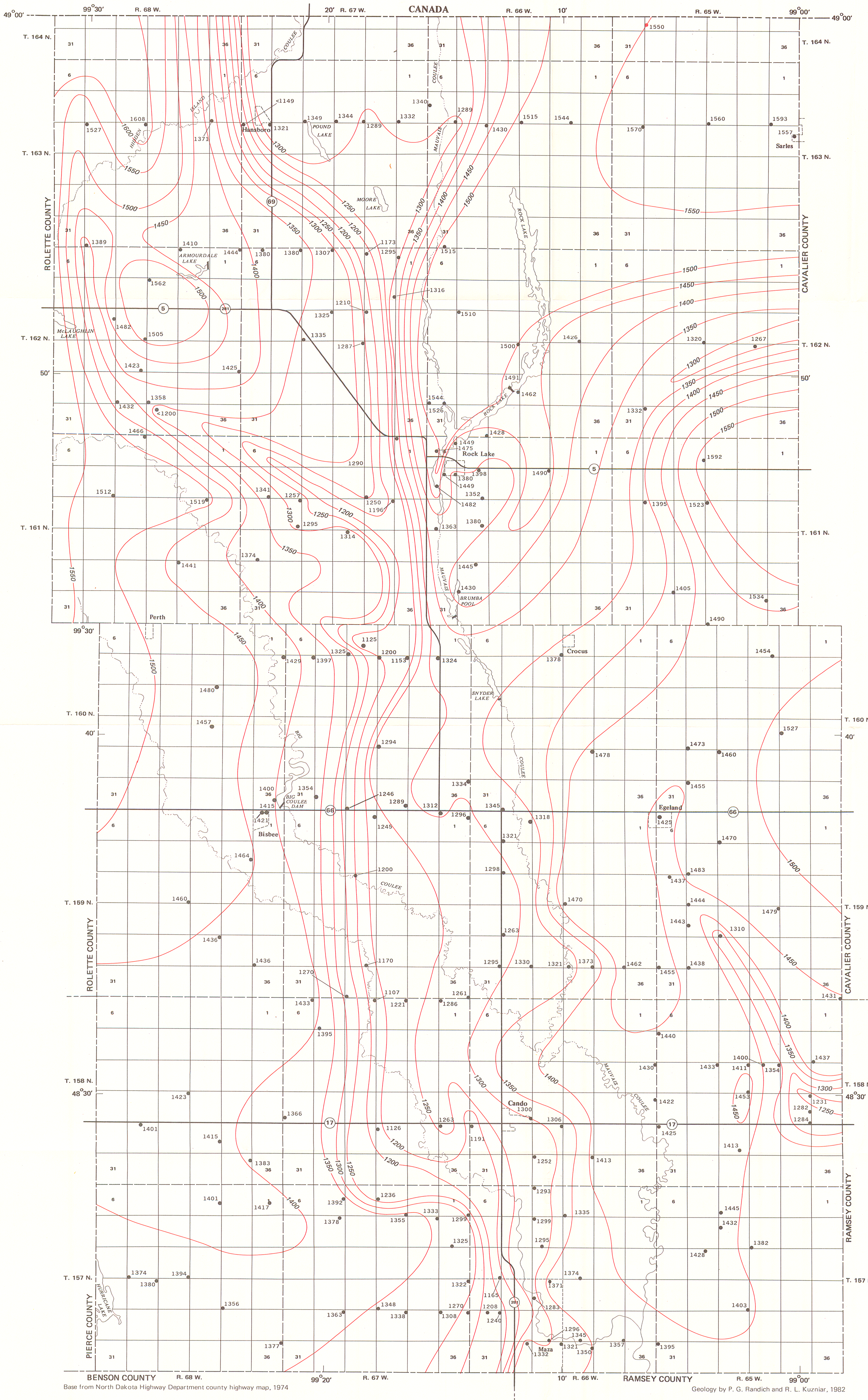
PREPARED BY
THE UNITED STATES GEOLOGICAL SURVEY
IN COOPERATION WITH
THE NORTH DAKOTA STATE WATER COMMISSION,
NORTH DAKOTA GEOLOGICAL SURVEY,
AND TOWNER COUNTY BOARD OF COMMISSIONERS

BULLETIN 79
COUNTY GROUND-WATER STUDIES 36
PART III
PLATE 1




Base from North Dakota Highway Department county highway map, 1974

Geology by P. G. Randich and R. L. Kuzniar, 1982

## EXPLANATION

—1400— BEDROCK CONTOUR–Shows altitude of bedrock surface. Contour interval 50 feet (15 meters). National Geodetic Vertical Datum of 1929

•1261 TEST HOLE–Number is altitude of top of bedrock, in feet. National Geodetic Vertical Datum of 1929

2 0 2 4 6 8 10 MILES

2 0 2 4 6 8 10 KILOMETERS

# PLATE 1.–MAP SHOWING BEDROCK TOPOGRAPHY OF TOWNER COUNTY, NORTH DAKOTA

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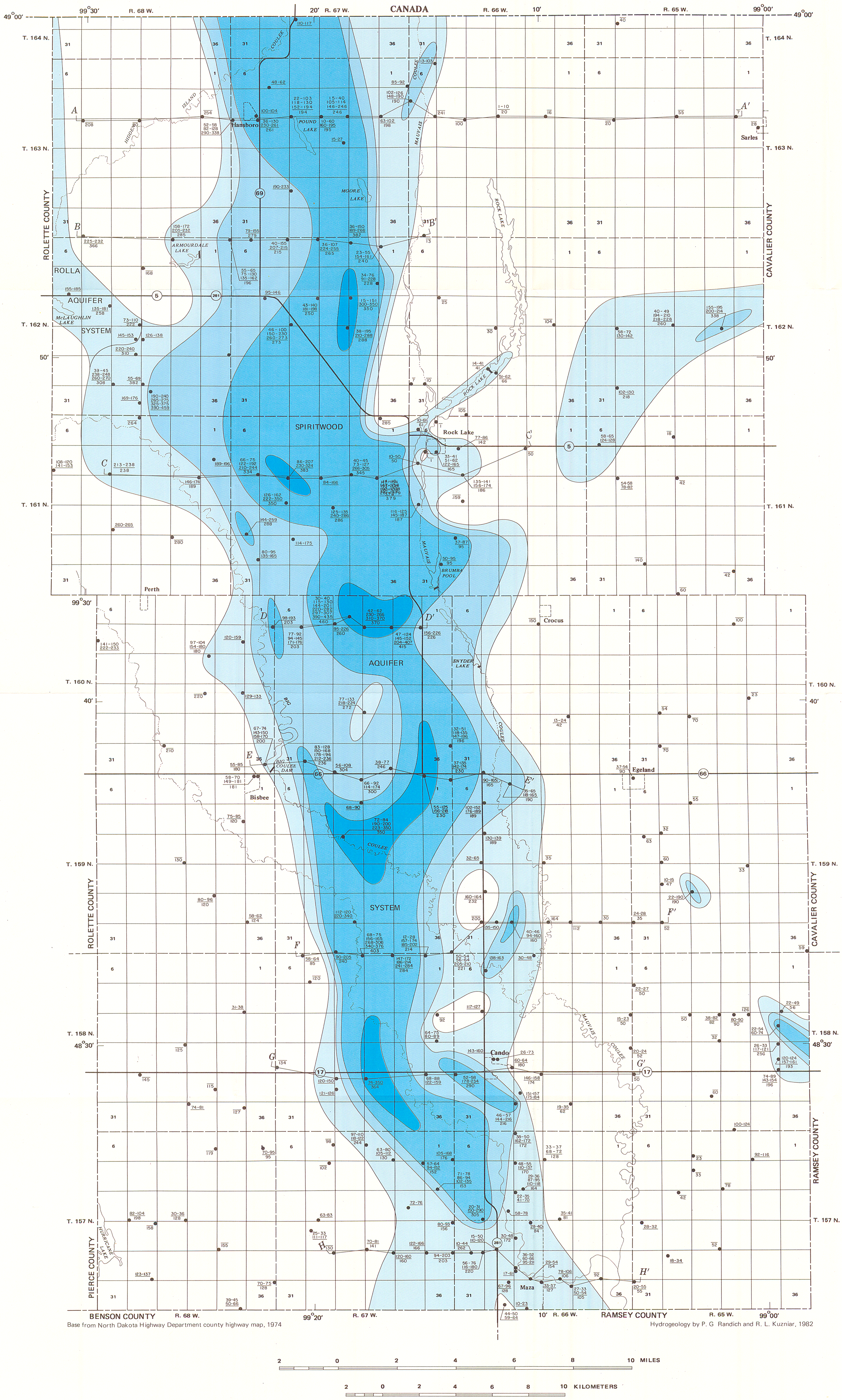


## EXPLANATION

ESTIMATED POTENTIAL WELL YIELDS, IN GALLONS PER MINUTE (LITERS PER SECOND)

- 1000 to 1500 (63 to 95)
- 500 to 1000 (32 to 63)
- 250 to 500 (16 to 32)
- 50 to 250 (3.2 to 16)
- 0 to 50 (0 to 3.2)

AQUIFER CONTACT

YIELD BOUNDARY

A A' TRACE OF SECTION

SELECTED TEST-HOLE AND WELL DATA

102-130 / 218 TEST HOLE OR WELL—Upper numbers are depth to top and bottom of aquifer interval, in feet below land surface. Sand and gravel thicknesses of less than 4 feet (1.2 meters) are not shown. Lower number is depth to bedrock, in feet below land surface. Absence of lower number indicates that the test hole or well did not completely penetrate the glacial drift

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

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# PLATE 3.–HYDROGEOLOGIC SECTIONS OF THE SPIRITWOOD AQUIFER SYSTEM IN TOWNER COUNTY, NORTH DAKOTA

Geohydrology by P. G. Randich and R. L. Kuzniar, 1982

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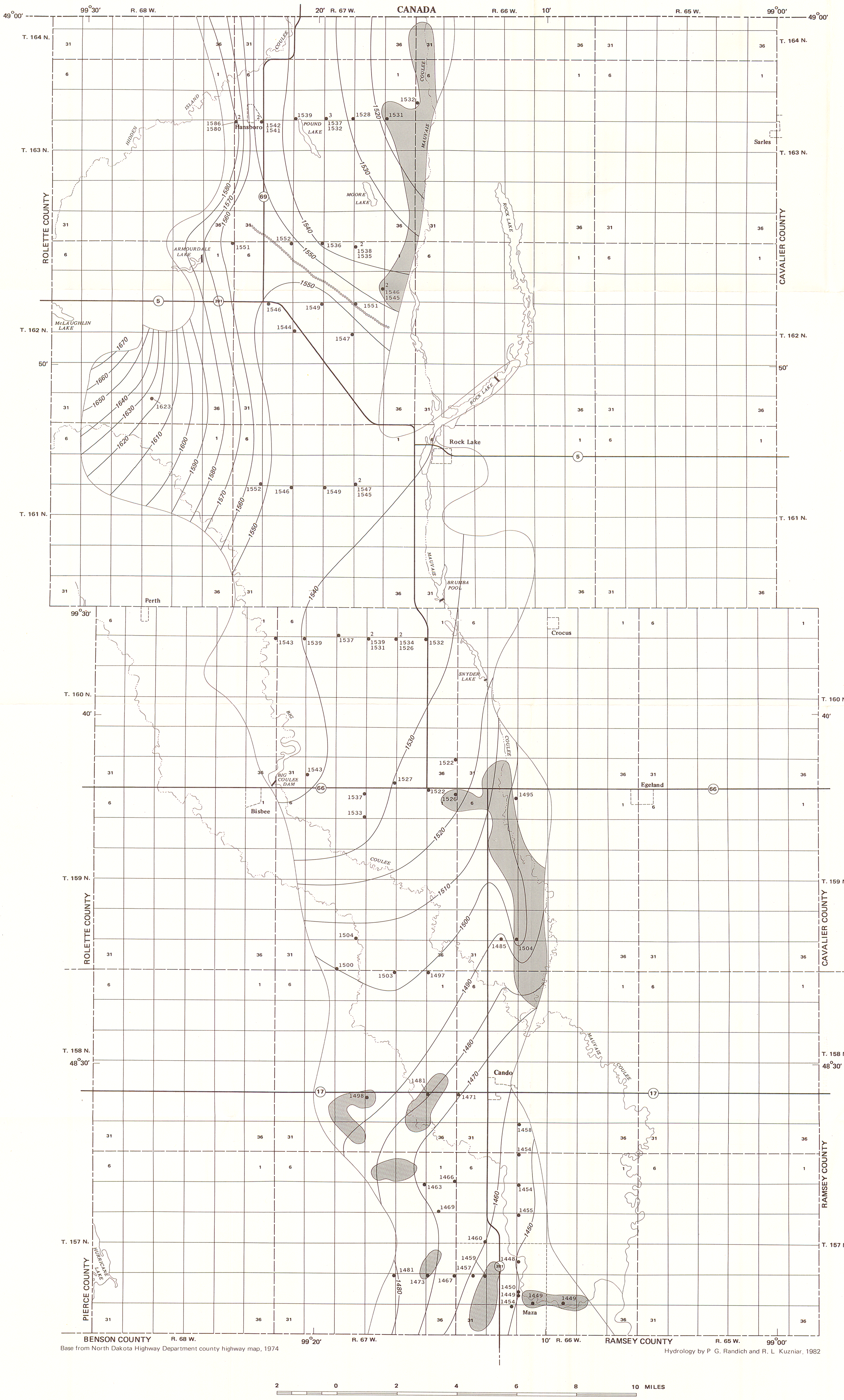
BULLETIN 79
COUNTY GROUND-WATER STUDIES 36
PART III
PLATE 4




## EXPLANATION

AREAS WHERE FLOWING WELLS MIGHT BE DEVELOPED IN THE SPIRITWOOD AQUIFER SYSTEM

1400 POTENTIOMETRIC CONTOUR—Shows altitude at which water level would have stood in tightly cased wells, October 1981. Contour interval 10 feet (3 meters). National Geodetic Vertical Datum of 1929

AQUIFER BOUNDARY

GROUND-WATER DIVIDE

1552 OBSERVATION WELL—Number is altitude of potentiometric surface, in feet. National Geodetic Vertical Datum of 1929

2 INDICATES MORE THAN ONE WELL AT THIS LOCATION

PLATE 4.—MAP SHOWING POTENTIOMETRIC SURFACE OF THE SPIRITWOOD AQUIFER SYSTEM, TOWNER COUNTY, NORTH DAKOTA