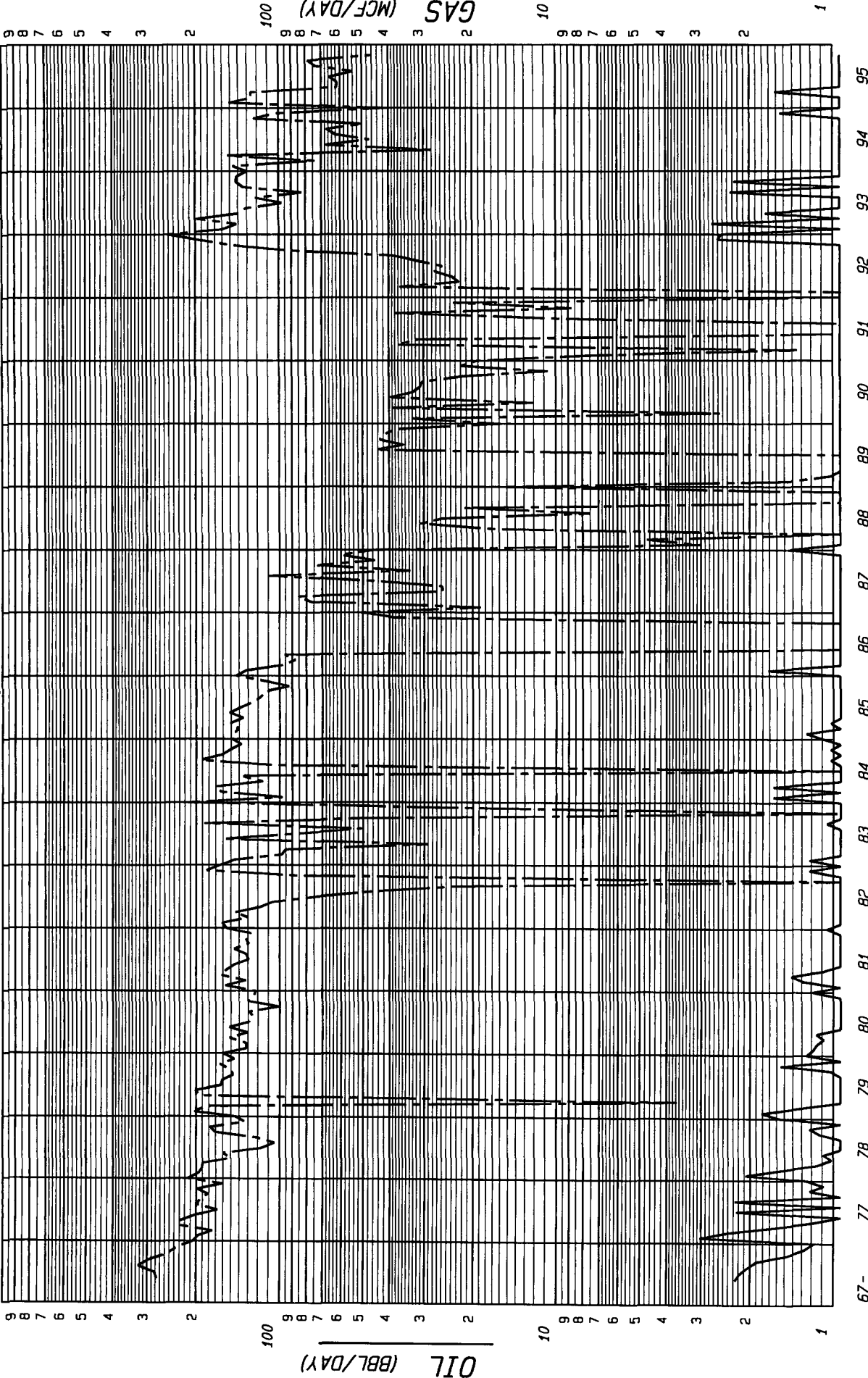
Date: 03-01-96

1000 Lease: FLORANCE LS

000004

Dwights

Retrieval Code: 251, 045, 27N08W18K00MV



County: SAN JUAN
Field: BLANCO (MESAVERT) MV
Reservoir: MESAVERT
Operator: AMOCO PRODUCTION CO
Oil Cum: 14244
Gas Cum: 2338623
Location: 18K 27N 8W
State: NM

F.P. Date 01-61

Date: 03-01-96

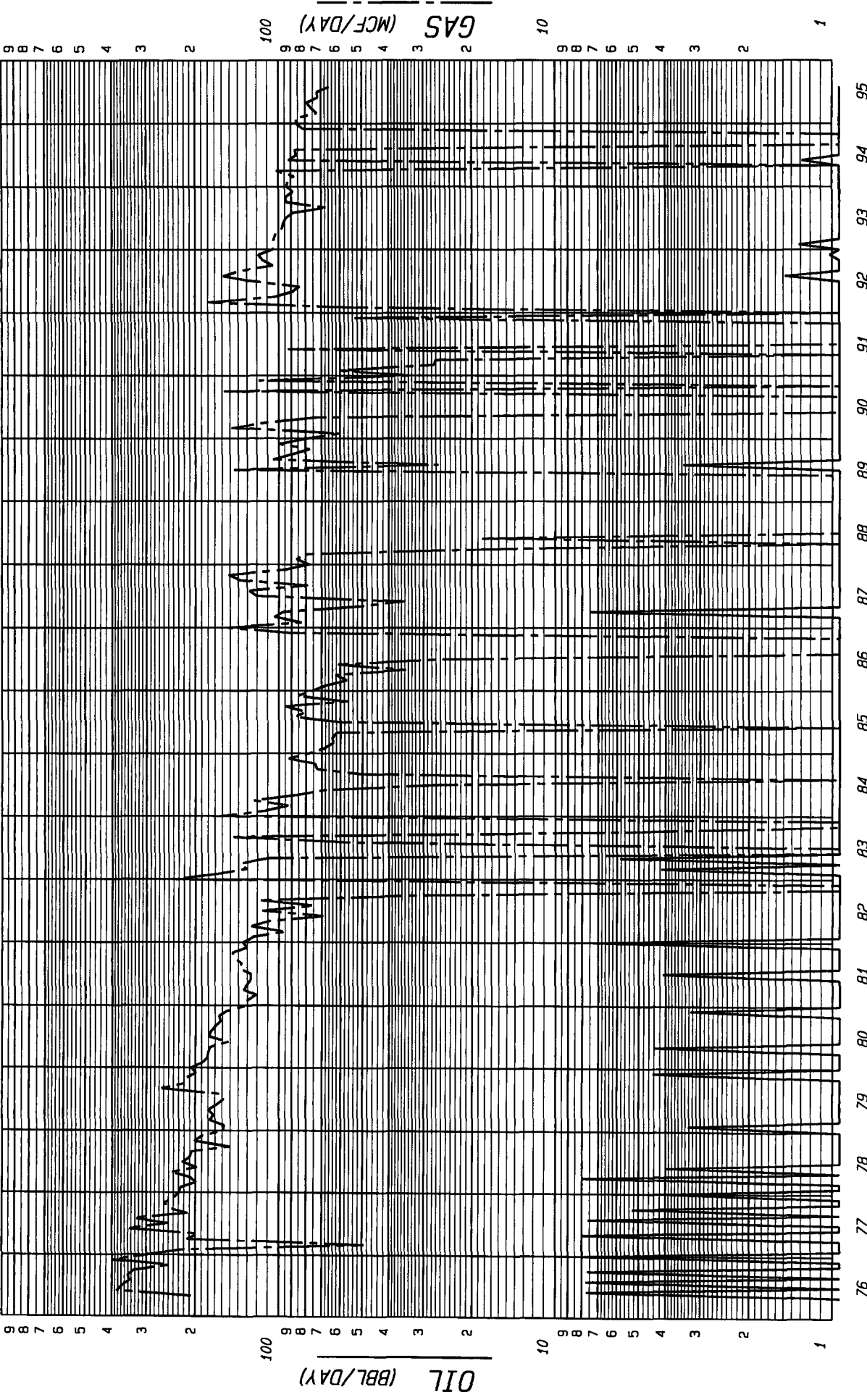
1000 Lease: MARRON

00042A

Dwights

Retrieval Code: 251, 045, 27N08W22C00MV

1000



County: SAN JUAN
Field: BLANCO (MESAVEDE) MV
Reservoir: MESAVEDE
Operator: R & G DRLG CO. INC
Oil Cum: 4069
Gas Cum: 758631
Location: 22C 27N 8W
State: NM

F.P. Date 04-76

Date: 03-01-96

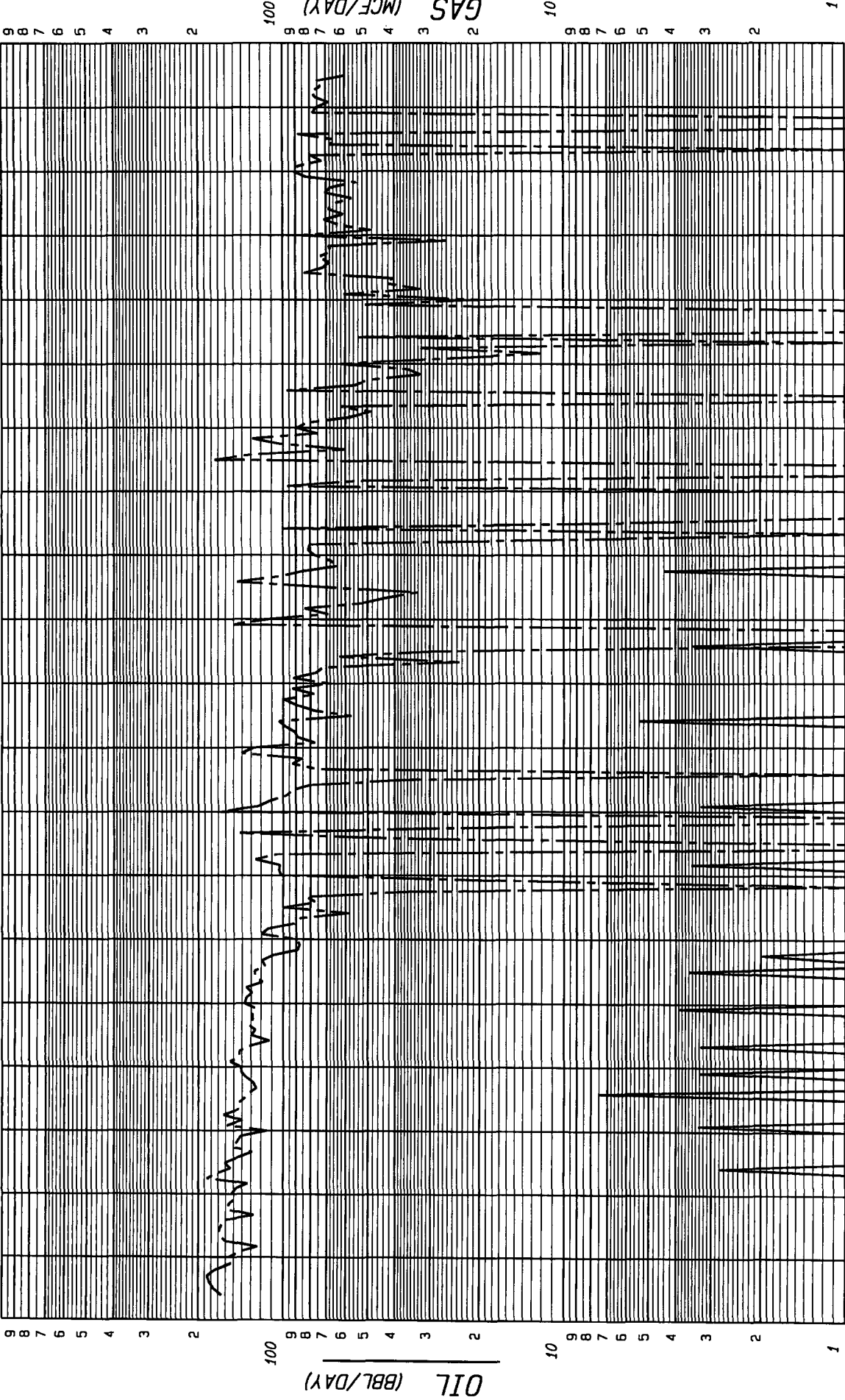
1000 Lease: MARRON

000042

Dwights

Retrieval Code: 251, 045, 27N08W22M00NW

1000



67- Annual Data

95 94 93 92 91 90 89 88 87 86 85 84 83 82 81 80 79 78 77

County: SAN JUAN
Field: BLANCO (MESAVERT) MV
Reservoir: MESAVERT
Operator: A & G OIL & GAS CO INC
Oil Cum: 2956
Gas Cum: 1596061
Location: 22N 27W 8W
State: NM

F.P. Date 03-52

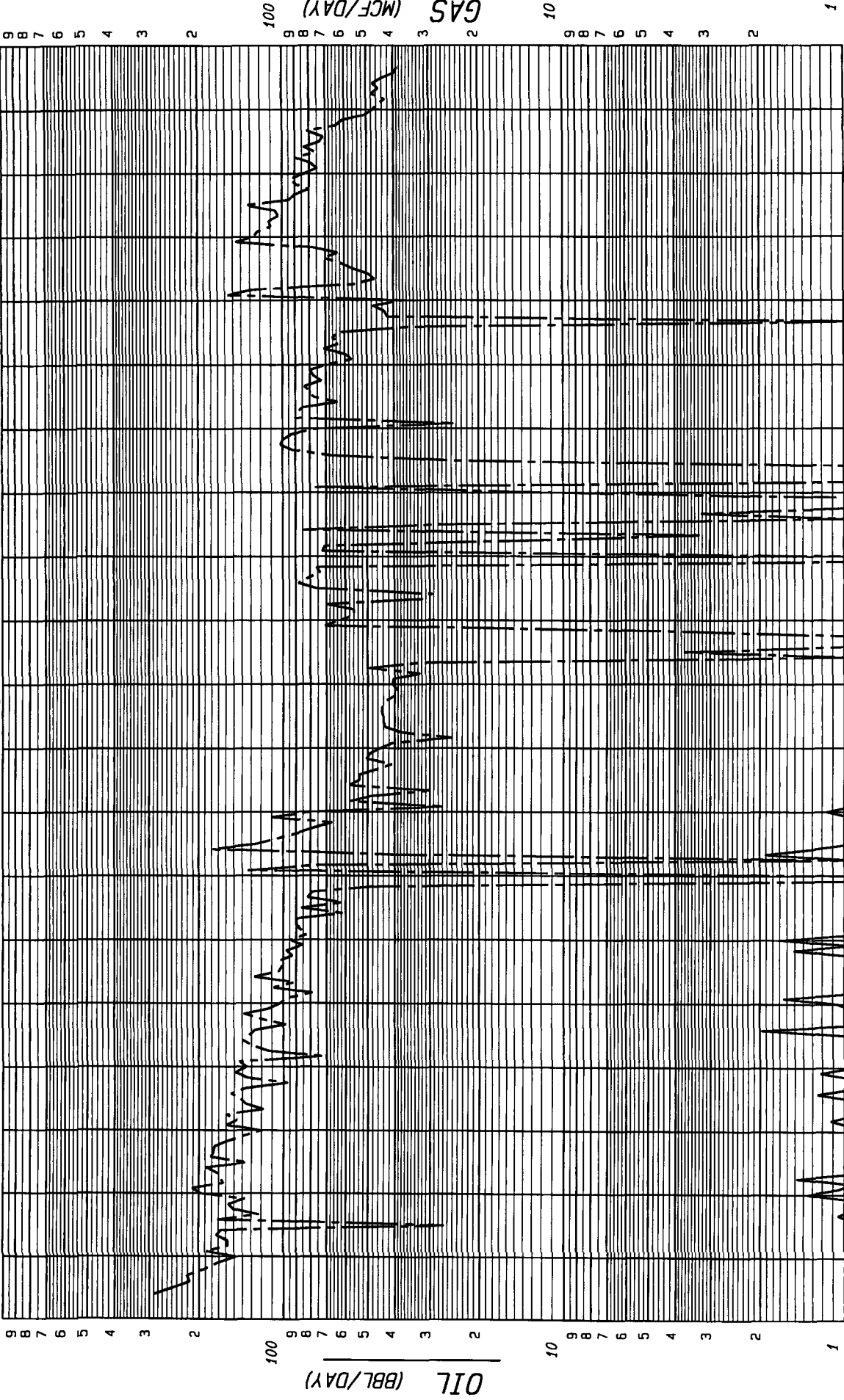
Date: 03-01-96

1000 Lease: FEDERAL D Retrieval Code: 251, 045, 27N08W22G00MV

Dwights

000001

1000 Lease: FEDERAL D



67 - Annual Data

County: SAN JUAN
Field: BLANCO (MESAVERDE) MV
Reservoir: MESAVERDE
Operator: BLEDSOE PETROLEUM CORP
Oil Cum: 2097
Gas Cum: 1081710
Location: 226 27N 8W
State: NM

F.P. Date

Date: 03-01-96