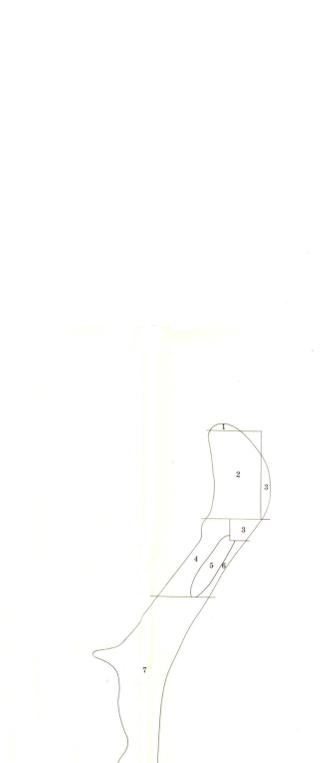
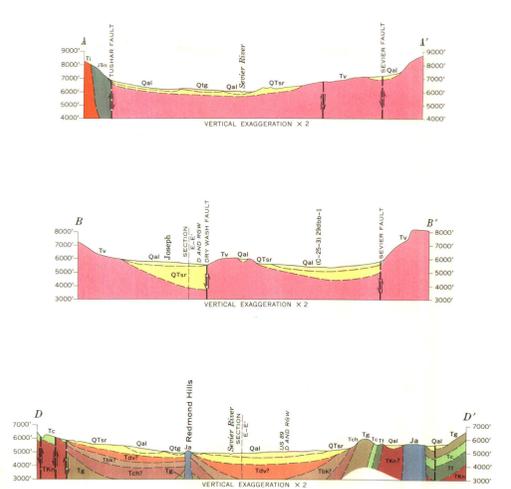
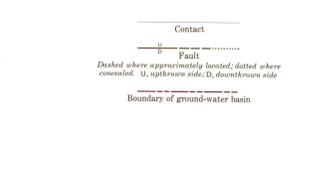




EXPLANATION

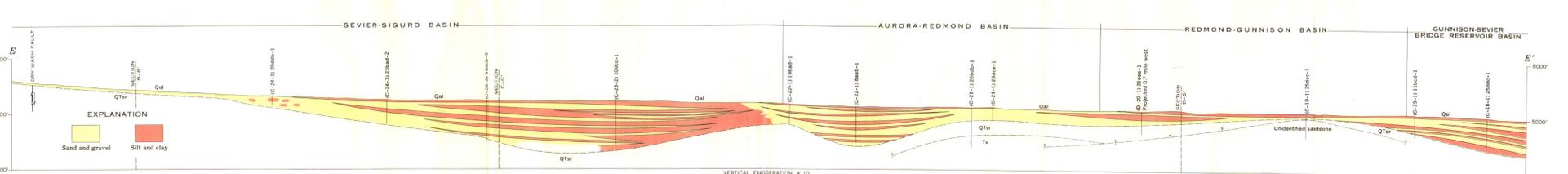
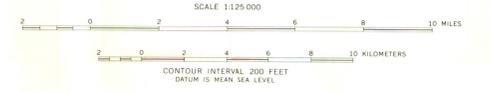
Qal	Alluvium Alluvium and alluvial fans composed of poorly to well-sorted clay, silt, sand, gravel, and boulders; 0-800+ ft thick. In the central Sevier Valley floor contains thick sand and gravel deposits which yield large amounts of water.	QUATERNARY
Ql	Landslide deposits Unsorted slide material, not a source of ground water.	
Qte	Terrace gravel Deposits of poorly sorted sand and gravel along present and former stream channels; 0-20 ft thick. Generally well drained, but some of the larger bodies yield water to springs and shallow dug wells.	
Qter	Sevier River Formation Perglomerate deposit consisting of silt, sand, gravel, cobbles, and boulders derived from adjacent highlands by torrential runoff; very poorly sorted; 0-800 ft thick. Includes Axtell Formation of Spieker (1949, p. 89). Yields small amounts of water to wells in most areas.	TERTIARY OR QUATERNARY
Ti	Intrusive rocks Quartz diorite, quartz monzonite, and monzonite intrusive into Ballous Canyon Volcanics. Much of the mineralization is associated with the quartz monzonite. Does not yield ground water in area.	TERTIARY
Tv	Volcanic rocks Includes Joe Lott Tuff, Mount Baldwyn Rhyolite, Dry Hollow Formation, Roger Park Basaltic Breccia, and Ballous Canyon Volcanics; 7,000-15,000 ft thick. Most are slightly permeable. The Dry Hollow Formation, which contains joints and elongate vesicles, serves as a ground-water reservoir that is a source of water for many springs.	
Tdv	Dipping Vat Formation of McCookey (1960) Evenly bedded to lenticular sandstone containing glass shales and rock fragments with sparse lenses of clay and silty limestone; about 200 ft thick. It is extremely permeable in some parts of the area, but no wells are known to penetrate the formation.	TERTIARY
Tbk	Bald Knoll Formation of Gilliland (1951) Pastel-colored clay, siltstone, sandstone, limestone, and pyroclastics; 600-1,000 ft thick. Very poorly consolidated. Eroded by sheetwash to form ball-and-socket topography. A 30-ft section penetrated by well (C-11-1) 1866-1 yielded no water.	
Tch	Crazy Hollow Formation of Spieker (1949) Red and orange sandstone, siltstone, and shale, light-gray sandstone, and silt-and-pepper sandstone of fluvial origin; 600-1,000 ft thick. The deep beneath the floor of the valley for development. Rockfall Springs, (C-25-3) 1866-1, issues from this formation.	TERTIARY
Tg	Green River Formation Massive to thin-bedded white to yellowish-gray limestone and green to grayish-green shale of lacustrine origin; 100-1,500 ft thick. May yield water where joints or solution cavities are developed in the limestone member.	
Tc	Colton Formation Evenly bedded brownish-red shale and sandstone of fluvial origin; 0-1,000 ft thick. Slightly permeable to ground water.	TERTIARY
Tf	Flagstaff Limestone White to red massive to thin-bedded limestone, siltstone, and sandstone of lacustrine and fluvial origin; 100-1,500 ft thick. No wells are known to penetrate this formation, but it yields about 1,800 gpm to Fayette Springs, (D-25-1) 1866-1, from a solution cavity.	
Tkn	North Horn Formation Yellow-brown sandstone with minor gray and red shale and some conglomerate of lacustrine or fluvial origin; 500-2,800 ft thick. Only two wells, both adjacent to the project area, are known to penetrate this formation, which yields water principally from joints.	CRETACEOUS
Ker	Price River Formation Buff sandstone to red boulder conglomerate; 800-2,000 ft thick. Wells are not known to penetrate this formation in the project area.	
Ki	Indiana Group Sandstone and conchoidal shale; 7,000-15,000 ft thick. Wells are not known to penetrate this group in the project area.	JURASSIC
Jm	Morrison(?) Formation Red coarse sandstone and conglomerate; about 1,800 ft thick. Wells are not known to penetrate this formation in the project area.	
Js	Araptan Shale Red and gray shale and red and gray fine-grained sandstone containing silt and gypsum; reaches a maximum thickness of about 15,000 ft. Slightly permeable. Contributes chloride and sulfate to percolating water.	TRIASSIC (?)
Jn	Navajo Sandstone Red to white cross-bedded sandstone; caps the top of the upthrust block west of the Tushar fault. Thickness here is unknown. Generally permeable.	



The geology of the central Sevier Valley was compiled and revised in 1960 by R.A. Young from the following sources:

- 1 Land & topography by R.A. Young
- 2 Gilliland (1951)
- 3 Spieker (1949)
- 4 Herman Lauthschlager (written commun., 1952)
- 5 Harby (1952)
- 6 McCookey (1960)
- 7 Callahan and Fisher (1961, 1962a, b), and Willard and Callaghan (1962)

Base from U.S. Geological Survey 250,000 series quadrangles: Price 1956, Salina 1956, and Richfield 1953



GENERALIZED GEOLOGIC MAP AND SECTIONS OF THE CENTRAL SEVIER VALLEY FLOOR AND ADJACENT UPLANDS, UTAH