



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

5-6-93

BRUCE KING
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

RE: Proposed:

MC
DHC ☒
NSL
NSP
SWD
WFX
PMX

MC 843

Gentlemen:

I have examined the application for the:

Lovington Deep Yates State 1-P 3616-35
Lovington Deep amoc State 3-N 6-17-36
Kruti State 31 1-M 31-16-36
Mobil Producing TX & NM Inc.
Operator _____ Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK

Yours very truly

Jerry Sexton
Jerry Sexton
Supervisor, District 1

/ed

Mobil Exploration & Producing U.S. Inc.

as agent for Mobil Producing Texas & N.M. Inc.

April 23, 1993

HOUSTON DIVISION
12450 GREENSPRING DRIVE
HOUSTON, TEXAS 77060-1991

State of New Mexico Energy
and Mineral Department
Oil Conservation Division

William J. Lemay
Director

MOBIL PRODUCING TEXAS & N.M. INC.
REQUEST FOR EXCEPTION TO RULE
303-A DOWN HOLE COMMINGLING
UPPER PENNSYLVANIAN AND WOLFCAMP
ZONES LOVINGTON DEEP AMACO
STATE #3, KRITI STATE 31 #1,
LOVINGTON DEEP YATES STATE #1-
LEA COUNTY, N.M.

31-16-36

6-17-36

36-16-35

Gentlemen:

Mobil Producing Texas and New Mexico, Inc. (MPTM) respectfully request your approval to down hole commingle the production from the Upper Pennsylvanian and Wolfcamp zones in the captioned wells. Each zone is classified as an oil zone. In support of this request, required information is attached.

If you need additional information, please contact the undersigned at (713)775-2125.

Sincerely,

Sheena Mathews

Sheena Mathews
Environmental & Regulatory
Engineer

MOBIL EXPLORATION & PRODUCING U.S.

LOVINGTON DEEP AMOCO STATE #3

DOWNHOLE COMMINGLING REQUIRED DATA

1. (a) Well involves a oil zone.
 1. Combined daily production from oil zones before commingling as determined in accordance with section D, paragraphs 4 and 5 of rule 303-C does not exceed 80 bbls/day limitation with the perforations of lowermost pool at greater than 10,000 ft.
 2. Artificial lift will be used to bring fluid from both zones.
 3. Neither zone produced more water than the combined oil limitation as determined in 1(a)1.
 4. Combining fluid from both zones does not result in the formation of precipitates at the formation.
 5. Value of the crude will not be reduced by commingling.
 6. Ownership is common.
 7. Commingling will not jeopardize efficiency of future secondary recovery operations.
2. (a) Mobil Exploration & Producing U.S.
12450 Greenspoint Dr.
Houston, Tx 77060-1991
- (b) Lovington Deep Amoco State #3
Sec 6, T-17S, R-36E
Lea County, New Mexico
Upper Pennsylvanian and Wolfcamp zones.
- (c) Ownership plat (attached).
- (d) A most current 24-hr test of the Wolfcamp is 20 BOPD and 3 BWPD. Production on the Upper Pennsylvanian immediately prior to recompletion to the Wolfcamp is 9 BOPD and 0 BWPD.
- (e) Production curves for both zones (attached).

- (f) Bottom hole pressures for each zone (attached).
- (g) Each zone is oil and there is no evidence of incompatibility.
- (h) Test the Wolfcamp prior to commingling, then test the commingled production. Allocate initial test production to the Wolfcamp. Allocated the differential of the commingled production and the Wolfcamp to the Upper Pennsylvanian.
- (i) Researched offset acreage and Mobil is the only operator in this field.

B.P. PATERNOSTRO
 Multiphase Curve Analysis
 Rate vs Time
 (c) 1988 Software, Inc

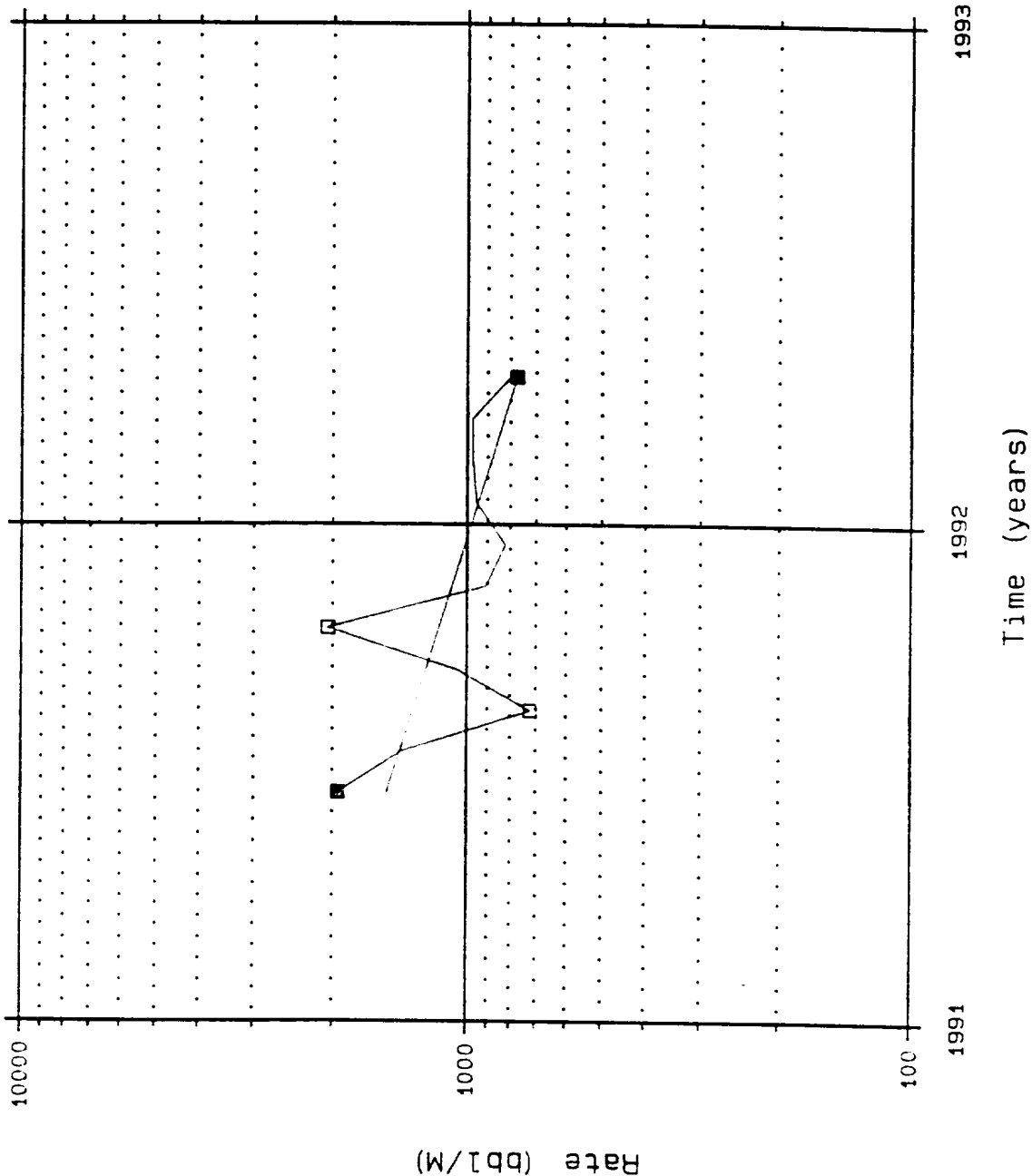
LD AMOCO ST. #3
 UPPER WOLFCAMP SAND
 PRODUCTION DECLINE FIT

6/04/1992

Project: LD AM ST3-WOLF

Production Curves

OIL: ■ OIL DATA
 0 History 6/91 - 4/92
 1 Connt Percent 6/91 - 4/92
 Q1 : 1570.061 BBL/M
 D1 : 55.255 %
 Ge : 751.222 BBL/M
 Np : 12.216 MBBL



Lovington Deep Amoco State #3

Lovington Deep Amoco State #3 produced from the Upper Pennsylvanian for a short period of time. There insufficient data to provide a decline curve for this zone in this well.

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Yates	Kriti Expl.	Exxon	H.E. Yates
36		31	32
Mobil	Amoco (Mobil) 80 Ac.	Mobil	6 5 Turner
	80 Ac.		
	80 Ac.	Texaco	Texaco
	1745' 1745' 730'	State	
Mobil 12	Texaco	Texaco	7 8 Texaco

RESERVE _____ PERMIT DEPTH _____

SPECIAL INSTRUCTIONS _____

THE STATE OF TEXAS
COUNTY OF Midland

I hereby certify that this plat truly represents conditions as they actually exist on this lease; that said plat which is drawn to the scale indicated hereon, is to the best of my knowledge true and correct; that it accurately shows said lease with all wells on same; that number and location of said wells are as indicated hereon; and that this plat correctly reflects all pertinent and required data.

Mobil Exploration & Producing U.S. Inc. Midland		
LEASE Lovington Deep Amoco State		
WELL NO. 3	DATE 19 93	LEASE NO.
TOTAL ACRES IN LEASE 309.85	ACRES COVERED BY PLAT 309.85	
DESCRIPTION West 2 of Section 6, T-17-S, R-36-E		
8 Miles SW form Lovington, NM.		
Lee County, New Mexico		
DRAWN SDB2140	DATE 8-2-81	FIELD South Shoe Bar-
SCALE 1" = 1000'	FILE NO 29	Wolfcamp

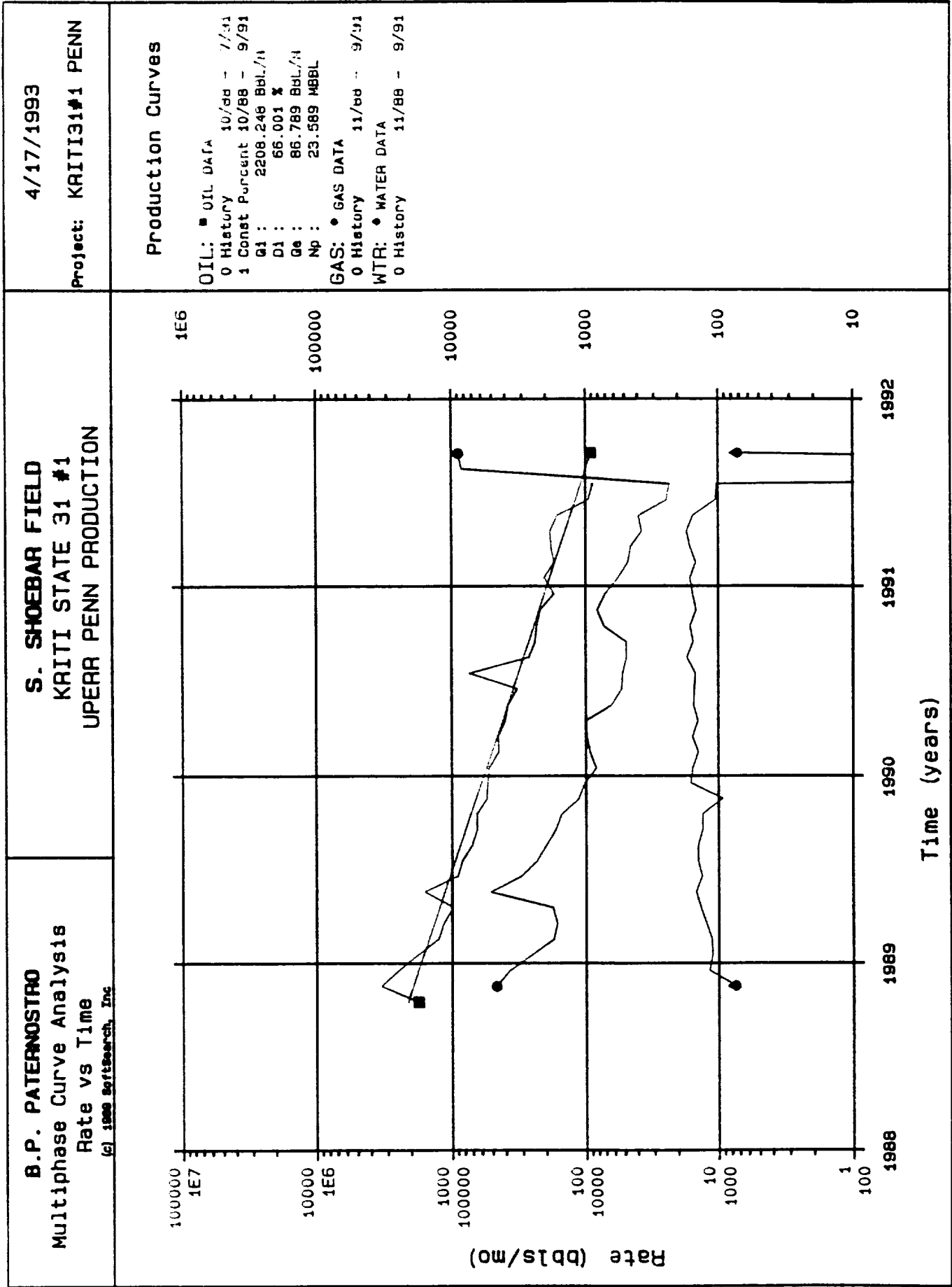
MOBIL EXPLORATION & PRODUCING U.S.

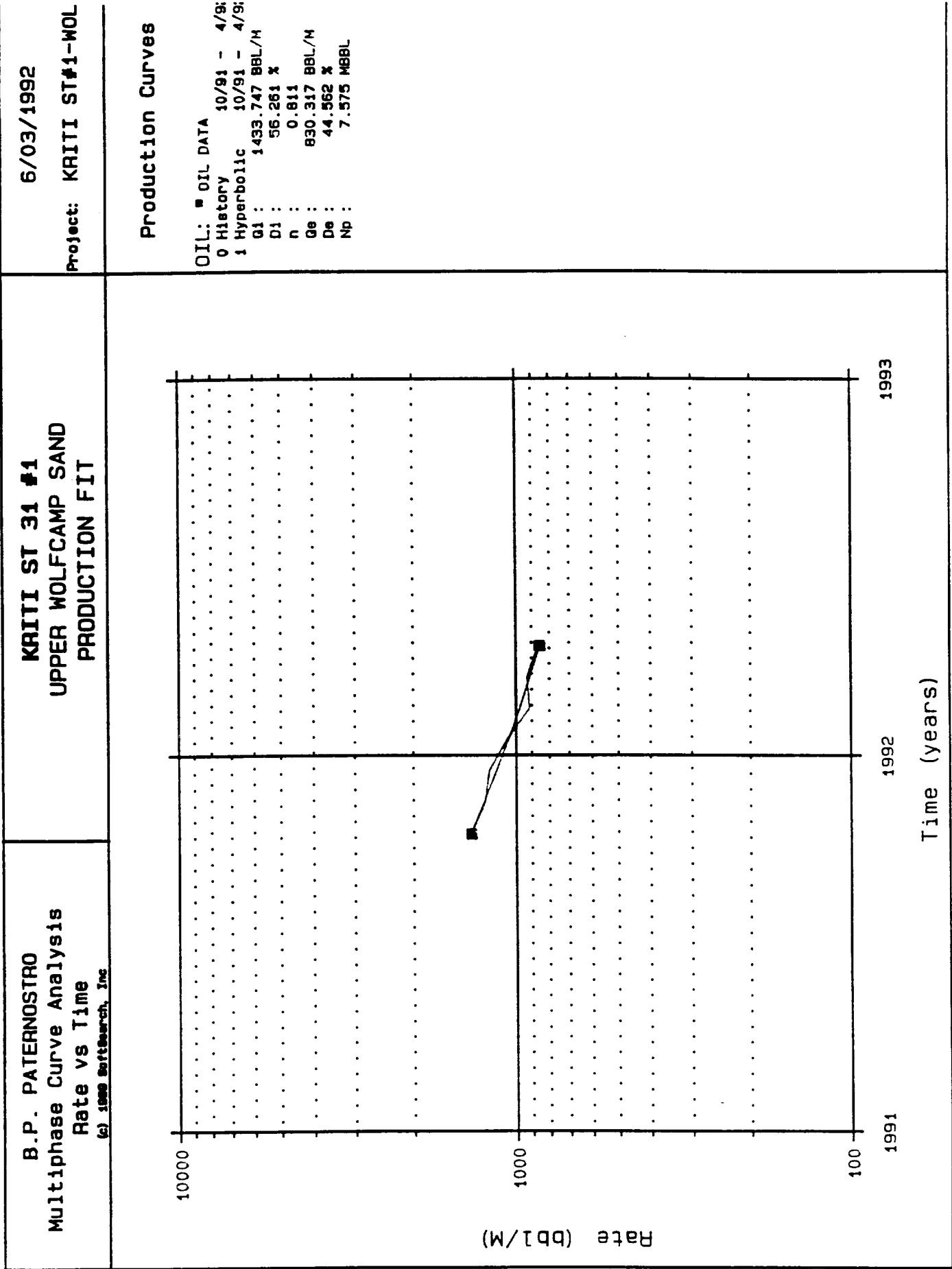
KRITI STATE 31 #1

DOWNHOLE COMMINGLING REQUIRED DATA

1. (a) Well involves a oil zone.
 1. Combined daily production from oil zones before commingling as determined in accordance with section D, paragraphs 4 and 5 of rule 303-C does not exceed 80 bbls/day limitation with the perforations of lowermost pool at greater than 10,000 ft.
 2. Artificial lift will be used to bring fluid from both zones.
 3. Neither zone produced more water than the combined oil limitation as determined in 1(a)1.
 4. Combining fluid from both zones does not result in the formation of precipitates at the formation.
 5. Value of the crude will not be reduced by commingling.
 6. Ownership is common.
 7. Commingling will not jeopardize efficiency of future secondary recovery operations.
2. (a) Mobil Exploration & Producing U.S.
12450 Greenspoint Dr.
Houston, Tx 77060-1991
- (b) Kriti State 31 #1
Sec 31, T-16S, R-36E
Lea County, New Mexico
Upper Pennsylvanian and Wolfcamp zones.
- (c) Ownership plat (attached).
- (d) A current 24-hr test of the Wolfcamp is 21 BOPD and 11 BWPD. Production on the Upper Pennsylvanian immediately prior to recompletion to the Wolfcamp is 5 BOPD and 49 BWPD.
- (e) Production curves for both zones (attached).

- (f) Bottom hole pressures for each zone (attached).
- (g) Each zone is oil and there is no evidence of incompatibility.
- (h) Test the Wolfcamp prior to commingling, then test the commingled production. Allocate initial test production to the Wolfcamp. Allocated the differential of the commingled production and the Wolfcamp to the Upper Pennsylvanian.
- (i) Researched offset acreage, and Mobil is the only operator in this field.





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Petrus	Maralo	Major, etal	Major, etal
Payne 24	State K-33	Mobil-St. 30	29 State
Petrus 25	Texaco	J. L. Hamon, etal 31	32 Yates Petr., etal
		Exxon	H. E. Yates
State Yates	J. L. Hamon Kriti Expl.		
State	Kriti State 31	State	State
Texaco 36	Amoco (Mobil)	Mobil 6	5 Turner
Lovington Deep State	Lovington Deep Amoco State	"V"	"D"

Reserve _____ Permit Depth _____

Special Instructions _____

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COUNTY OF Midland

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Mobil Producing Texas & New Mexico Inc
Midland Division

LEASE Kriti State 31
WELL NO. 1 DATE _____ 19____
LEASE NO. _____
TOTAL ACRES IN LEASE 154.73 ACRES COVERED BY PLAT 154.73
DESCRIPTION SW 1/4 of Sec. 31, T-16-S, R-36-E

5 Miles SW of Lovington, N.W.
Lea County, New Mexico

DRAWN <u>ARH</u>	DATE <u>2-16-89</u>	FIELD <u>Shoe Bar, South</u>
SCALE <u>1"=1000'</u>	FILE NO. <u>36</u>	<u>WOLFCAMP</u>

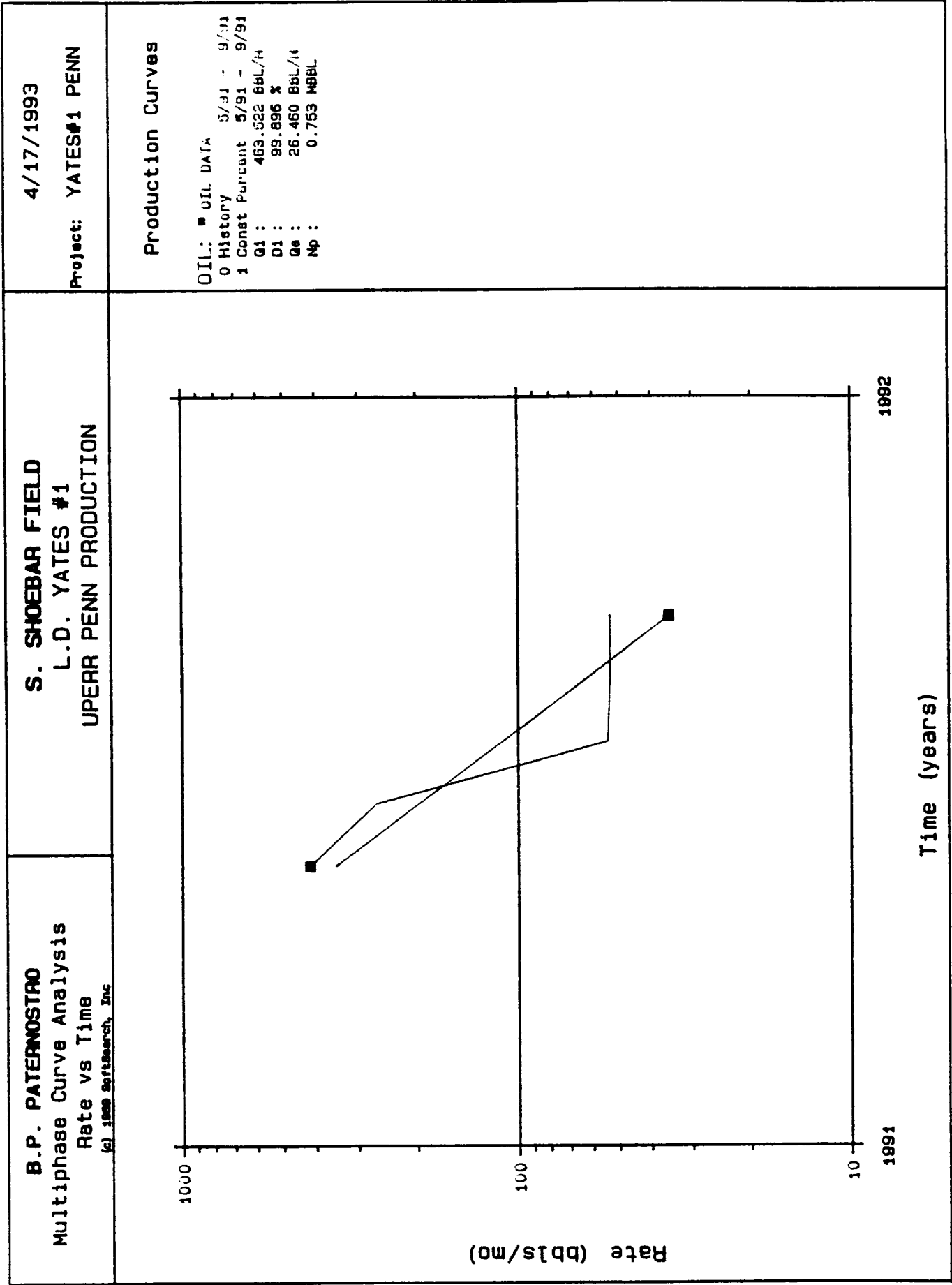
MOBIL EXPLORATION & PRODUCING U.S.

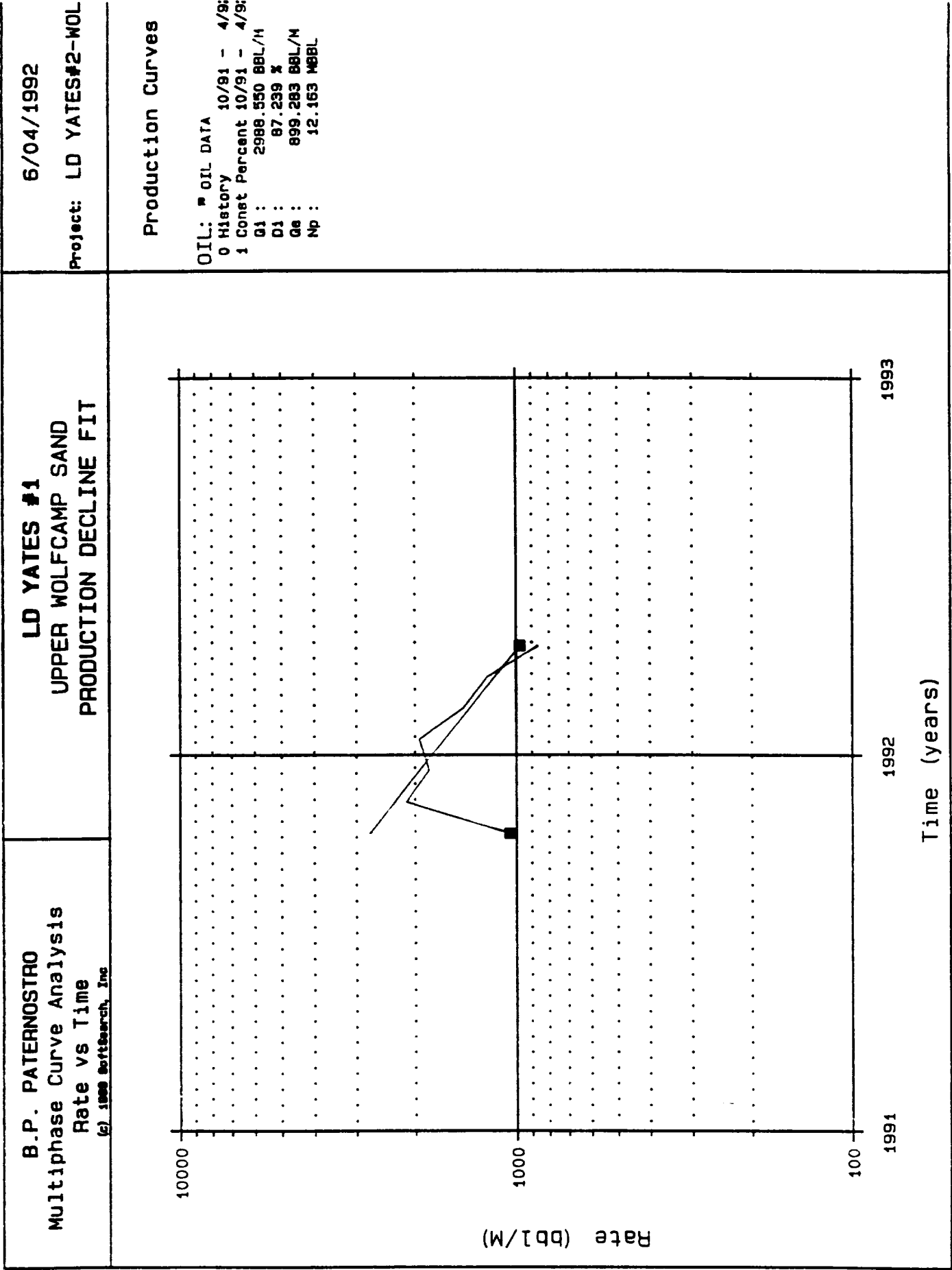
LOVINGTON DEEP YATES STATE #1

DOWNHOLE COMMINGLING REQUIRED DATA

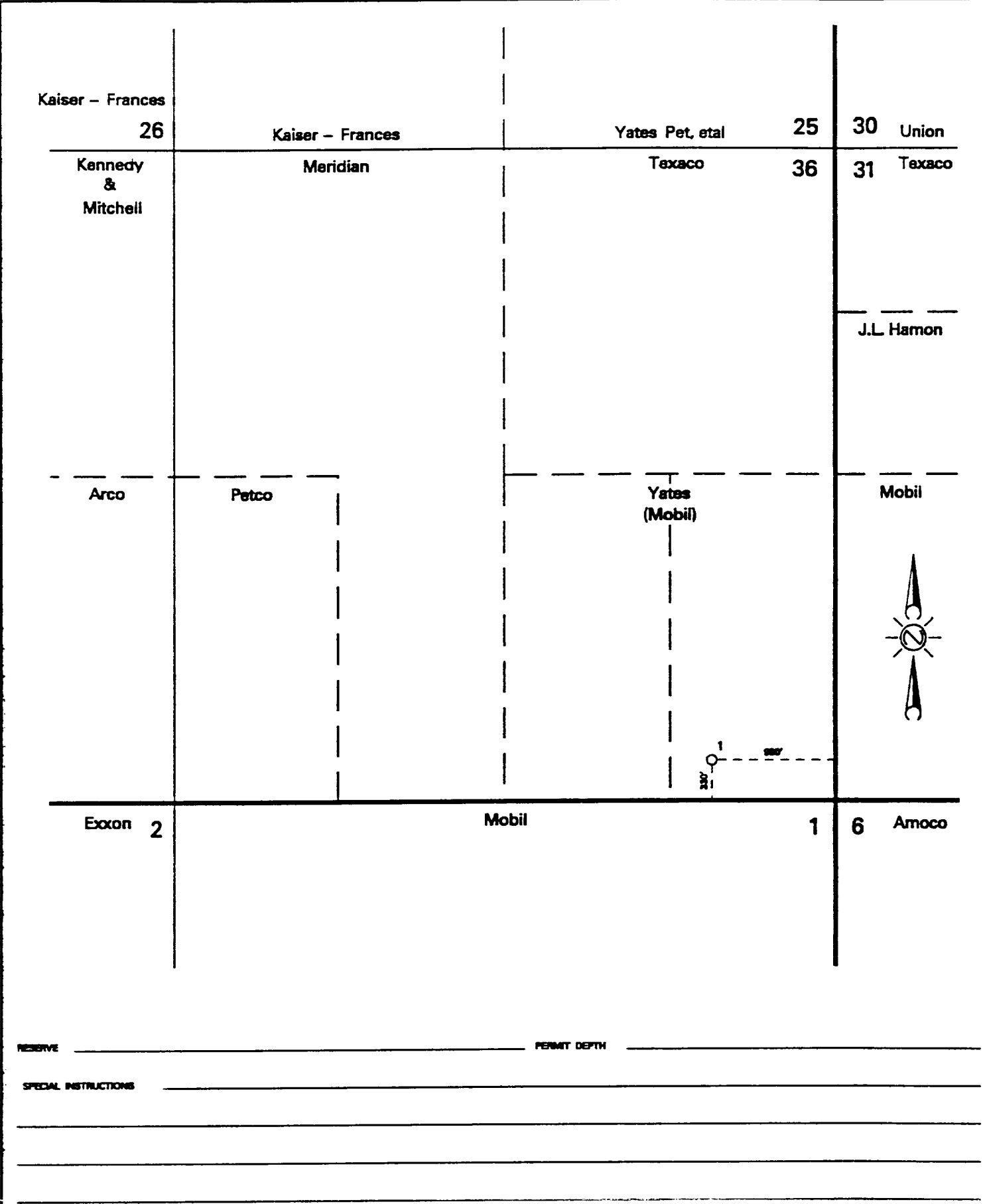
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2. (a) Mobil Exploration & Producing U.S.
12450 Greenspoint Dr.
Houston, Tx 77060-1991
- (b) Lovington Deep Yates State #1
Sec 36, T-16S, R-35E
Lea County, New Mexico
Upper Pennsylvanian and Wolfcamp zones.
- (c) Ownership plat (attached).
- (d) A current 24-hr test of the Wolfcamp is 8 BOPD and 1 BWPD. Production on the Upper Pennsylvanian immediately prior to recompletion to the Wolfcamp is 2 BOPD and 2 BWPD.

- (e) Production curves for both zones (attached).
- (f) Bottom hole pressures for each zone (attached).
- (g) Each zone is oil and there is no evidence of incompatibility.
- (h) Test the Wolfcamp prior to commingling, then test the commingled production. Allocate initial test production to the Wolfcamp. Allocated the differential of the commingled production and the Wolfcamp to the Upper Pennsylvanian.
- (i) Researched offset acreage, and Mobil is the only operator in this field.





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SPECIAL INSTRUCTIONS _____

<p>THE STATE OF TEXAS COUNTY OF Midland</p> <p>I hereby certify that this plat truly represents conditions as they actually exist on this lease; that said plat which is drawn to the scale indicated hereon, is to the best of my knowledge true and correct; that it accurately shows said lease with all wells on same; that number and location of said wells are as indicated hereon; and that this plat correctly reflects all pertinent and required data.</p>	Mobil Exploration & Producing U.S. Inc. Midland		
	LEASE <u>Lovington Deep Yates State</u>		
	WELL NO. <u>1</u>	DATE <u>7-30-01</u>	LEASE NO. <u>18</u>
	TOTAL ACRES IN LEASE <u>160</u> ACRES COVERED BY PLAT <u>160</u>		
	DESCRIPTION <u>SE4 of Section 36, T-16-S, R-35-E</u>		
<u>6 Miles SW from Lovington, NM</u>			
<u>Lee County, New Mexico</u>			
DRAWN <u>SDB2140</u>	DATE <u>7-30-01</u>	FIELD <u>Wolfcamp</u>	
SCALE <u>1" = 1000'</u>	FILE NO <u>30</u>	South Shoe Bar	