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

PREPARED IN COOPERATION WITH THE
COLORADO DEPARTMENT OF NATURAL RESOURCES,
DIVISION OF WATER RESOURCES, and the
COLORADO WATER CONSERVATION BOARD

HYDROLOGIC INVESTIGATIONS ATLAS HA–742
Arapahoe aquifer—Castle Rock area—SHEET 5 OF 5
Robson, S.G., and others, 1998, Structure, outcrop, and subcrop of the bedrock aquifers along the western margin of the Denver Basin, Colorado

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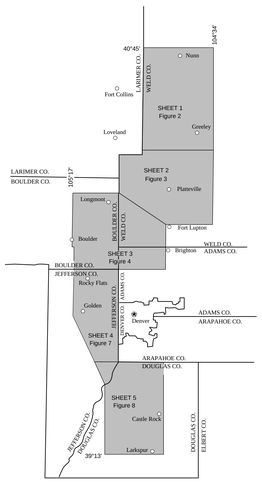
CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
foot	0.3048	meter
mile	1.609	kilometer
square mile	2.59	square kilometer
gallon per minute (gpm)	0.0631	liters per second

Sea level: In this report, "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called "Mean Sea Level."



EXPLANATION

GEOHYDROLOGIC UNIT OUTCROP
See Table 1 for additional description

- Tu — Unsaturated Tertiary rocks
- Tdw — Dawson aquifer
- TKd — Denver aquifer
- Ka — Arapahoe aquifer
- Kl — Laramie confining layer
- Klf — Laramie–Fox Hills aquifer
- Ku — Pierre undifferentiated confining layer
- MPu — Mesozoic and Paleozoic rocks undifferentiated
- pC — Precambrian rocks
- S — Subcrop of Laramie–Fox Hills or Arapahoe aquifer under principal alluvial aquifer

4500 — STRUCTURE CONTOUR—Shows altitude of the base of the Arapahoe aquifer. Dashed where inferred. Interval 100 and 500 feet. Datum is sea level

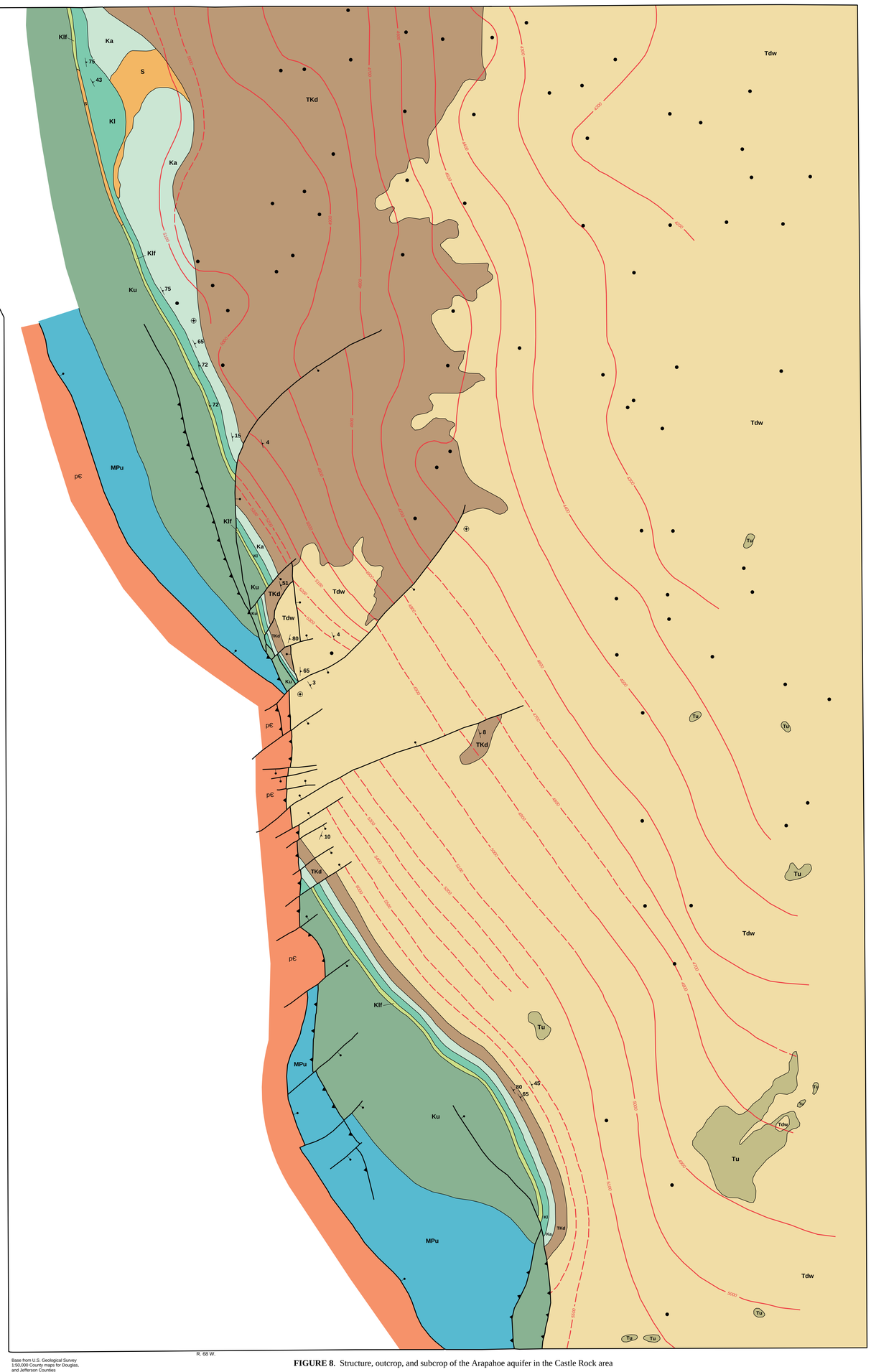
GEOLOGIC CONTACT

FAULT—Bar and ball on downthrown side

THRUST FAULT—Saw teeth on upper plate

STRIKE AND DIP OF BEDS
8 — Inclined beds
Horizontal beds

DATA POINT—Location of well with geophysical log used to contour structure



Base from U.S. Geological Survey 1:50,000 County maps for Douglas, and Jefferson Counties

FIGURE 8. Structure, outcrop, and subcrop of the Arapahoe aquifer in the Castle Rock area

SCALE 1:50,000
0 1 2 3 MILES
0 1 2 3 KILOMETERS
CONTOUR INTERVAL 80 FEET
DATUM IS SEA LEVEL

STRUCTURE, OUTCROP, AND SUBCROP OF THE BEDROCK AQUIFERS ALONG THE WESTERN MARGIN OF THE DENVER BASIN, COLORADO

by
S.G. Robson, George Van Slyke, and Glenn Graham

1998

Cyan Magenta Yellow Black