

LEGEND

OVERLAP ASSEMBLAGES

- PALEOCENE**
RHYOLITE CREEK VOLCANOPLUTONIC COMPLEX (ca. 57-54 Ma):
 PRV and PR: andesitic to dacitic volcanic breccia and subvolcanic intrusions; angular to rounded clasts of purple to grey feldspar porphyry and fine-grained intermediate volcanics within a feldspar crystal-rich, andesitic to dacitic matrix.
- RUBY RANGE SUITE (ca. 64-57 Ma):**
 PR: medium to coarse-grained, equigranular, light grey to white biotite ± hornblende granodiorite; fine to coarse-grained, salt and pepper, hornblende ± biotite, quartz diorite; very coarse grained biotite, muscovite K-feldspar pegmatite dikes; likely in part coeval with Rhyolite Creek volcanoplutonic complex.
- PRgb: medium to coarse-grained, equigranular, dark grey to black, hornblende, pyroxene gabbro to diorite, commonly strongly weathered forming crumbly outcrops, locally more leucocratic with increasing amounts of plagioclase, likely mafic phase of the Ruby Range suite.
- LATE CRETACEOUS**
CASINO SUITE (ca. 78-74 Ma):
 LKc: medium to coarse-grained, hornblende, quartz-diorite, granodiorite and diorite; local coarse-grained hornblende gabbro; abundant magnetite; locally strongly altered where in contact with PDSs and PDScs.
- CRETACEOUS**
KLUANE SCHIST:
 Kkgn: medium to coarse-grained, dark-grey, brown to orange quartz, biotite, feldspar paragneiss, abundant leucosomes composed of quartz, plagioclase and minor biotite, leucosomes are folded and sheared.
- EARLY JURASSIC**
LONG LAKE SUITE (ca. 192-178 Ma):
 EJL: medium to coarse-grained biotite, hornblende granodiorite to quartz-diorite; locally k-spar megacrystic; minor coarse-grained gabbro; plagioclase, quartz ± potassium feldspar, pegmatite dikes locally common; strongly foliated near contact with metamorphic rocks of the Yukon-Tanana terrane, massive away from contact.

- YUKON-TANANA TERRANE**
MISSISSIPPIAN TO PERMIAN
 MPgn: medium to coarse-grained biotite, hornblende granodiorite to quartz-diorite orthogneiss; locally includes quartz and/or feldspar augen up to 3 cm, commonly interlayered with amphibolitic gneiss and schist (PDSa).
- PROTEROZOIC TO DEVONIAN**
SNOWCAP ASSEMBLAGE:
 PDScs: fine to medium-grained, grey to black quartzite, carbonaceous quartz-mica schist, locally interlayered with garnet amphibolite schist and chlorite schist, may in part be interfolds of Devonian to Mississippian Finlayson assemblage of the Yukon-Tanana terrane (Murphy et al., 2006).
- PDSa: fine to very fine grained, dark grey, black and dark green amphibolite, locally chlorite schist, often garnet bearing, interlayered with marble (PDSa) and locally with carbonaceous schist (PDScs), locally forms layers of plagioclase rich amphibolitic gneiss of variable thickness within MPgn.
- PDsc: fine to medium-grained, grey-cream weathered, light grey to white marble occurring as lenses and thick layers (up to several tens of metres wide); common skarnification consisting of quartz, epidote, diopside and garnet occurs where intruded by plutonic rocks, locally includes calcisilicate (PDSsc) and thin amphibolite layers (PDSa).
- PDSsc: fine to medium-grained calcareous, quartz-muscovite schist, calcisilicate schist, and garnet, diopside and epidote skarn.
- PDSs: fine to medium-grained, sugary, massive to banded and strongly folded light grey weathered quartzite, dark grey quartz-biotite schist and quartz-feldspar biotite schist; locally abundant garnet and muscovite; medium to coarse-grained augen gneiss and biotite-rich paragneiss; kyanite, staurolite and andalusite locally common.

- 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**
- geologic contact (defined, approximate, inferred).....
- fault; movement not known (approximate, inferred).....
- foliation (dominant/early).....
- mineral lineation.....
- intersection lineation.....
- crenulation lineation.....
- fold axis (upright fold).....
- fold axial trace (upright anticline, overturned syncline/anticline).....
- bedding.....
- dike.....
- field station.....
- Road, limited-use road or trail.....
- cross section line..... A B C

MINFILE Occurrences

Number	Name	Deposit Type	Commodity
115H015	Moraine	Cu-Skarn	Cu, Au, Ag

REFERENCE

Murphy, D.C., Mortensen, J.K., Piercey, S.J., Orchard, M.J., and Gehrels, G.E. 2006. Mid-Paleozoic to early Mesozoic tectonostratigraphic evolution of Yukon-Tanana and Slide Mountain terranes and affiliated overlap assemblages, Finlayson Lake massive sulphide district, southeastern Yukon. In: Paleozoic Evolution and Metallogeny of Pericratonic Terranes at the Ancient Pacific Margin of North America, Canadian and Alaskan Cordillera: Colpron, M. and Nelson, J.L., (eds.), Geological Association of Canada, Special Paper 45, p. 75-105.

RECOMMENDED CITATION

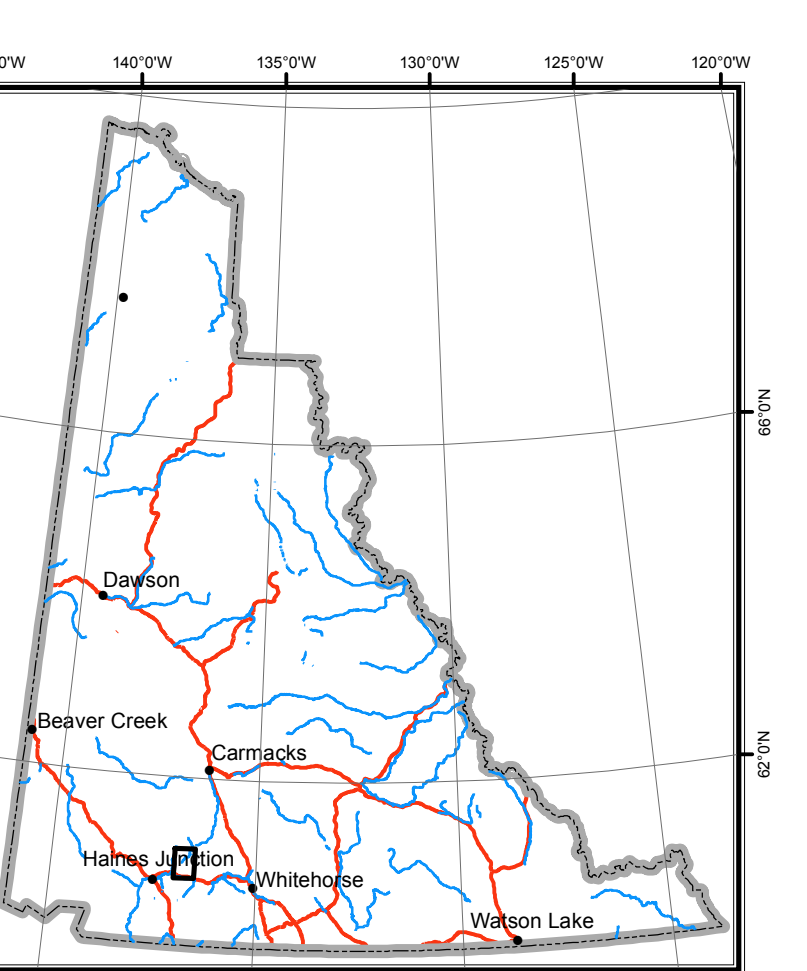
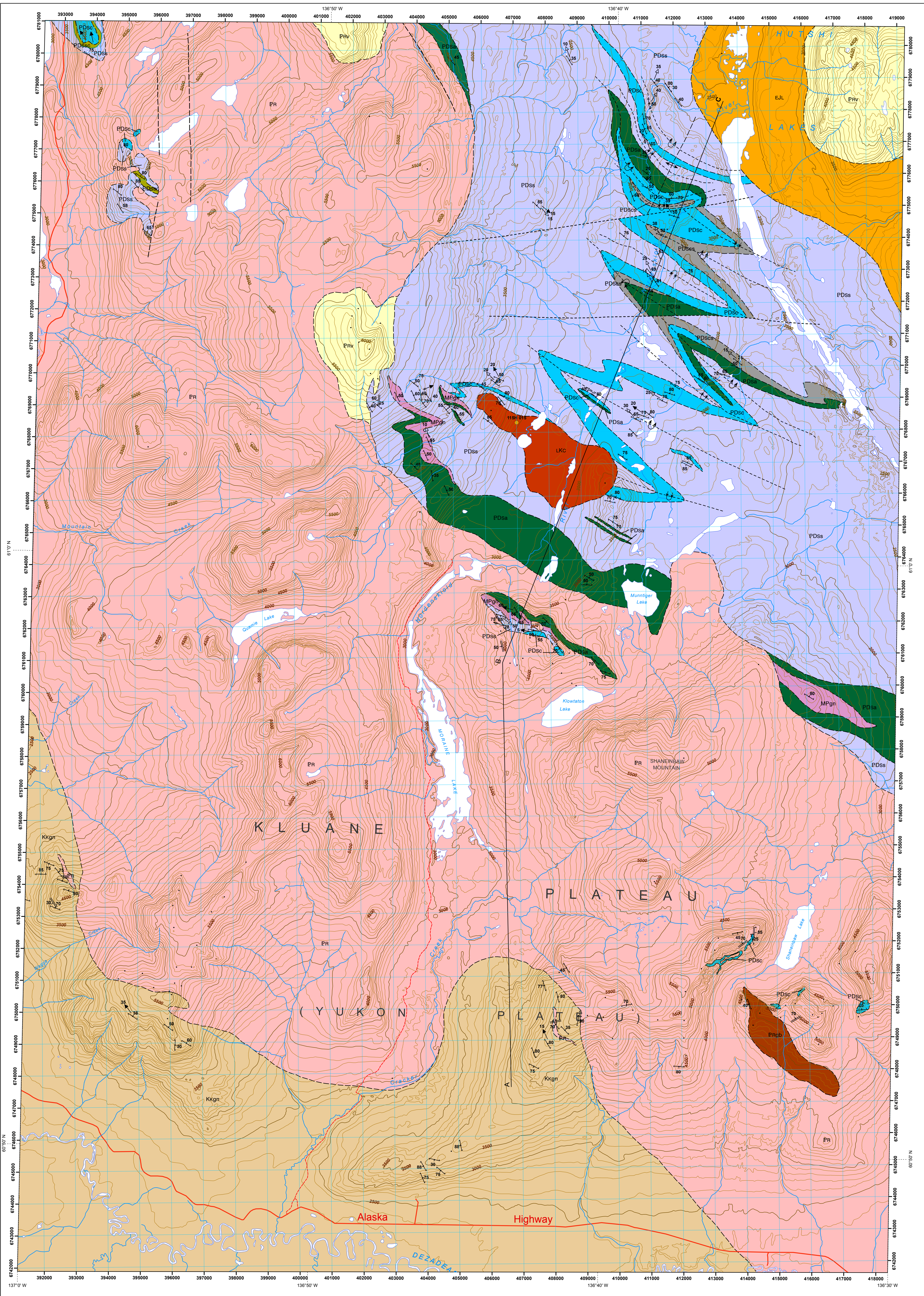
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Digital cartography and drafting by Steve Israel, Yukon Geological Survey.

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

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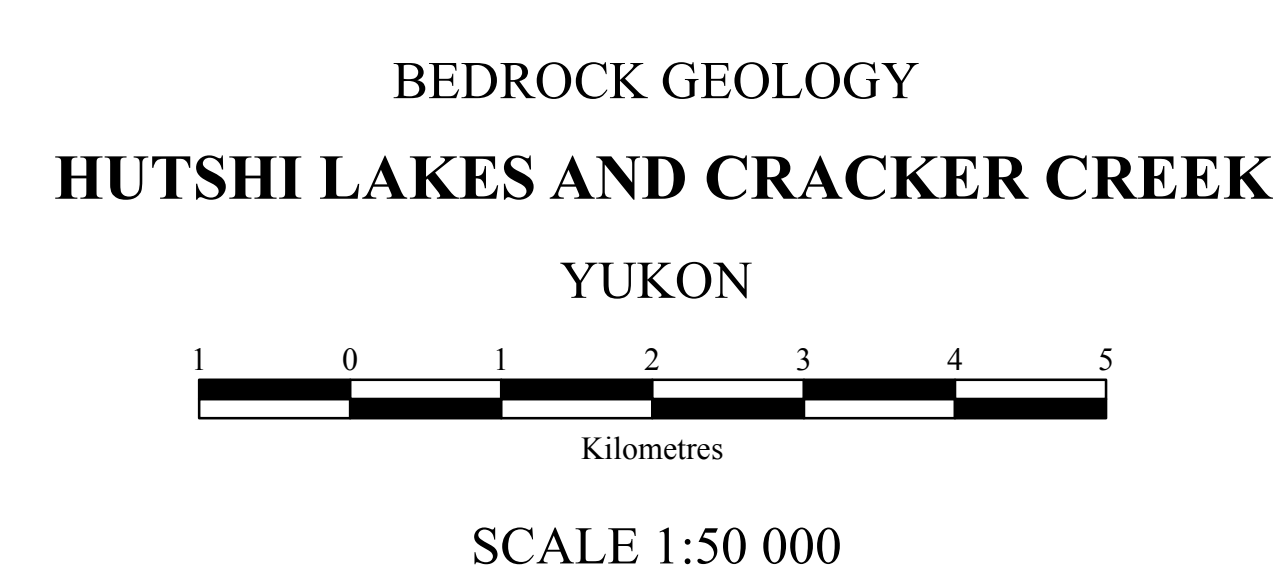
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1:50 000-scale topographic base data produced by CENTRE FOR TOPOGRAPHIC INFORMATION, NATURAL RESOURCES CANADA

ONE THOUSAND METRE GRID
 Universal Transverse Mercator Projection
 North American Datum 1983
 Zone 8

CONTOUR INTERVAL 100 Feet
 Elevations above Mean Sea Level



Itliemt Lake	Hutshi Lakes	Mount Cooper
	This Map	
Canyon	Cracker Creek	Champagne

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Preliminary geological map of the Hutshi Lakes and Cracker Creek map areas, parts of NTS 115A/15 and 115H/2 (1:50 000 scale)

by
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