



QUATERNARY unconsolidated alluvial, colluvial, fluvial and glacial deposits

UPPER MEMBER: light to medium grey weathering dolostone; commonly thickly bedded; locally fossiliferous

> VOLCANICLASTIC MEMBER: grey, green and orange weathering volcaniclastic sandstone and conglomerate; locally fossiliferous LOWER MEMBER: light to medium grey weathering saccharoidal dolostone containing minor grey chert

CAMBRIAN TO DEVONIAN

EDBv

€DBI

EDIACARAN

BLUEFLOWER FORMATION: brown weathering shale and

GAMETRAIL FORMATION: well bedded and laminated grey, buff, maroon, yellow-orange, and green weathering silty lime and

CRYOGENIAN-EDIACARAN

RAVENSTHROAT FORMATION: grey and cream weathering dolostone containing interlayered grey and black chert; local chaotic bedding and tepee structures

> MOUNT PROFEIT DOLOSTONE/ICE BROOK FORMATION: grey and cream weathering dolostone; interval of light grey weathering carbonate-clast diamictite at top unit

CRYOGENIAN

orange, maroon and brown weathering clast to matrix-supported conglomerate and diamictite; maroon and green mudstone and sandstone intervals

> CALLISON LAKE FORMATION light to medium grey weathering dolostone containing irregular chert layers; commonly laminated; intervals of silica replaced oolitic

grainstone; local hematite-cemented conglomerate **HEMATITE CREEK GROUP**

laminated, medium to very thickly bedded, grey, purple and orange weathering quartz and arkosic sandstone, containing subordinate

mudstone, limestone, red-weathering stromatolitic dolostone, and orange-weathering dolostone and dolomitic siltstone

MESOPROTEROZOIC "VAL DOLOSTONE"

> dark and light grey laminated dolostone; local breccia and zebra textures; probably equivalent to Rubble Creek Formation, Pinguicula Group

HART RIVER SILLS medium grey weathering fine to medium-grained greenish-grey gabbro sills and dikes (ca. 1380 Ma.) mPH

PALEOPROTEROZOIC

fossil collection..

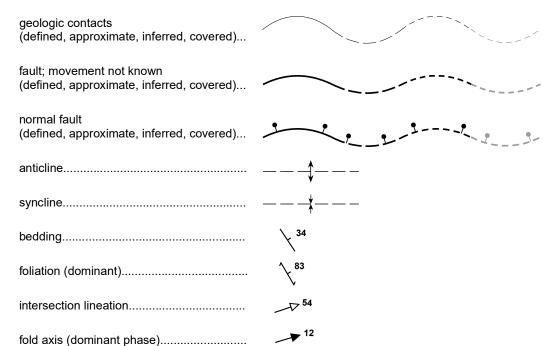
LOWER CARBONATE UNIT well-bedded, laminated, grey and orange weathering dolostone and

limestone; commonly planar or hummocky/swaley cross-stratified; intervals of dolomitic/calcareous mudstone and sandstone; local intraclast rudstone; probably equivalent to Gillespie Lake Group, Wernecke Supergroup

LOWER CLASTIC UNIT

grey, brown, black, terracotta, green and blue weathering mudstone and fine-grained sandstone; locally phyllitic and slatey; local conglomerate; probably equivalent to Quartet Group, Wernecke Supergroup

SYMBOLS



MINERAL OCCURRENCES

MINFILE#	Name	Status	
106C 083	Vera Main	Deposit	
106C 085	Little Red	Drilled Prospect	
106C 114	Gunsight	Drilled Prospect	
106C 115	Big Red	Drilled Prospect	
106C 116	Tetrahedrite	Drilled Prospect	
106C 117	South Hill	Drilled Prospect	
106C 118	Lakes	Prospect	
106C 119	Stromatolite	Prospect	
106C 131	A-Zone	Showing	
106C 132	Paka	Drilled Prospect	
106C 134	P-Zone	Prospect	
106C 135	Siltstone	Deposit	
106C 136	West Ridge	Showing	
106C 137	South Rusty Mountain	Drilled Prospect	
106C 138	Marco	Showing	
106C 139	Scarp	Drilled Prospect	
106C 140	Jorge	Drilled Prospect	
106C 141	GD	Showing	
106C 142	Camp View	Drilled Prospect	
106C 143	NE Ridge	Drilled Prospect	
106C 144	NW Ridge	Showing	
106C 145	North Creek	Showing	
106C 146	V-Zone	Prospect	
106C 147	Canyon	Showing	
106C 148	Azure	Showing	
106C 149	Archie's Vein	Drilled Prospect	
106C 150	North Kill	Drilled Prospect	

NOTE: MINFILE locations () indicated on map. For all occurences, the deposit type is considered to be Manto/MVT, and the commodity is Pb-Zn-Ag.

FOSSIL COLLECTIONS

Мар#	Age	STATION	Fossil	AUTHOR	Map Unit
1	Silurian	19TA006	Macrofossil	R.B. BLODGETT	€Dви
2	Middle Ordovician-Early Silurian	19TA091	Macrofossil	R.B. BLODGETT	€D _B v

NOTES

Geology by T. Ambrose (2019) with additional information from Eaton (1999) and Colpron et al. (2013). The geology of this area is described in more detail in Ambrose and Bowie (2020). Thanks to Cantex Mine Development Corporation for logistical support in the field.

Digital cartography and drafting by Tyler Ambrose, Yukon Geological Survey.

Any revisions or additional geological information known to the user would be welcomed by the Yukon Geological Survey.

Paper copies of this map may be obtained from the Yukon Geological Survey, Energy, Mines and Resources, Government of Yukon, P.O. Box 2703 (K-102), Whitehorse, Yukon, Y1A 2C6., Email: geology@gov.yk.ca.

A digital PDF of this map may be accessed free of charge from the Yukon Geological Survey website: https://data.geology.gov.yk.ca/Reference/95835.

RECOMMENDED CITATION

Ambrose, T.K., 2019, Preliminary bedrock geology map of the southern Rusty Mountain area, southern Wernecke Mountains, Yukon (parts of NTS 106C/4, 5 and 106D/1, 8). Yukon Geological Survey, Open File 2020-2, 1:50 000 scale.

REFERENCES

Ambrose, T. and Bowie, S., 2020. Preliminary report on the bedrock geology of the Rackla River area, southern Wernecke Mountains, Yukon (parts of NTS 106C/4, 5 and 106D/1, 8). In: Yukon Exploration and Geology 2019, K.E. MacFarlane (ed.), Yukon Geological Survey, p. 1–21.

Colpron, M., Moynihan, D., Israel, S. and Abbott, G., 2013. Geological map of the Rackla belt, east-central Yukon (NTS 106C/1-4, 106D/1). Yukon Geological Survey, Open File 2013-13, 1:50 000 scale, 5 maps and legend.

Eaton, J., 1999. Geochemical, Geological and Geophysical Assessment Report for the Val, Vera, Rusty, KLA, Nad and Craig Claims, Manson Creek Resources Ltd; Yukon Energy, Mines and Resource Assessment Report 093968.

YUKON MINFILE, 2019. Yukon Minfile – A database of mineral occurrences. Yukon Geological Survey, https://data.geology.gov.yk.ca/, accessed: November 1, 2019.



Yukon Geological Survey Energy, Mines and Resources Government of Yukon

Open File 2020-2

Preliminary bedrock geology map of the southern Rusty Mountain area, southern Wernecke Mountains, Yukon (parts of NTS 106C/4, 5 and 106D/1, 8) (1:50 000 scale)

Tyler Ambrose

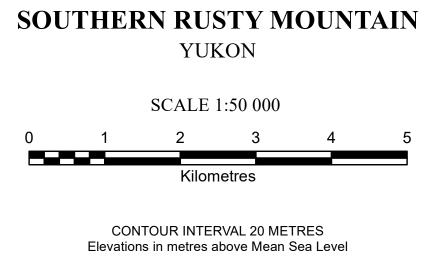


1:50 000-scale topographic base data produced by CENTRE FOR TOPOGRAPHIC INFORMATION, NATURAL RESOURCES CANADA Copyright Her Majesty the Queen in Right of Canada 30 metre shaded relief from GEOMATICS YUKON www.geomaticsyukon.ca ONE THOUSAND METRE GRID

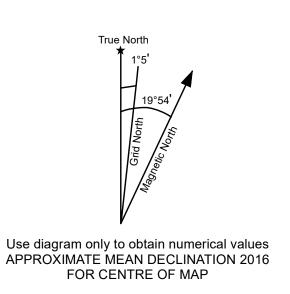
Universal Transverse Mercator Projection

North American Datum 1983

Zone 8



BEDROCK GEOLOGY



106D/9	106C/12	106C/11	
MCCLUSKY LAKE	GILLESPIE CREEK	CORN CREEK	
106D/8	106C/5 RUSTY MOUNTAIN	106C/6 BONNET PLUME PASS	
MOUNT GOOD	THIS MAP		
106D/1	106C/4	106C/3	
MOUNT WESTMAN	MOUNT MERVYN	MOUNT FERRELL	