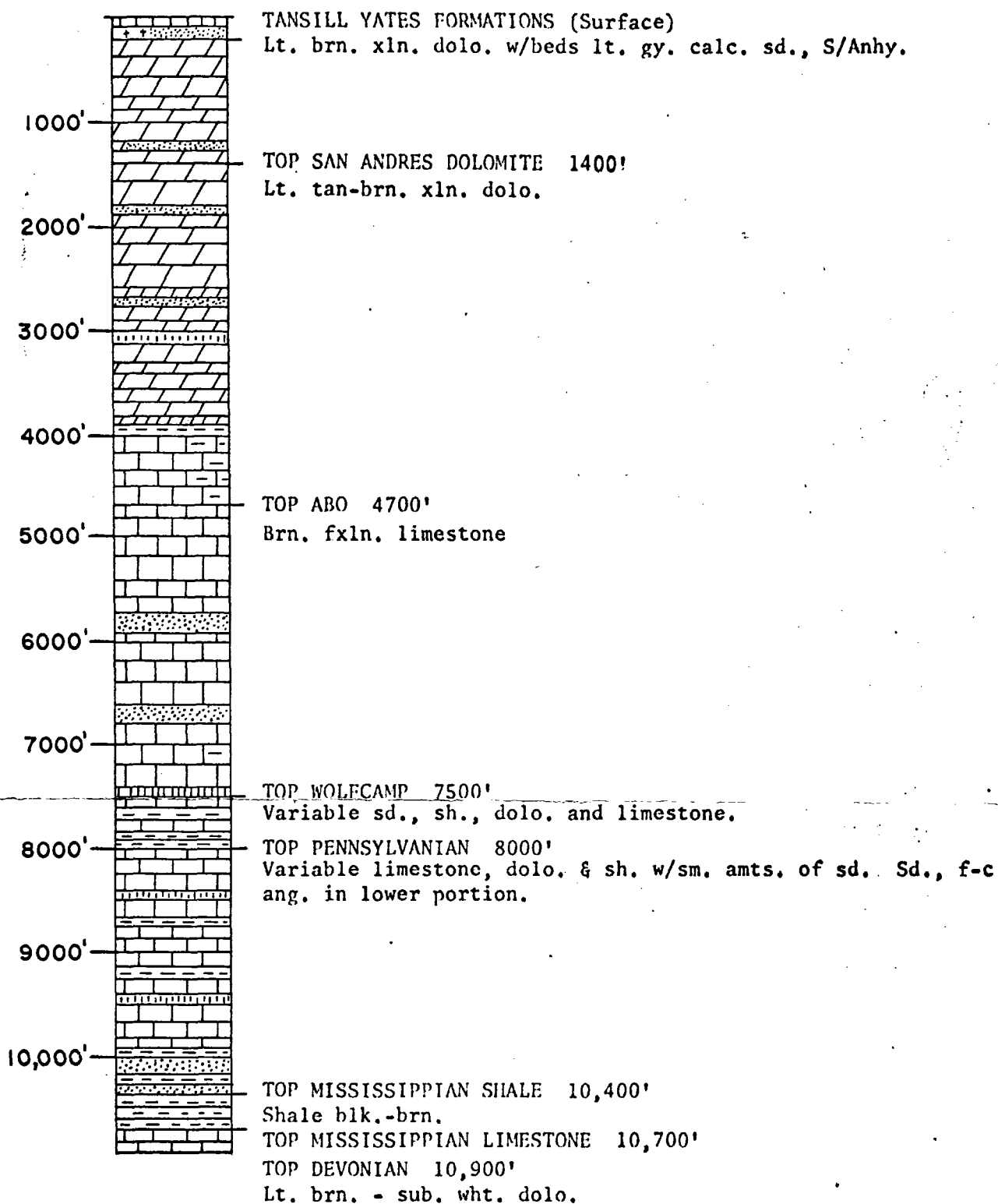
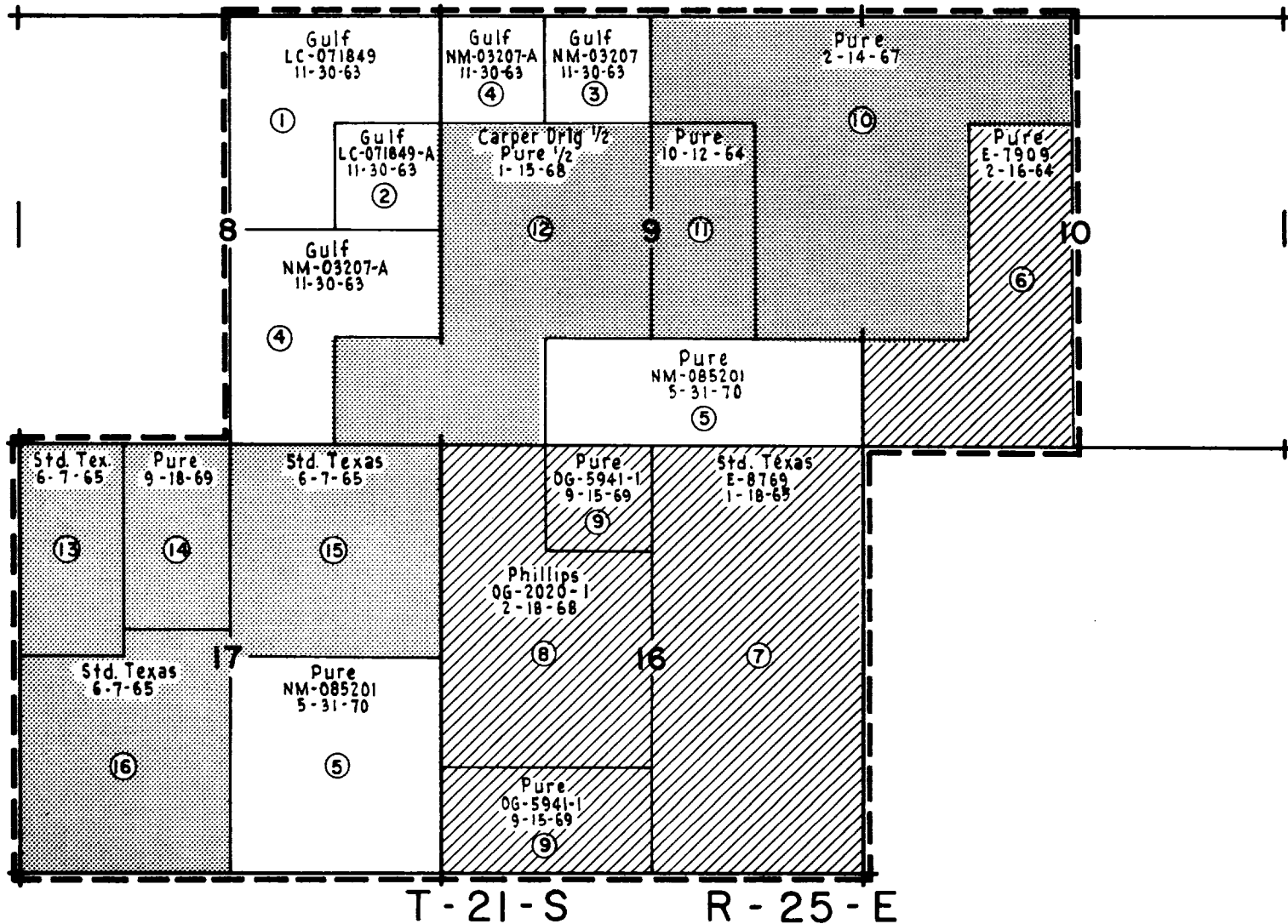




EAST ROCKY ARROYO DRILLING UNIT
 Township 21 South
 Range 25 East
 Eddy County, New Mexico
 Proposed 10,700' Mississippian Test
 Columnar Section
GEOLOGIC
EXHIBIT "E"

Vertical Scale
 1" = 1400' (Approx.)

24 May 1963



**FEDERAL SERIAL NUMBERS INVOLVED IN UNIT
(SHOWING EXPIRATION DATES)**

- | | | |
|---|-------------|----------|
| ① | LC-071849 | 11-30-63 |
| ② | LC-071849-A | 11-30-63 |
| ③ | NM-03207 | 11-30-63 |
| ④ | NM-03207-A | 11-30-63 |
| ⑤ | NM-085201 | 5-31-70 |

**STATE LEASE NUMBERS INVOLVED IN UNIT
(SHOWING EXPIRATION DATES)**

- | | | |
|---|-----------|---------|
| ⑥ | E-7909 | 2-16-64 |
| ⑦ | E-8769 | 1-18-65 |
| ⑧ | OG-2020-1 | 2-18-68 |
| ⑨ | OG-5941-1 | 9-15-69 |

LEGEND

- | | | |
|-----|--------------------------|------------|
| --- | UNIT OUTLINE | |
| □ | FEDERAL LAND | 640 ACRES |
| ▨ | STATE OF NEW MEXICO LAND | 800 ACRES |
| ▤ | PATENTED (FEE) LAND | 1120 ACRES |
| | TOTAL | 2560 ACRES |
| ② | TRACT NUMBER | |

MURPHY H. BAXTER
MIDLAND, TEXAS

EAST ROCKY ARROYO UNIT
EDDY COUNTY, NEW MEXICO

2000 0 2000 4000
SCALE IN FEET

EXHIBIT "A"

SOUTH

GULF

No. 1 North Canyon Unit

11-23S-24E

-3000

NORTHERN NATURAL

No. 1-A McKittrick Hill

23-22S-24E

PROPOSED LOCATION

9-21S-25E

GULF

NORTH

No. 4 Seven Rivers Hills Unit

4-21S-25E

The diagram is a geological cross-section oriented South-North. The vertical axis on the left indicates depth in feet, with markers at -3000, -4000, -5000, -6000, -7000, and -8000. The horizontal axis represents distance, with two well locations marked: TD 11,508' on the left and TD 11,522' on the right. The geological layers, from top to bottom, are: Dean (stippled pattern), Wolfcamp (horizontal dashed lines), Cisco Reef (horizontal solid lines), Base Reef (horizontal solid lines), Atoka (horizontal solid lines), Morrow (horizontal solid lines), Barnett (horizontal solid lines), Woodford (horizontal solid lines), and Devonian (horizontal solid lines). Fluid content is indicated by labels: 'SALT WATER' in several locations, 'GAS' in two locations, 'SHOW GAS SALT WATER' in one location, and 'SULPHUR WATER' in one location. A 'MISSISSIPPIAN LINE' is marked between the Woodford and Barnett layers. The cross-section shows a general dip to the north.

- DOLomite
- LIME
- SAND
- SHALE

MURPHY H. BAXTER
MIDLAND, TEXAS

EAST ROCKY ARROYO UNIT
T-21-S R-25-E
EDDY COUNTY, NEW MEXICO

SOUTH-NORTH CROSS SECTION

SCALE
VERTICAL: 1" = 750'
HORIZONTAL: 1" = 8000'

TD 10,791'
IP CAO F 1.3 MM (Morrow)

GEOLOGIC EXHIBIT "D"