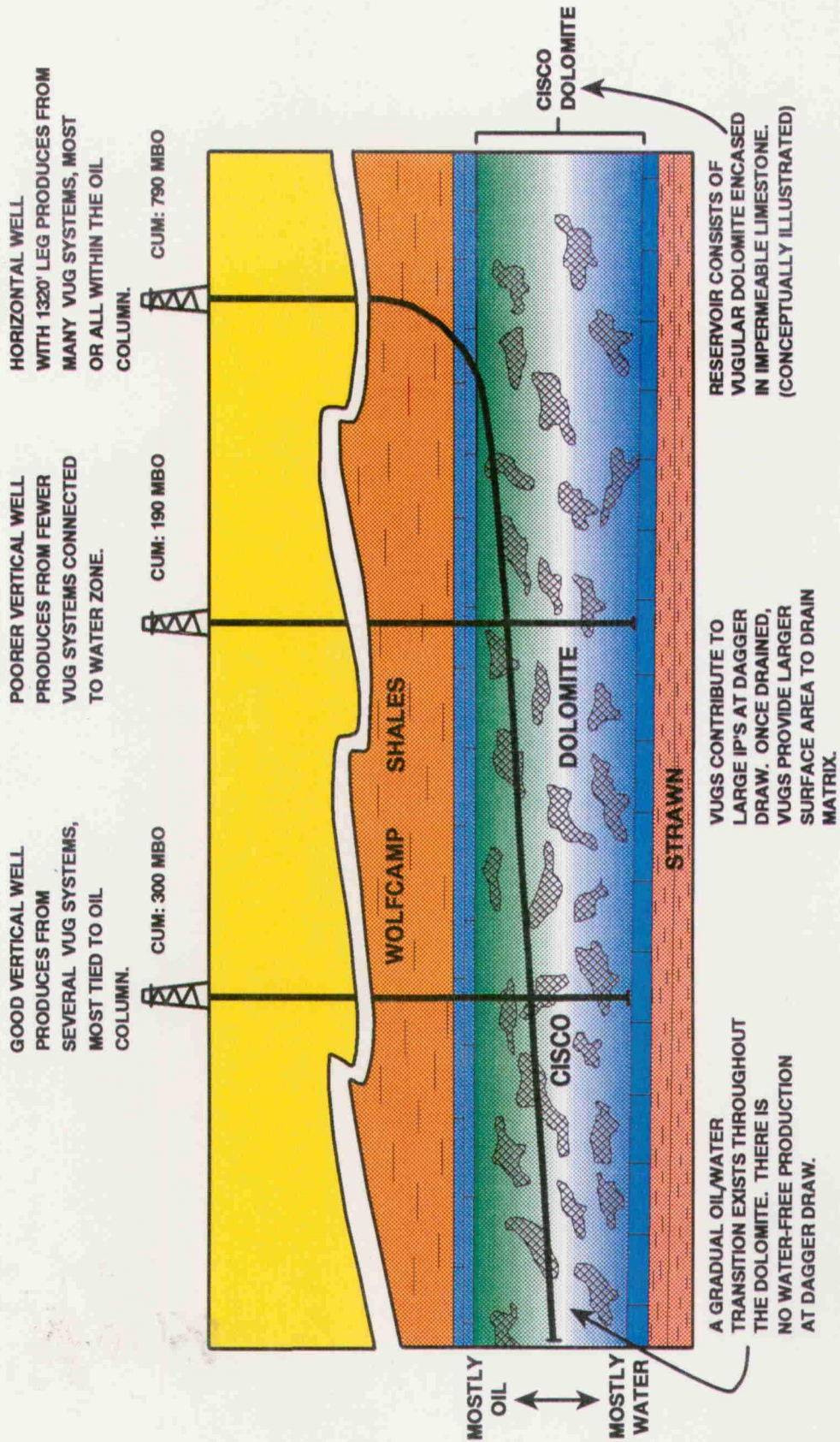


HORIZONTAL WELL CONCEPT

DAGGER DRAW FIELD, EDDY CO., NEW MEXICO



BEFORE EXAMINER
OIL CONSERVATION DIVISION

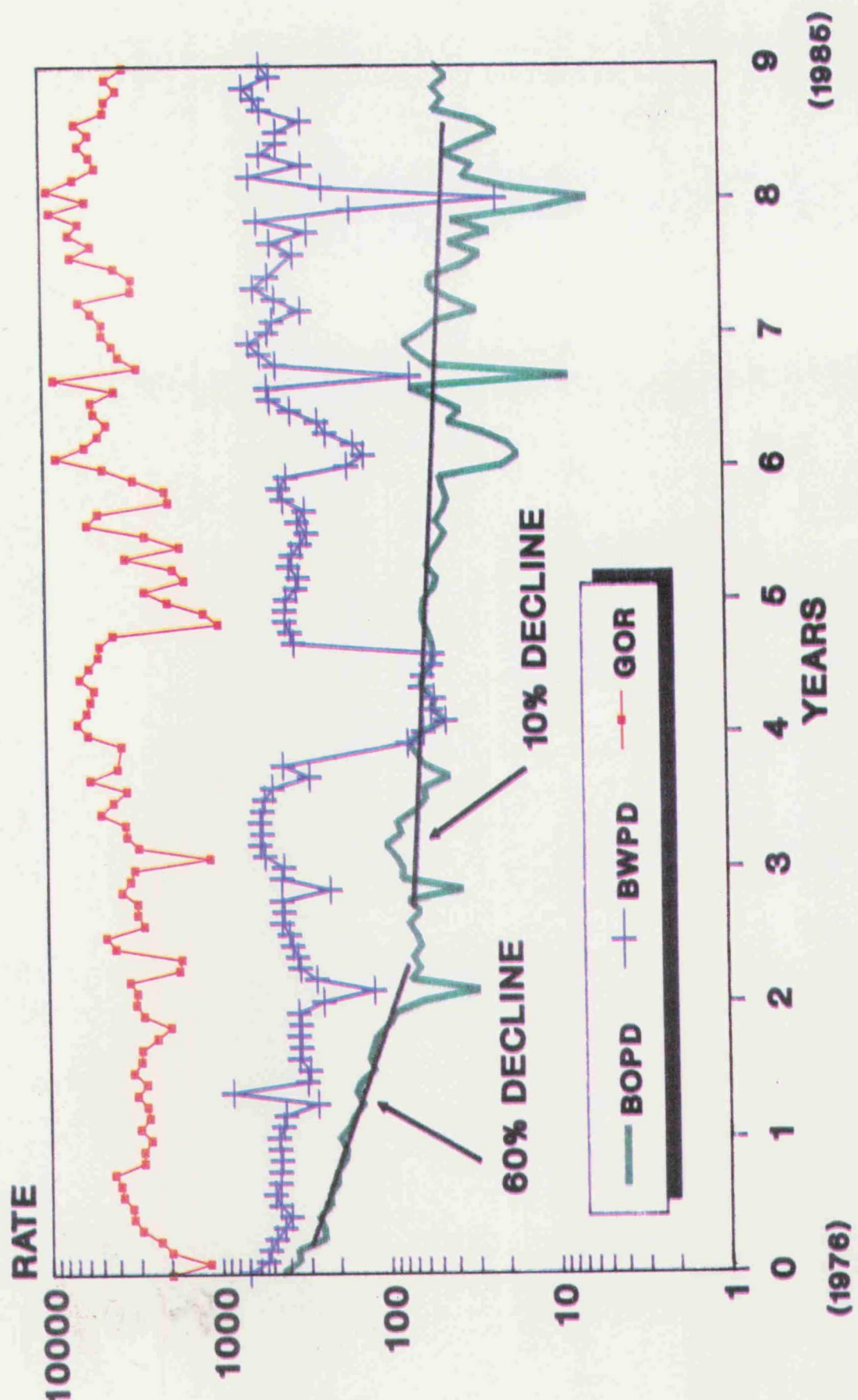
EXHIBIT NO. 9

CASE NO. 10339

Submitted by Conoco Inc.

Hearing Date 6-27-91

BARBARA FEDERAL NO. 6 NORTH DAGGER DRAW POOL



BEFORE EXAMINER
OIL CONSERVATION DIVISION

EXHIBIT NO. 10

CASE NO. 10339

Submitted by Conoco Inc.

Hearing Date 6-27-91

TYPICAL VERTICAL WELL PROFILE NORTH DAGGER DRAW POOL

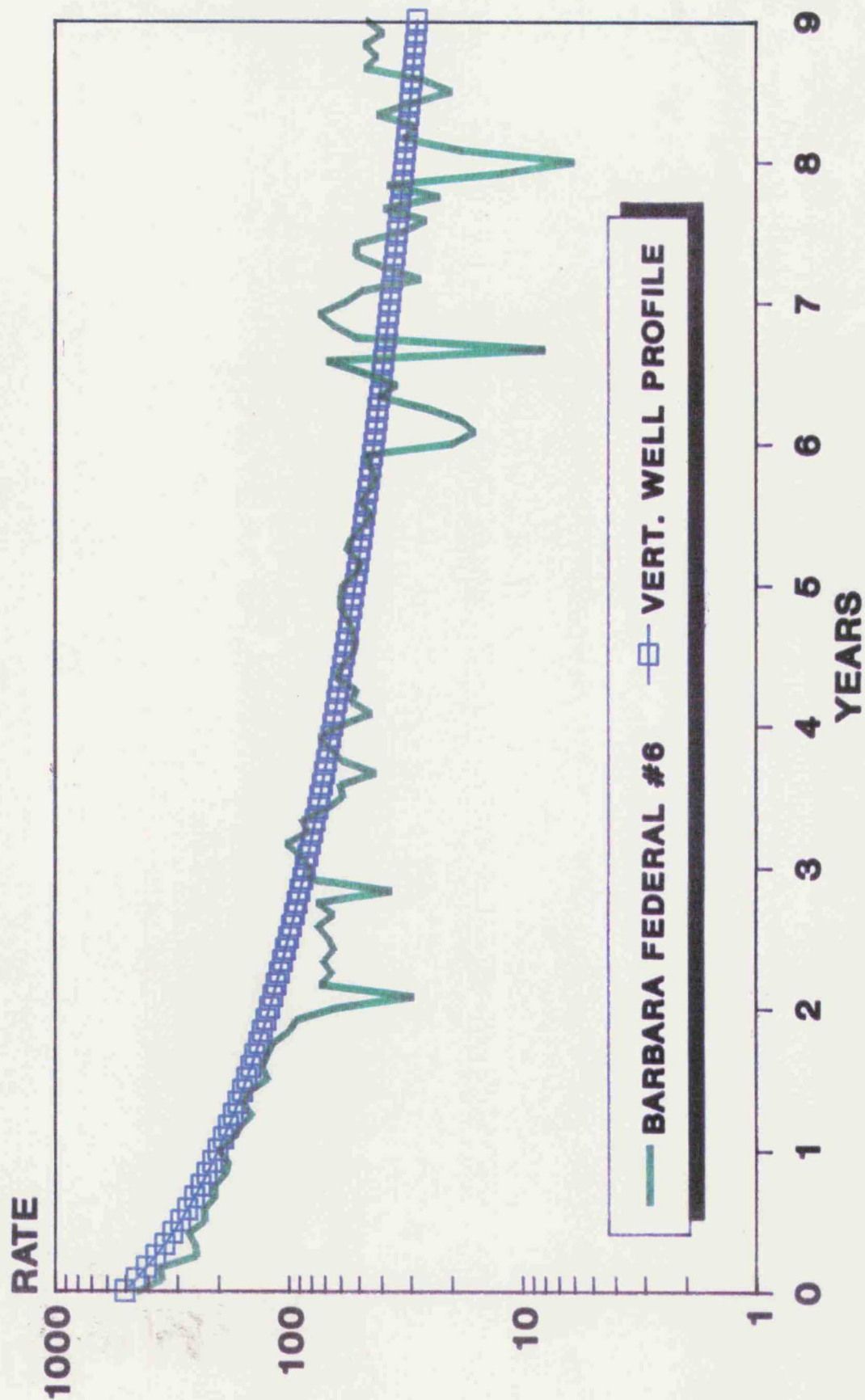


EXHIBIT 11

BEFORE EXAMINER
OIL CONSERVATION DIVISION

EXHIBIT NO. 11

CASE NO. 10339

Submitted by Conoco Inc.

Hearing Date 6-27-91

**PARAMETERS USED IN TYPICAL
VERTICAL WELL DECLINE CURVE ANALYSIS**

Initial Annual Decline Rate	60%
Pay Thickness	100 Ft.
Porosity	12%
Oil Saturation	60%
Effective Oil Permeability, Ko	2.15
Reservior Pressure	2000 psi
Flowing Bottomhole Pressure	200 psi
Recovery Factor	12%
Cumulative Recovery	300 MBO

**PARAMETERS USED IN HORIZONTAL
WELL DECLINE CURVE ANALYSIS**

Vertical Permeability/Horizontal Permeability	0.3
Horizontal Well Length	1320 Ft.
Horizontal/Vertical Production Ratio	3.4
Calculated Oil Rate	1700 BOPD
Recovery Factor	17%
Cumulative Recovery	790 MBO

BEFORE EXAMINER OIL CONSERVATION DIVISION
EXHIBIT NO. <u>12</u>
CASE NO. <u>10339</u>
Submitted by <u>Conoco Inc.</u>
Hearing Date <u>6-27-91</u>

DAILY PRODUCTION FORECAST NORTH DAGGER DRAW POOL

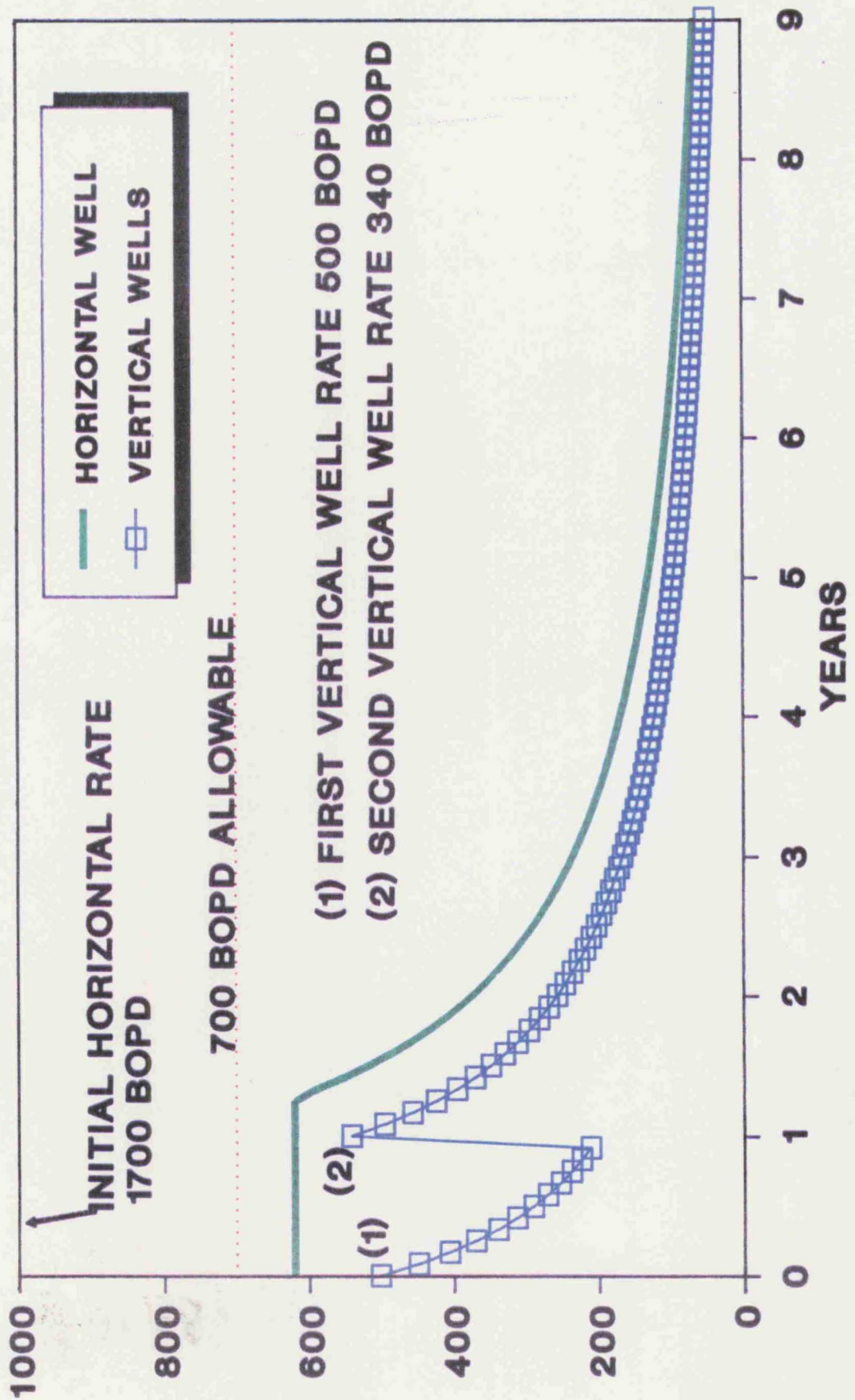


EXHIBIT 13

BEFORE EXAMINER OIL CONSERVATION DIVISION
EXHIBIT NO. <u>13</u>
CASE NO. <u>10339</u>
Submitted by <u>Conoco Inc.</u>
Hearing Date <u>6-27-91</u>

CUMULATIVE PRODUCTION FORECAST NORTH DAGGER DRAW POOL

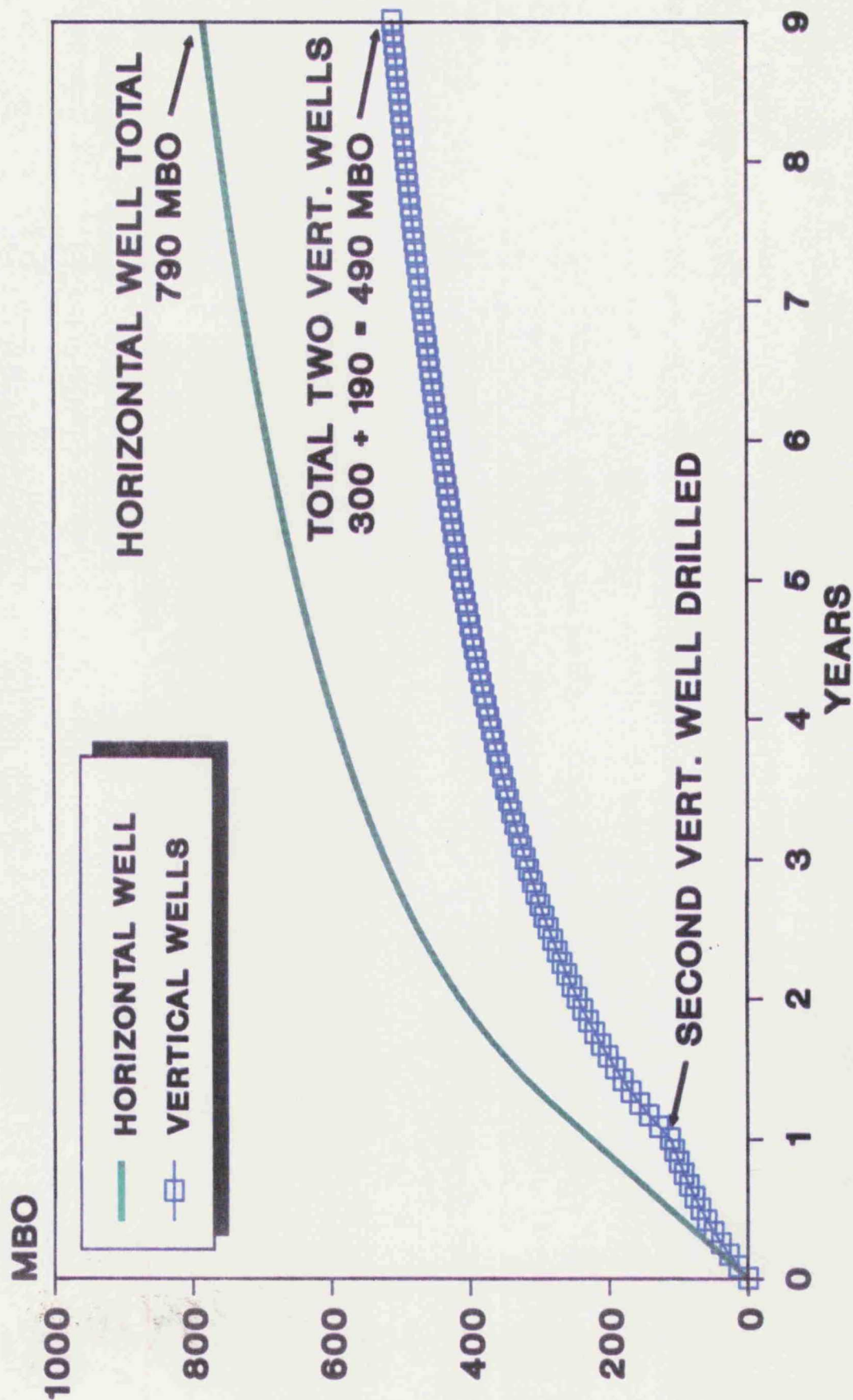


EXHIBIT 14

BEFORE EXAMINER
OIL CONSERVATION DIVISION

EXHIBIT NO. 14

CASE NO. 10339

Submitted by Conoco Inc.

Hearing Date 6-27-91



Midland Division
Exploration and Production

Conoco Inc.
10 Desta Drive West
Midland, TX 79705-4514
(915) 686-5400

June 4, 1991

Yates Petroleum Corp.
105 S. Fourth Street
Artesia, NM 88210

Gentlemen:

**Request For Examiner Hearing on June 27, 1991
For Approval Of A Horizontal Directional Drilling
Pilot Project, The Barbara Federal Well No. 13,
And An Unorthodox Surface Well Location In The
North Dagger Draw Upper Pennsylvanian Pool,
Eddy County, New Mexico**

Conoco has applied for approval of a Horizontal Directional Drilling Pilot Project in the NW/4 Sec. 17, T-19S, R-25E of the North Dagger Draw Pool. A copy of that application and its exhibits is attached to this letter.

Although our application calls for an unorthodox surface location, this well will be cased through all of the upper wellbore until it reaches a standard subsurface location of 660' from the proration unit boundary. All of the producing portion of the wellbore will be within the bounds of a standard location window for a horizontal well in the N/2 NW/4 of Sec. 17.

Since it appears that all operators in the North Dagger Draw Pool are moving toward eventual 40-acre development, a horizontal well should provide a more efficient recovery from the two 40-acre tracts in the N/2 of the subject proration unit. Conoco has chosen to drill this well at a 760 foot setback from the boundary between our Barbara Federal Lease and your Roy Lease instead of the minimum required 660 feet.

Also attached to this letter is a waiver to objection for this application. If you have no objection, please return the signed waiver in the enclosed postage-paid envelope. If you have further questions concerning the application please contact Jerry W. Hoover a (915) 686-6548.

Very truly yours,

Jerry W. Hoover
Regulatory Coordinator

JWH/tm

EXHIBIT 15

BEFORE EXAMINER OIL CONSERVATION DIVISION
EXHIBIT NO. <u>15</u>
CASE NO. <u>10339</u>
Submitted by <u>Conoco Inc.</u>
Hearing Date <u>6-27-91</u>

CONOCO INC.
10 Desta Drive, Ste. 100W
Midland, Texas 79705-4500

Application for approval of a Horizontal Directional Drilling Pilot Project, the Barbara Federal Well No. 13, and an unorthodox surface well location of 760' FNL & 2630' FWL, Sec. 17, T-19S, R- 25E, in the North Dagger Draw Upper Pennsylvanian Pool, Eddy County, New Mexico.

WAIVER TO OBJECTION

We, the undersigned, as an offset operator to the above described well, waive any objection to the drilling of this horizontal well and to beginning at an unorthodox surface location providing that the subsurface producing interval is contained within a standard rectangular window defined as 660' FNL, 990' FNL, 660' FEL, and 660' FWL.

Yates Petroleum Corporation

Signature

Title

Date

● **SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. (Extra charge) 2. ☐ Restricted Delivery (Extra charge)

3. Article Addressed to: Yates Petroleum Corp 105 S. Fourth Street Artesia, NM 88210	4. Article Number P 583 520 541 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise Always obtain signature of addressee or agent and <u>DATE DELIVERED</u> .
5. Signature — Addressee X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature — Agent X Mike Baul	
7. Date of Delivery 6-6-91	

PS Form 3811, Apr. 1989

★ U.S.G.P.O. 1989-238-815

DOMESTIC RETURN RECEIPT

EXHIBIT 16

BEFORE EXAMINER OIL CONSERVATION DIVISION
EXHIBIT NO. <u>16</u>
CASE NO. <u>10339</u>
Submitted by <u>Conoco Inc.</u>
Hearing Date <u>6-27-91</u>