

EXPLANATION

POTENTIAL WELL YIELD, IN GALLONS PER MINUTE (LITRES PER SECOND)

- 250-500 (16-32)
- 50-250 (3-16)
- 10-50 (0.6-3)
- 0-10 (0-0.6)

SELECTED WATER-LEVEL AND GEOLOGIC DATA

TEST HOLE OR WELL—Upper numbers indicate saturated aquifer interval, in feet below land surface. Where more than one interval was penetrated, upper and lower limits are given. Plus (+) sign following lower aquifer limit indicates that the test hole did not completely penetrate the glacial drift. Lower number, in parentheses, is aquifer thickness. Thicknesses of less than 10 feet (3.05 m) are not shown.

POTENTIOMETRIC CONTOURS—Show altitude of the potentiometric surface, approximately located. Contour interval 5, 25, and 50 feet (1.52, 7.62, and 15.2 m). Datum is mean sea level.

B B' LINE OF HYDROGEOLOGIC SECTION—Shows control test holes and wells.

CHEMICAL COMPOSITION OF WATER

Number above line at center of circular diagram is carbonate hardness (calcium magnesium hardness as CaCO₃), in milligrams per litre; number below line is dissolved solids, in milligrams per litre. The size of the segments of each semicircle is proportional to the quantity of each group of anions or cations to the total anions or cations present.

BASE PREPARED FROM NORTH DAKOTA STATE HIGHWAY DEPARTMENT COUNTY HIGHWAY MAPS

HYDROGEOLOGY BY R.D. HUTCHINSON, 1971

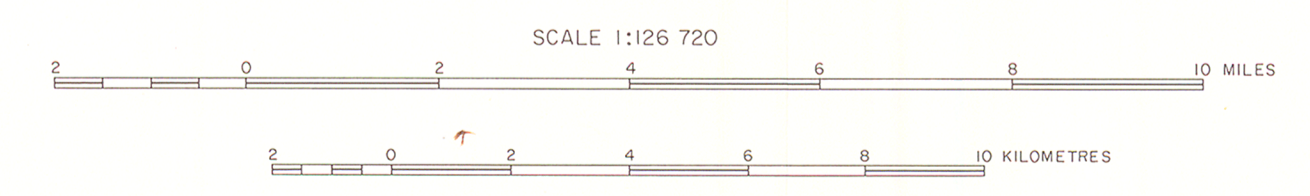
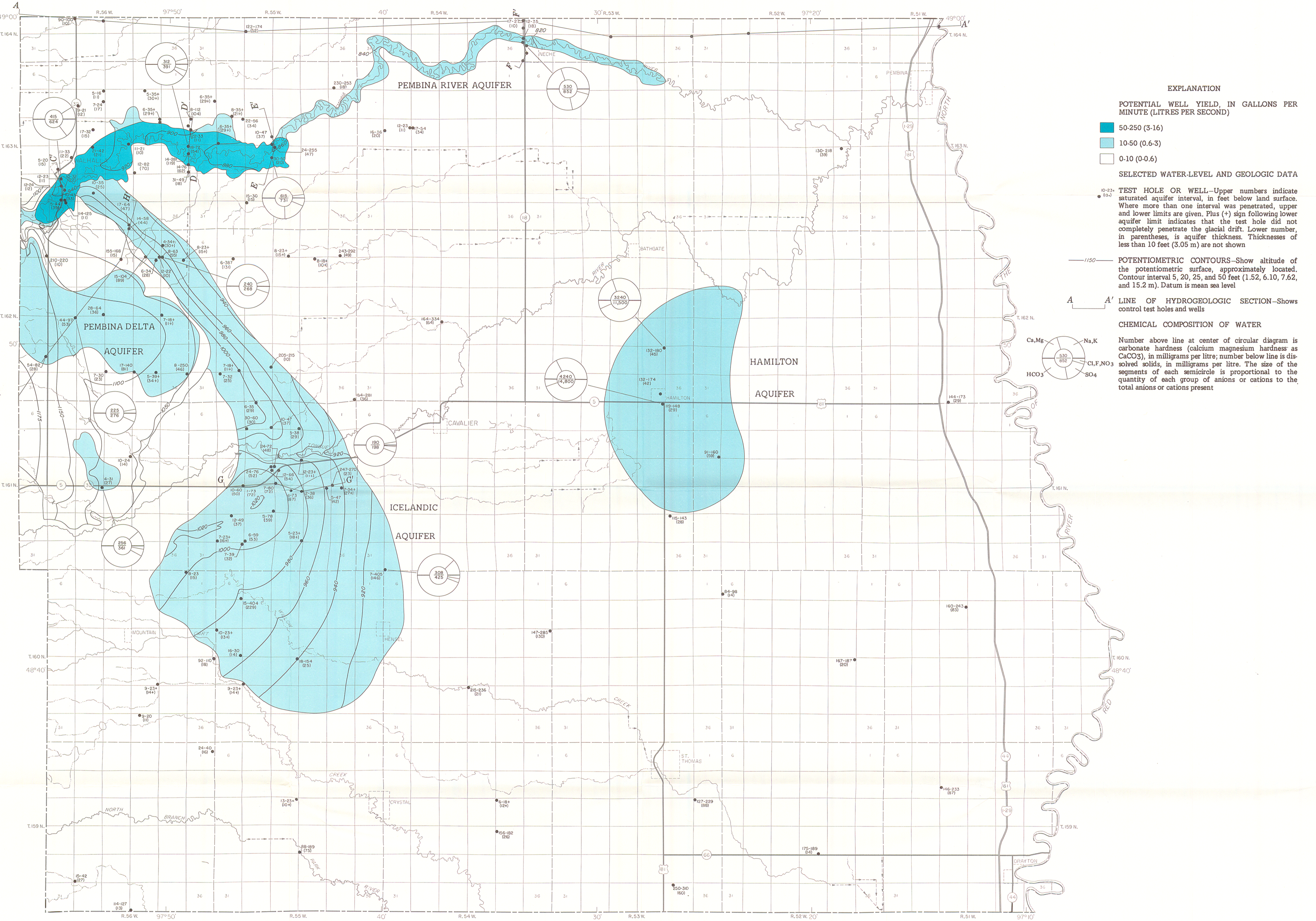


PLATE 1.—MAP SHOWING AVAILABILITY OF GROUND WATER FROM MAJOR GLACIAL-DRIFT AQUIFERS IN CAVALIER COUNTY, NORTH DAKOTA



BASE PREPARED FROM NORTH DAKOTA STATE HIGHWAY DEPARTMENT COUNTY HIGHWAY MAPS

HYDROGEOLOGY BY R.D. HUTCHINSON, 1971

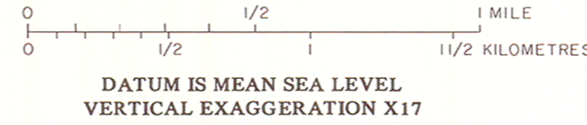
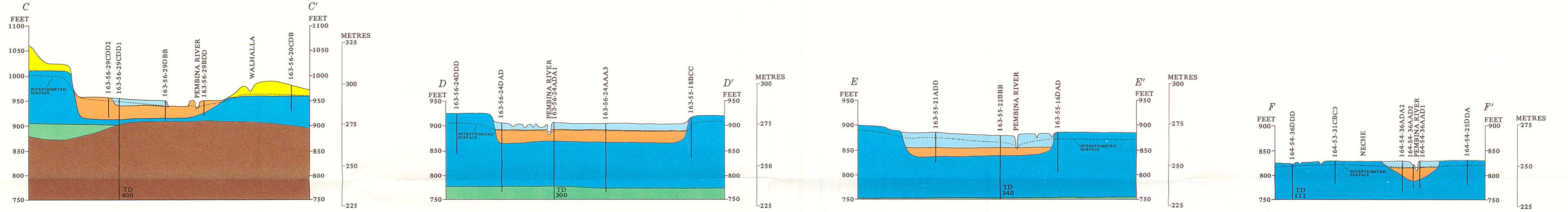
SCALE 1:126 720



PLATE 2.—MAP SHOWING AVAILABILITY OF GROUND WATER FROM MAJOR GLACIAL-DRIFT AQUIFERS IN PEMBINA COUNTY, NORTH DAKOTA

PREPARED BY THE UNITED STATES GEOLOGICAL SURVEY IN COOPERATION WITH THE NORTH DAKOTA STATE WATER COMMISSION, NORTH DAKOTA GEOLOGICAL SURVEY, AND PEMBINA COUNTY BOARD OF COMMISSIONERS

COUNTY GROUND-WATER STUDIES 20
PART III
PLATE 3



EXPLANATION

- Sand
- Sand and gravel
- Clay and silt
- Silt
- Till
- Shale, undifferentiated

PLATE 3.—HYDROGEOLOGIC SECTIONS THROUGH THE PEMBINA RIVER AQUIFER, PEMBINA COUNTY, NORTH DAKOTA

HYDROGEOLOGY BY R. D. HUTCHINSON, 1971