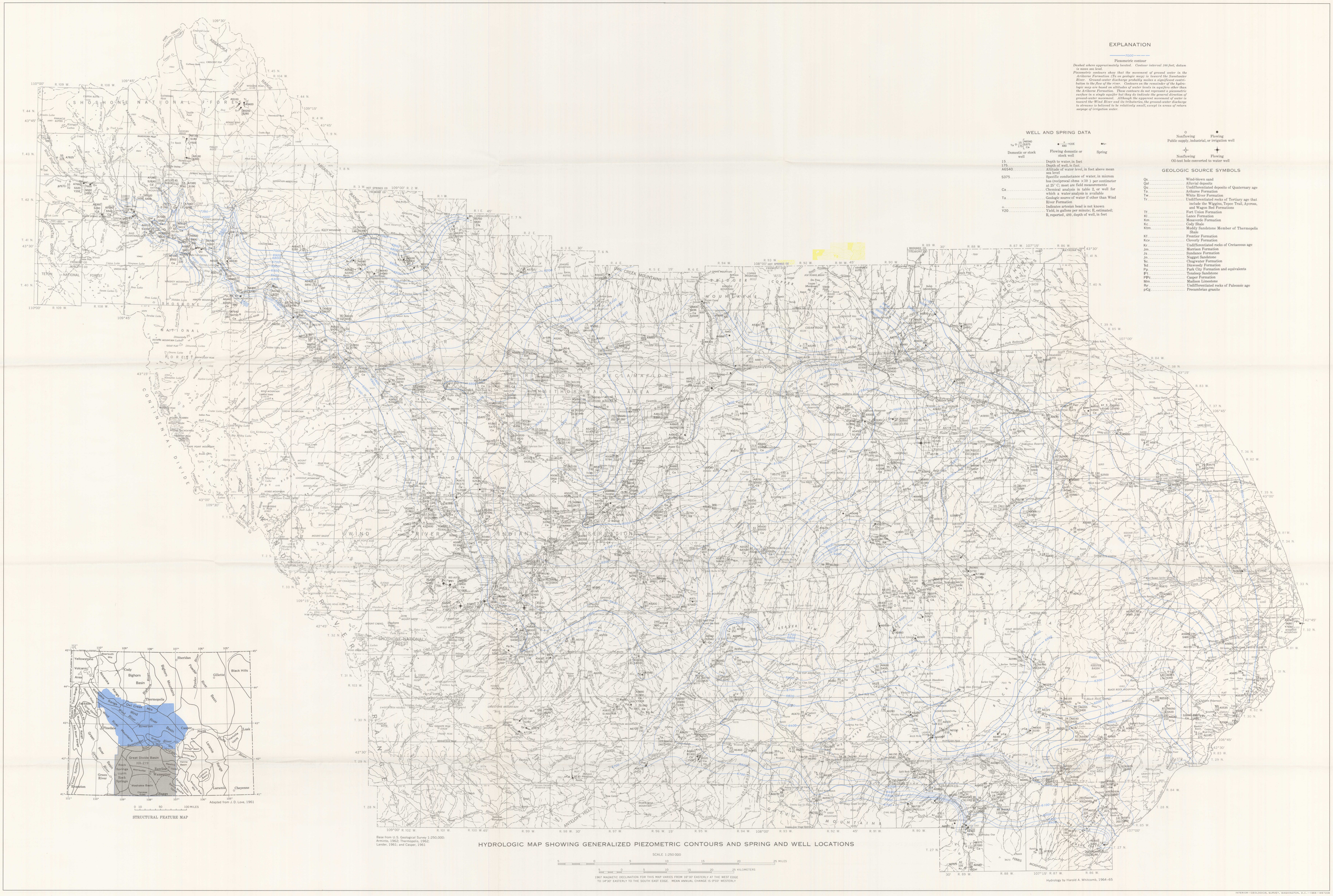

HYDROLOGIC MAP SHOWING GENERALIZED PIEZOMETRIC CONTOURS AND SPRING AND WELL LOCATIONS

EXPLANATION

7000

Piezometric contour

Dashed where approximately located. Contour interval 100 feet; datum is mean sea level.

Piezometric contours show that the movement of ground water in the Arikaree Formation (Ta on geologic map) is toward the Sweetwater River. Ground-water discharge probably makes a significant contribution to the flow of the river. Contours on the remainder of the hydrologic map are based on altitudes of water levels in aquifers other than the Arikaree Formation. These contours do not represent a piezometric surface in a single aquifer but they do indicate the general direction of ground-water movement. Although the apparent movement of water is toward the Wind River and its tributaries, the ground-water discharge to streams is believed to be relatively small, except in areas of return seepage of irrigation water.

WELL AND SPRING DATA

Ta 15 / 175 A6540 / S375 / Ca — Domestic or stock well

480 — Y20E — Flowing domestic or stock well

Spring

15 ..... Depth to water, in feet
175 ..... Depth of well, in feet
A6540 ..... Altitude of water level, in feet above mean sea level
S375 ..... Specific conductance of water, in microm hos (reciprocal ohms ×10) per centimeter at 25° C; most are field measurements
Ca ..... Chemical analysis in table 2, or well for which a water analysis is available
Ta ..... Geologic source of water if other than Wind River Formation
+ ..... Indicates artesian head is not known
Y20 ..... Yield, in gallons per minute; E, estimated; R, reported, 480, depth of well, in feet

Nonflowing — Flowing
Public supply, industrial, or irrigation well

Nonflowing — Flowing
Oil-test hole converted to water well

GEOLOGIC SOURCE SYMBOLS

Qs ..... Wind-blown sand
Qal ..... Alluvial deposits
Qu ..... Undifferentiated deposits of Quaternary age
Ta ..... Arikaree Formation
Tw ..... White River Formation
Tr ..... Undifferentiated rocks of Tertiary age that include the Wiggins, Tepee Trail, Aycross, and Wagon Bed Formations
Tf ..... Fort Union Formation
Kl ..... Lance Formation
Km ..... Mesaverde Formation
Kc ..... Cody Shale
Ktm ..... Muddy Sandstone Member of Thermopolis Shale
Kf ..... Frontier Formation
Kcv ..... Cloverly Formation
Kr ..... Undifferentiated rocks of Cretaceous age
Jm ..... Morrison Formation
Js ..... Sundance Formation
Jn ..... Nugget Sandstone
Ꞧc ..... Chugwater Formation
Ꞧd ..... Dinwoody Formation
Ꝑp ..... Park City Formation and equivalents
ꝑt ..... Tensleep Sandstone
PꝑC ..... Casper Formation
Mm ..... Madison Limestone
Ꝑr ..... Undifferentiated rocks of Paleozoic age
pCg ..... Precambrian granite

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