

EXPLANATION

Qal
Alluvium
Principally unconsolidated gravel and sand, as much as 30 feet thick. Includes discontinuous bodies of silt and clay at places. Yields moderate to large amounts of water.

Qcg
Cemented gravel
Principally a well-cemented heterogeneous mixture of basaltic gravel, sand, silt, and clay, as much as 400 feet thick. Locally contains discontinuous bodies of clay, silt, and unconsolidated gravel. Overlies Ellensburg formation and Yakima basalt unconformably. Yields only small amounts of water in areas of outcrop but yields moderate to large amounts to wells in eastern part of area.

Te
Tyw
Tei
Ty
Ellensburg formation and Yakima basalt
Te, main body of Ellensburg formation. Principally indurated clay, silt, and sand, with interbedded strata of unconsolidated sand, and semiconsolidated and unconsolidated gravel, as much as 1000 feet thick. Characteristically tuffaceous sand and gravel. Conformably overlies undifferentiated Yakima basalt and Wenas(?) basalt member of the Yakima. Yields moderate to large amounts of water in eastern half of valley.
Tyw, upper part of basalt sequences, as much as 250 feet thick, separated from main body of Yakima basalt by unnamed member of Ellensburg formation. May be equivalent to Wenas basalt of Smith (1903). Locally may contain significant aquifers.
Tei, unnamed discontinuous member of Ellensburg formation between Wenas(?) basalt member and main body of Yakima basalt. Principally indurated mixture of pumiceous sand, silt, and clay, as much as 75 feet thick. May be equivalent to lower Ellensburg of Smith (1903). Not an important aquifer.
Ty, main body of Yakima basalt. Consists of a sequence of basaltic lava flows more than 2000 feet thick. Mostly impermeable but contains permeable zones that yield large amounts of water.

Contact
Dashed where approximately located

Axis of anticline
Dashed where approximately located; queried where inferred

Inferred axis of syncline

Strike and dip of beds

Strike and dip of overturned beds

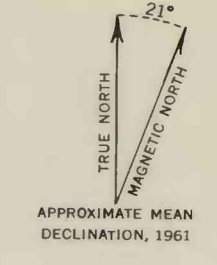
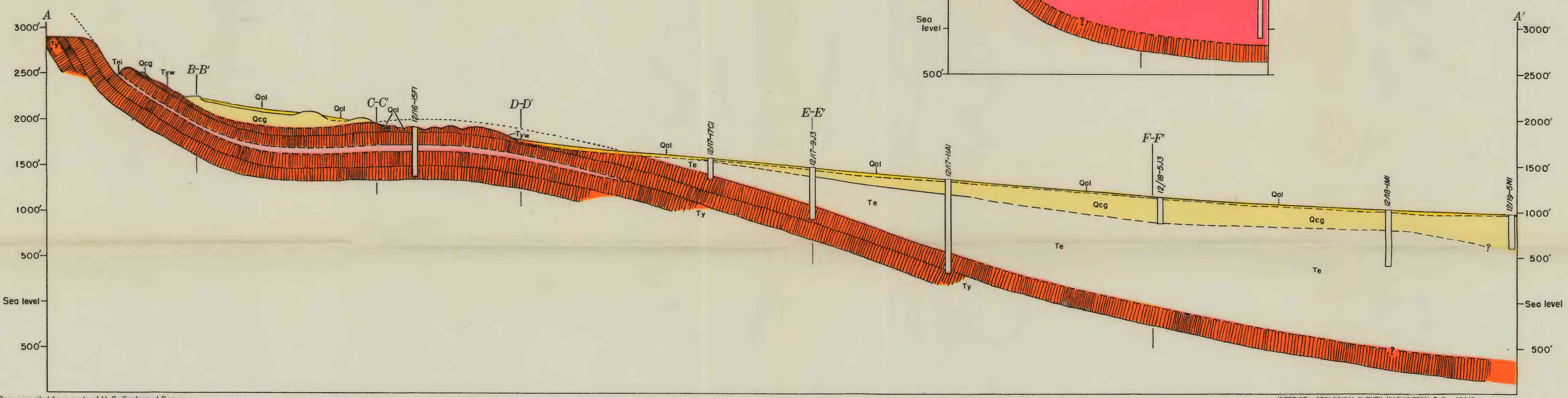
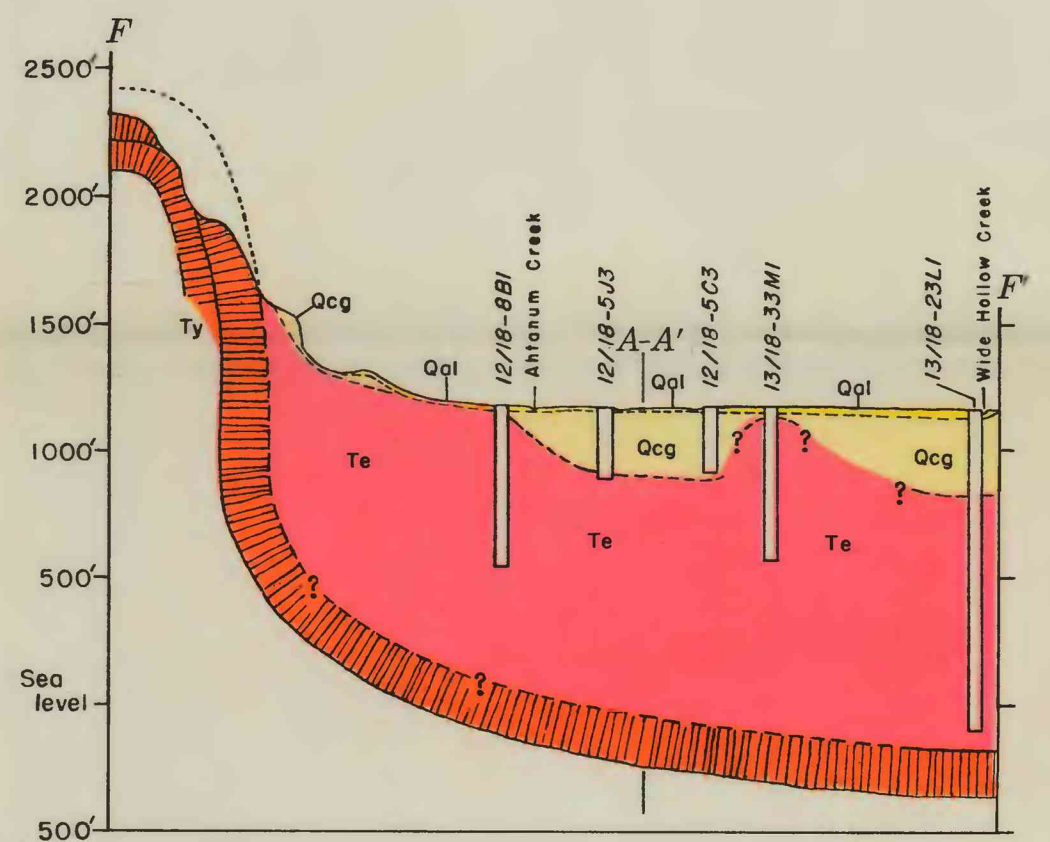
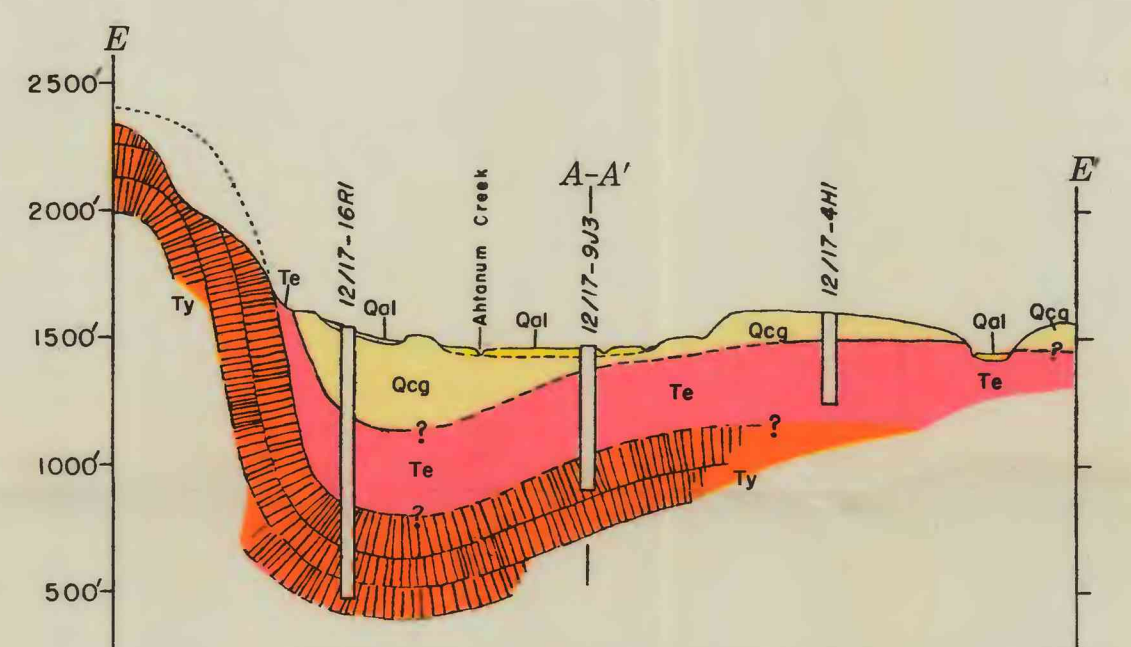
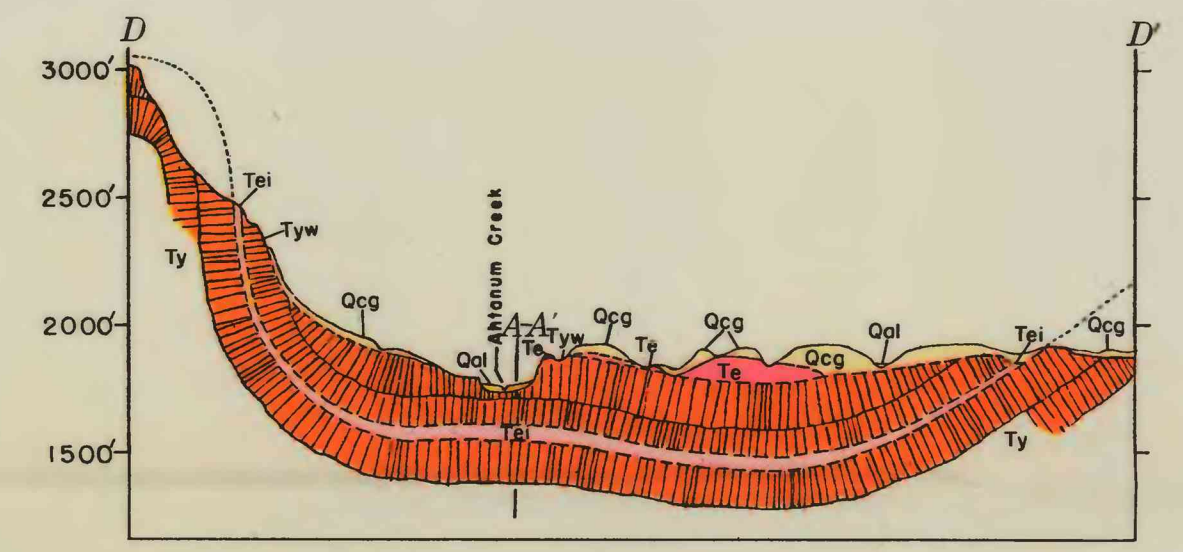
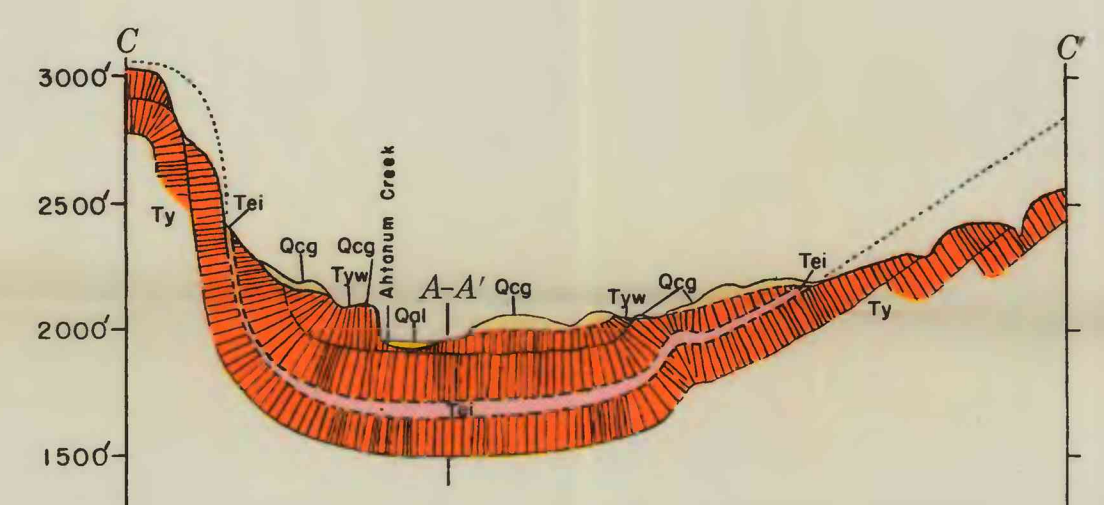
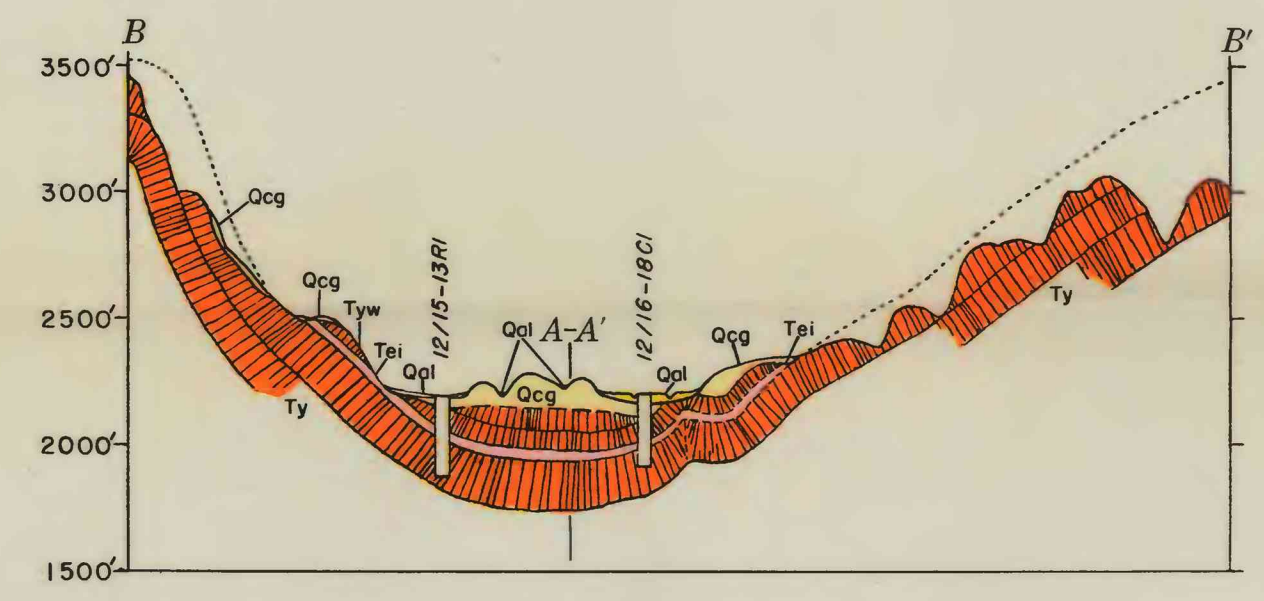
Horizontal beds

Nonflowing well

Flowing well

Stream-gaging station, in operation

Stream-gaging station, discontinued



Base compiled from parts of U. S. Geological Survey
Ellensburg and Yakima East topographic
quadrangles and aerial photographs

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—10443

**GEOLOGIC MAP AND SECTIONS OF AHTANUM VALLEY, SHOWING LOCATION OF REPRESENTATIVE
WELLS, YAKIMA COUNTY, WASHINGTON**

