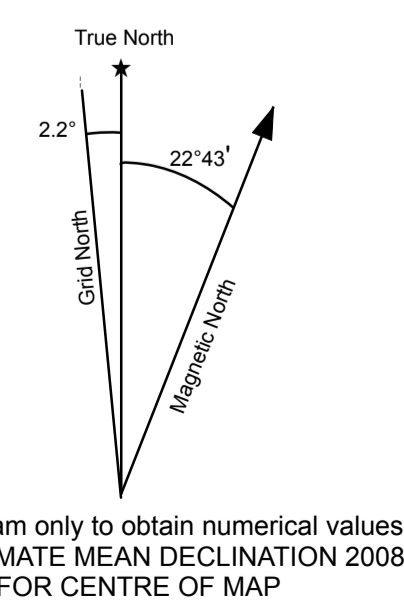
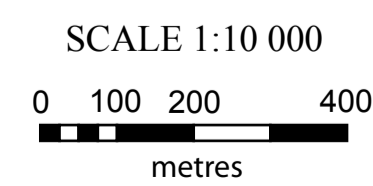


1:50 000-scale topographic base data  
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CENTRE FOR TOPOGRAPHIC  
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NATURAL RESOURCES CANADA

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

**BEDROCK GEOLOGY  
THE DUKE RIVER FAULT  
NEAR HOGE CREEK  
YUKON**



115F/09	115G/12	115G/11
TEEPEE LAKE	LYNX CREEK	NUNTAEA CREEK
115F/08	115G/05	115G/06
TEMPEST MOUNTAIN	<b>THIS MAP</b>	DUKE RIVER
115F/01	115G/04	115G/03
MOUNT STEELE	DONJEK GLACIER	BIGHORN CREEK

**LEGEND**

**INTRUSIVE ROCKS**

**MIOCENE**

*Wrangell Suite*

- Mw** fine to medium-grained, hornblende-biotite-pyroxene diorite; fine to medium-grained hornblende-biotite granodiorite to quartz monzonite occurring as dykes

**EARLY CRETACEOUS**

*Pyroxenite Creek*

- EKP** medium-grained pyroxene +/- hornblende gabbro, and biotite-hornblende diorite

**DEVONIAN**

*Steele Creek Complex*

- DSc** green to purple medium- to coarse-grained hornblende-pyroxene gabbro that is highly altered

**LAYERED ROCKS**

**WRANGELLIA**

**PENNSYLVANIAN - PERMIAN**

*Skolai Group*

*Hasen Creek Formation*

- PHc** light grey to brown, calcareous, fossiliferous packstone; medium-grained litharenite sandstone grades into a poorly bedded pebble conglomerate with coarse-grained sandstone interbeds
- PHc2** light grey, laminated to massive limestone
- PHc3** green and maroon boulder conglomerate dominated by well-rounded clasts of gabbro and diorite; locally maroon volcanic breccia with a sandy matrix

**ALEXANDER TERRANE**

**DEVONIAN TO TRIASSIC**

*Icefjeld assemblage*

- DTK1** fine-grained, calcareous, muscovite-feldspar +/- quartz schist and phyllite; very fine grained phyllonite (feldspar and clay)
- DTK2** dark grey, carbonaceous and calcareous, thin-bedded siltstone
- DTK3** dark grey, fine-grained, locally amygdaloidal, plagioclase-phyric basalt; green, volcanic breccia made up of basalt clasts; rare biege crystal tuff
- DTK4** grey, thin-bedded limestone to marble

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

Isotopic Age Determinations						
Type	Station #	Age (Ma)	Mineral	Interpretation	Reference	
1	U-Pb (TIMS)	09-RC-161A01	15.44 ±0.03	zircon	crystallization	Cobbett, 2011

**SYMBOLS**

- geologic contacts (defined, approximate, inferred).....
- fault (movement not known).....
- thrust fault (defined, approximate).....
- mapping limit.....
- fold axial surface trace (upright - anticline, syncline).....
- bedding.....
- foliation (dominant, late).....
- lineation (stretching, mineral).....
- crenulation lineation.....
- fold axis (dominant phase).....
- vein.....
- fault plane.....
- isotopic age sample locations (U-Pb).....
- cross section line.....
- field station.....

**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.J. and Campbell, R.B., 1992. Geology of the Klunene Lake map area (115G and F[1E]2), Yukon Territory. Geological Survey of Canada, Open File, 2188, 1:25 000 scale.

**RECOMMENDED CITATION**

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Digital cartography and drafting by Rosie Cobbett, 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 Geoscience Information and Sales, Yukon Geological Survey, Energy, Mines and Resources, Government of Yukon, P.O. Box 2703 (K-102), Whitehorse, Yukon, Y1A 2C6. Ph. 867-667-3201, Fax. 867-667-3198, Email: [geosales@gov.yk.ca](mailto:geosales@gov.yk.ca)

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Government of Yukon

Open File 2013-6

**Bedrock geology along the Duke River fault near Hoge Creek, Yukon (part of NTS 115G/5) (1:10 000 scale)**

by  
Rosie Cobbett