

LEGEND

INTRUSIVE ROCKS

MIOCENE

Wrangell Suite

Mw fine to medium-grained, feldspar-quartz-porphyritic granite

EARLY CRETACEOUS

Pyroxenite Creek

EKP medium-grained hornblende, pyroxene gabbro

Ekum dark green to black, medium-grained pyroxenite

LAYERED ROCKS

MIOCENE

Wrangell volcanics

Nw2 fine-grained, dark grey to black basalt; blegg. fine to medium-grained crystal tuff with porphyritic feldspar

WRANGELLIA

TRIASSIC

Chitistone Limestone

uTC light to medium grey, massive to bedded limestone

uTCg light grey to white, massive to laminated gypsum

Nikolai formation

DK17b dark green and maroon weathered and fresh, massive to locally foliated, amygdaloidal and vesicular basalt flows; rare pillows

Hasen Creek Formation

Phc grey to brown, fine-grained sandstone interbedded with medium to coarse-grained sandstone; locally beds of conglomerate

ALEXANDER TERRANE

DEVONIAN TO TRIASSIC

Icefield assemblage: Silver Creek member

Dk17 green and maroon, foliated pebble conglomerate, green, fine-grained banded tuff and fine to medium-grained volcanoclastic sandstone; pyroxene-bearing basalt breccia; rare fossiliferous marble

Dk17b grey to brown, coarse-grained, lithic sandstone; grey-brown, fossiliferous limestone

Icefield assemblage

Dk11 fine to very fine grained, calcareous, feldspar-quartz-muscovite schist and phyllite

Dk12 fine-grained, carbonaceous, calcareous, quartz-muscovite schist and phyllite

Dk14 dark grey to black, fine-grained, thin-bedded calcareous siltstone to banded silty limestone or marble

Dk16 light grey to white, massive marble

Note: Legend units from Cobbett, 2011 and Dodds and Campbell, 1992

SYMBOLS

geologic contacts (defined, approximate, inferred).....

fault (approximate sinistral motion).....

mapping limit.....

thrust fault (defined, approximate).....

fold axial surface trace (upright - anticline, syncline).....

foliation (dominant).....

lineation (stretching, mineral).....

fold axis (dominant phase).....

fault plane.....

cross section line..... A A'

macro fossil location..... F

macro fossil location..... •

Fossil Age Determinations				
Type	Station #	Age	Fossil	Reference
1	Macro	113-CAB-77-3	Late Permian	Parafusulina Dodds et al., 1993

REFERENCE

Cobbett, R.N., 2011. Timing and kinematics of the Duke River fault: insights into the evolution of the insular terrane, southwest Yukon. Unpublished MSc thesis, University of British Columbia, 140 p.

Dodds, C.F. and Campbell, R.B., 1992. Geology of Klauene Lake map area (115G and F[E1/2]), Yukon Territory. Geological Survey of Canada, Open File, 2188, 1:25 000 scale.

Dodds, C.F., Campbell, R.B., Read, P.B., Orchard, M.J., Tozer, E.T., Bamber, E.W., Pedder, A.E.H., Norford, B.S., McLaren, D.J., Harker, P., McIver, E., Norris, A.W., Ross, C.A., Chatterton, B.D.E., Copper, G.A., Flower, R.H., Haggart, J.W., Uyeno, T.T., and Irwin, S.E.B., 1993. Macrofossil and conodont data from: SW Klauene Lake (115G and F (East half)), Mount St. Elias (115B and C (East half)), SW Dezadeash (115A), NE Yakutat (114C) and Tashshini River (114P) map areas, southwestern Yukon and northwestern British Columbia. Geological Survey of Canada, Open File 2731, 137 p.

RECOMMENDED CITATION

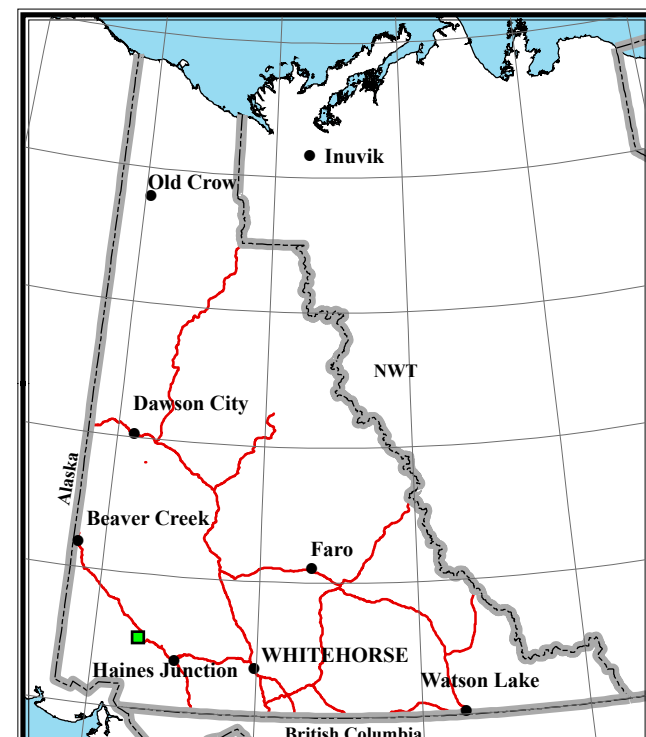
Cobbett, R., 2012. Bedrock geology along the Duke River fault near Bullion Creek, Yukon (part of NTS 115G/02) (1:10 000 scale). Yukon Geological Survey, Open File 2013-5.

Digital cartography and drafting by Rosie Cobbett, Yukon Geological Survey.

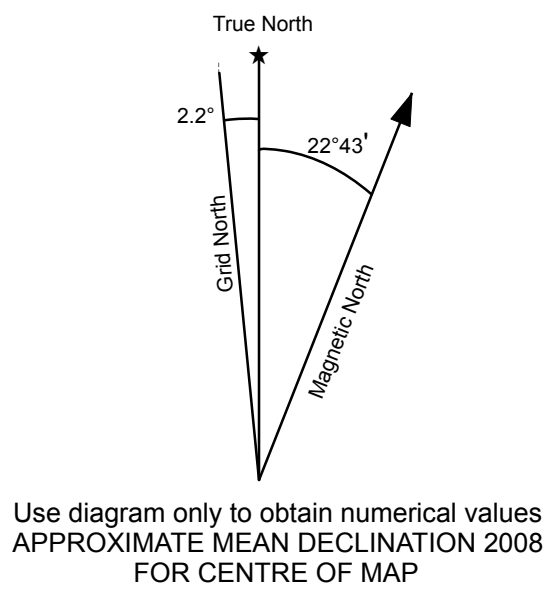
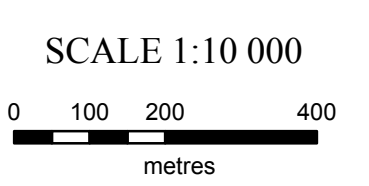
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BEDROCK GEOLOGY
THE DUKE RIVER FAULT
NEAR BULLION CREEK
YUKON



1:50 000-scale topographic base data
produced by
CENTRE FOR TOPOGRAPHIC
INFORMATION
NATURAL RESOURCES CANADA

FOUR HUNDRED METRE GRID
Universal Transverse Mercator Projection
North American Datum 1983
Zone 7

CONTOUR INTERVAL 100 Feet
Elevations in feet above Mean Sea Level

115G/06 DUKE RIVER	115G/07 BURWASH LANDING	115G/08 GLADSTONE CREEK
115G/03 BIGHORN CREEK	THIS MAP	115G/01 CULTUS CREEK
115B/14 KLUANE GLACIER	115B/15 SLIMS RIVER	115B/16 JARVIS RIVER

Open File 2013-5
Bedrock geology along the
Duke River fault near Bullion Creek, Yukon
(parts of 115G/02)
(1:10 000 scale)

by
Rosie Cobbett