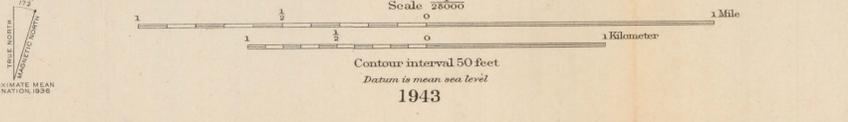


EXPLANATION		
SEDIMENTARY ROCKS		
Recent	Qal	Alluvium (Flood-plain deposits of gravel, sand, and silt)
QUATERNARY	Ql	Talus, rockstreams, and alluvial fans (Angular rock waste; only large areas mapped)
	Qs	Landslides
Pleistocene	Qm	Moraines
Middle (?) Jurassic	Jn	UNCONFORMITY
	Jn	Nugget sandstone (Mainly whitish sandstone)
TRIASSIC (?)	Ta	Ankareh shale (Mainly red shale; some sandstone)
	Tt	Thaynes formation (Limestone, sandstone, and shale)
Lower Triassic	Tw	Woodside shale (Fine-grained thin-bedded shale, mainly red)
	Cpc	Park City formation (Limestone, sandstone, quartzite, shale, and a little phosphate rock)
Permian	Cw	Weber quartzite (Chiefly fine-grained quartzite and sandstone with some interbedded cherty limestone)
	Cmo	Morgan (?) formation (Limestone interbedded with sandstone and shale and having a conglomerate at the base)
Pennsylvanian	Ch	UNCONFORMITY
	Ch	Humburg formation (Limestone interbedded with sandstone and shale)
Mississippian	Cdm	Deseret and Madison limestones (Deseret, mostly dark gray, dolomitic, and cherty but includes white crinoidal bed; black shale at base. Madison, gray, partly magnesian, little chert; many fossils)
	Cdm	CONCEALED UNCONFORMITY (?)
Middle Devonian	Dj	Jefferson (?) dolomite (Mostly gray thick-bedded dolomite; some thin-bedded and shaly layers; wags in some layers; no chert; few fossils; sandstone at base)
	Cm	UNCONFORMITY
Upper Cambrian	Cm	Maxfield limestone (Upper and lower parts dolomitic; middle part mottled limestone with interbedded shale)
	Cc	Ophir shale (Chiefly shale, but includes a medial stratum of mottled limestone)
Middle Cambrian	Cta	Tintic quartzite (Light-colored quartzite, fine to coarse, with conglomerate at base)
	Ct	UNCONFORMITY
Lower Cambrian	Ct	Tillite interbedded with varved shales (Dark-colored, weathering reddish brown)
	preC	UNCONFORMITY (?)
PRE-CAMBRIAN	preC	Quartzite, sandstone, and shale, undifferentiated
	preC	IGNEOUS ROCKS
INTRUSIVES	sd	Silicic dikes (Whitish alaskite porphyry)
	ld	Lamprophyre dikes (Dark rocks, much weathered)
PROBABLY LATE CRETACEOUS OR TERTIARY	ind	Intermediate dikes (Monzonite, granodiorite, and diorite porphyries; in part metamorphosed)
	qm	Quartz monzonite (Little Cottonwood stock) (Coarse-grained, light-gray, mostly porphyritic)
	ga	Granodiorite (Alta stock) (Porphyritic facies stippled)
	di	Diorite (Clayton Peak stock) (Darker and finer than granodiorite)
	di	Small bodies of diorite near mouth of Mill D South Fork (Gray, medium fine-grained)
		Fault or fissure, showing downthrown side
		Overthrust low-angle fault; T, overthrust side
		Strike and dip of bedding
		Strike of vertical bedding

Topography by R. H. Sargent, R. W. Burchard, and American Smelting and Refining Co. Control by R. H. Sargent and R. W. Burchard Surveyed in 1903, 1905, 1919, and 1930 Culture revised in 1936 by W. B. Upton Jr.

GEOLOGIC MAP OF COTTONWOOD-AMERICAN FORK AREA, UTAH

Geology by F. C. Calkins and B. S. Butler assisted by W. H. Bradley



APPROXIMATE MEAN DECLINATION 1938