

North Hume 5 Fed No. 1  
Sec. 5, T16S, R34E  
Lea County, New Mexico

I. Estimated Gross Ultimate Recovery

Cumulative Production to 6-30-89      123,533 BO

Remaining Reserves

= 84 BOPD @ 47%/yr decline to 3 BOPD E.L.

= 46,568 BO

Gross Ultimate Recovery = 170,101 BO

II. Reservoir Data and Estimated Drainage

$\phi = 11.87\%$     $S_w = 11.93\%$    Net Pay = 10'    $Bo_i = 1.462$

Estimated Recovery Factor = 20%

$$\begin{aligned}\text{Drainage (Acres)} &= \frac{\text{GUR} \times Bo_i}{7758 \times \text{Net Pay} \times \phi \times (1-S_w) \times \text{Est Recov \%}} \\ &= \frac{170101 \times 1.462}{7758 \times 10' \times .1187 \times (1-.1193) \times .20} \\ &= 153.3 \text{ Acres}\end{aligned}$$

GBN:sl-1085

BEFORE EXAMINER CATANACH	
OIL CONSERVATION DIVISION	
<i>Santa Fe</i>	EXHIBIT NO. <u>5</u>
CASE NO. <u>9175 + 9354</u>	

N. H. 5 FEDERAL 000001

HUNE WOLF CAMP, NORTH MC

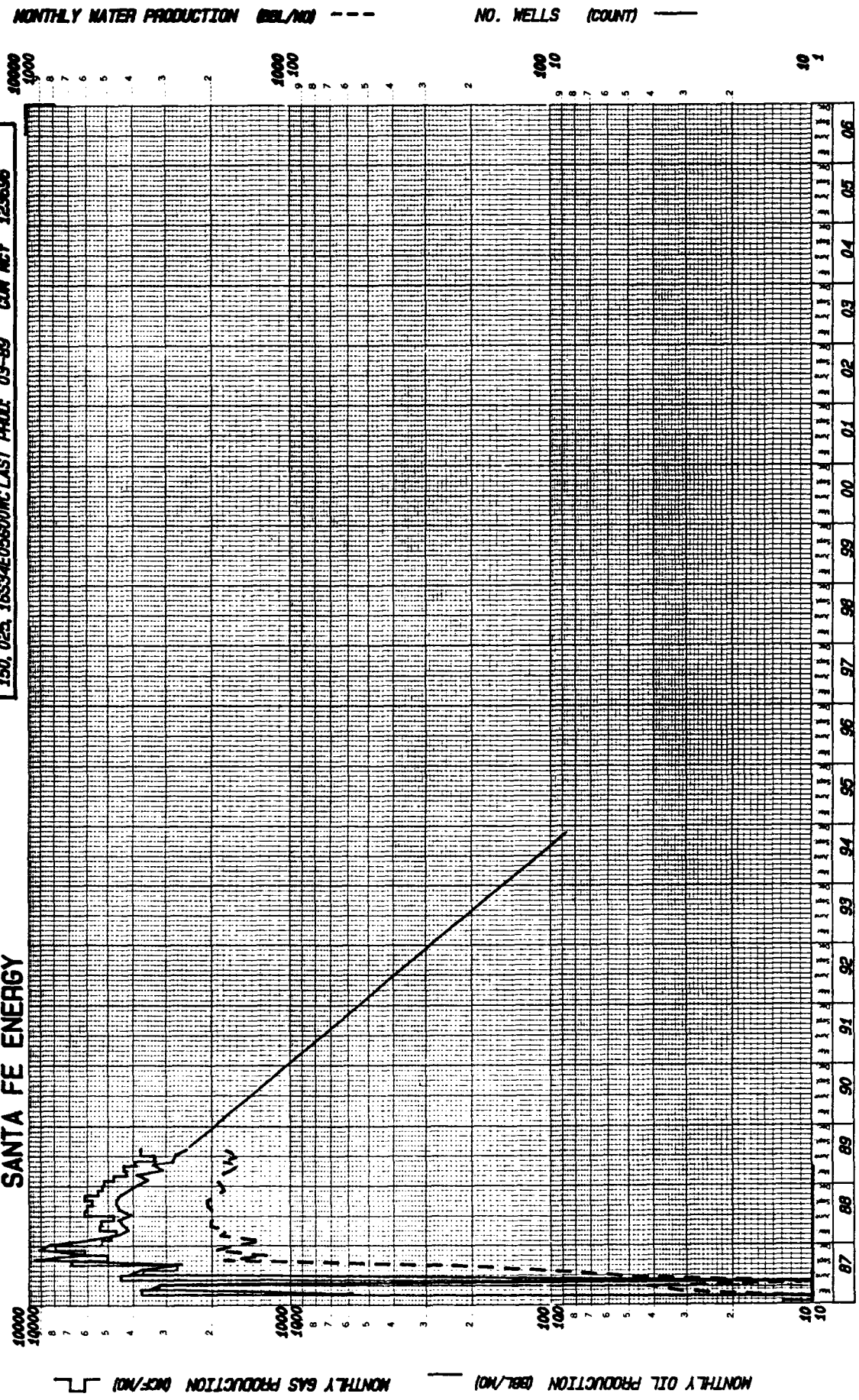
SANTA FE ENERGY OPER PAR

LEA NM

56 16S 34E FIRST PROD: 01-87 CUM BOIs 115422

150, 025, 16S34E05600MC LAST PROD: 03-89 CUM Mc: 123636

SANTA FE ENERGY



Humble Hume 5 State No. 1  
Sec. 5, T16S, R34E  
Lea County, New Mexico

I. Estimated Gross Ultimate Recovery

Cumulative Production to 6-30-89      118,532 BO

Remaining Reserves

= 168 BOPD @ 55%/yr decline to 3 BOPD E.L.

= 75,422 BO

Gross Ultimate Recovery = 193,954 BO

II. Reservoir Data and Estimated Drainage

$\phi = 11.11\%$     $S_w = 17.7\%$    Net Pay = 12'    $Bo_i = 1.380$

Estimated Recovery Factor = 20%

$$\begin{aligned}\text{Drainage (Acres)} &= \frac{\text{GUR} \times Bo_i}{7758 \times \text{Net Pay} \times \phi \times (1-S_w) \times \text{Est Recov \%}} \\ &= \frac{193954 \times 1.380}{7758 \times 12' \times .1111 \times (1-.177) \times .20} \\ &= 157.2 \text{ Acres}\end{aligned}$$

GBN:sl-1085

BEFORE EXAMINER CATANACH	
OIL CONSERVATION DIVISION	
<i>Santa Fe</i>	EXHIBIT NO. <u>6</u>
CASE NO: <u>9175 + 9354</u>	

000001

MC

HUMBLE HUME 5 STATE

HUME WOLF CAMP, NORTH

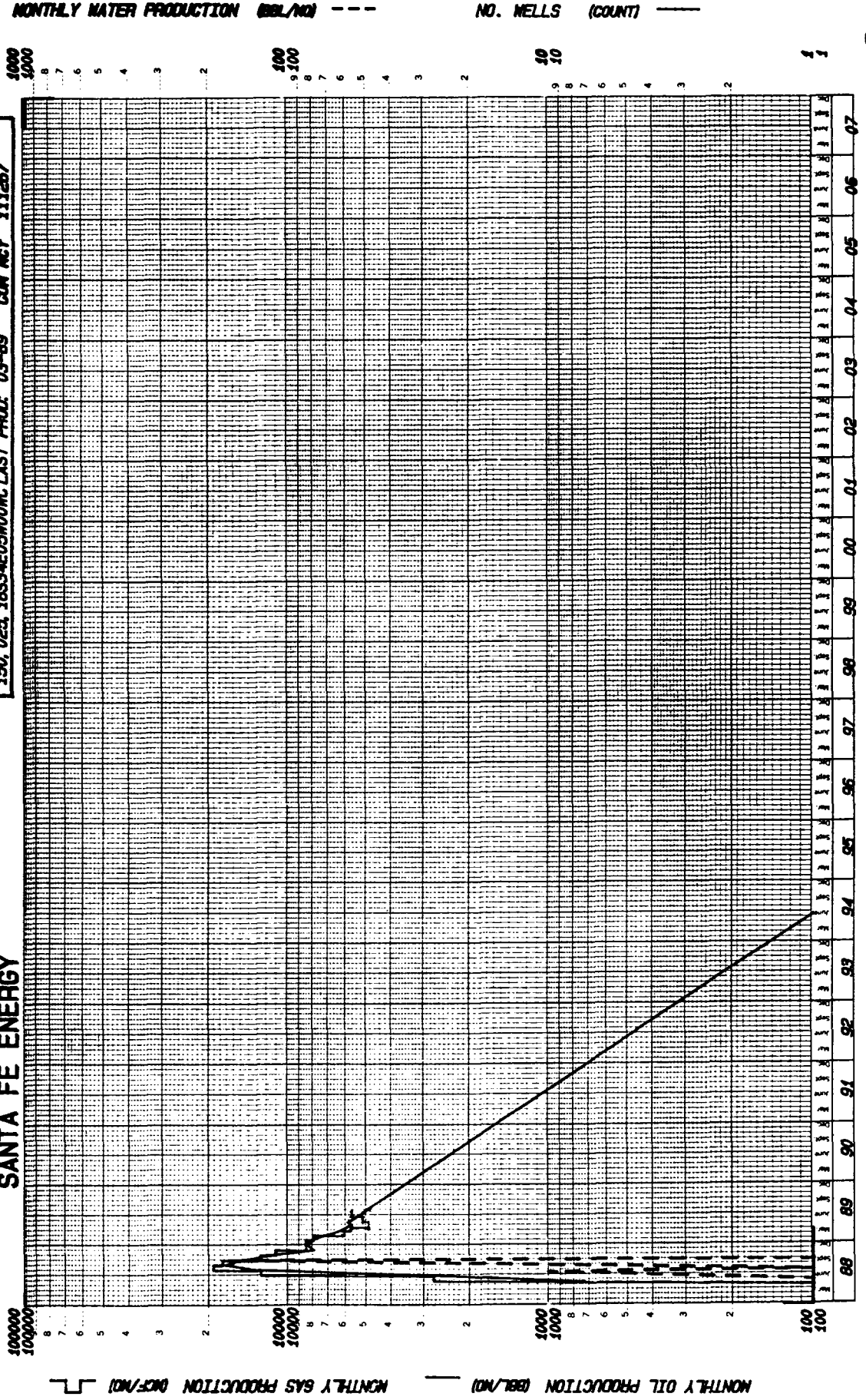
SANTA FE ENERGY OPER PAR

LEA NM

SW 16S 34E FIRST PROD: 04-88 CUM BOIS 102214

150, 025, 16S34E05N00MC LAST PROD: 03-89 CUM Mcf 111267

# SANTA FE ENERGY



North Hume 35 No. 1  
Sec. 35, T15S, R33E  
Lea County, New Mexico

I. Estimated Gross Ultimate Recovery

Cumulative Production to 6-30-89      24,860 BO

Remaining Reserves

= 50 BOPD @ 28%/yr decline to 3 BOPD E.L.

= 54,444 BO

Gross Ultimate Recovery = 79,304 BO

II. Reservoir Data and Estimated Drainage

$\phi = 10.29\%$     $S_w = 32.52\%$    Net Pay = 14'    $Bo_i = 1.462$

Estimated Recovery Factor = 20%

$$\begin{aligned}\text{Drainage (Acres)} &= \frac{\text{GUR} \times Bo_i}{7758 \times \text{Net Pay} \times \phi \times (1-S_w) \times \text{Est Recov \%}} \\ &= \frac{79304 \times 1.462}{7758 \times 14' \times .1029 \times (1-.3252) \times .20} \\ &= 76.9 \text{ Acres}\end{aligned}$$

GBN:sl-1085

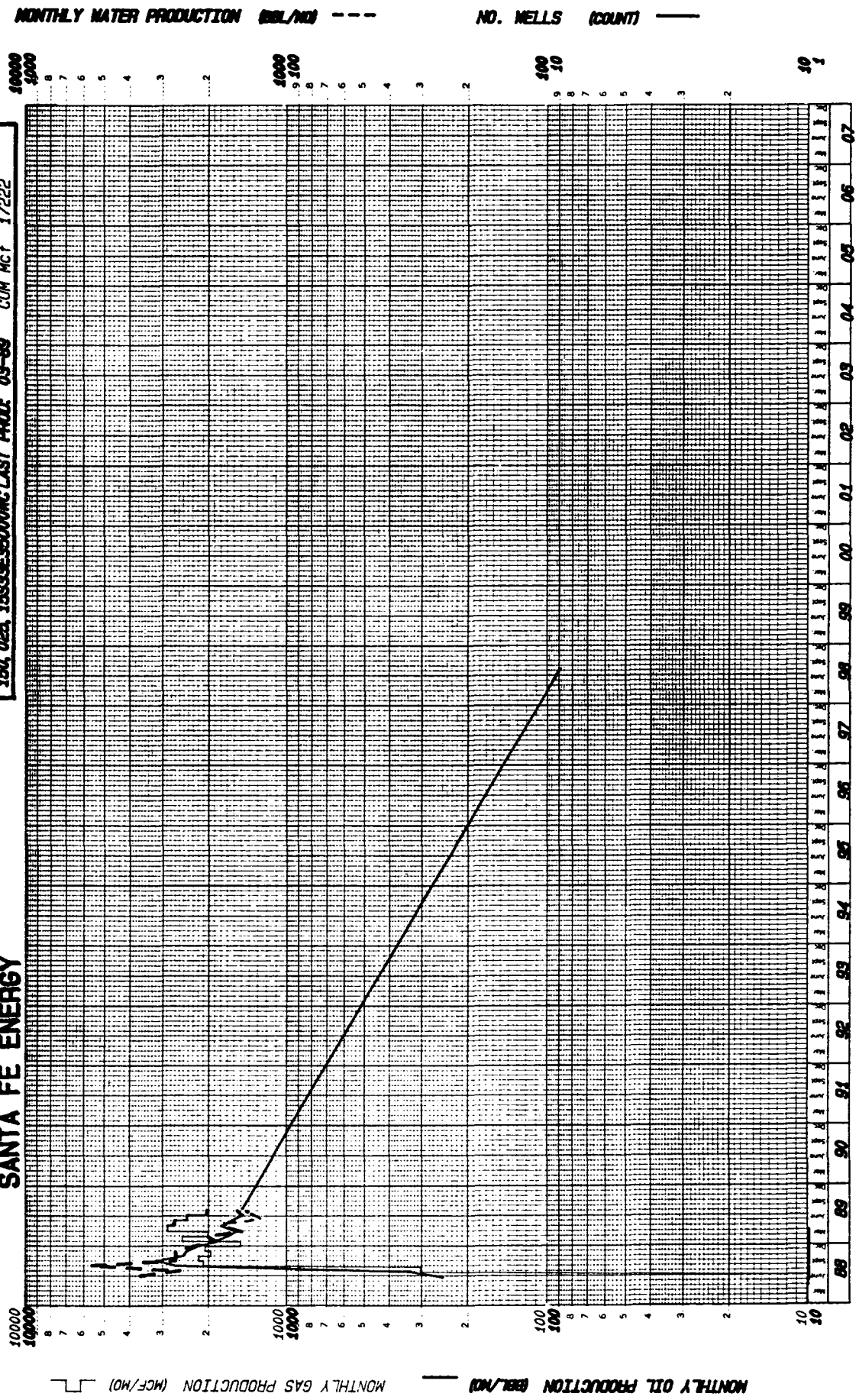
BEFORE EXAMINER CATANACH	
OIL CONSERVATION DIVISION	
<i>Santa Fe</i>	EXHIBIT NO. <u>7</u>
CASE NO. <u>9175 + 9354</u>	

N. H. 35 000001

HUNE WOLF CAMP, NORTH  
SANTA FE ENERGY OPER PAR  
LEA NM

350 185 33E FIRST PROD: 05-88 CUM BOI 20194  
150, 025, 155393580000 MC LAST PROD: 03-89 CUM MCF 17222

SANTA FE ENERGY



MONTHLY WATER PRODUCTION (BBL/MO) - - -

NO. WELLS (COUNT) —

MONTHLY GAS PRODUCTION (MCF/MO) —

MONTHLY OIL PRODUCTION (BBL/MO) —

Chevron State No. 1  
Sec. 36, T15S, R33E  
Lea County, New Mexico

I. Estimated Gross Ultimate Recovery

Cumulative Production to 3-31-89      8,884 BO

Remaining Reserves

= 15 BOPD @ 25%/yr decline to 3 BOPD E.L.

= 15,225 BO

Gross Ultimate Recovery = 24,109 BO

II. Reservoir Data and Estimated Drainage

$\phi = 10.49\%$     $S_w = 32.82\%$    Net Pay = 14'    $Bo_i = 1.462$

Estimated Recovery Factor = 20%

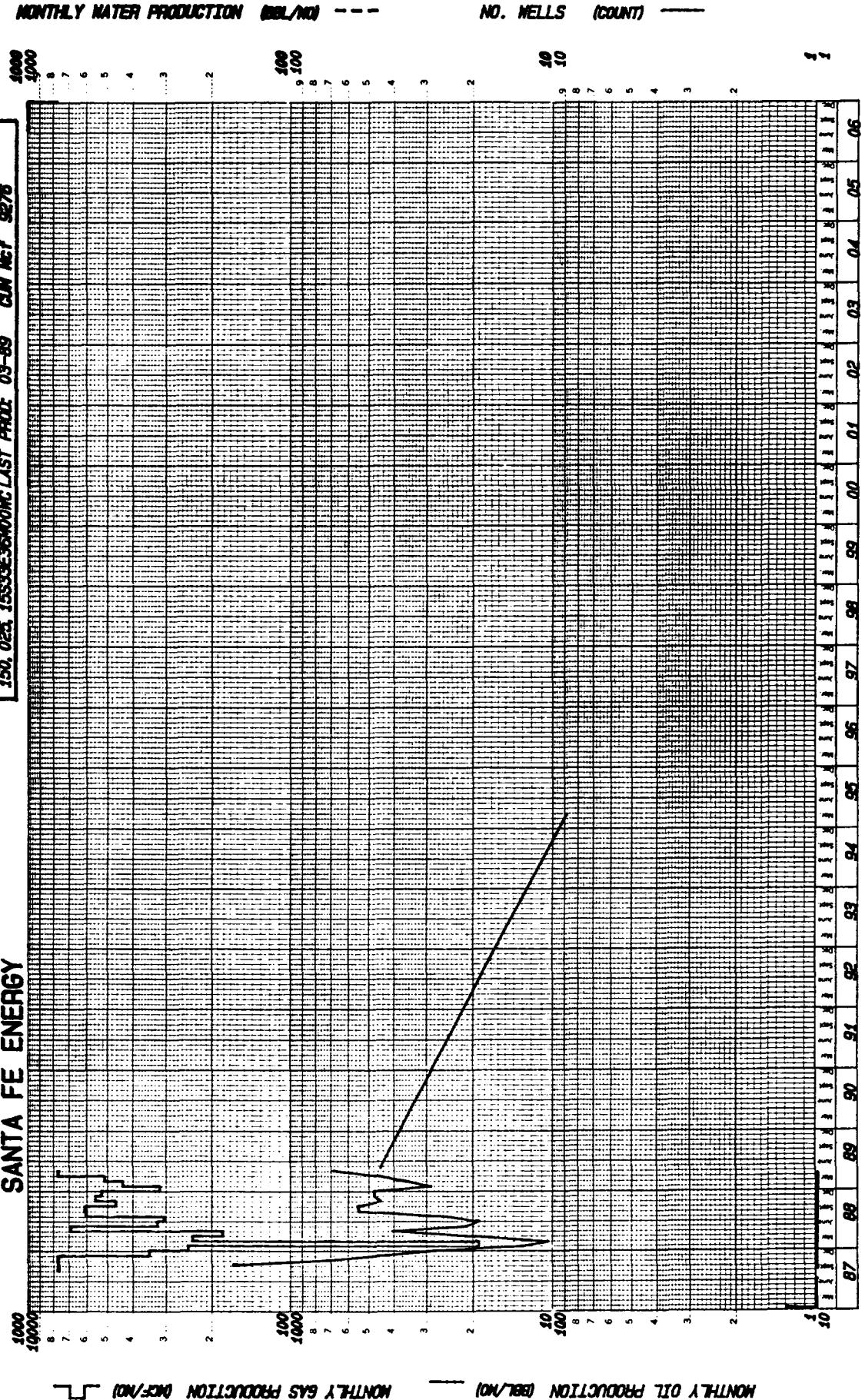
$$\begin{aligned}\text{Drainage (Acres)} &= \frac{\text{GUR} \times Bo_i}{7758 \times \text{Net Pay} \times \phi \times (1-S_w) \times \text{Est Recov \%}} \\ &= \frac{24109 \times 1.462}{7758 \times 17' \times .1049 \times (1-.3382) \times .20} \\ &= 19.2 \text{ Acres}\end{aligned}$$

GBN:s1-1085

BEFORE EXAMINER CATANACH	
OIL CONSERVATION DIVISION	
<i>Santa Fe</i>	EXHIBIT NO. <u>8</u>
CASE NO.	<u>9175 + 9354</u>

CHEVRON STATE 000001  
 HUME WOLF CAMP, NORTH NC  
 V F PETROLEUM INC  
 LEA NM  
 36W 15S 33E FIRST PROD: 06-87 CUM Bbls 8894  
 150, 025, 15S33E36W00NC LAST PROD: 03-89 CUM Mcf 9276

SANTA FE ENERGY



MONTHLY WATER PRODUCTION (BBL/MO) ---

NO. WELLS (COUNT) —

MONTHLY GAS PRODUCTION (MCF/MO) —