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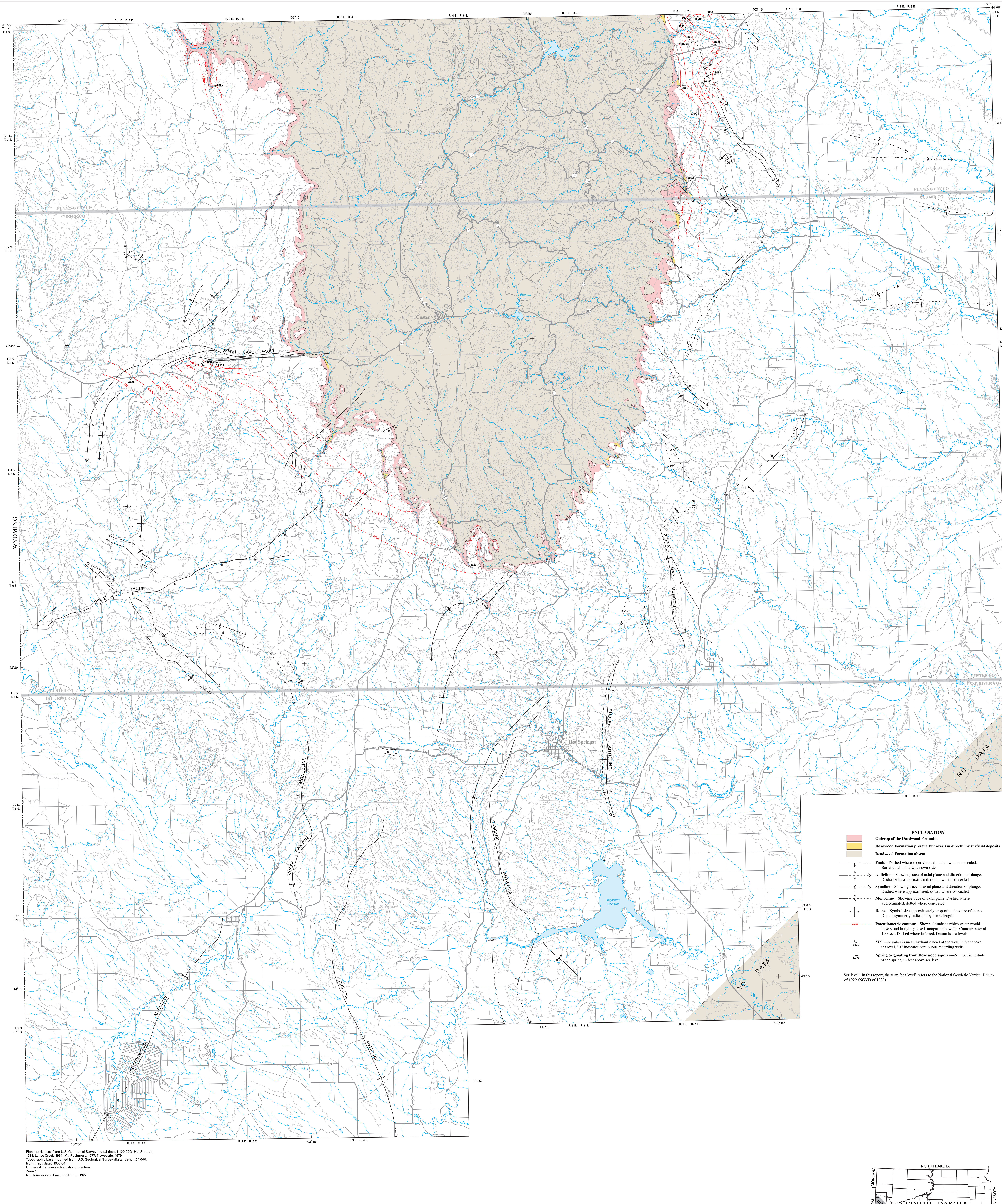
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH THE
SOUTH DAKOTA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
AND THE WEST DAKOTA WATER DEVELOPMENT DISTRICT

HYDROLOGIC INVESTIGATIONS ATLAS HA-745-E
Southern part of area —SHEET 2 OF 2
Strobel, M.L., Galloway, J.M., Hamade, G.R., and Jarrell, G.J., 2000
Potentiometric Surface of the Deadwood Aquifer in the Black Hills Area, South Dakota



EXPLANATION

Outcrop of the Deadwood Formation

Deadwood Formation present, but overlain directly by surficial deposits

Deadwood Formation absent

Fault—Dashed where approximated, dotted where concealed. Bar and ball on downthrown side

Anticline—Showing trace of axial plane and direction of plunge. Dashed where approximated, dotted where concealed

Syncline—Showing trace of axial plane and direction of plunge. Dashed where approximated, dotted where concealed

Monocline—Showing trace of axial plane. Dashed where approximated, dotted where concealed

Dome—Symbol size approximately proportional to size of dome. Dome asymmetry indicated by arrow length

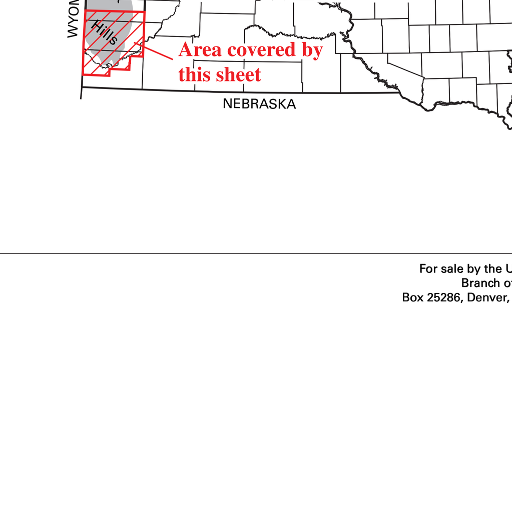
5000 **Potentiometric contour**—Shows altitude at which water would have stood in tightly cased, nonpumping wells. Contour interval 100 feet. Dashed where inferred. Datum is sea level[1]

R 6539 **Well**—Number is mean hydraulic head of the well, in feet above sea level. "R" indicates continuous recording wells

6075 **Spring originating from Deadwood aquifer**—Number is altitude of the spring, in feet above sea level

[1]Sea level: In this report, the term "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)

Planimetric base from U.S. Geological Survey digital data, 1:100,000: Hot Springs, 1985; Lance Creek, 1981; Mt. Rushmore, 1977; Newcastle, 1979
Topographic base modified from U.S. Geological Survey digital data, 1:24,000, from maps dated 1950-84
Universal Transverse Mercator projection
Zone 13
North American Horizontal Datum 1927



SCALE 1:100,000
2 0 2 4 6 8 10 MILES
2 0 2 4 6 8 10 KILOMETERS
LAND SURFACE CONTOUR INTERVAL 200 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

For sale by the U.S. Geological Survey
Branch of Information Services
Box 25286, Denver, Colorado 80225-0286

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By
Michael L. Strobel, Joel M. Galloway, Ghaith R. Hamade, and Gregory J. Jarrell
2000

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