

LEGEND

OVERLAP ASSEMBLAGES

MIOCENE (?)

WRANGELL VOLCANICS

MW coherent flow-banded andesitic to dacitic lavas and subvolcanic intrusions; silicic tuff and lapilli

OLIGOCENE

OA pebble to cobble and locally boulder, clast supported conglomerate; clast types include well-rounded to subangular rock-types found in the immediate area including mafic to intermediate volcanic and intrusive rocks, fine-grained clastics and marble

TKOPE SUITE (ca. 34-23 Ma):

OT medium to coarse-grained, plagioclase, quartz porphyry;

EARLY CRETACEOUS

KLUANE RANGES SUITE (ca. 124 - 116 Ma):

medium to coarse-grained, strongly foliated, hornblende, biotite granodiorite to quartz-diorite

PYROXENITE CREEK SUITE (ca. 124 Ma):

EKP fine to coarse-grained, strongly foliated to massive hornblende, biotite granodiorite; white to beige weathered, salt and pepper fresh; garnets common

DEZADEASH FORMATION:

JKD interbedded light to dark buff-grey lithic greywacke, sandstone, siltstone, thin dark grey shale, argillite and conglomerate; mass-flow conglomerate; rare light grey tuff

LATE TRIASSIC

BEAR CREEK ASSEMBLAGE

uTBm foliated and faulted melange-like assemblage of medium to dark green, medium to coarse-grained clastic or volcaniclastic rocks and lesser grey chert and mudstone, with local highly foliated, cm to dm scale, cream-coloured layers and lenses of more felsic composition (tuff?)

uTBs fine-grained meta-siltstone, mudstone and sandstone; phyllitic to schistose, locally more massive; abundant pyrite cubes observed in mudstone

uTBv fine to medium-grained, strongly foliated to massive intermediate to mafic meta-volcanic rocks; greenschist near fault zones; interlayered with metasedimentary rocks of uTBs and thin carbonate horizons; locally pillowed

WRANGELLIA

LATE TRIASSIC

MAPLE CREEK GABBRO (ca. 232 Ma)

uTMg medium to coarse-grained, gabbro and diorite; massive to strongly foliated near fault zones

KLUANE MAFIC/ULTRAMAFIC SUITE (ca. 232-228 Ma)

uTM medium to fine-grained peridotite, dunite and gabbro; where deformed abundant serpentinite

MCCARTHY FORMATION

uTM massive beige to cream weathered carbonate; white to light grey, strongly deformed evaporite

NIKOLAI FORMATION

uTN dark green to maroon, massive to locally foliated, amygdaloidal and vesicular basalt; rare pillow and volcanic breccia

MISSISSIPPIAN TO PERMIAN

HASEN CREEK FORMATION

Ptbc beige to white weathered, laterally discontinuous carbonate; light to dark grey banded to massive, locally strongly deformed

Pm fine-grained mudstone, siltstone and sandstone; minor volcaniclastic rocks; locally phyllitic

STATION CREEK FORMATION

CS dark green metabasalt, volcanic breccia, greenschist; minor carbonate and fine-grained siliciclastic rocks

ALEXANDER TERRANE

JURASSIC

SAINT ELIAS SUITE (ca. 152-148 Ma)

JS coarse-grained, dark brown-black, hornblende +/- biotite, granodiorite and quartz-diorite

DEVONIAN

BULLION CREEK ASSEMBLAGE

Dp fine-grained, dark to light grey phyllite and calcareous phyllite

Dc fine to medium-grained, grey-cream weathered, light grey to white marble; internally strongly deformed

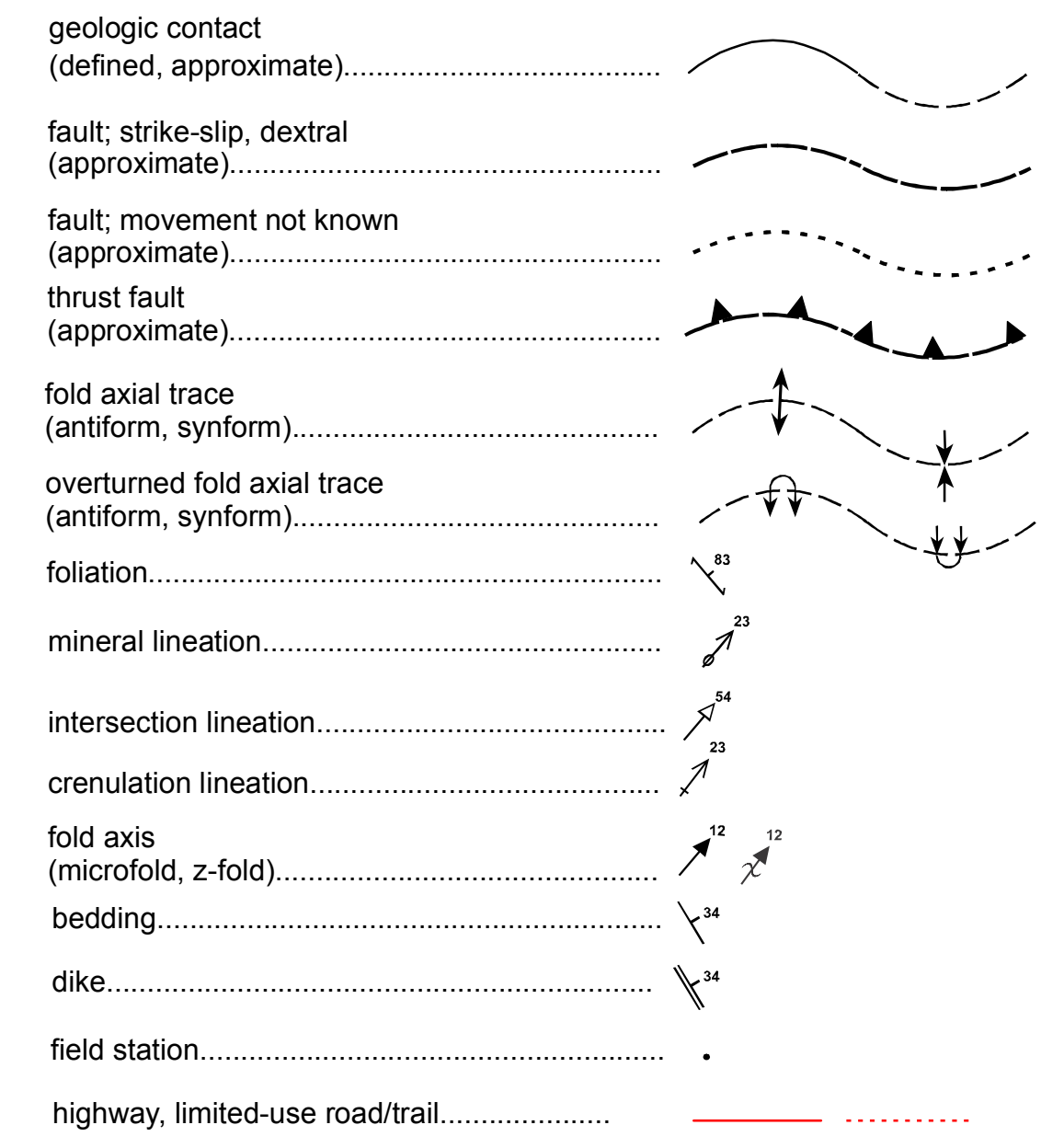
Dv dark green metabasalt, meta-volcaniclastic rocks, greenschist

LEGEND EXPLANATION

PLUTONIC SUITES: grouping of plutonic rock units based on age, regional distribution and in some cases composition

LAYERED ROCK ASSEMBLAGES: regionally mappable units generally of Group or Formation rank

SYMBOLS



MINFILE Occurrences

Number	Name	Deposit Type	Commodity
115A036	ARCHIBALD	Au-Quartz Veins	Gold
115A037	STRIDE	Podiform Chromite	Chromite
115A038	SUGDEN	Coal	Coal
115A039	FERGUSON	Unknown	Unknown
115A040	DECOELI	Gabbroid Cu-Ni-PGE	Cu-Ni-PGE
115A041	ELLEN	Volcanogenic Massive Sulfide	Copper
115A053	BH	Unknown	Unknown
115B002	KASKAWULSH	Unknown	Copper
115B003	KIMBERLY	Coal	Coal
115B004	JARVIS	Unknown	Copper
115B011	BRYSON	Coal	Coal
115B008A	TELLURIDE	Volcanogenic Massive Sulfide	Copper, Zinc
115A008B	FROHBERG	Volcanogenic Massive Sulfide	Copper, Zinc

RECOMMENDED CITATION

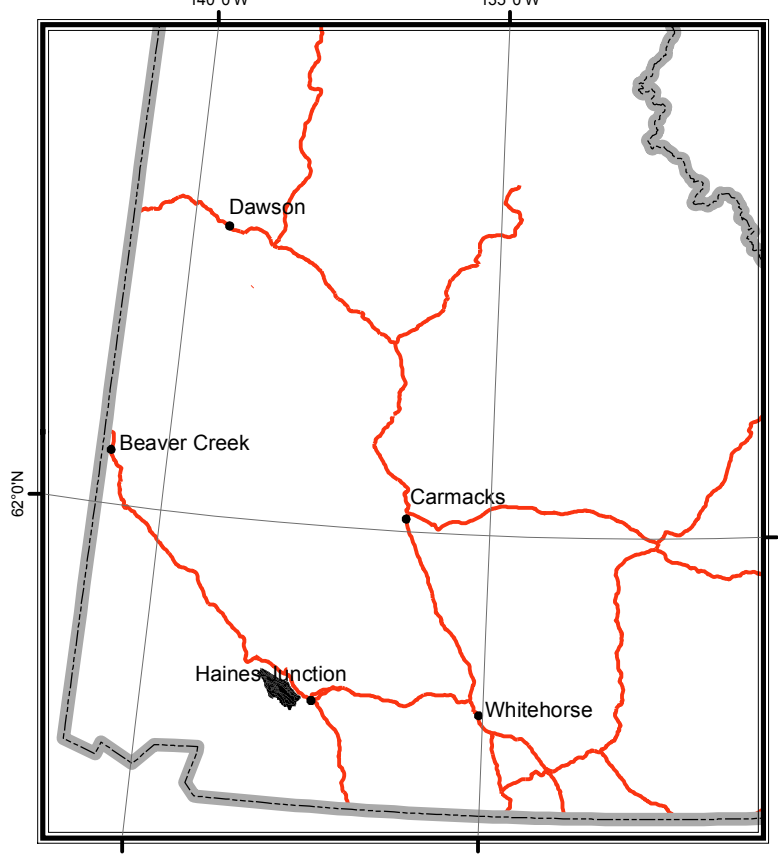
Israel, S., Colpron, M., Cudley, J., Moynihan, D., Murphy, D.M., and Relf, C. Preliminary bedrock geology of the Mt. Decoeli area, parts of NTS (115A/12, 13 and 115B/9, 16), Yukon Geological Survey Open File 2014-18.

Digital cartography and drafting by Steve Israel, Yukon Geological Survey.

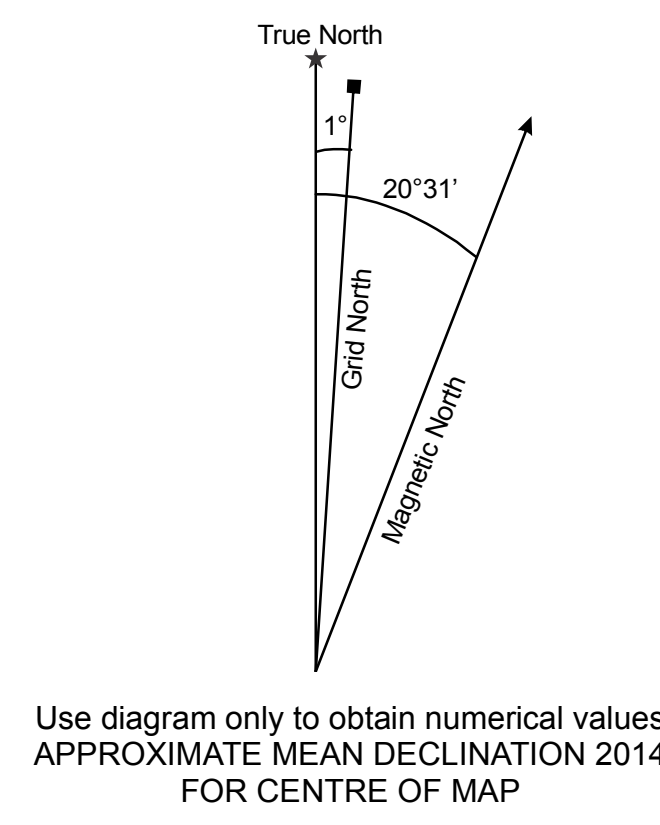
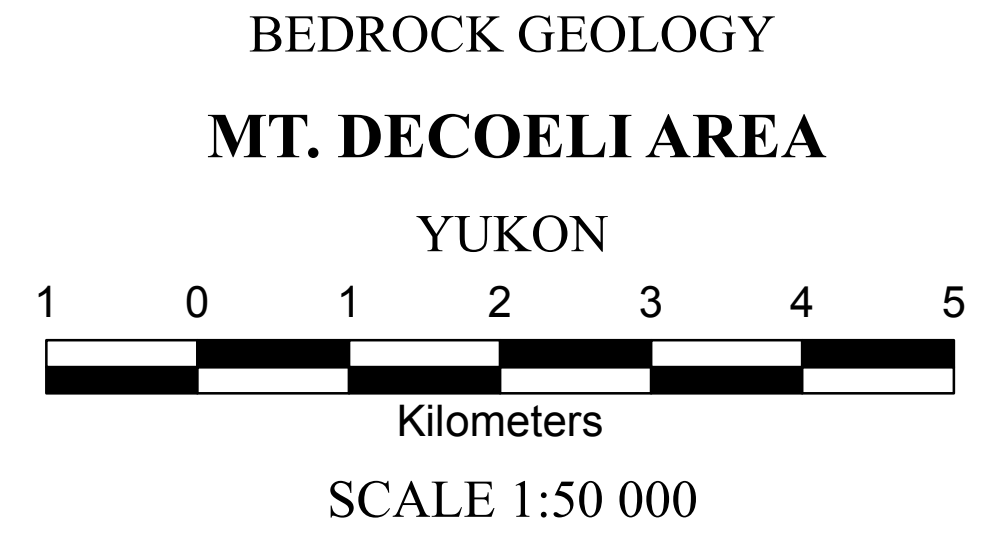
Any revisions or additional geological information known to the user would be welcomed by the Yukon Geological Survey.

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1:50 000-scale topographic base data produced by CENTRE FOR TOPOGRAPHIC INFORMATION, NATURAL RESOURCES CANADA  
ONE THOUSAND METRE GRID  
Universal Transverse Mercator Projection  
North American Datum 1983  
Zone 8  
CONTOUR INTERVAL 100 Feet  
Elevations in feet above Mean Sea Level



Yukon Geological Survey  
Energy, Mines and Resources  
Government of Yukon  
Open File 2014-18  
**Preliminary geological map of the Mt. Decoeli area, NTS 115A/12, 13 and 115B/9, 16 (1:50 000 scale)**  
by Steve Israel, Maurice Colpron, Joel Cudley, David Moynihan, Don Murphy and Carolyn Relf