

AMEND DHC 1/31/00

Houston Division  
Production Operations, United States

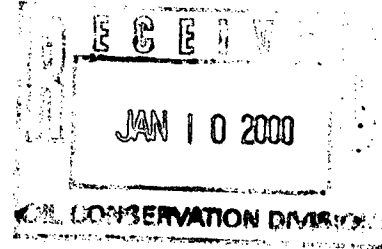


**Marathon  
Oil Company**

P.O. Box 2490  
Hobbs, New Mexico 88240  
Telephone 505/393-7106

January 6, 2000

Mr. David Catanach  
Oil Conservation Department  
Energy and Minerals Department  
P.O. Box 2088  
Santa Fe, New Mexico 87501



RE: Request for Allocation Change  
on DHC #2506  
Bertha Barber Well No. 16  
Unit Letter K, 2140' FSL & 1650' FWL  
Section 5, T-20-S, R-37-E  
Monument Tubb & Monument Abo  
Monument Field  
Lea County, New Mexico

Dear Mr. Catanach:

Marathon Oil Company requests administrative approval to change the production allocation on the DHC #2506 permit in the above subject well from the Monument Tubb & Monument Abo pools in Lea County, New Mexico.

Bertha Barber Well No. 16 was drilled in the summer of 1997. The Abo was perforated and acidized. Production since 1997 until now has been from the Abo. A casing leak was discovered in September 1999 and a RBP was set above the Abo perfs to isolate them. The casing leak was repaired. Perforations were then added to the Tubb and the new perfs were stimulated with acid and a sand frac. The RBP will soon be removed and the Tubb and Abo will be DHC. Rod pumping equipment will be utilized to keep the PBHP as low as possible, preventing crossflow.

The Monument Tubb production (oil and gas) in Bertha Barber Well No. 16 was significantly lower than was predicted in the original Down-Hole Commingling application. Enclosed is pertinent data supporting the change in production allocation for the Tubb and Abo. If additional information is necessary, please contact me at (505) 393-7106, ext 201.

Sincerely,

A handwritten signature in cursive script that reads 'Thomas P. Kacir'.

Thomas P. Kacir  
Production Engineer

Enclosure

**REQUEST FOR EXCEPTION TO RULE 303-A**

**Bertha Barber Well No. 16**

**Monument Field**

**A: Operator**

Marathon Oil Company  
P.O. Box 2490  
Hobbs, New Mexico 88241

**B: Lease Name and Well Number**

Bertha Barber Well No. 16  
Unit Letter K, 2140' FSL & 1650' FWL  
Section 5, T-20-S, R-37-E  
Lea County, New Mexico  
Monument: Monument Tubb, Monument Abo Pools

**C: C-116's**

Attached

**D: Production Decline Curves**

Expected Decline Curves are Attached

**E: Production Allocation**

<u>POOL</u>	<u>BOPD</u>	<u>MCFD</u>	<u>BWPD</u>	<u>Estimated Methods</u>
Monument Tubb	35	50	0.8	Post-Workover Test (oil & gas)
Monument Abo	<u>35</u>	<u>126</u>	<u>0.5</u>	Pre-Workover Test (oil & gas)
Total	70	176	1.3	water is average

<u>Allocated Percentages</u>	<u>Oil %</u>	<u>Gas %</u>	<u>Water %</u>
Monument Tubb	50	28.4	62
Monument Abo	<u>50</u>	<u>71.6</u>	<u>38</u>
Total	100	100	100

State of New Mexico  
Energy, Minerals and Natural Resources Department

# OIL CONSERVATION DIVISION

2040 Pacheco St.  
Santa Fe, NM 87505

Form C-116  
Revised 1/1/89

Submit 2 copies to Appropriate  
District Office.  
DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240  
DISTRICT II  
811 S. 1st Street, Artesia, NM 88210-2834  
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

## GAS - OIL RATIO TEST

Operator		Pool		Monument; Tubb & Abo		County		Lea						
Marathon Oil Company														
Address		P.O. Box 2490 Hobbs, NM 88241		TYPE OF TEST - (X)		Completion		Special						
				SCHEDULED				X						
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS-OIL RATIO CUFT/BBL	
		U	S	T						R	WATER BBL.	GRAV. OIL		OIL BBL.
Bertha Barber	16	K	5	20	37	1/02/00	P							
Monument Tubb									24	0		35	50	1750
Monument Abo						8/22/99	P		24	0		35	126	3600

### Instructions:

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60°F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

(See Rule 301, Rule 1116 & appropriate pool rules.)

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

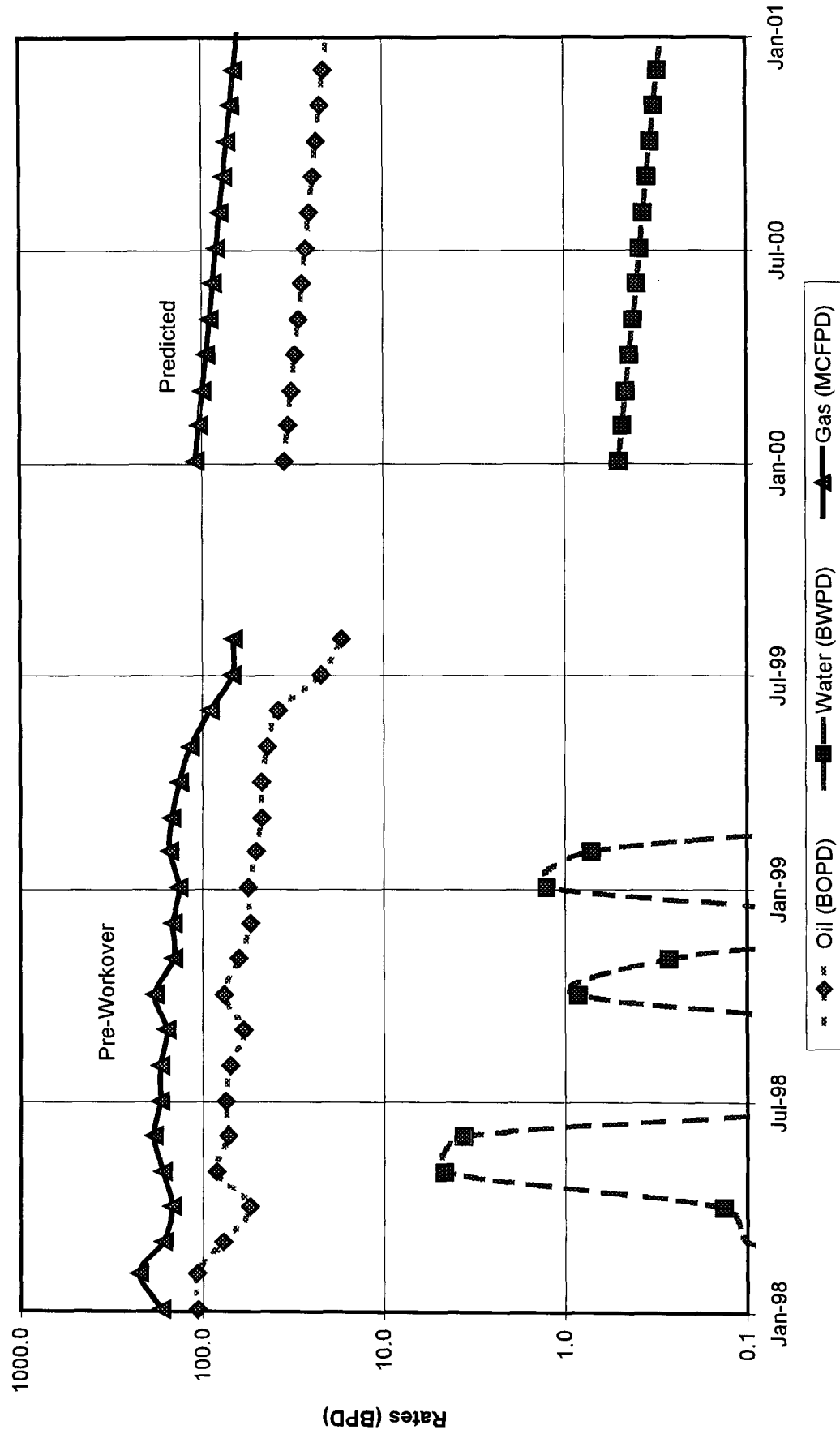
*Thomas P. Kacir*  
Signature

Thomas P. Kacir  
Printed name and title

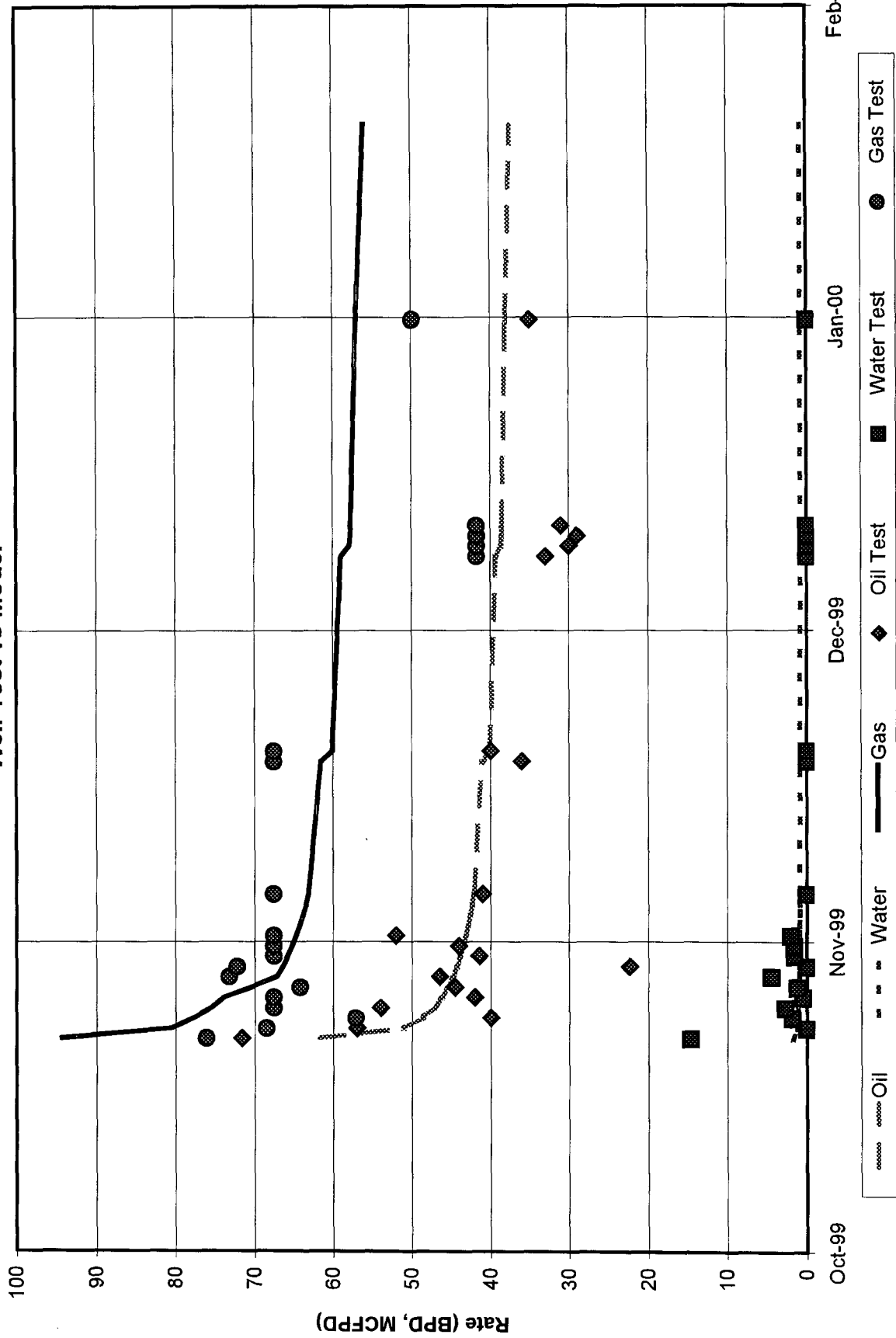
1/06/2000  
Date

393-7106  
Telephone No.

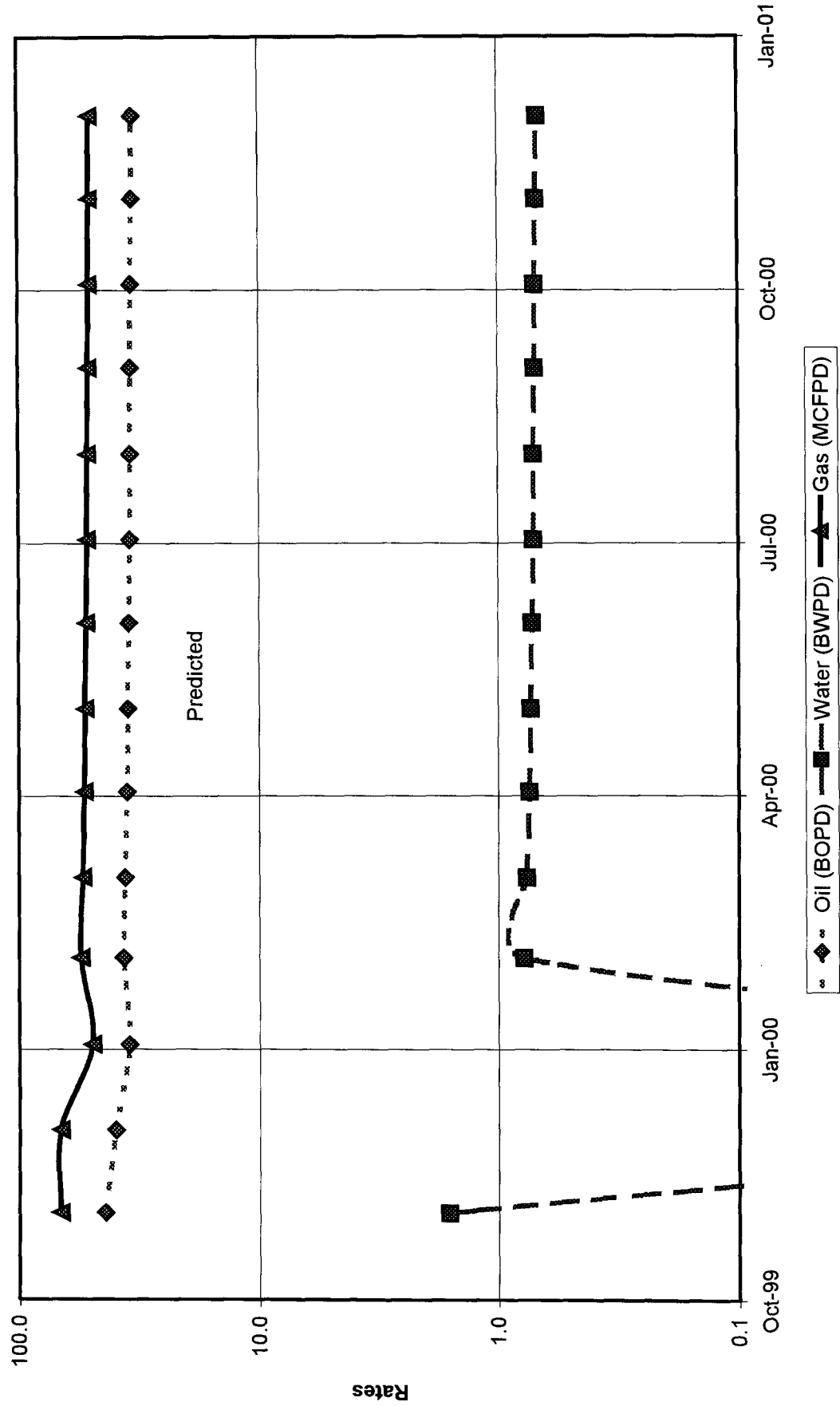
# Bertha Barber Well No. 16 Monument Abo Production



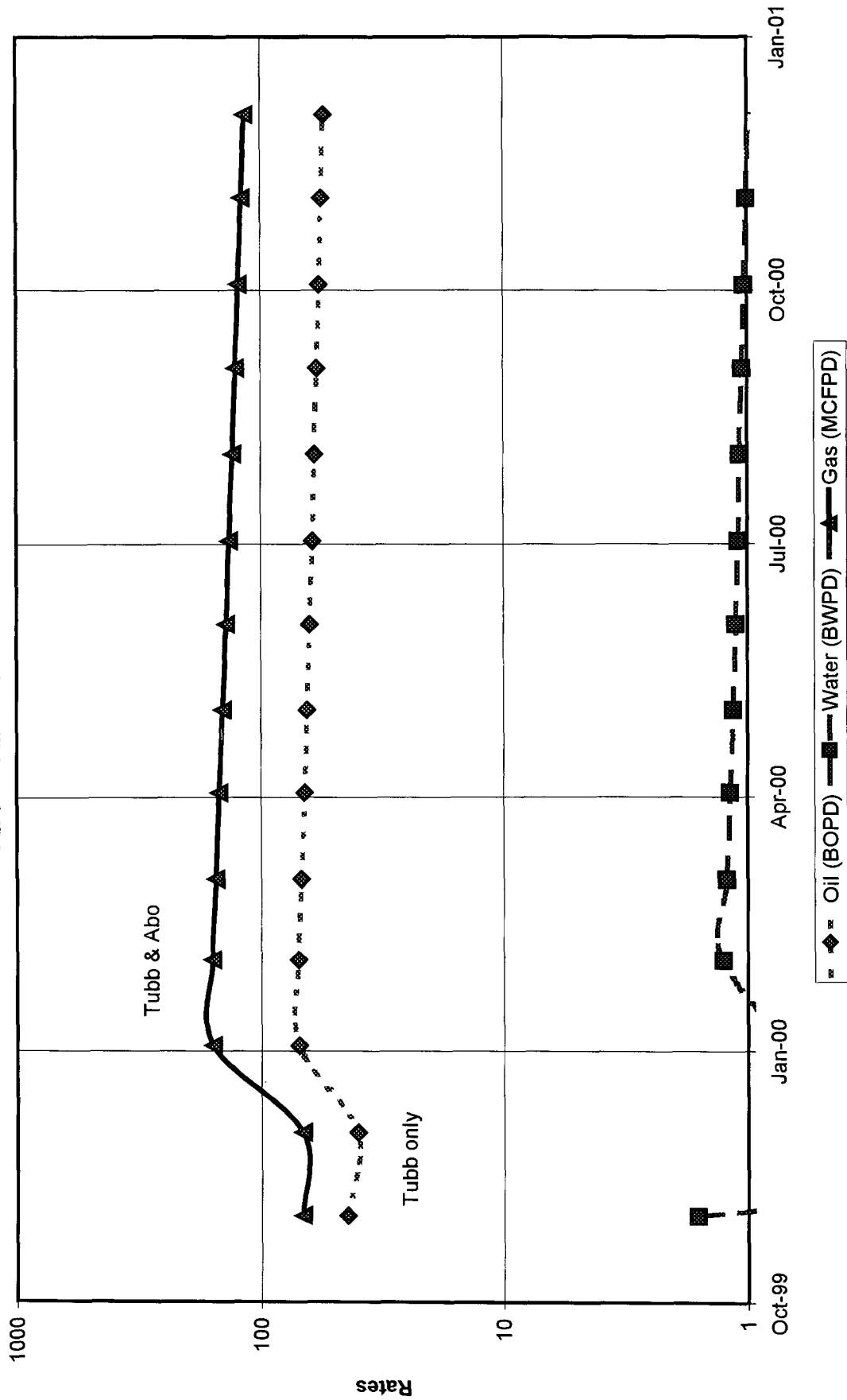
# Bertha Barber Well No. 16 Tubb Pool Production Well Test vs Model



# Bertha Barber Well No. 16 Monument Tubb



# Bertha Barber Well No. 16 Expected Post Workover Abo & Tubb Production



DHC-2506



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE

10/15/99

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

Gentlemen:

I have examined the application for the:

Marathon Oil Co Bertha Barber #16-K-5-2Ds-37e  
Operator Lease & Well No. Unit S-T-R  
API # 30-025-33919

and my recommendations are as follows:

OK.

Yours very truly,

Chris Williams  
Supervisor, District 1

/ed