

ATTACHMENT IV  
RESERVOIR AND PRODUCTION DATA  
PAN AMERICAN'S EMPEROR OIL COMPANY FEDERAL WELL NO. 1  
DOS HERMANOS (MORROW) GAS POOL  
EDDY COUNTY, NEW MEXICO

RESERVOIR DATA

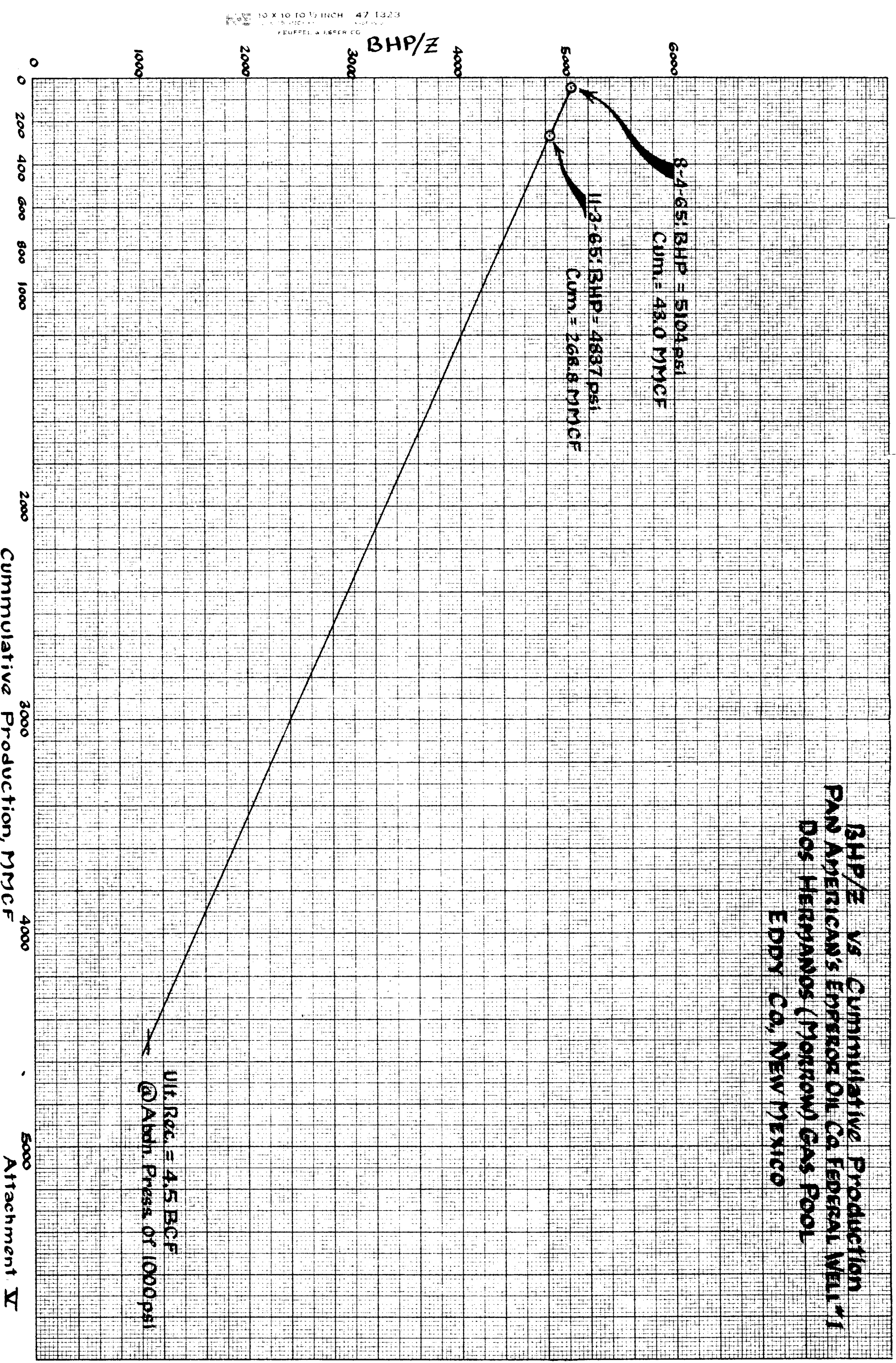
<u>Net Pay, Feet</u>	40
<u>Est. Effective Net Pay, Feet</u>	14
<u>Average Porosity, %</u>	7.3
<u>Est. Water Saturation, %</u>	25
<u>Producing Mechanism</u>	Pressure Depletion
<u>Lithology</u>	Medium to coarse grain angular quartz sandstone
<u>Gas-Water Contact</u>	Not Defined
<u>Reservoir Temperature, °F</u>	176
<u>Initial Pressure, psi and Datum, Feet</u>	5104 @ -8889
<u>Abandonment Pressure, psi and Datum, Feet</u>	1000 @ -8889
<u>Recoverable Gas, MCF/Ac. Ft.</u>	523

PRODUCTION DATA

<u>Date</u>	<u>Bbls. Condensate</u>	<u>MCF Gas</u>
5-65	391	136
6-65	146	17,580
7-65	94	19,560
8-65	492	36,321
9-65	787	90,264
10-65	914, est.	105,000, est.
Cum. 11-1-65	2,824	268,861

Produced Gas-Liquid Hydrocarbon Ratio: 95.2 MCF/Bbl.

**BHP/Z vs Cumulative Production**  
**PAN AMERICAN'S EMPEROR OIL Co. FEDERAL Well #1**  
**DOS HERMANOS (Mojorro) Gas Pool**  
**EDDY Co., New Mexico**



ATTACHMENT VI  
ECONOMIC COMPARISON FOR DEVELOPMENT WELLS  
DOS HERMANOS (MORROW) GAS POOL  
EDDY COUNTY, NEW MEXICO

<u>RESERVES</u>	<u>320 ACRES</u>	<u>640 ACRES</u>
Gas, MCF	2,250,000	4,500,000
Condensate, Bbls.	23,500	47,000
<u>VALUE</u>		
Gas, \$/MCF	0.15	0.15
Condensate, \$/bbl.	2.73	2.73
<u>GROSS W.I. INCOME*</u>		
Gas, \$	278,000	556,000
Condensate, \$	52,800	106,000
Total, \$	330,800	662,000
<u>INVESTMENT</u>		
Well, \$	200,000	200,000
Lease Equipment, \$	15,000	15,000
Total, \$	215,000	215,000
<u>OPERATING EXPENSE**, \$</u>	37,525	70,150
<u>PROFIT PER WELL, \$</u>	78,275	376,850
<u>PAYOUT, MONTHS</u>	35	35
<u>PRODUCTION DURING PAYOUT</u>		
MCFPD	1,500	1,500
BCPD	16	16
<u>RETURN ON INVESTMENT</u>	0.4	1.8

\*Less 12.5% Royalty plus 5% ORI.

\*\*Includes taxes of 6.3%, Operating Expense of \$125/Month, Condensate Trucking Cost of \$0.18 per barrel, and Workover Costs of \$5,000.

ATTACHMENT VII  
SUGGESTED TEMPORARY RULES AND REGULATIONS  
FOR THE  
DOS HERMANOS (MORROW) GAS POOL  
EDDY COUNTY, NEW MEXICO

RULE 1. Each well completed or recompleted in the Dos Hermanos Morrow Gas Pool or in the Morrow formation within one mile of the Dos Hermanos Morrow Gas Pool, and not nearer to or within the limits of another designated Morrow pool, shall be spaced, drilled, operated, and produced in accordance with the Rules and Regulations hereinafter set forth.

RULE 2. Each well completed or recompleted in the Dos Hermanos Morrow Gas Pool shall be located on a standard proration unit containing 640 acres, more or less, consisting of a single governmental section.

RULE 3. Each well completed or recompleted in the Dos Hermanos Morrow Gas Pool shall be located <sup>upon, but</sup> no nearer than 330 feet to any governmental quarter section line of, the SW/4 NE/4, NW/4 SE/4, NE/4 SW/4, or SE/4 NW/4 of the section.

RULE 4. For good cause shown, the Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when the application is for a non-standard unit comprising less than 640 acres. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director of the Commission may approve the application if, after a period of 30 days, no offset operator has entered an objection to the formation of such non-standard unit.

RULE 5. The Secretary-Director may grant an exception to the footage requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon, provided the well will be located no nearer than 330 feet to the outer boundary of the unit. All operators offsetting the proposed unorthodox location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the unorthodox location within 20 days after the Secretary-Director has received the application.

PLOT OF BHP/Z VS CUMULATIVE PRODUCTION  
PAN AMERICAN PETROLEUM CORP.  
USA EMPEROR OIL COMPANY WELL NO.1  
DOS HERMANOS - MORROW GAS POOL  
EDDY COUNTY, NEW MEXICO

Drainage Volume =  $\frac{7,350,000 \text{ MCF}}{509 \text{ MCF/AC-Ft}} = 14,450 \text{ AC-Ft}$

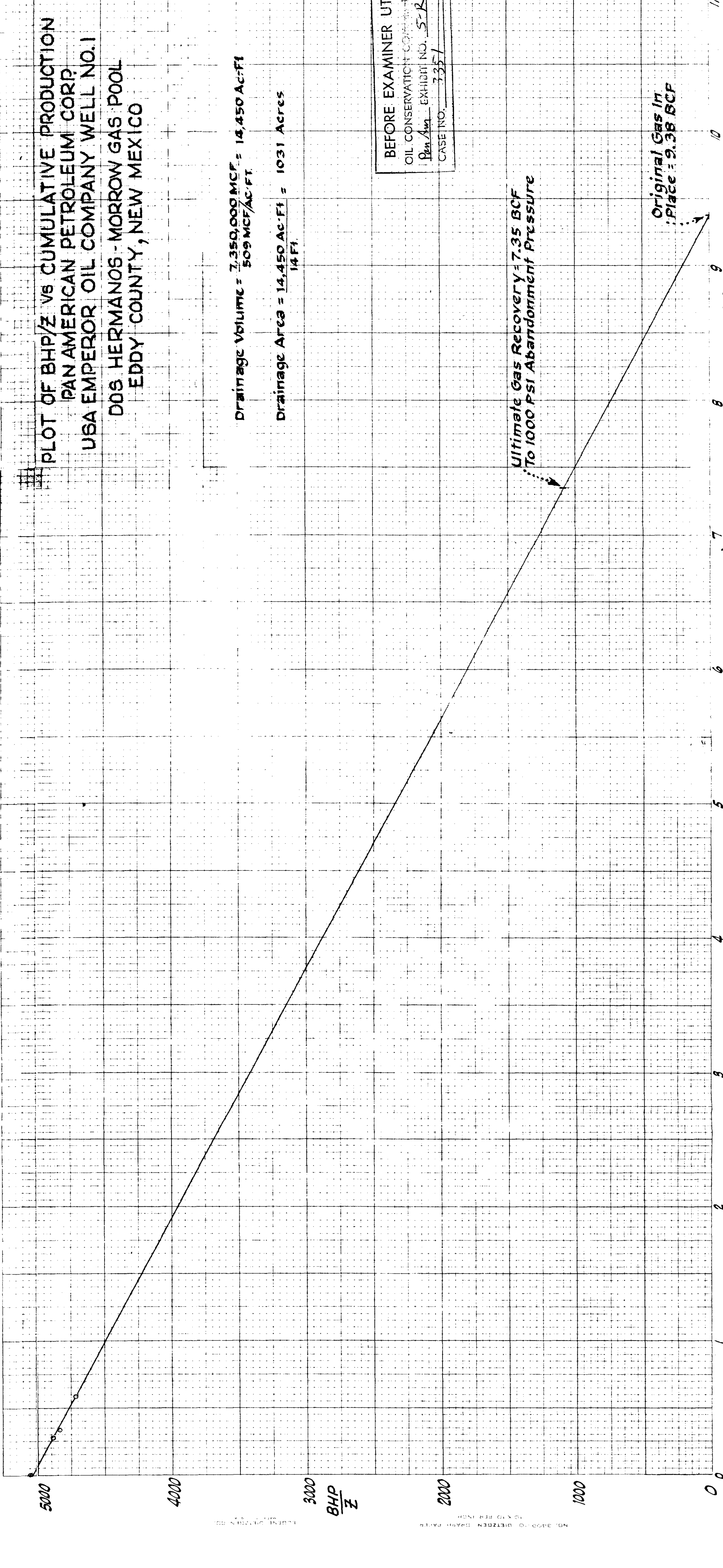
Drainage Area =  $\frac{14,450 \text{ AC-Ft}}{14 \text{ Ft}} = 1031 \text{ Acres}$

BEFORE EXAMINER UTZ  
OIL CONSERVATION COMPANY  
Pen Am EXHIBIT NO. 5-R  
CASE NO. 3351

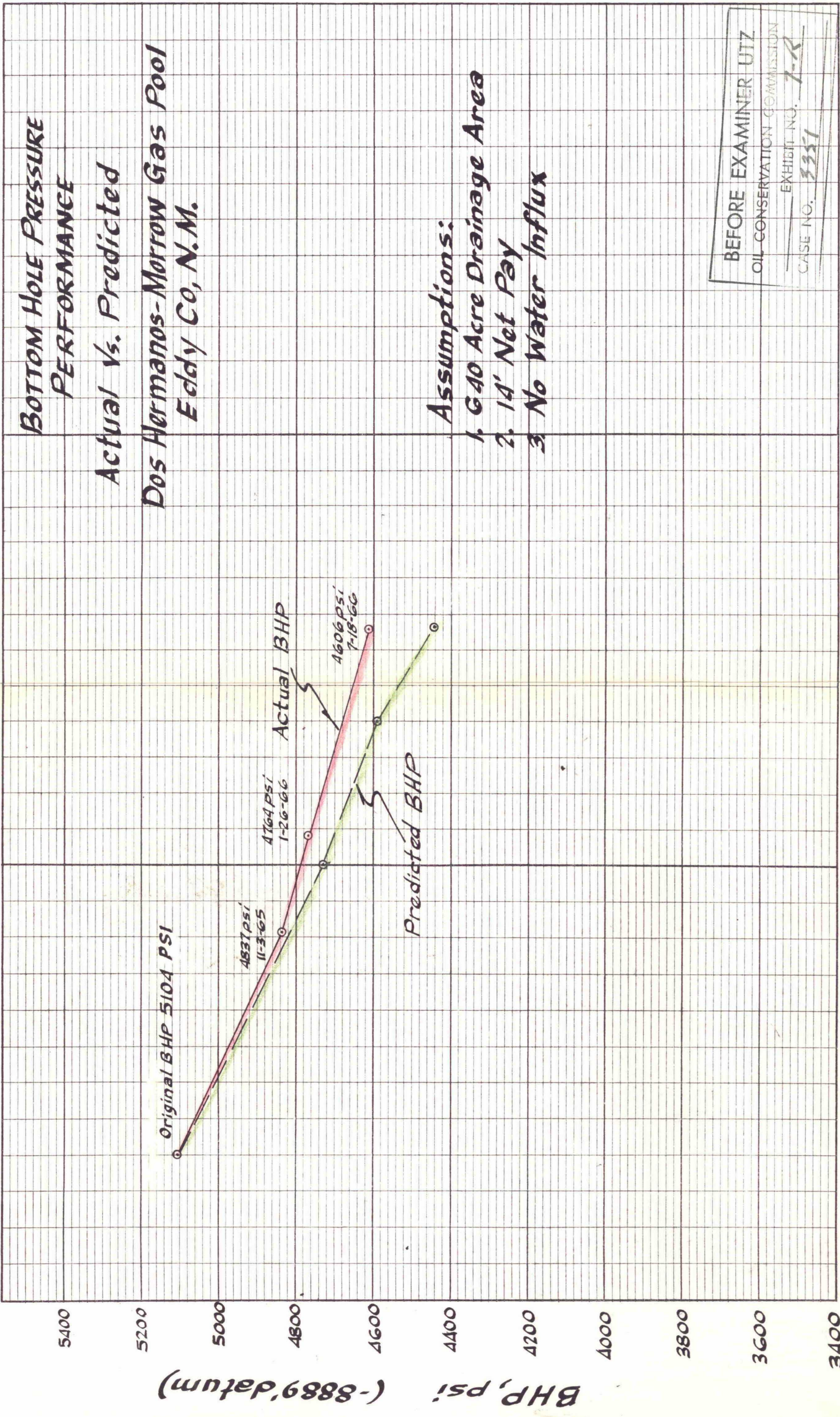
Ultimate Gas Recovery = 7.35 BCF  
To 1000 PSI Abandonment Pressure

Original Gas In  
Place = 9.38 BCF

CUMULATIVE GAS PRODUCTION (INCLUDES GAS EQUIVALENT OF STOCK TANK CONDENSATE), BILLION STD.CU.FT. @ 15.025 PSI. 60°F.







BEFORE EXAMINER UTZ  
OIL CONSERVATION COMMISSION  
EXHIBIT NO. 7-R  
CASE NO. 3351