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-744-A
Southern part of area — SHEET 2 OF 2

Altitude of the Top of the Inyan Kara Group in the Black Hills Area, South Dakota

By
Janet M. Carter and Jack A. Redden

1999

Carter, J.M., and Redden, J.A., 1999, Altitude of the Top of the Inyan Kara Group in the Black Hills Area, South Dakota

EXPLANATION

- Outcrop of the Inyan Kara Group
- Inyan Kara Group present, but overlain directly by surficial deposits
- Inyan Kara Group 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
- 500 **Structure contour**—Shows approximate altitude of the top of the Inyan Kara Group. Contour interval 100 feet. Dashed were inferred. Datum is sea level
- 2500 **Control point**—Location of water well or oil, gas, or water test hole. Number is known altitude in feet above sea level

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
LAND SURFACE CONTOUR INTERVAL 200 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

For sale by the U.S. Geological Survey
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