
PRELIMINARY MAP
SHOWING
PRESENT STATE OF KNOWLEDGE
RELATING TO
UNDERGROUND WATERS
IN THE
CENTRAL GREAT PLAINS
BY
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1904
Scale 1/1,267,200
20 15 10 5 0 20 40 miles
Contour interval 250 feet up to 6000 feet, above which it is 500 feet
Datum is mean sea level
Topography compiled from U. S. Geological Survey maps and other sources, with many new data based mainly on barometer readings
Broken lines indicate approximate contours
EXPLANATION
Depths to Dakota sandstone
0 to 500 feet
500 to 1000 "
1000 to 1500 "
1500 to 2000 "
2000 to 2500 "
2500 to 3000 (or more)
(Artesian water occurs at various depths in Dakota and underlying sandstones)
Dakota and associated sandstones at or near the surface
Region of artesian flow from Dakota, Benton, and Laramie sandstones
Doubtful areas indicated by broken lines
(flow exhausted about Denver and La Junta)
Laramie and allied formations, comprising sandstones with local water supplies (depths to Dakota sandstone 2000 to 3500 feet or more)
"Red Beds" (and overlying shales)
Paleozoic limestones and sandstones with local water supplies
Dakota sandstone absent and Benton-Niobrara beds lie on crystalline rocks
Crystalline rocks: Granite, quartzite, etc
Region so heavily covered by Tertiary deposits that relations of the older formations have not been determined
Flowing wells from Dakota sandstone
Flowing wells from Benton sandstone
Flowing wells from Laramie and associated formations
Flowing wells from rocks of Carboniferous age
Nonflowing deep wells in Dakota sandstone
Unsuccessful deep borings which failed to reach Dakota sandstone
Nonflowing deep wells in formations younger than Dakota sandstone
Nonflowing deep wells in rocks older than Dakota sandstone
Unsuccessful deep borings into Dakota sandstone
Unsuccessful deep borings in rocks older than Dakota sandstone
Water of very bad quality
S Salt wells
Where there are several wells at a locality representative or deepest ones are given
Boundary lines very uncertain
2665 Figures in red indicate depths of wells
MONTANA
WYOMING
SOUTH DAKOTA
NEBRASKA
COLORADO
KANSAS
MINNESOTA
IOWA