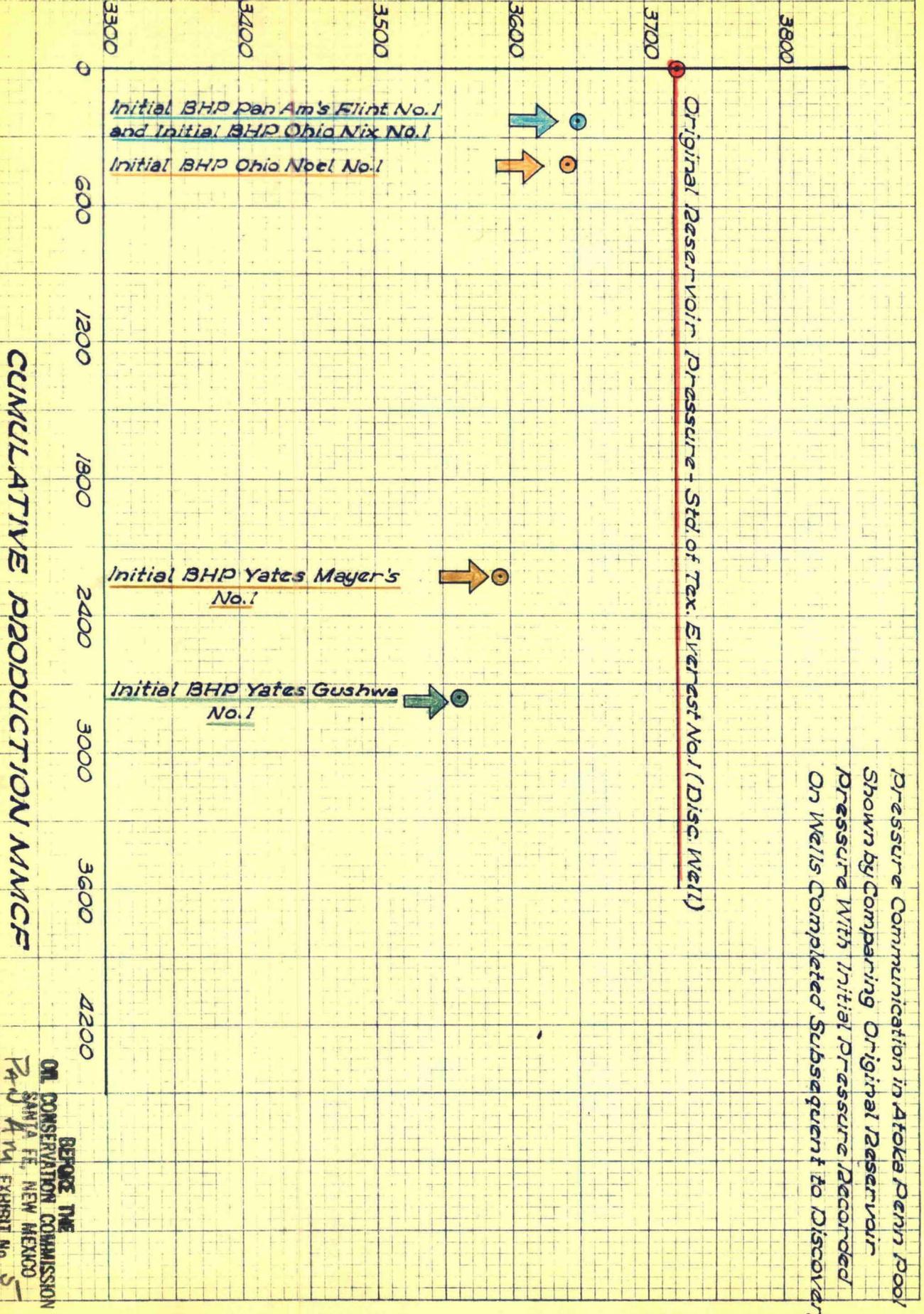


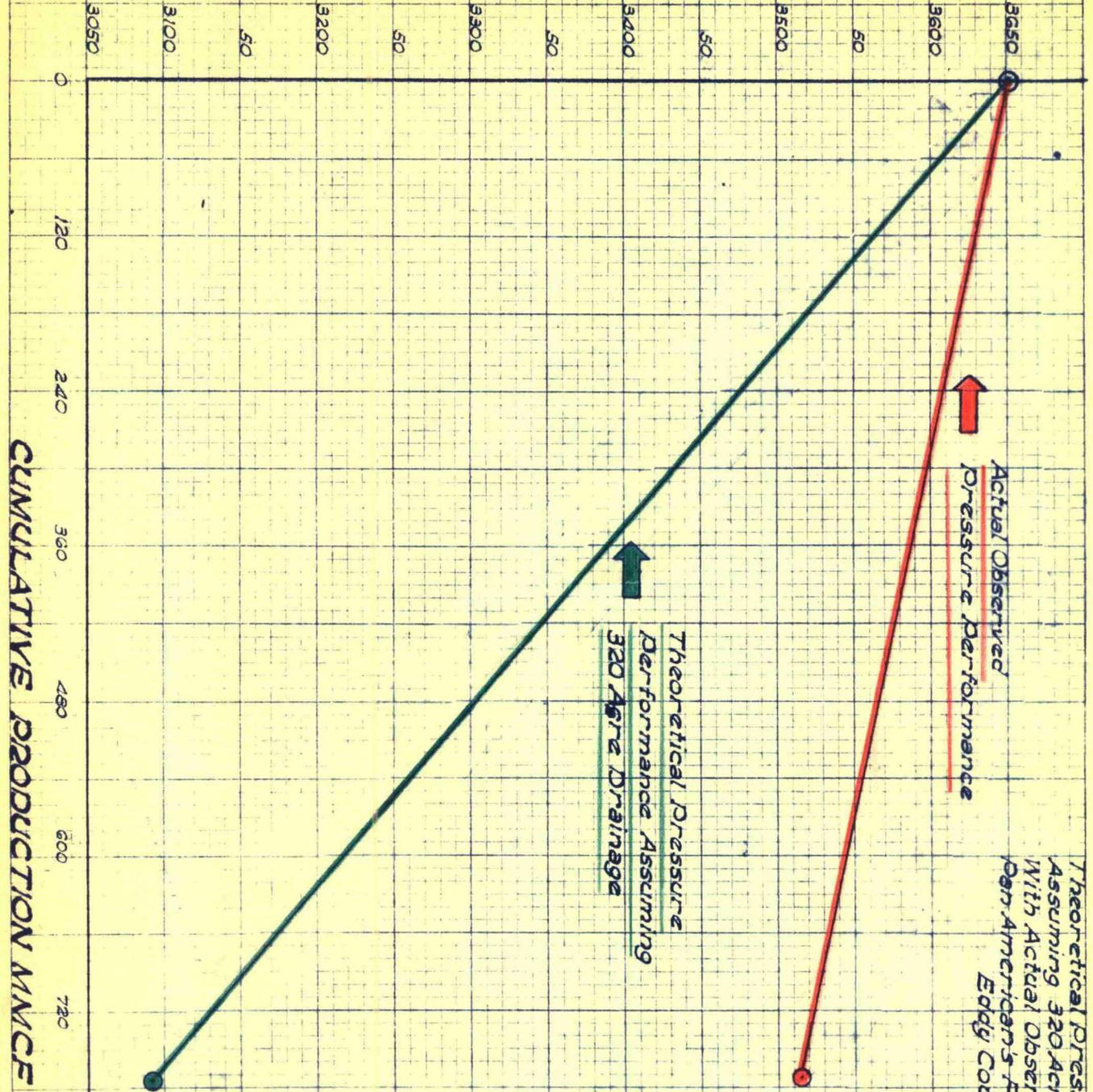
**BOTTOM HOLE PRESSURE PSIA  
 at - 5600'**



*Pressure Communication in Atoka Penn Pool  
 Shown by Comparing Original Reservoir  
 Pressure With Initial Pressure Recorded  
 On Wells Completed Subsequent to Discovery*

BEFORE THE  
 OIL CONSERVATION COMMISSION  
 SANTA FE, NEW MEXICO  
 PAN AM EXHIBIT No. 5  
 DATE 1669 (5-17-61)

**BOTTOM HOLE PRESSURE PSIA  
 at - 5600'**



**Actual Observed  
 Pressure Performance**

**Theoretical Pressure  
 Performance Assuming  
 320 Acre Drainage**

*Theoretical Pressure Performance  
 Assuming 320 Acre Drainage Area Compared  
 With Actual Observed Pressure Performance  
 Dan American's Flint No. 1 Acre Perm Pool  
 Eddy County, New Mexico*

**CUMULATIVE PRODUCTION MMCF**

BEFORE THE  
 OIL CONSERVATION COMMISSION  
 SANTA FE, NEW MEXICO  
**PAU AM EXHIBIT NO. 7**  
 ONE 1669 (5-17-61)

E 2 5

ECONOMIC DATA

	<u>320-Acres</u>	<u>160-Acres</u>
Reserves		
Gas	8,553,000 MCF	4,277,000 MCF
Distillate	94,000 Bbls.	47,000 Bbls.
Price		
Gas	\$0.1075/MCF	\$0.1075/MCF
Distillate	\$2.79/Bbl.	\$2.79/Bbl.
Total Income*		
Gas	\$ 805,000	\$403,000
Distillate	<u>230,000</u>	<u>115,000</u>
Total	\$1,035,000	\$518,000
Rate of Income During Payout*		
Gas	\$101/Day	\$51/Day
Distillate	<u>\$ 30/Day</u>	<u>\$15/Day</u>
Total	\$131/Day	\$66/Day
Operating Expense	\$100/Well/Month	\$100/Well/Month
Investment		
Well Cost	\$170,000	\$170,000
Surface Equipment	<u>8,000</u>	<u>8,000</u>
Total	\$178,000	\$178,000
Taxes Other Than Federal Income Taxes - 10%		

\*Based on 7/8 Working Interest

BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
PAN AM EXHIBIT No. 5  
CASE 1669

6

ECONOMIC CALCULATIONS

PAYOUT:  $\frac{\text{Investment}}{\text{Rate of Return-Operating Expense}}$

320-Acres

$$\frac{\$178,000}{(.90)(\$131/\text{Day})(30.4 \text{ days/Mo.})-\$100/\text{Mo.}} = \frac{178,000}{3,480} = 51.2 \text{ Months}$$

160 Acres

$$\frac{\$178,000}{(.90)(\$66)(30.4)-\$100} = \frac{178,000}{1,710} = 104 \text{ Months}$$

RETURN ON INVESTMENT (20-Year Life):

$\frac{\text{Total Income-Investment-Operating Expenses}}{\text{Investment}}$

320 Acres

$$\frac{(.90)(\$1,035,000)-\$178,000-(20 \text{ Yrs.})(12 \text{ Mo/Yr.})(\$100/\text{Mo.})}{\$178,000} = \frac{\$932,000-\$178,000-\$24,000}{\$178,000} = \frac{\$730,000}{\$178,000} = 4.1$$

160 Acres

$$\frac{(.90)(518,000)-178,000-(20)(12)(100)}{178,000} = \frac{466,000-178,000-24,000}{178,000} = \frac{\$264,000}{\$178,000} = 1.48$$

BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO.  
PAN AM EXHIBIT No. 6  
CASE 1669

ATOKA PENNSYLVANIAN GAS POOL  
EDDY COUNTY, NEW MEXICO

General Information

The Atoka Pennsylvanian Gas Pool was discovered by the completion of Standard Oil Company of Texas J. H. Everest No. 1, which is located 1980' FSL & 660' FWL of Section 14, T-18-S, R-26-E, Eddy County, New Mexico. This well was completed in October, 1957 with a calculated absolute open flow of 21,000 MCFD. While testing, the well also produced distillate with recoveries of 11 to 13 barrels per MMCF of gas. Production is from a coarse grained sand found at approximately 9100'. Three successful completions have been realized to date and one non-commercial well has been drilled. A market for this gas has not yet been developed and only relatively small volumes have been produced. This production has been primarily to furnish gas as rig fuel and for drilling other wells in the area.

Pertinent data for the individual wells are attached.

Structural Information

The sand body from which the Atoka Pennsylvanian Gas Pool produces is considered to be a continuous sand trending generally in a northeast-southwest direction. Production is considered to be from a stratigraphic trap in an area of porosity and/or permeability development. The dip of the sand is to the southeast in this area.

Characteristics of the Reservoir Rock and Fluids

The pay has been described on core analyses as a gray, coarse grained sand. Porosity and permeability of the pay in the section of the well where a full hole core was obtained averaged 9.5% and 51 Md., respectively. Log calculations support this porosity average. Distillate recoveries have been reported ranging from 11 to 17 barrels per MMCF of gas. The corrected gravity of the distillate is approximately 60° API.

Cumulative Production

The cumulative production from the three wells completed in the pool is as follows:

<u>Operator and Well</u>	<u>MMCF</u>	<u>Bbls. Dist.</u>
Standard Oil Company of Texas		
Everest No. 1	152	2,426
Martin No. 1	70	852
Pan American Petroleum Corporation		
Flint No. 1	<u>0</u>	<u>0</u>
Pool Total	222	3,278

Economics

The cost to drill and complete a well in the Atoka Pennsylvanian Gas Pool is estimated to be \$170,000. An additional investment of approximately \$8,000 will be required for surface equipment, such as storage tanks and a separator. Net return-on-investment using a 20-year well life is calculated to be 4.1 and 1.48 for 320-acre and 160-acre development, respectively.

STANDARD OF TEXAS-EVEREST NO. 1

1980' FSL & 660' FWL  
Section 14, T-18-S, R-26-E

TD: 10,546'  
PBD: 9,267'  
7" CSA 9370'  
Perf: 9079-9085'  
9089-9093'  
9095-9116'  
IPF: 3,472 MCF  
38 Bbls. Dist.  
24 Hrs.  
Natural  
CAOF: 21,000 MCFD

DST:  
Interval: 9067-9130'  
Open 1 Hr. GTS 2 Min.  
Est. F 1,600 MCFD  
Rec. 100' Dist. / 50' Mud  
FP 3500-3675 psi  
30 Min. SIP 3690 psi

DST of Perfs:  
Open 29 Hrs. WBTS 5 Min. GTS 6 Min.  
F 3320 MCFD / 11 Bbls. Dist./MMCF For 24 Hrs.  
TP 2750 psi; 18/64" Choke  
F 6,140 MCFD / 13 Bbls. Dist./MMCF for 5 Hrs.  
TP 2350 psi; 24/64" Choke  
45 Min. SIP 3750 psi

STANDARD OF TEXAS-MARTIN NO. 1

1650' FSL & 1980' FEL  
Section 15, T-18-S, R-26-E

TD: 9086'  
5-1/2" CSA 9086'  
Perf 8966-9018'  
Acid Wash w/500 Gal.  
IPF: 5400 MCFD  
Based on 4-Hr. Test  
Dist. recovery not reported  
CAOF: 43,000 MCFD  
+ 17 Bbls. Dist./MMCF

No DST's

STANDARD OF TEXAS-PAUL TERRY, ET AL, UNIT NO. 1

1980' FNL & 1980' FWL  
Section 15, T-18-S, R-26-E

TD: 9100'  
Plugged and Abandoned

DST's:

Interval: 8890-9100'  
Packer failed

Interval: 8870-9100'  
Open 1 Hr. 30 Min. GTS 12 Min.  
Est. F 215 MCFD  
Recovered 430' GCM  
FP 235 psi  
1 Hr. SIP 3060 psi

Attempted fracture treatment 8494-9100' - Failed.

PAN AMERICAN-FLINT NO. 1

1980' FSL & 1980' FEL  
Section 22, T-18-S, R-26-E

TD: 9263'  
PBD: 9155'  
5-1/2" CSA 9263'  
Perf 9094-9116'  
IPF: 10,540 MCF  
        60 Bbls. Distillate  
        12 Hrs.  
        Natural  
CACF: 21,000 MCFD  
        / 11 Bbls. Dist./MMCF

DST:  
Interval 9072-9263'  
Open 3-1/2 Hrs. GTS 2 min.  
F 5800 MCFD / 2.75 Bbls. Dist./Hr.  
Rec. 30' Mud / 150' Dist.  
FP 3050 psi  
90 Min. SIP 3735 psi