

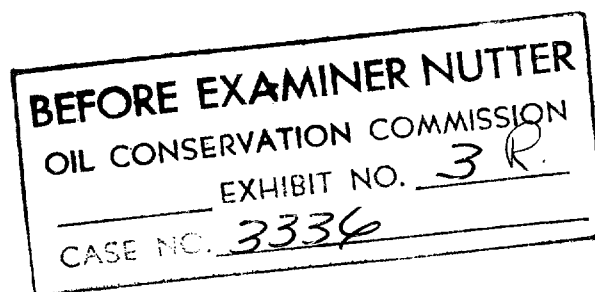
RESERVOIR CHARACTERISTICS  
EAST HIGHTOWER-UPPER PENNSYLVANIAN POOL  
LEA COUNTY, NEW MEXICO  
CASE NO. 3336  
NOVEMBER 23, 1965

FORMATION

|                                              |      |
|----------------------------------------------|------|
| 1. Net Pay, feet                             | 12   |
| 2. Porosity, %                               | 6    |
| 3. Permeability, md.                         | 4.   |
| 4. Water Saturation, %                       | 40   |
| 5. Reservoir Temperature, F                  | 156  |
| 6. Original Reservoir Pressure, psig @ -5600 | 3550 |

FLUID

|                                                  |       |
|--------------------------------------------------|-------|
| 1. Original Solution Gas-Oil Ratio, cu. ft./bbl. | 1378  |
| 2. Stock-Tank Oil Gravity, API                   | 44.9° |

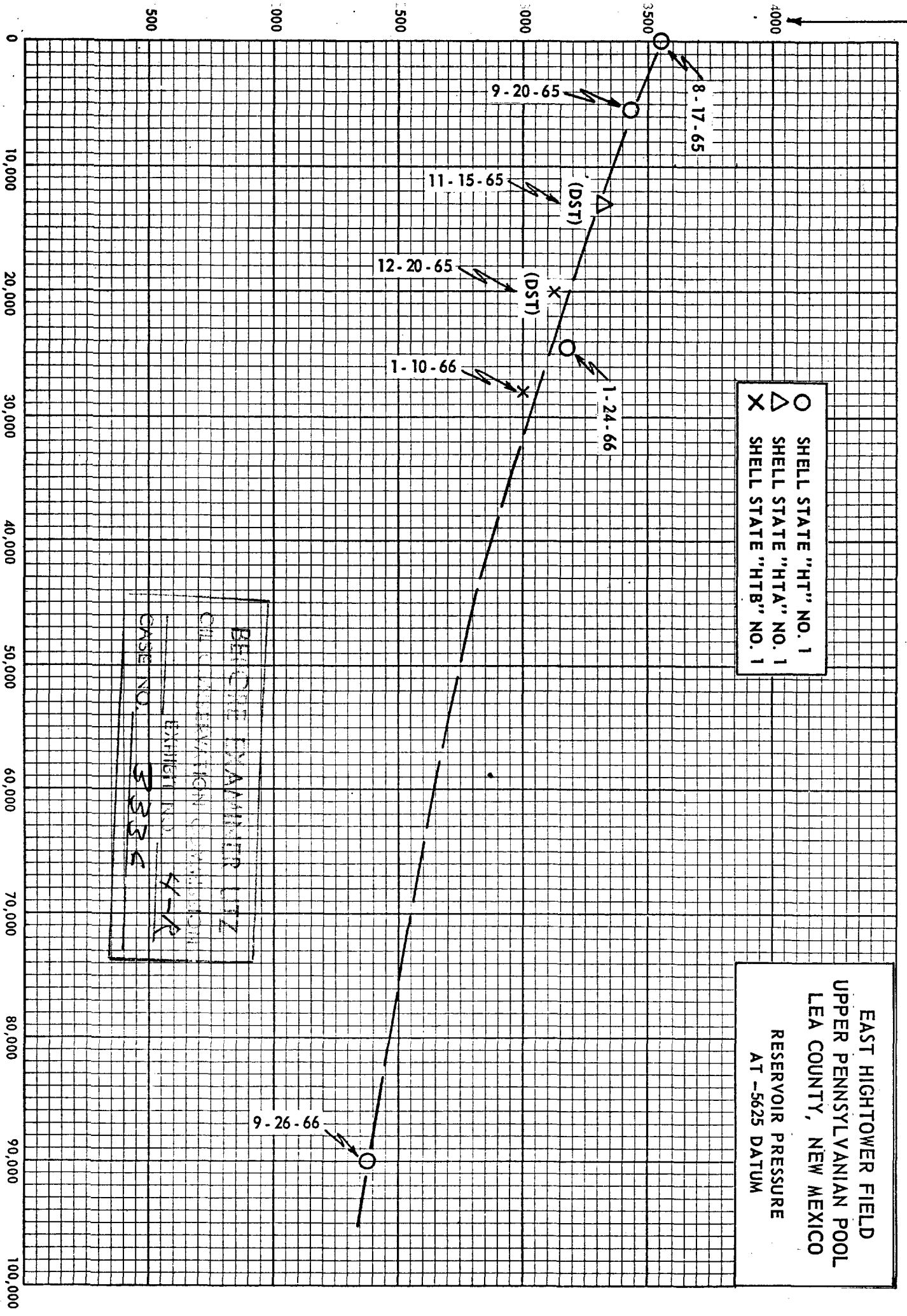




BOTTOM HOLE PRESSURE - PSIG

○ SHELL STATE "HT" NO. 1  
△ SHELL STATE "HTA" NO. 1  
X SHELL STATE "HTB" NO. 1

EAST HIGHTOWER FIELD  
UPPER PENNSYLVANIAN POOL  
LEA COUNTY, NEW MEXICO  
RESERVOIR PRESSURE  
AT -5625 DATUM



BECOME EXAMINER 172  
CUMULATIVE OIL PRODUCTION  
EXHIBIT NO. 4-K  
CASE NO. 3335

CUMULATIVE OIL PRODUCTION - BARRELS

ECONOMIC FOR VARIOUS SPACING SCHEMES  
EAST HIGHTOWER UPPER PENNSYLVANIAN POOL  
LEA COUNTY, NEW MEXICO  
CASE NO. 3336  
NOVEMBER 23, 1965

Basic Data:

|                                                        |                     |
|--------------------------------------------------------|---------------------|
| 1. Oil Value                                           | \$2.95/Bbl.         |
| 2. Oil Purchaser                                       | Permian Corporation |
| 3. Gas Value                                           | \$0.11/MCF          |
| 4. Gas Purchaser                                       | -                   |
| 5. Production Taxes                                    | \$0.218/Bbl.        |
| 6. Lifting Costs                                       | \$0.335/Bbl.        |
| 7. Investment (well lease facilities and pumping unit) | \$174,000           |
| 8. Net Interest                                        | 87.5%               |

Economics:

| <u>Item</u>                                       | <u>Well Spacing</u> |                |
|---------------------------------------------------|---------------------|----------------|
|                                                   | <u>40-Acre</u>      | <u>80-Acre</u> |
| 1. Recoverable oil, Bbl.                          | 75,000              | 150,000        |
| 2. Recoverable gas, MMCF                          | 225                 | 450            |
| 3. Oil Revenue, \$2.95 x (1)                      | 221,000             | 442,000        |
| 4. Gas Revenue, \$110. x (2)                      | 24,700              | 49,400         |
| 5. Total Revenue, \$ (3) + (4)                    | 265,700             | 491,400        |
| 6. Total Net Revenue after Royalty, \$0.875 x (5) | 232,000             | 464,000        |
| 7. Operating Costs, \$.335 x (1)                  | 25,100              | 50,200         |
| 8. Production Taxes, \$.218 x (1)                 | 16,300              | 32,600         |
| 9. Net Income, \$(6)-(7)-(8)                      | 190,600             | 381,200        |
| 10. Investment \$                                 | 174,000             | 174,000        |
| 11. Profit, \$(9)-(10)                            | 16,600              | 207,200        |
| 12. Profit-to-Investment Ratio (11) ÷ (10)        | 0.095               | 1.190          |

BEFORE EXAMINER NUTTER  
OIL CONSERVATION COMMISSION  
EXHIBIT NO. SR  
CASE NO. 3336

## SUMMARY OF PRODUCTION DATA

BEFORE EXAMINER UTZ  
CIT. COMM. NO. 2-4  
EXHIBIT NO. 233C  
CASE NO.

ECONOMICS OF 40 AND 80 ACRE SPACING  
EAST HIGHTOWER UPPER PENNSYLVANIAN POOL  
LEA COUNTY, NEW MEXICO

Basic Data:

|                                                         |                     |
|---------------------------------------------------------|---------------------|
| 1. Oil Value                                            | \$2.95/Bbl.         |
| 2. Oil Purchaser                                        | Permian Corporation |
| 3. Gas Value                                            | \$0.11/MCF          |
| 4. Gas Purchaser                                        | Warren Petroleum    |
| 5. Production and Property Taxes                        | \$0.225/Bbl.        |
| 6. Lifting Costs (including overheads)                  | \$0.365/Bbl.        |
| 7. Investment (well, lease facilities and pumping unit) | \$175,000           |
| 8. Net Interest                                         | 87.5%               |

Economics of Average Well

| <u>Item</u>                                          | <u>Well Spacing</u> |                |
|------------------------------------------------------|---------------------|----------------|
|                                                      | <u>40-Acre</u>      | <u>80-Acre</u> |
| 1. Recoverable oil, Bbls.                            | 50,000              | 100,000        |
| 2. Recoverable gas, MMCF                             | 150                 | 300            |
| 3. Oil Revenue, \$2.95 x (1)                         | 147,500             | 295,000        |
| 4. Gas Revenue, \$110. x (2)                         | 16,500              | 33,000         |
| 5. Total Revenue, \$ (3) + (4)                       | 164,000             | 328,000        |
| 6. Total Net Revenue after Royalty,<br>\$0.875 x (5) | 143,500             | 287,000        |
| 7. Operating Costs, \$.365 x (1)                     | 18,200              | 36,500         |
| 8. Production Taxes, \$.225 x (1)                    | 11,300              | 22,500         |
| 9. Net Income, \$(6)-(7)-(8)                         | 114,000             | 228,000        |
| 10. Investment \$                                    | 175,000             | 175,000        |
| 11. Profit (Loss), \$(9)-(10)                        | (61,000)            | 53,000         |
| 12. Profit-to-Investment<br>Ratio (11) ÷ (10)        | -                   | 0.303          |

|                             |       |
|-----------------------------|-------|
| BEFORE EXAMINER UTZ         |       |
| OIL CONSERVATION COMMISSION |       |
| EXHIBIT NO.                 | 5-R   |
| CASE NO.                    | 333 C |



ENCLOSURE No. 4  
Case No. 3336  
11-23-65

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

COMPANY \_\_\_\_\_ FIELD \_\_\_\_\_ FILE \_\_\_\_\_  
WELL \_\_\_\_\_ COUNTY \_\_\_\_\_ DATE \_\_\_\_\_  
LOCATION \_\_\_\_\_ STATE \_\_\_\_\_ ELEV. \_\_\_\_\_

## CORE-GAMMA CORRELATION

This report is based on information furnished by the owner of the well and the operator of the well, and the accuracy and reliability of the data is not guaranteed. The report is based on the information furnished and the accuracy and reliability of the data is not guaranteed. The report is based on the information furnished and the accuracy and reliability of the data is not guaranteed.

# ILLEGIBLE

VERTICAL SCALE 5' = 100'

BEFORE EXAMINER NUTTER  
CONSERVATION COMMISSION  
CASE NO. 3336  
EXHIBIT NO. 4

### CORE-GAMMA SURFACE LOG

PATENT APPLIED FOR

GAMMA RAY

RADIATION UNITS

TOTAL WATER

PERCENT TOTAL WATER

0 20 40 60 80 100

PERMEABILITY

POROSITY

PERCENT

OIL SATURATION

PERCENT PORE SPACE

0 20 40 60 80 100

