

EXPLANATION

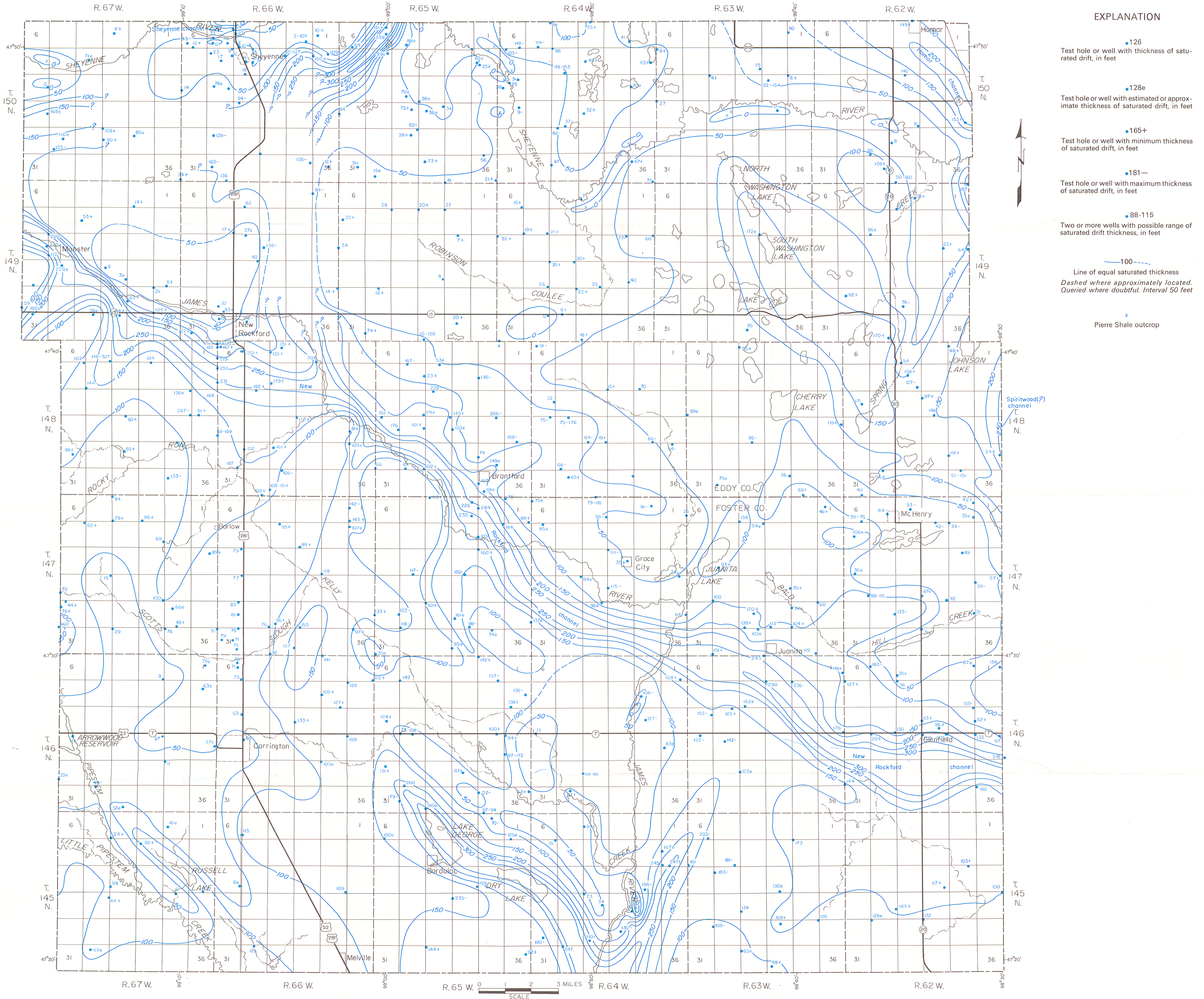
1515  
Well with elevation of water level, in feet above mean sea level, measured or adjusted to October 14-15, 1964

1580  
Water-table contour  
Shows elevation of water table. Dashed where approximately located. Contour interval 20 feet. Datum is mean sea level



BASE PREPARED FROM NORTH DAKOTA HIGHWAY DEPARTMENT COUNTY HIGHWAY MAPS

PLATE 1. - MAP SHOWING ELEVATION OF THE WATER TABLE AS OF OCTOBER 14-15, 1964 IN EDDY AND FOSTER COUNTIES, NORTH DAKOTA

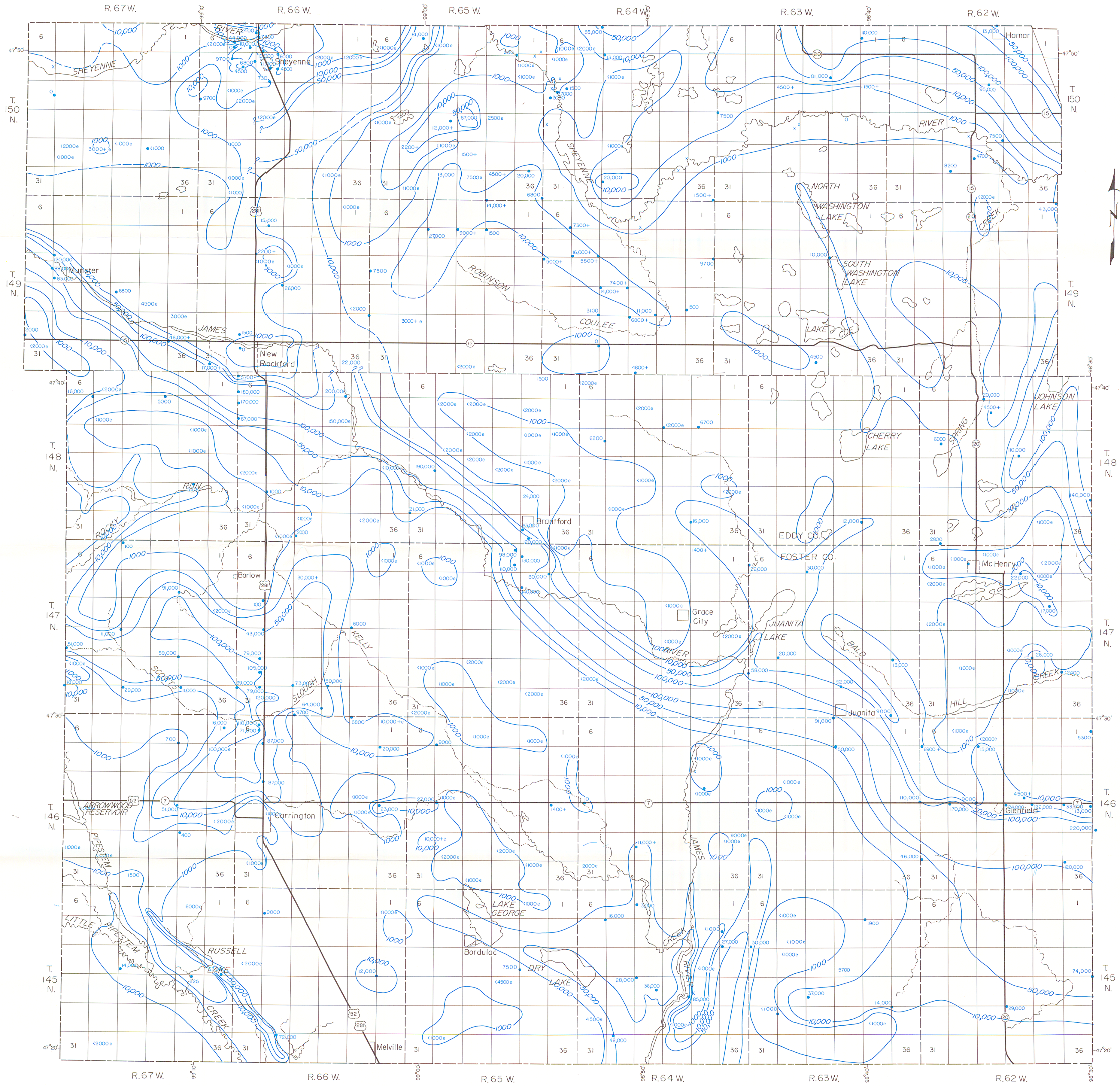


EXPLANATION

- 126  
Test hole or well with thickness of saturated drift, in feet
- 128e  
Test hole or well with estimated or approximate thickness of saturated drift, in feet
- 165+  
Test hole or well with minimum thickness of saturated drift, in feet
- 181-  
Test hole or well with maximum thickness of saturated drift, in feet
- 88-115  
Two or more wells with possible range of saturated drift thickness, in feet
- 100—  
Line of equal saturated thickness  
Dashed where approximately located.  
Queried where doubtful. Interval 50 feet
- x  
Pierre Shale outcrop

BASE PREPARED FROM NORTH DAKOTA HIGHWAY DEPARTMENT COUNTY HIGHWAY MAPS

PLATE 2. - MAP SHOWING THICKNESS OF WATER-SATURATED GLACIAL DRIFT AS OF OCTOBER 14-15, 1964 IN EDDY AND FOSTER COUNTIES, NORTH DAKOTA

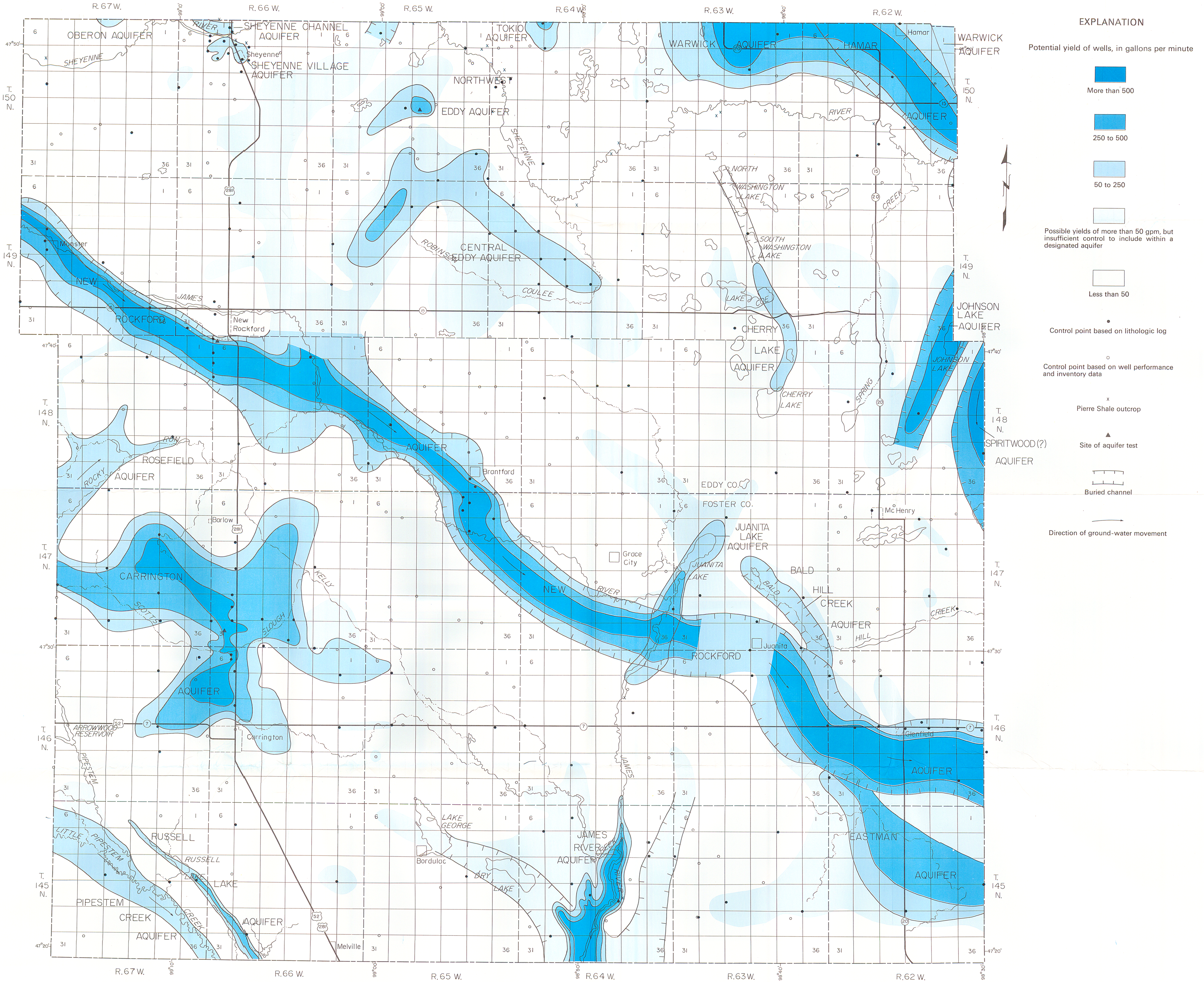


EXPLANATION

- <1 000e  
Transmissibility, in gallons per day per foot, estimated from inventory data
- 50,000  
Transmissibility, in gallons per day per foot, estimated from lithologic log
- x  
Pierre Shale outcrop
- ▲  
Aquifer test site
- 10,000 —  
Line of equal estimated transmissibility  
Dashed where approximately located.  
Queried where doubtful. Interval irregular:  
1,000, 10,000, 50,000 and 100,000 gal-  
lons per day per foot

BASE PREPARED FROM NORTH DAKOTA HIGHWAY DEPARTMENT COUNTY HIGHWAY MAPS

PLATE 3. - MAP SHOWING ESTIMATED TRANSMISSIBILITY OF THE GLACIAL DRIFT, EDDY AND FOSTER COUNTIES, NORTH DAKOTA



EXPLANATION

Potential yield of wells, in gallons per minute

More than 500

250 to 500

50 to 250

Possible yields of more than 50 gpm, but insufficient control to include within a designated aquifer

Less than 50

Control point based on lithologic log

Control point based on well performance and inventory data

Pierre Shale outcrop

Site of aquifer test

Buried channel

Direction of ground-water movement

BASE PREPARED FROM NORTH DAKOTA HIGHWAY DEPARTMENT COUNTY HIGHWAY MAPS

PLATE 4. - MAP SHOWING ESTIMATED POTENTIAL YIELDS FROM GLACIAL DRIFT AQUIFERS, EDDY AND FOSTER COUNTIES, NORTH DAKOTA

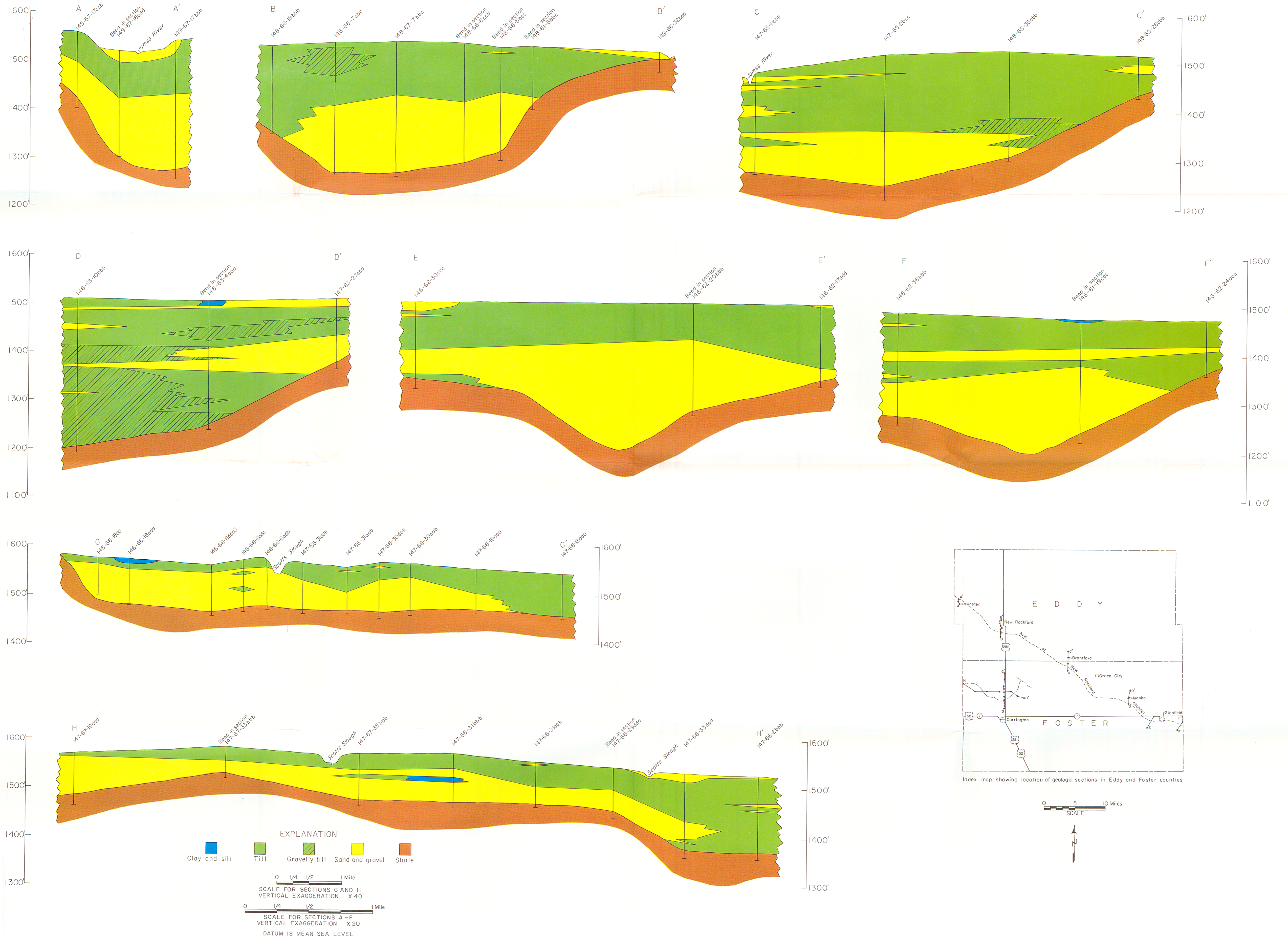
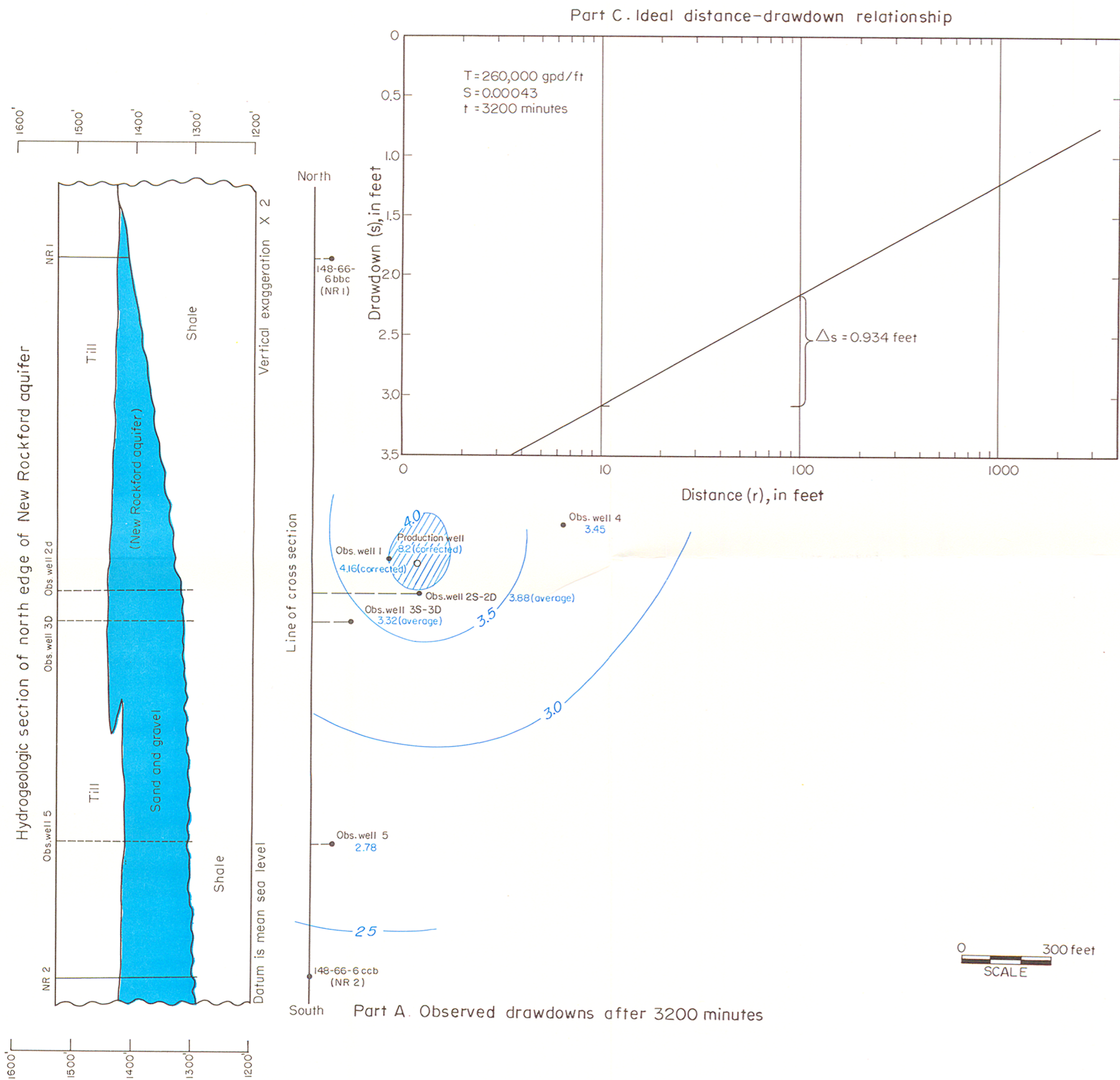


PLATE 5. - GEOLOGIC SECTIONS, NEW ROCKFORD AND CARRINGTON AQUIFERS, EDDY AND FOSTER COUNTIES, NORTH DAKOTA



**EXPLANATION**

- Part A**
- Line of equal observed drawdown, in feet, after 3,200 minutes pumping
  - Lines of equal drawdown not shown because of crowding
- Part B**
- Line of equal ideal drawdown, in feet, after 3,200 minutes pumping production well, T = 260,000 gallons per day per foot, S = 0.00043
  - Line of equal ideal drawdown, in feet, after 3,200 minutes pumping image well 1
  - Line of equal ideal drawdown, in feet, after 3,200 minutes pumping image well 2
  - Line of equal ideal drawdown, in feet, resulting from combined effects of production well and image wells 1 and 2
  - s = sum of ideal drawdowns, in feet, resulting from pumping production well and image wells for 3,200 minutes
  - Hydrologic boundary

PLATE 6.— MAPS, HYDROGEOLOGIC SECTION, AND GRAPH SHOWING IMAGE-WELL SOLUTION, NEW ROCKFORD AQUIFER TEST, EDDY COUNTY, NORTH DAKOTA