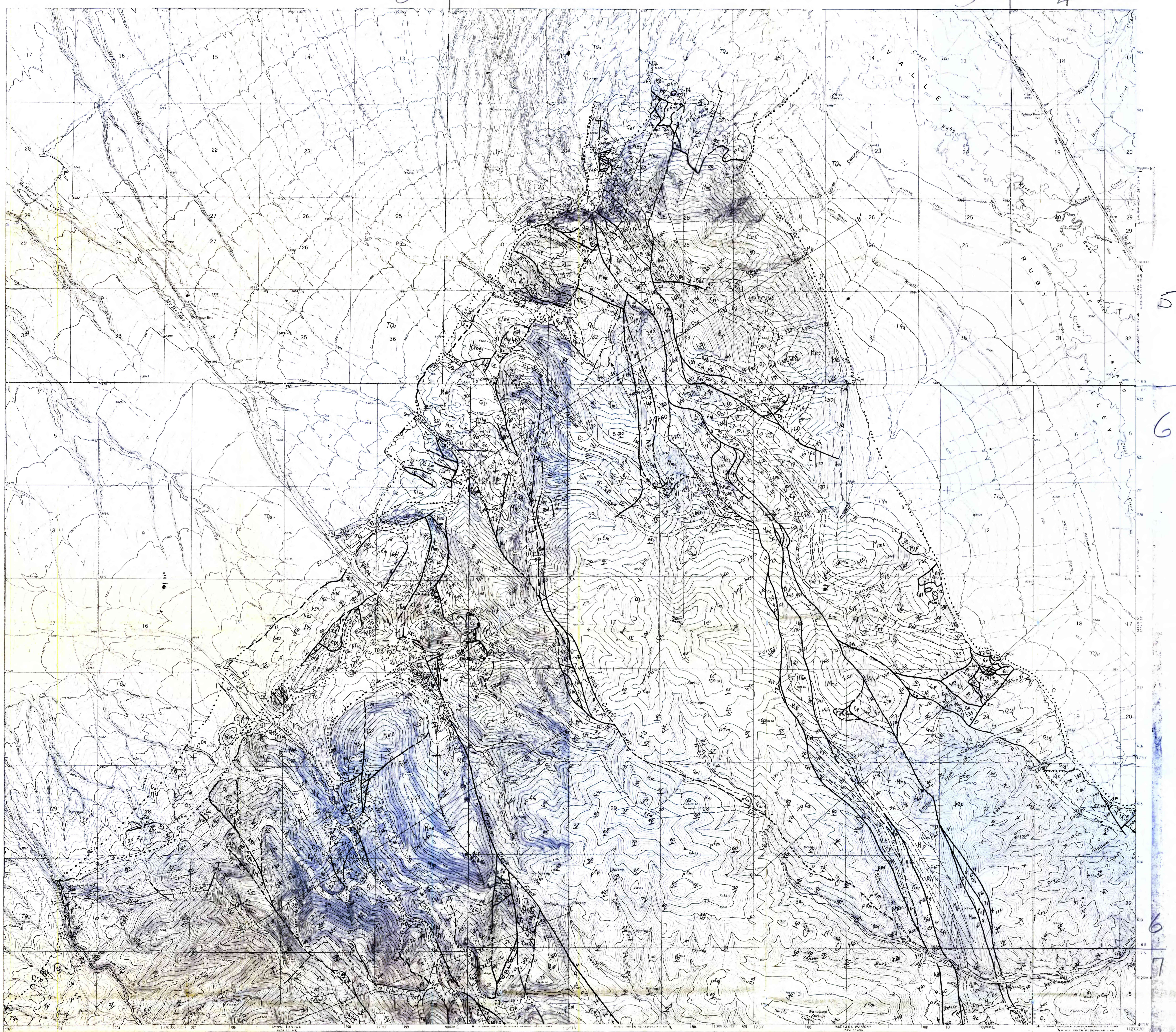


**GEOLOGY, NORTHERN END OF RUBY RANGE
MADISON CO, MONTANA**

by
RUSSELL G. TYSDAL
1970



UNIT	DESCRIPTION	UNIT	DESCRIPTION
Qcp	PROVINCIAL RAMPART	Mk	KIBBY FORMATION Reddish thin- and medium-bedded dolomite, commonly silty.
Qgm	GLACIAL MORAINES Small terminal moraine.	Mnc	MENSTON CANYON LIMESTONE Light gray weathering medium- and thick bedded limestone. Solution breccia in upper part. Chert nodules and stringers occur locally.
Qm	MASS MOVEMENT DEPOSITS Includes Landslide deposits (Qm), earth-flowage deposits (Qm), and slump deposits (Qm).	Mip	INDREPOLE LIMESTONE Two units. Lower one-half of formation is yellowish brown silty shaly beds. Upper one-half is light gray weathering thin- to thick-bedded fossiliferous limestone.
Qc	COLLUVIUM Unconsolidated angular rock fragments in hillwash and talus.	Dp	THREE FORKS FORMATION Three units. Loam Creek Member (at base) is evaporite solution breccia and thinly bedded limestone. Trident member is olive green clay shale. Laramie member is siltstone.
Qal	ALLUVIUM Unconsolidated material deposited along streams.	Dj	JEROME FORMATION Dark yellowish brown thin- to thick-bedded dolomite. Partly contains thin silty shaly beds at several horizons.
Qcm	UNNAMED CONGLOMERATE Angular to subangular pebbles, cobbles, and locally boulders in sandy matrix. Reflects lithologies of nearby outcrops. Occurs at range margin.	C2	RED LION FORMATION Two units. Dry Creek member at base is olive green and brown fissile clay shale. Overlying base member is brownish, commonly silty, dolomite with coarse stromatolites locally in upper part.
Qsf	TUPE Light gray porous limestone. Lower one-half contains local and spring deposits.	Cp	FLORISS LIMESTONE Two units. Lower one is pale yellowish brown thin- to thick-bedded dolomite. Upper unit is brown to reddish thin-bedded dolomite with much quartz sand.
Tm	TRIASSIC-WATERFURY UNDIVIDED Includes Oligocene sediments locally, Miocene-Liocene rocks, minor volcanic rocks, loess deposits, gravel, alluvium, and caliche.	Ck	POW SHALE Olive green fissile clay shale with minor thin claystone beds in lower part and minor thin dolomite beds in upper part.
Td	OLIGOCENE SEDIMENTS Gray and green mudstone, sandstone, siltstone, and locally conglomerate.	Ck	MERCER LIMESTONE Mostly pale yellowish brown dolomite, thin- to thick-bedded; locally light gray limestone. Much commonly forms good outcrop.
Tv	EXTENSIVE IGNEOUS ROCKS Andesitic breccia.	Cv	WOOLLY SHALE Olive green clay shale, fissile. Sandy in lower part. Commonly covered.
Tfb	INTRUSIVE IGNEOUS ROCKS Three types. Basaltic composition (Tfb), basaltic composition (Tfb), and andesitic composition (Tfb). Form sills and dikes.	Cf	FLATHEAD SANDSTONE White to pale shades of pink and brown, medium- to coarse-grained quartz sandstone, locally conglomeratic.
KB	BEAVERHEAD CONGLOMERATE Conglomerate composed of quartzite clasts, KTb; carbonate-rock clasts, KTb; or a mixture, KTb.	pm	METAMORPHIC ROCKS Many rock types. Includes metachert, amphibolite, quartzite, and quartzofelsitic gneiss.
Pm	QUADRANT SANDSTONE Interbedded light gray thick-bedded limestone and pale gray to orange fine-grained quartz sandstone.		

