

DATE IN 5/10/99	SUSPENSE 5/31/99	ENGINEER DC	LOGGED KN	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

2366

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.

J W Hawkins
Print or Type Name

J W Hawkins
Signature

Regulatory Affairs Engineer
Title

5/6/99
Date

Amoco Production Company

BP Amoco
Western Gas Business Unit
Post Office Box 3092
Houston, TX 77253-3092

May 6, 1999

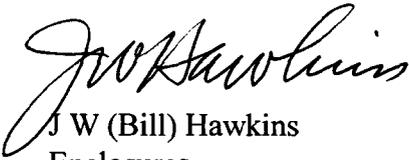
Ms. Lori Wrotenbery, Director
New Mexico Oil Conservation Division
2040 S. Pacheco Street
P. O. Box 6429
Santa Fe, NM 87505

Application for Exception to Rule 303-A- Downhole Commingling
A.L. Elliott A #4
Unit F Section 11-T29N-R09W
Blanco Mesaverde and Basin Dakota Pools
San Juan County, New Mexico

Enclosed please find an administrative application form (C-107-A) and attachments for downhole commingling for the captioned well. Amoco is the only offset operator in the formations captioned and all affected interest ownership is common. The Division Director may approve the proposed downhole commingling in the absence of a valid objection from any offset operator or any interest owner in those instances where ownership is not common in the zones to be commingled within 20 days after the receipt of the application if, in her opinion, waste will not result thereby, and correlative rights will not be violated.

Should you have questions regarding this application, do not hesitate to call me at (281) 366-5450.

Sincerely,



J W (Bill) Hawkins

Enclosures

cc: James Dean
Mary Corley
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

OFFSET OPERATORS

A.L. Elliott A #4

Amoco is the only offset operator to this well in all surrounding sections.

Production Allocation Recommendation

A.L. Elliott A #4

Since all ownership is common, production is proposed to be allocated using fixed percentages based on estimated offset production from the Mesaverde and previous production capability of the Basin Dakota.

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 SF-078132

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. SEE ATTACHED
- * 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 *J W Hawkins* TITLE Regulatory Affairs Engr. DATE 5/6/99
TYPE OR PRINT NAME J W Hawkins TELEPHONE NO. (281) 366-5450

OIL CONSERVATION DIVISION

APPROVAL PROCESS:

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

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

Administrative Hearing

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

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE
 YES NO

Amoco Production Company	PO Box 3092 Houston, TX 77253-3092
Operator A. L Elliott A	Address F 11-29N-09W
Lease 4	County San Juan
Well No.	Unit Ltr. - Sec Twp - Rge

OGRID NO. 000778 Property Code 000459 API NO. 300452330900 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 Mesaverde 72319		Basin Dakota 71599
2. Top and Bottom of Pay Section (Perforations)	4184'-4900' est.		6927'-7109'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure	(Current) 564 psig (est)	a.	a. 866 psig
Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	(Original) 1181 psig (est)	b.	b. 1438 psig
6. Oil Gravity (° API) or Gas BTU Content	1280 btu		1180 btu
7. Producing or Shut-In?	New zone		Producing
Production Marginal? (yes or no)	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: 1100 MCFD (est) Rates: 5 BCPD 0 BWPD	Date: Rates:	Date: Rates:
• If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: Rates:	Date: Rates:	Date: 162 MCFD Rates: 2.5 BCPD 0 BWPD
8. Fixed Percentage Allocation Formula -% for each zone	Oil: 66 % Gas 87 %	Oil: % Gas %	Oil: 34 % Gas 13 %

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 SF-078132

15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S) _____

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 - * Data to support allocation method or formula. SEE ATTACHED
 - * 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 J W Hawkins TITLE Regulatory Affairs Engr. DATE 5/6/99
TYPE OR PRINT NAME J W Hawkins TELEPHONE NO. (281) 366-5450

WELL LOCATION AND ACREAGE DEDICATION PLAT

Effective 1-1-

All distances must be from the outer boundaries of the Section.

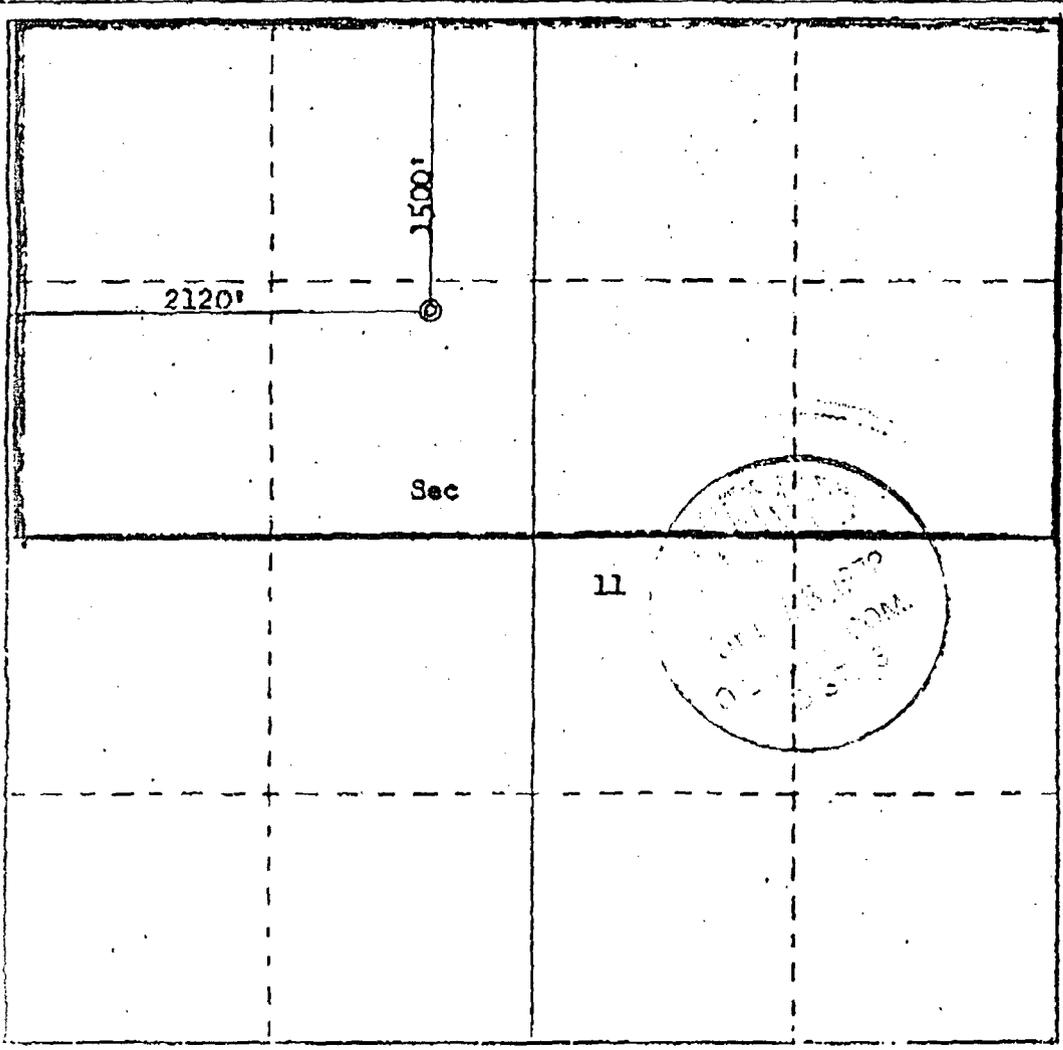
Operator AMOCO PRODUCTION COMPANY		Lease A. L. ELLIOTT "A"		Well No. 4
Unit Letter F	Section 11	Township 29N	Range 9W	County San Juan
Actual Footage Location of Well: 1500 feet from the North line and 2120 feet from the West line				
Ground Level Elev. 5945	Producing Formation Dakota	Pool Basin Dakota	Dedicated Acreage 320 Acre	

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 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. (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.

J. L. Krupka
 Name
J. L. KRUPKA
 Position
DISTRICT ENGINEER
 Company
AMOCO PRODUCTION COMPANY
 Date
DECEMBER 12, 1978

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.

Date Surveyed
December 12, 1978
 Registered Professional Engineer
 and State Land Surveyor
 No. **2958**
Frederick B. Kerr, Jr.
 Certified by **F. B. KERR, JR.**
3950

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

Form C-102
 Revised October 18, 1994
 Instructions on back
 Submit to Appropriate District Office
 State Lease - 4 Copies
 Fee Lease - 3 Copies

OIL CONSERVATION DIVISION
 2040 South Pacheco
 Santa Fe, NM 87505

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 APT Number 3004523309		2 Pool Code 72319		3 Field Name Blanco Mesaverde	
4 Property Code 000459		5 Property Name A. L. Elliott A			6 Well Number 4
7 OGRID No. 000778		8 Operator Name Amoco Production Company			9 Elevation 5945

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
F	11	29N	9W		1500	North	2120	West	San Juan

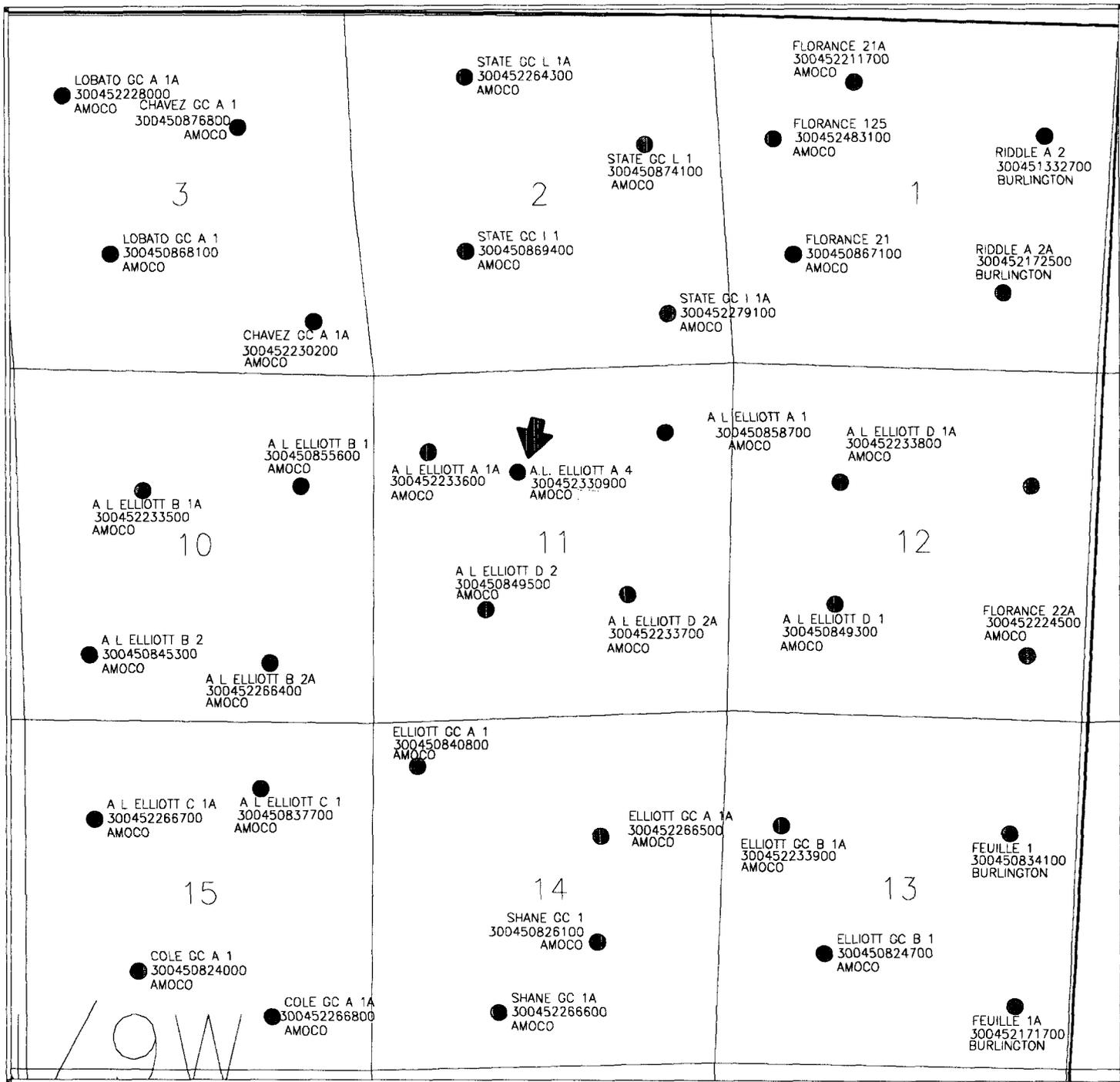
11 Bottom Hole Location If Different From Surface

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 320.00	13 Joint or Infill	14 Consolidation Code	15 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>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i> <i>Gail M. Jefferson</i> Signature Gail M. Jefferson Printed Name Sr. Admin. Staff Asst. Title November 9, 1998 Date
	18 SURVEYOR CERTIFICATION <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> December 1, 1978 Date of Survey Signature and Seal of Professional Surveyor: Fred B. Kerr, Jr. 3950 Certificate Number



AMOCO PRODUCTION COMPANY		
A. L. ELLIOTT A 4 - RECOMPLETION/COMMIN MESAVERDE 9 SECTION PLAT F-11-T29N-R09W		
ALC		12/16/98
Scale: 1:26290.42		

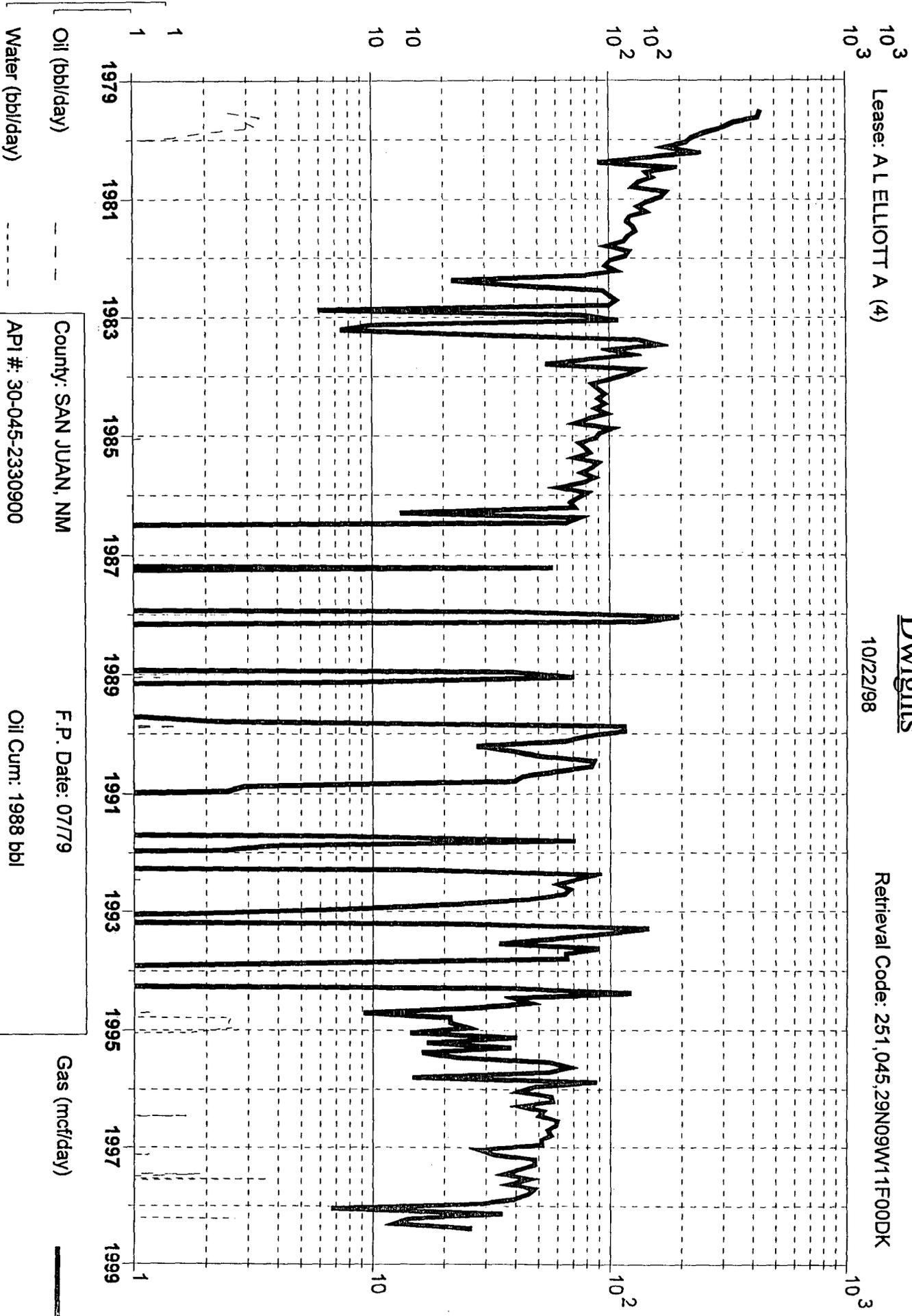
LEGEND	
●	ACTIVE MESAVERDE WELLS
●	INACTIVE MESAVERDE WELLS
●	RECOMPLETION/COMMINGLE CANDIDATE

Dwights

Lease: A L ELLIOTT A (4)

10/22/98

Retrieval Code: 251,045,29N09W11F00DK



Oil (bbl/day)

Water (bbl/day)

Gas (mcf/day)

County: SAN JUAN, NM

F.P. Date: 07/79

API #: 30-045-2330900

Oil Cum: 1988 bbl

Reservoir: DAKOTA

Gas Cum: 433.8 mmcf

Operator: AMOCO PRODUCTION CO

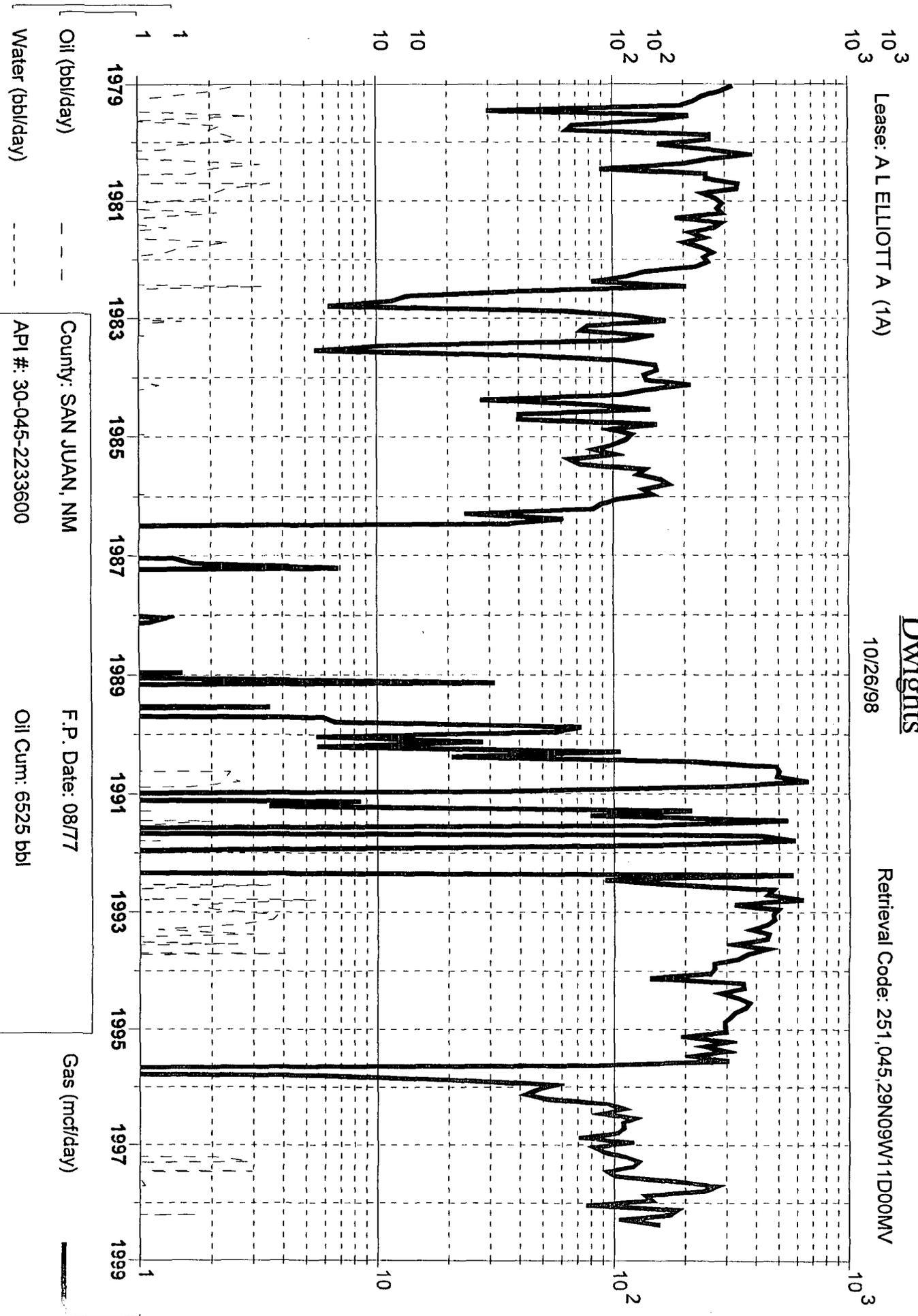
Location: 11F 29N 9W

Dwights

Lease: AL ELLIOTT A (1A)

10/26/98

Retrieval Code: 251,045,29N09W11D00MV



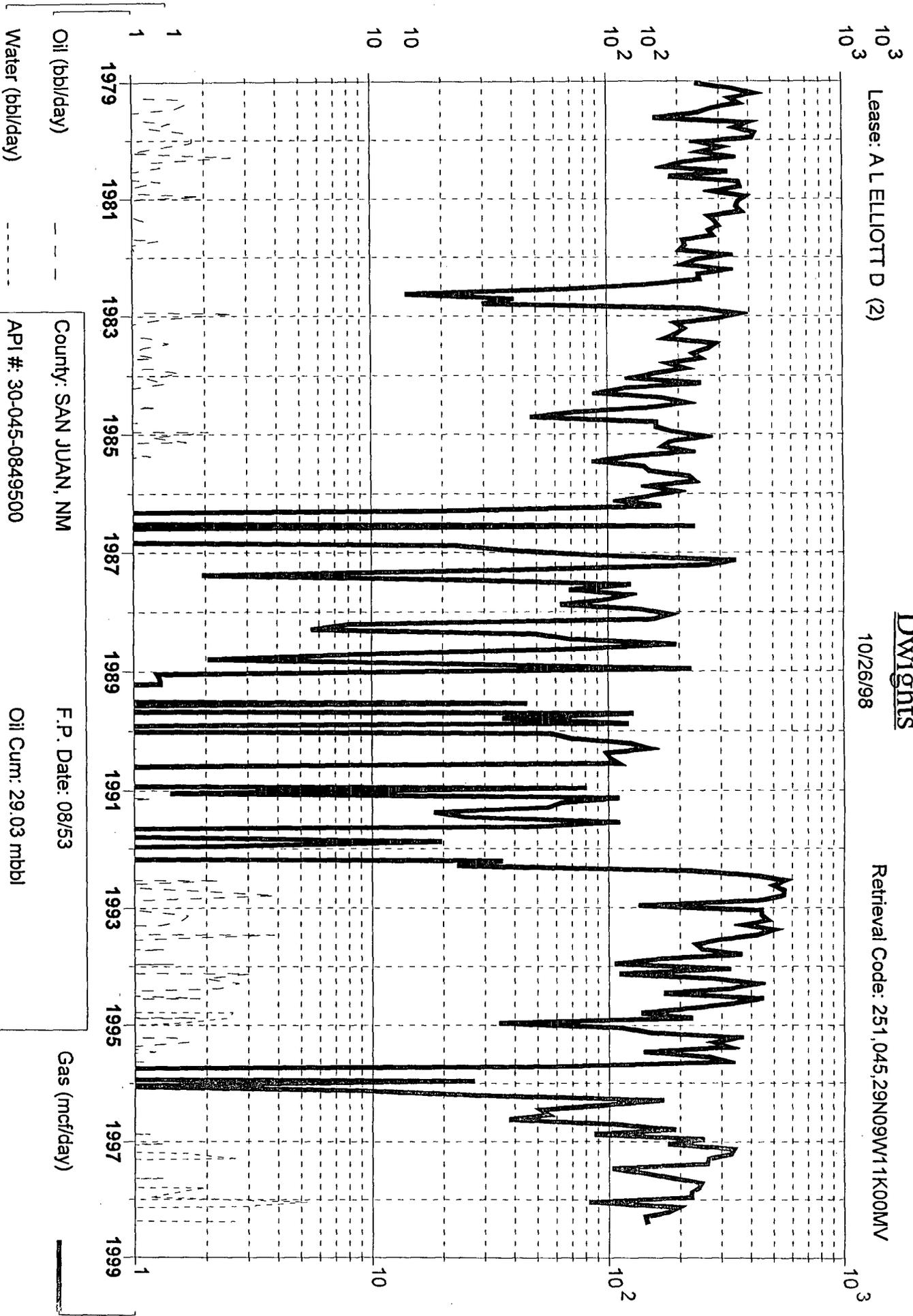
County: SAN JUAN, NM
F.P. Date: 08/77
API #: 30-045-2233600
Oil Cum: 6525 bbl
Reservoir: MESAVERDE
Gas Cum: 1347 mmcf
Operator: AMOCO PRODUCTION CO
Location: 11D 29N 9W

Dwights

Lease: A L ELLIOTT D (2)

10/26/98

Retrieval Code: 251,045,29N09W11K00MV



Oil (bbl/day)

Water (bbl/day)

Gas (mcf/day)

County: SAN JUAN, NM

F.P. Date: 08/53

API #: 30-045-0849500

Oil Cum: 29.03 mbbl

Reservoir: MESAVERDE

Gas Cum: 6380 mmcf

Operator: AMOCO PRODUCTION CO

Location: 11K 29N 9W

Elliott A4

DK	0.08	PC	0.04
MV	0.07	FT	0.04
		CK	0.04

WELL NAME: A L ELLIOTT A #4

FORMATION: DK

SURFACE PRESS: 305

PERFS TOP: 6927

BOTTOM: 7100

$$(6927 + 7100) / 2 = 7014 \text{ Mid Perf}$$

$$7013.5 \times 0.08 = 561$$

$$561.08 + 305 = \boxed{866} \text{ Bottom Hole Pressure}$$

Initial Bottom Hole Pressure

A L ELLIOTT D #9 IBHP= 1438

WELL NAME: A L ELLIOTT A #1A

FORMATION: MV

SURFACE PRESS: 240

PERFS TOP: 4504

BOTTOM: 5294

$$(4504 + 5294) / 2 = 4899 \text{ Mid Perf}$$

$$4899 \times 0.07 = 343$$

$$342.93 + 240 = \boxed{583} \text{ Bottom Hole Pressure}$$

Initial Bottom Hole Pressure 1177

WELL NAME: A L ELLIOTT D #2

FORMATION: MV

SURFACE PRESS: 228

PERFS TOP: 4130

BOTTOM: 4935

TOP BOTTOM

$$(4130 + 4935) / 2 = 4533 \text{ Mid Perf}$$

$$4532.5 \times 0.07 = 317$$

$$317.28 + 228 = \boxed{545} \text{ Bottom Hole Pressure}$$

Initial Bottom Hole Pressure= 1185

WELL NAME: A L ELLIOTT A 4

FORMATION: MV

Initial Bottom Hole Pressure: (1177 + 1185) / 2 \approx 1181 est.

Bottom Hole Pressure: (583 + 545) / 2 \approx 564 est.

ELLIOTT A #1A/ELLIOTT D #2 bbls (320 + 0) / 2 \approx 160 est.

ELLIOTT A #1A/ELLIOTT D #2 mcf (33410 + 33455) / 2 \approx 33433 est.

ALLOCATION

FM	BBL	%	GAS	%
DK	84	34%	4943	13%
MV	160	66%	33433	87%