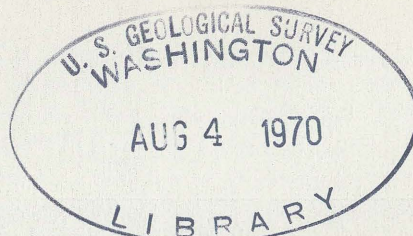


GEOLOGIC MAP OF THE ARVADA QUADRANGLE, COLORADO

By

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This illustration is preliminary
and has not been edited or reviewed
for conformity with U. S. Geological
Survey standards or nomenclature.



EXPLANATION

af

Artificial fill

Clay, silt, sand, gravel, concrete, brick and trash.
Includes highway and railway fills, dams, canal embank-
ments, trash dumps and sanitary landfill areas. Generally
10 to 20 feet thick but some dams and embankments are as
much as 90 feet thick

Qls

Landslide deposit

Clay, silt, and sand material which has moved downslope
on hillsides as discrete masses. As much as 20 feet thick

Qco

Colluvium

Poorly sorted clay, silt, sand, and some pebbles. On
steep to gentle slopes. Generally less than 5 feet thick

Qpp

Post-Piney Creek alluvium

Light-grayish-brown sand, silt, and clay. Dark-brown
and dark-bluish-black humic bog clays, interbedded in
places, with sand and silt. As much as 5 feet thick

Qpc

Piney Creek Alluvium

Brown, light brown, light-gray to dark-gray sand, silt,
and clay. Humic material common in upper 1 to 2 feet. In
places, lower part may be gravel. Commonly 5 to 10 feet
thick

Qes

Eolian sand

Light-brown, fine-grained sand and sandy silt. In some
localities may contain large amounts of clay and silty
clay. Crossbedded in some places, but generally struc-
tureless. Generally less than 10 feet thick, but in places
may be as much as 30 feet thick

Qb

Broadway Alluvium

Pink to light-brown, fine- to coarse-grained pebbly
arkosic sand. Upper 2 to 3 feet commonly a clayey to
pebbly silt. As much as 15 feet thick

Qyl

Loess

Yellowish-brown to light-grayish-brown sandy silt.
Upper 2 to 3 feet may contain appreciable amounts of
clay and clayey silt. Slightly calcareous. As much
as 10 feet thick

Qlo

Louviers Alluvium

Reddish- to yellowish-brown pebbly, arkosic sand, cobble-
size gravel, and occasional boulders. Includes lenticular
masses of silt and clay. The coarse granular materials
contain abundant amounts of biotite mica and are generally
crossbedded. As much as 40 feet thick in valley of Clear
Creek

Qs

Slocum Alluvium

Brown to reddish-brown, well-stratified, clayey to
cobble coarse sand and gravel. Contains lenticular beds
of fine sand and silt. A strongly developed calcium
carbonate-enriched zone (relict soil) occurs near the top
of the alluvium. As much as 40 feet thick

Qv

Verdos Alluvium

Light-brown to reddish-brown clay, silt, sand, pebbles,
cobbles and boulders. May contain thin beds of volcanic
ash. In places a strongly developed calcium carbonate-
enriched zone (relict soil) occurs in the upper part of
the alluvium. As much as 40 feet thick

Qrf

Rocky Flats Alluvium

Reddish-brown to light-brown, poorly sorted, coarse sand
and gravel, cobbles, and scattered boulders. A strongly
developed calcium carbonate-enriched zone (relict soil),
2 to 4 feet thick, occurs near the top of the alluvium.
10 to 20 feet thick

TKda

Denver and Arapahoe Formations

Brown, yellowish-brown, gray and blue-gray interbedded
sandstone, claystone, siltstone, shale and conglomerate.
Crossbedded and lenticular units are common throughout the
formations. Shale and claystone generally exhibit marked
swelling properties when wetted. Olive-brown andesitic
sandstone beds are a diagnostic feature of the Denver
Formation. The lower conglomerate member of the Arapahoe
Formation is generally water bearing. 781 foot thickness
reported in well log at Westminster

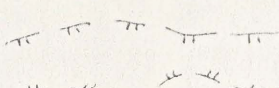
Contact

Dashed where approximately located. Dotted where con-
cealed beneath younger materials

▲ 2' silt
8' sand
10' TKda
935' Kl
97' Kfh

Abbreviated columnar section

Stratigraphic sequence and approximate thickness in feet
of geologic map unit or material. Based on measured outcrop,
well logs, test holes or test pits. Horizontal line separates
surficial deposits above line from bedrock below line. Thick-
ness of lowest unit in column is only that part which is
penetrated or exposed; does not always indicate complete
thickness of unit. The symbol Kl denotes the Laramie Formation,
symbol Kfh the Fox Hills Formation. These formations do not
crop out on the surface in the Arvada quadrangle, but are
penetrated in the deeper wells. The Fox Hills Formation is
generally water bearing



High-water line

Indicates the maximum height of water of South Platte
River during flood of June 16, 1965. Hachures are on high-
water side of boundary line. (adapted from USGS Water Supply
Paper 1850-B, Plate 3, 1969)

Holocene

Wisconsin

Pleistocene

Illinoian
Sangamon

Kansan
Yarmouth

Nebraskan
Aftonian

Upper Cretaceous
and
Paleocene

Quaternary

Cretaceous - Tertiary