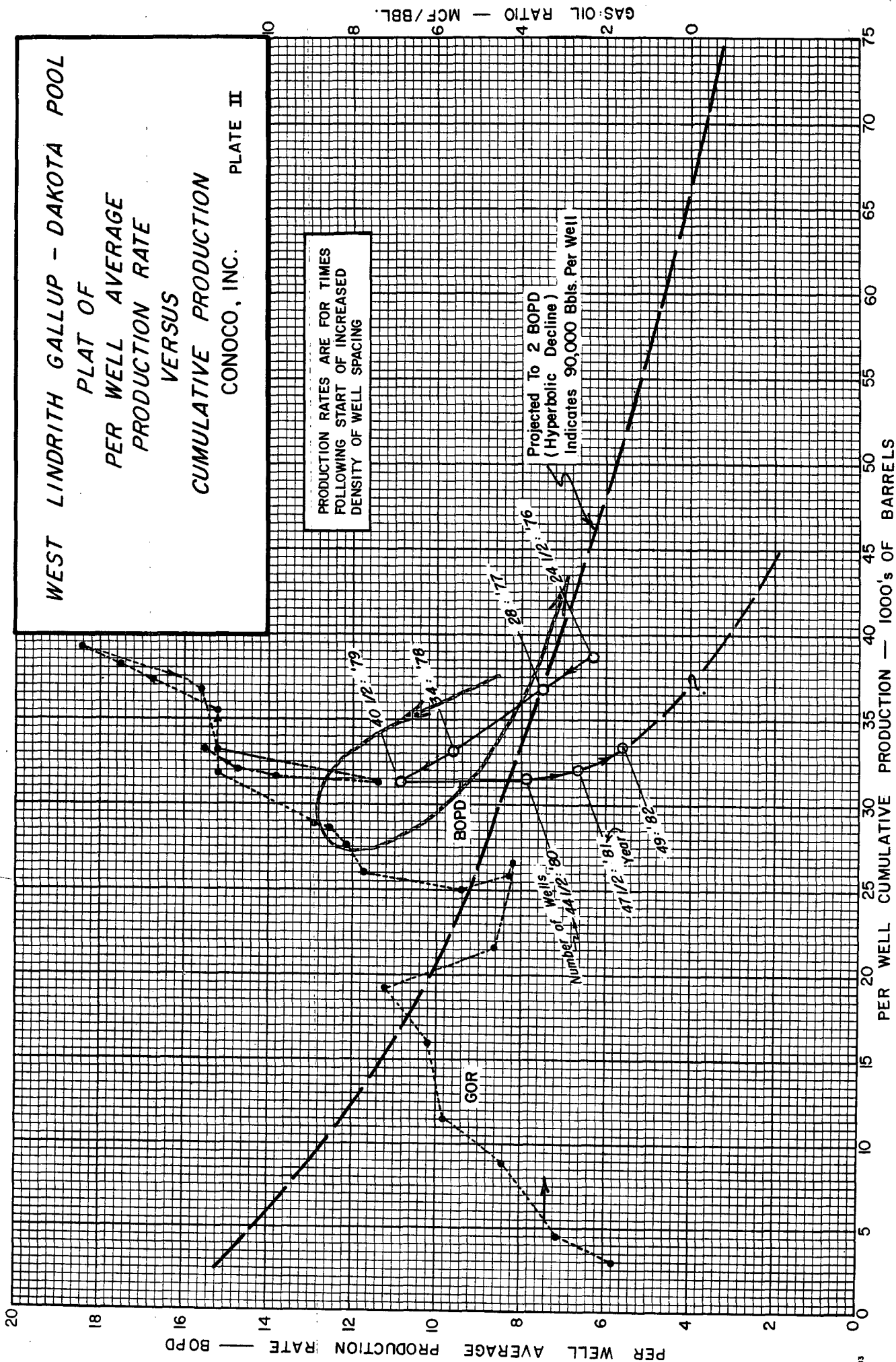
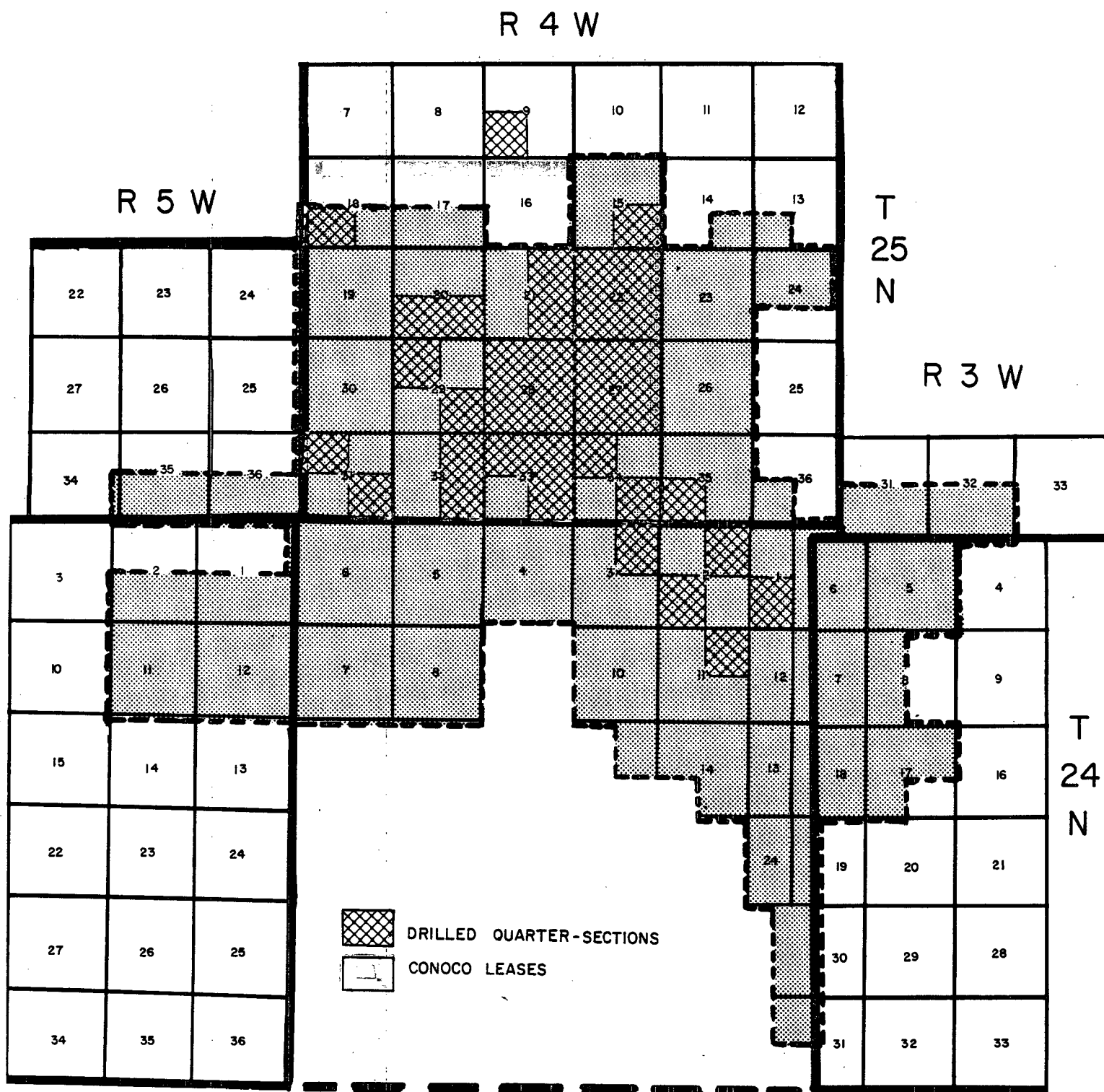


WEST LINDRITH GALLUP - DAKOTA POOL
 PLAT OF
 PER WELL AVERAGE
 PRODUCTION RATE
 VERSUS
 CUMULATIVE PRODUCTION

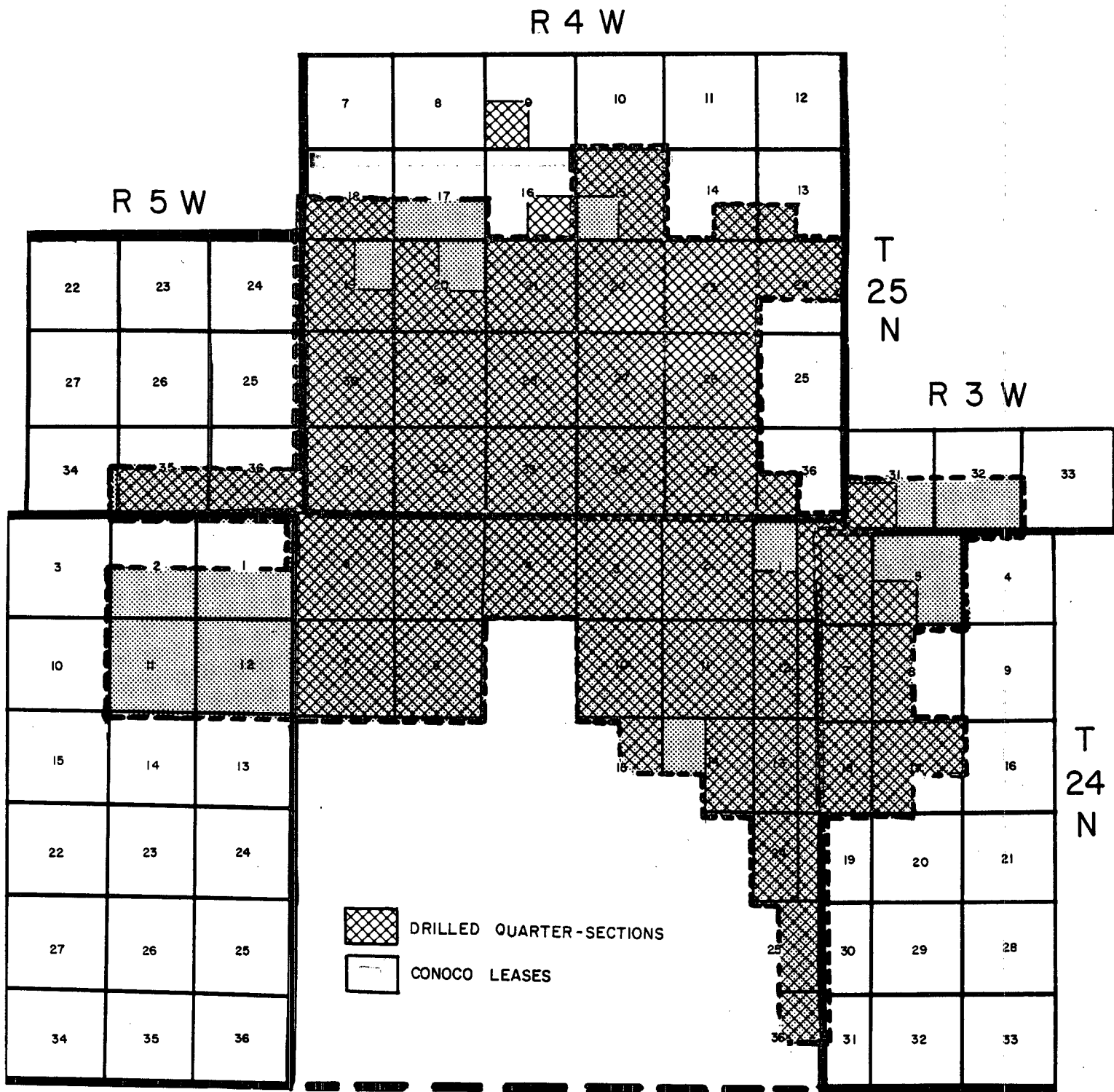
CONOCO, INC. PLATE II

PRODUCTION RATES ARE FOR TIMES
 FOLLOWING START OF INCREASED
 DENSITY OF WELL SPACING

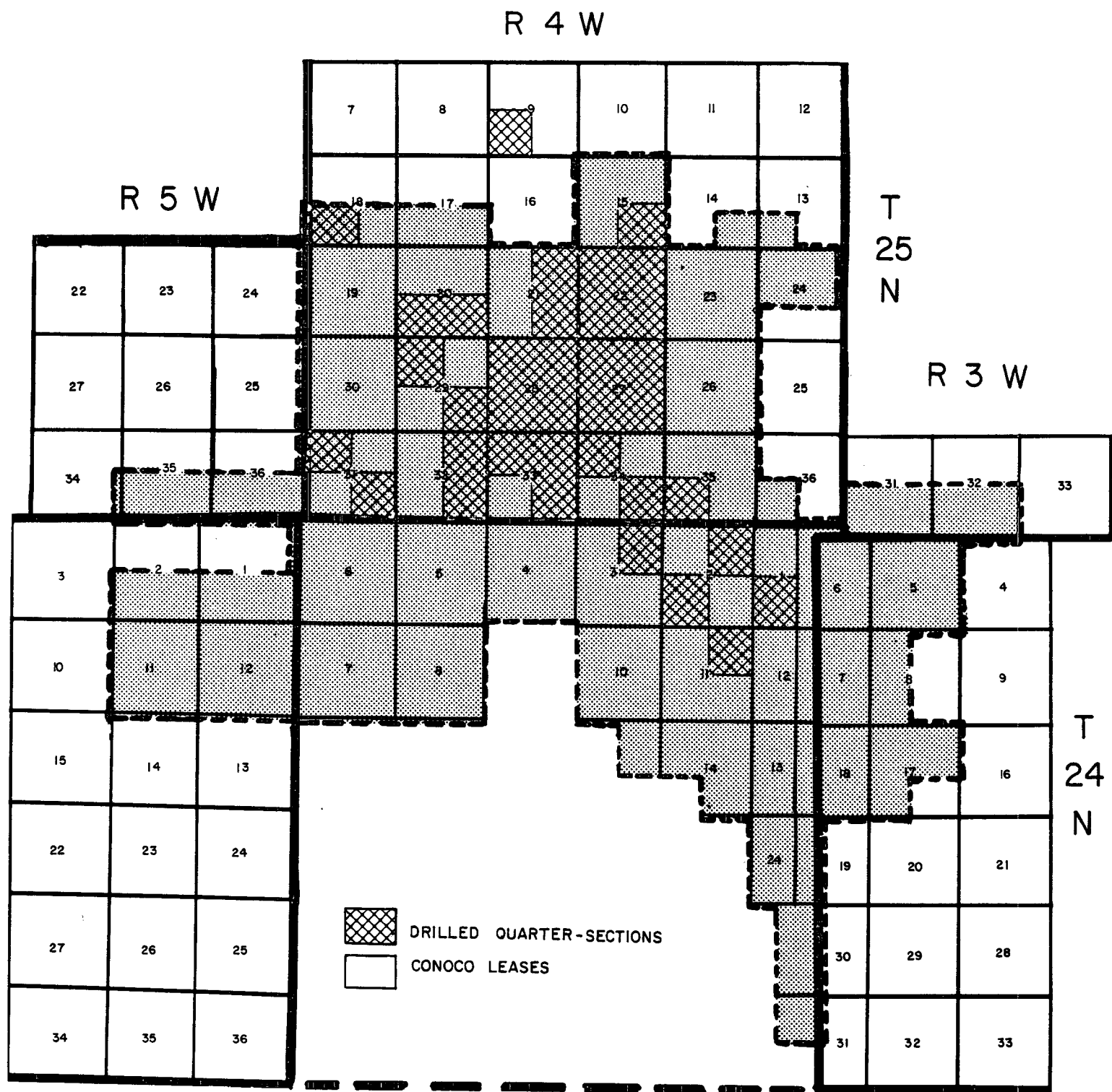




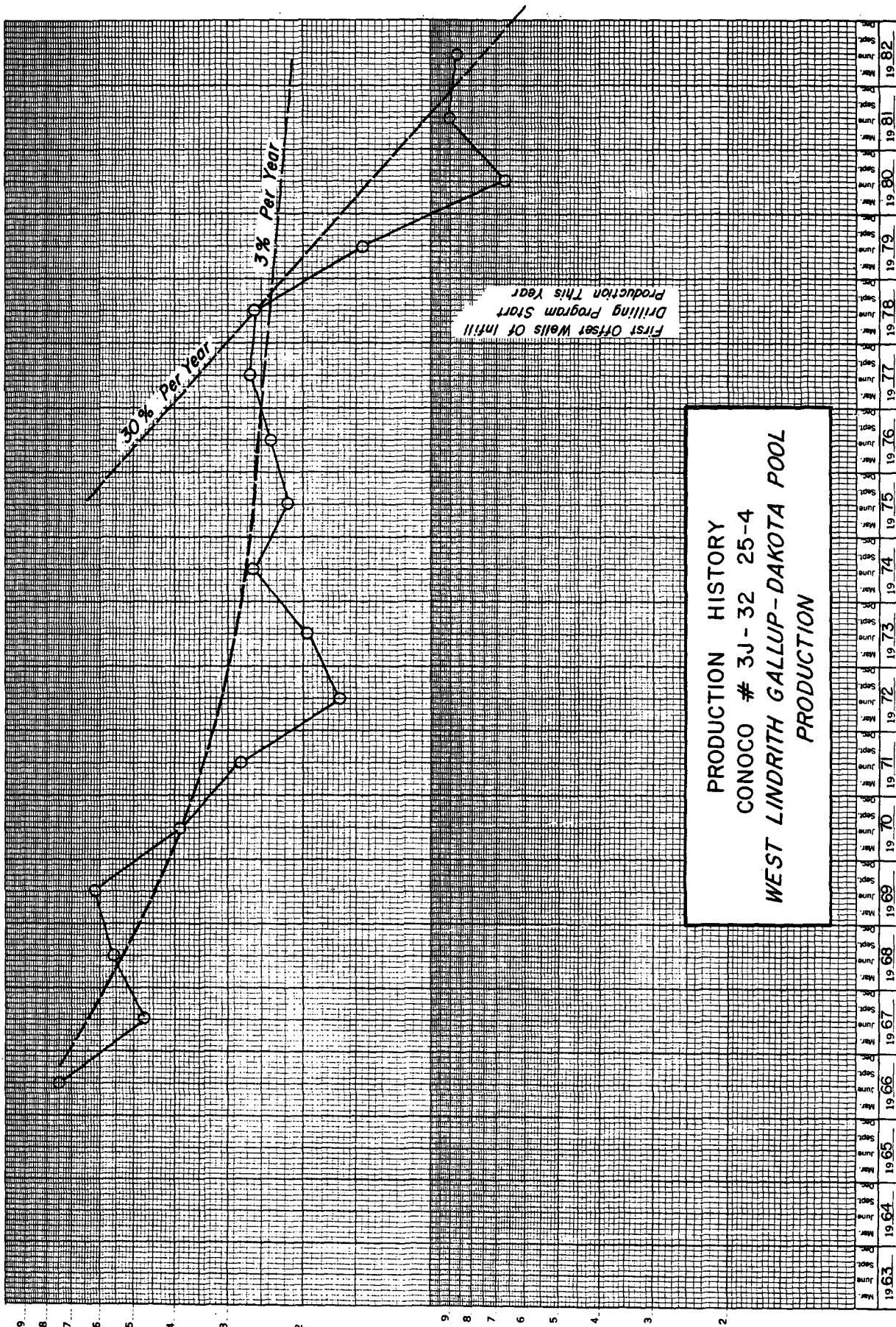
LINDRITH GALLUP-DAKOTA, WEST
 DENSITY OF WELLS - YEAR 1975
 VICINITY OF CONOCO LEASES

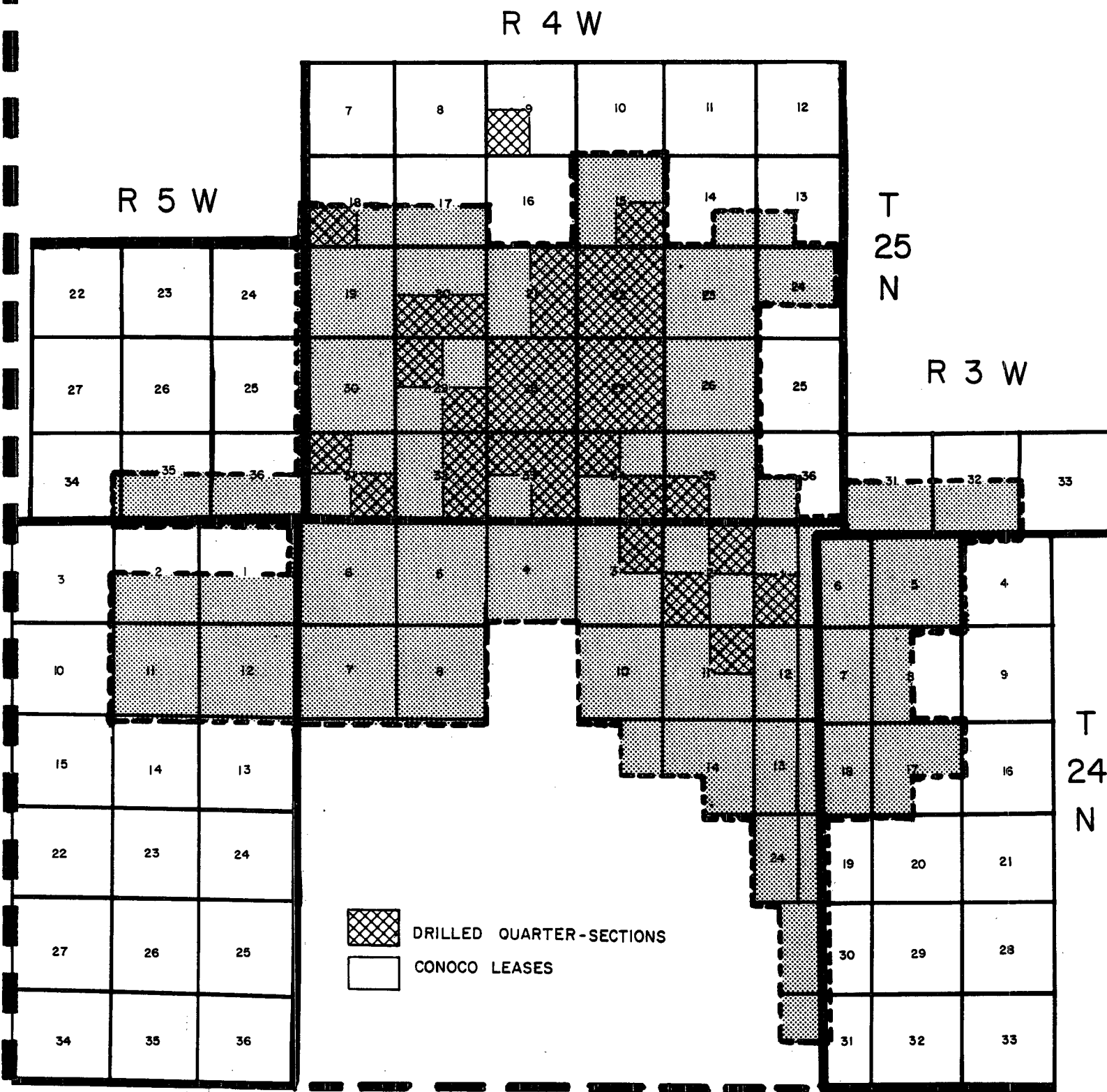


LINDRITH GALLUP-DAKOTA, WEST
 DENSITY OF WELLS - YEAR 1982
 VICINITY OF CONOCO LEASES



LINDRITH GALLUP-DAKOTA, WEST
 DENSITY OF WELLS - YEAR 1975
 VICINITY OF CONOCO LEASES



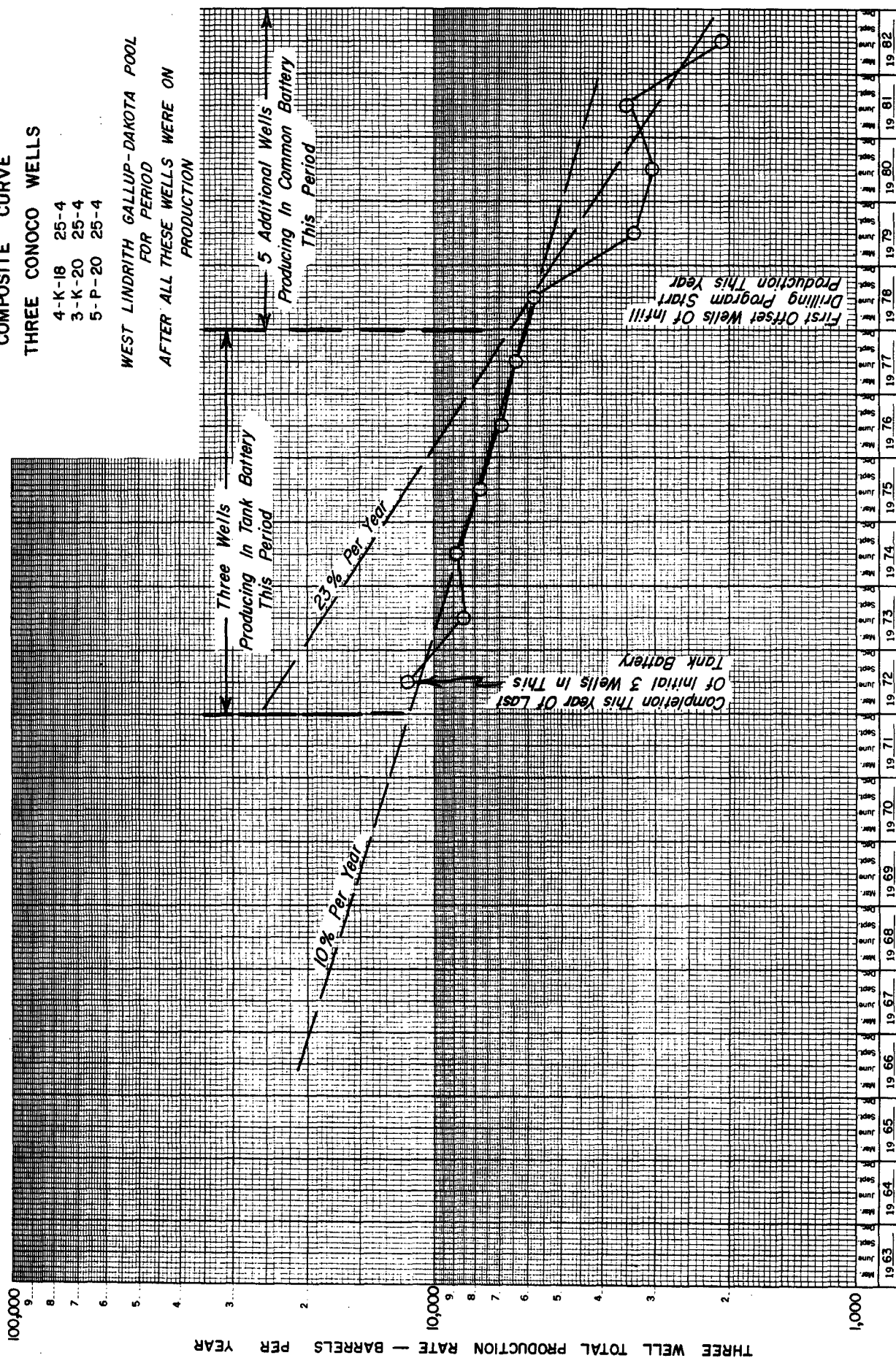


LINDRITH GALLUP-DAKOTA, WEST
DENSITY OF WELLS - YEAR 1975
VICINITY OF CONOCO LEASES

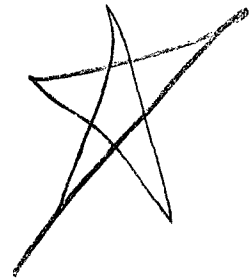
COMPOSITE CURVE THREE CONOCO WELLS

4-K-18 25-4
3-K-20 25-4
5-P-20 25-4

WEST LINDRITH GALLUP-DAKOTA POOL
FOR PERIOD
AFTER ALL THESE WELLS WERE ON
PRODUCTION



SUMMARIZED REVIEW
OF INFORMATION PROVIDED BY ANALYSIS
OF WEST LINDRITH GALLUP-DAKOTA PRODUCTION



Oil in Place Data:

1. Average per-well production from both formations is anticipated to be on the order of 40,000 to 60,000 barrels per well.
2. The initial wells drilled in the pool were either dually completed or completed from separate zones. The production volumes were approximately 50% from the Mancos and 50% from the Dakota.
3. Testing of wells on these same leases by Conoco in the late 1970's showed 80 to 84% of the production coming from the Dakota and the remaining 16 to 20% coming from the Mancos formation.
4. Using these statistics, approximately $\frac{3}{8}$ of the total production can be attributed to the Mancos formation, which means: 15,000 to 22,000 barrels per well coming from the Mancos formation, or 94 to 140 barrels per acre (use for future estimates 100 to 150 barrels per acre).
5. At an average gas-oil ratio of 10,000 to 1 and 100 to 150 barrels per acre recovery, the effective hydrocarbon pore space is in the range of 2500 to 4000 barrels per acre.
6. This effective hydrocarbon pore space translates into an equivalent of:
 - 2 to 3 feet of reservoir with 15% porosity, or
 - 3 to 5 feet of reservoir with 10% porosity, or
 - 30 to 50 feet of reservoir with 1% porosity, or
 - 60 to 90 feet of reservoir with $\frac{1}{2}\%$ porosity.

These figures suggest - along with the logs and intervals perforated and treated - that the effective reservoir porosity is fracture porosity.

Drainage Characteristics:

1. The rapid interference effects show that the initial wells were draining far in excess of 160 acres each (rapid interference at 160-acre spacing indicated minimum of 640-acre drainage).
2. Such rapid interference also suggests that the effective hydrocarbon porosity is fracture porosity since the ratio of permeability to porosity for matrix porosity would not be sufficiently high to give a diffusivity constant which would allow such interference.