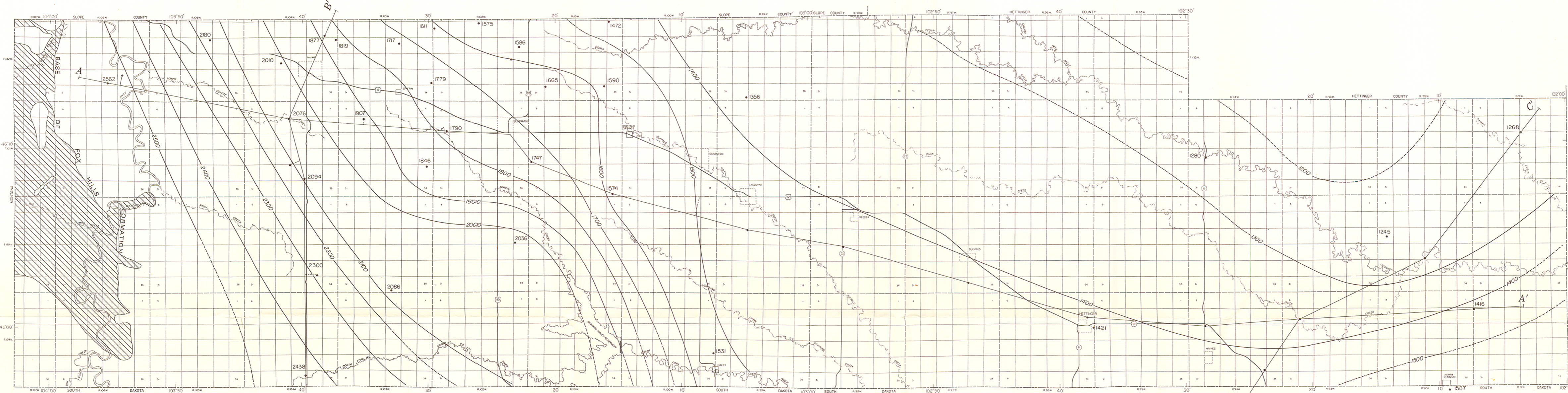


PLATE 1.—HYDROGEOLOGIC SECTIONS, ADAMS AND BOWMAN COUNTIES, NORTH DAKOTA.



A.—STRUCTURE CONTOURS ON BASE OF FOX HILLS FORMATION

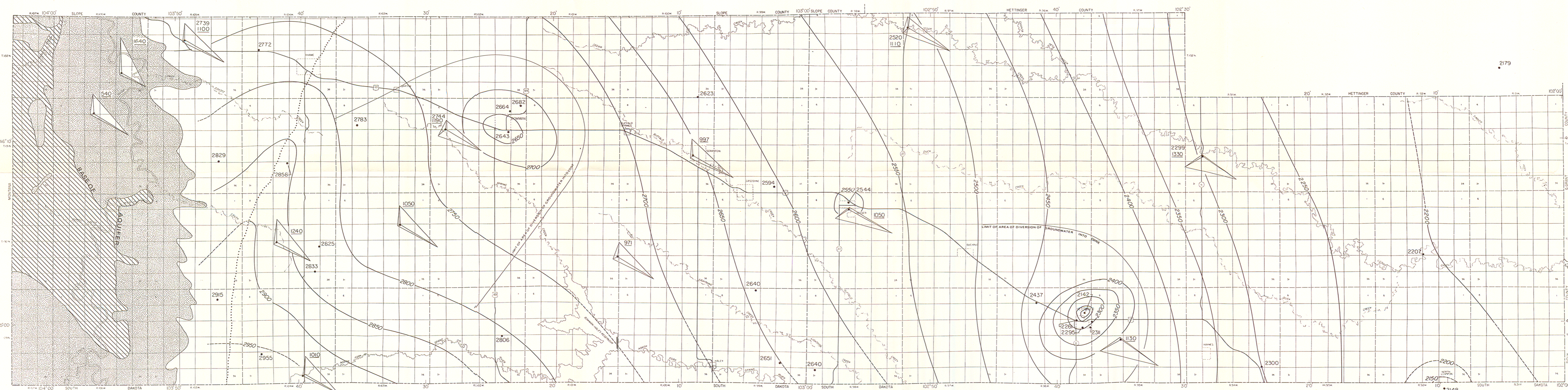
EXPLANATION

PIERRE FORMATION

TEST HOLE—Shows location of test hole used for contouring. Number is altitude of base of Fox Hills Formation in feet above mean sea level

STRUCTURE CONTOUR—Shows altitude of base of Fox Hills Formation. Dashed where approximately located. Contour interval 100 feet (30 m). Datum is mean sea level

LINE OF GEOLOGIC SECTION



B.—POTENTIOMETRIC SURFACE (1971-72) AND WATER QUALITY

EXPLANATION

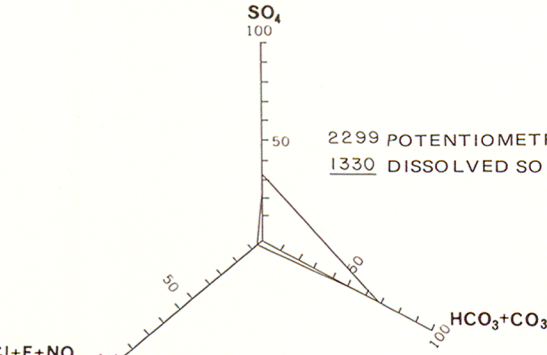
PIERRE FORMATION

OUTCROP AREA OF THE FOX HILLS AND BASAL HELL CREEK AQUIFER

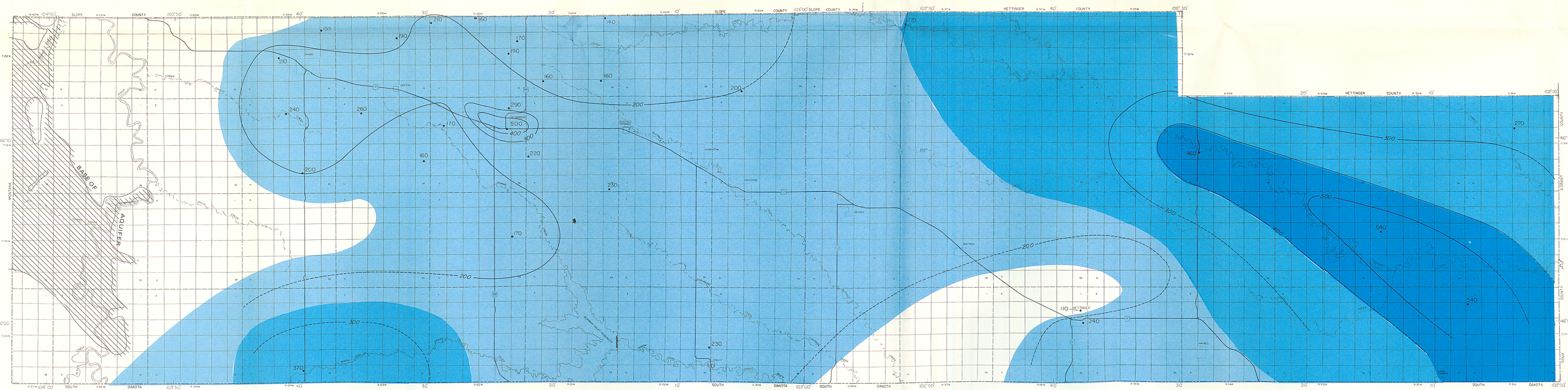
GROUND-WATER DIVIDE

WELL—Shows location of well used for contouring. Number is altitude of potentiometric surface in feet above mean sea level

POTENTIOMETRIC CONTOUR—Shows altitude at which water level would have stood in tightly cased wells (1971-72). Dashed where approximately located. Contour interval 50 feet (15 m). Datum is mean sea level



CHEMICAL DIAGRAM—Consists of three legs radiating from a point that indicates the location of the well sampled. The percentage reacting values of each of the anions is plotted on the appropriate vector. The chemical-analysis diagram is the triangle formed by connecting these points. Numbers beside each diagram indicate potentiometric surface in feet and dissolved solids in milligrams per liter



C.—TRANSMISSIVITY AND YIELD

EXPLANATION

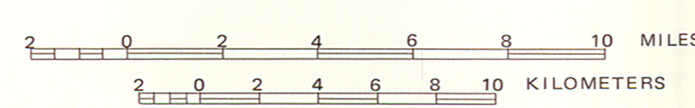
PIERRE FORMATION

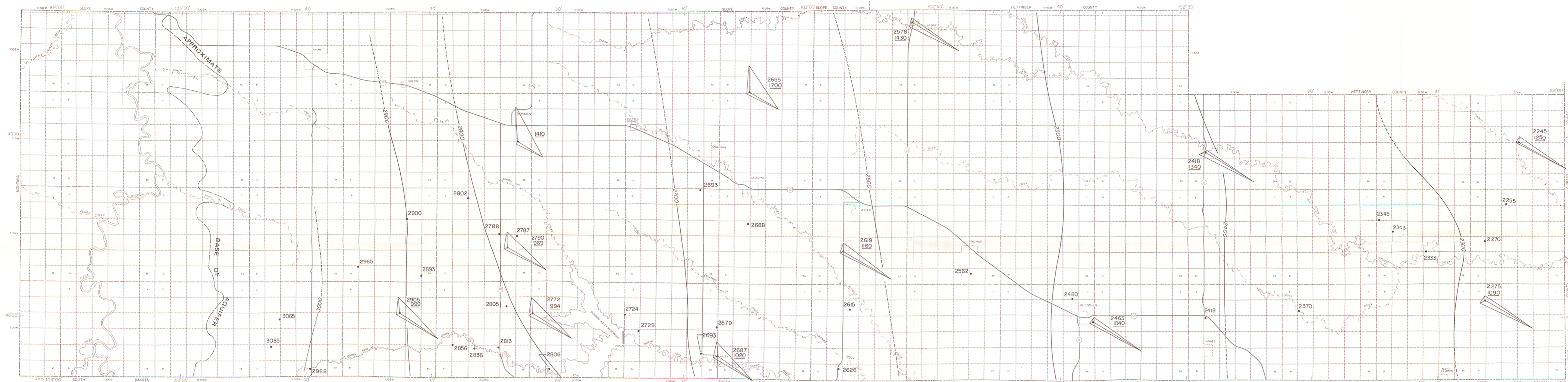
WELL OR TEST HOLE—Number is calculated transmissivity of the aquifer in feet squared per day (meters squared per day)

LINE OF EQUAL TRANSMISSIVITY—Dashed where inferred. Interval is 100 ft<sup>2</sup>/d (9 m<sup>2</sup>/d)

ESTIMATED YIELD IN GALLONS PER MINUTE (LITERS PER SECOND)—Drawdown about 50 feet (15 m) in pumped well after 24 hours

- 75-100 (5-6)
- 50-75 (3-5)
- 25-50 (2-3)
- 1-25 (0.06-2)



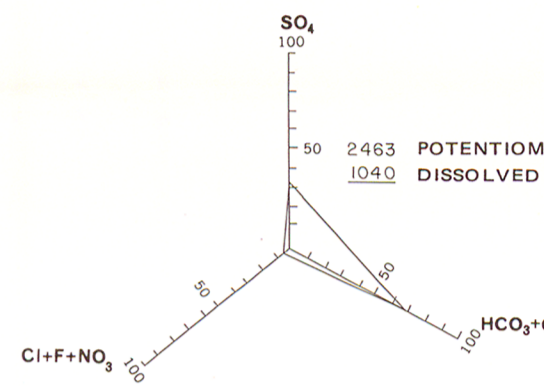


A.—POTENTIOMETRIC SURFACE (1971-72) AND WATER QUALITY

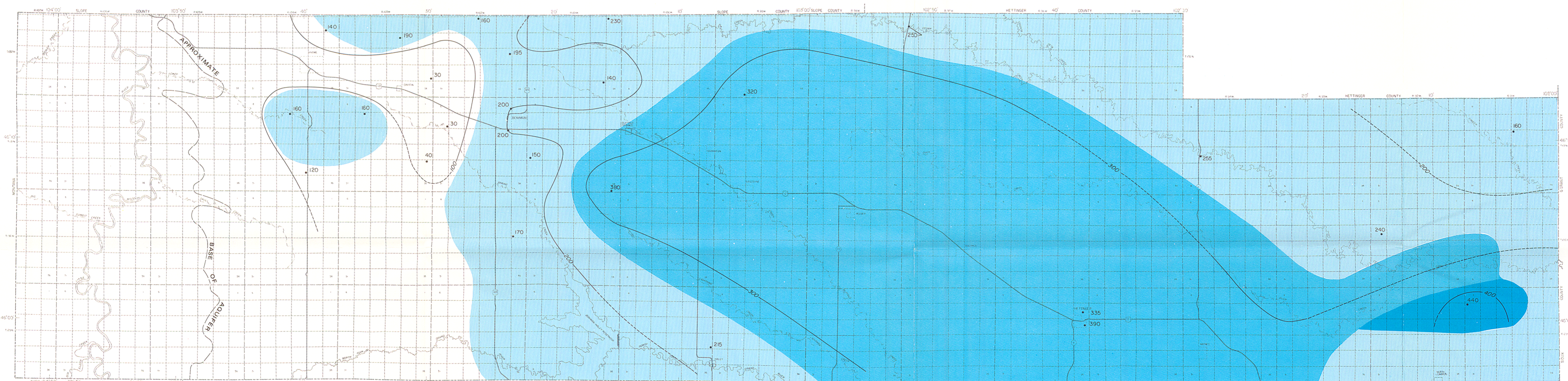
EXPLANATION

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B.—TRANSMISSIVITY AND YIELD

EXPLANATION

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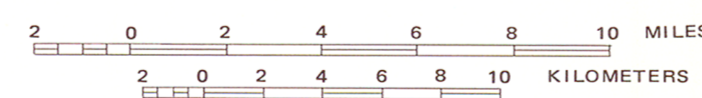
LINE OF EQUAL TRANSMISSIVITY—Dashed where inferred. Interval is 100 ft<sup>2</sup>/d (9 m<sup>2</sup>/d)

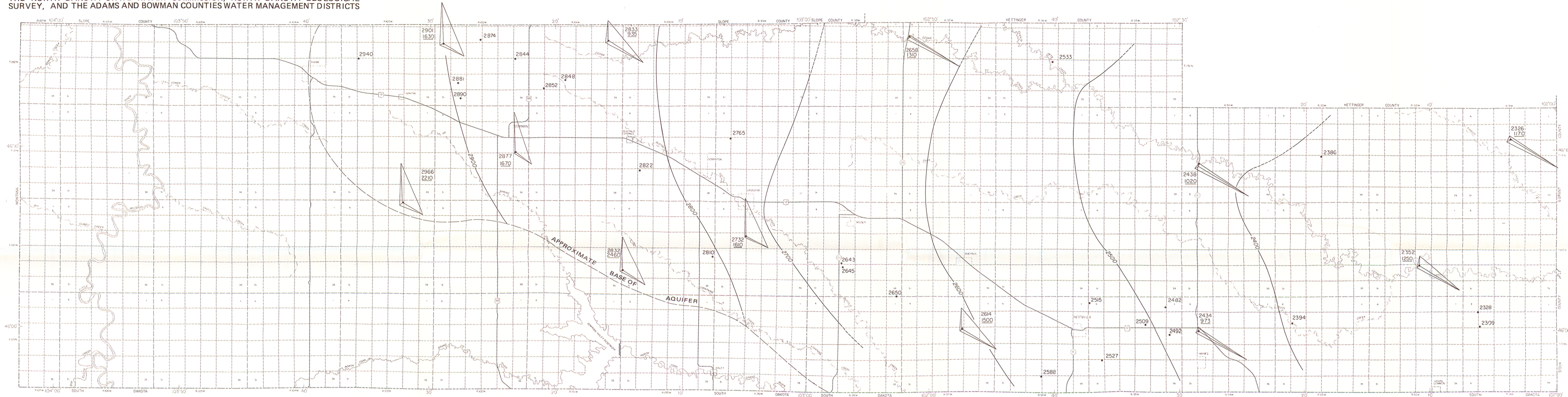
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- 1-25 (0.06-2)

BASE PREPARED FROM NORTH DAKOTA STATE HIGHWAY DEPARTMENT COUNTY HIGHWAY MAPS

Hydrology by M. G. Croft, 1973



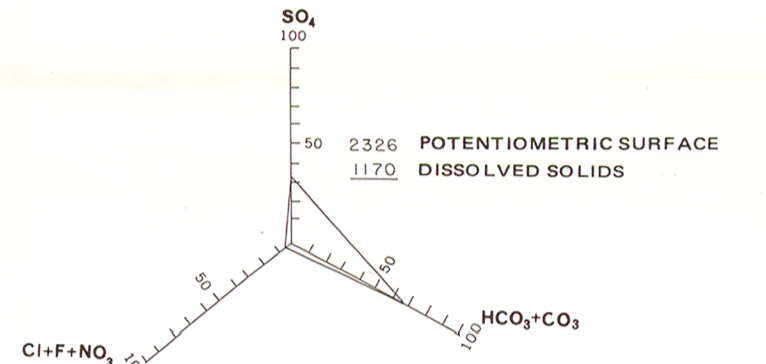


A.—POTENTIOMETRIC SURFACE (1971-72) AND WATER QUALITY

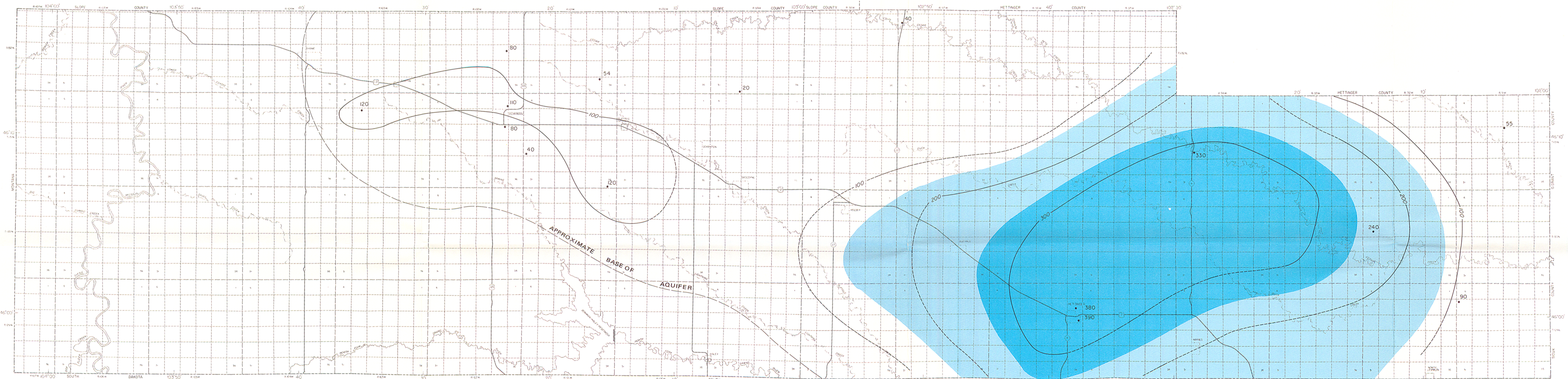
EXPLANATION

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