

- LEGEND**
- OVERLAP ASSEMBLAGES**
- PALEOCENE**
RHYOLITE CREEK VOLCANOPLUTONIC COMPLEX (ca. 57-54 Ma):
- PRp** massive, fine to medium-grained, plagioclase porphyry; fine-grained hornblende, quartz-diorite to granodiorite
 - PRv** 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
- LATE CRETACEOUS**
CASINO SUITE (ca. 78-74 Ma):
HOPPER PLUTON (ca. 78 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 PDS and PDscs
 - LKp** fine to medium-grained hornblende, ± biotite, plagioclase porphyry; commonly strongly chlorite and sericite altered; weathers orange, brown where in contact with PDS and PDscs
- EARLY JURASSIC**
LONG LAKE SUITE (ca. 186-180 Ma):
- EJL** medium to coarse-grained biotite, hornblende granodiorite to quartz-diorite; locally k-spar megacrystic; minor coarse-grained gabbro; plagioclase, quartz ± k-spar pegmatite dikes locally common; strongly foliated near contact with metasedimentary rocks of the YTT, massive away from contact
- YUKON-TANANA TERRANE**
DEVONIAN TO MISSISSIPPIAN
FINLAYSON ASSEMBLAGE:
- DMfc** fine to medium-grained, light grey to white weathered, banded marble, up to several tens of metres thick, locally interlayered with dark grey to black, fine-grained chert and calcareous, quartz, biotite schist
 - DMF** fine to medium-grained light to dark grey, strongly to weakly carbonaceous quartzite and psammite schist; locally abundant layers of biotite-rich, quartz-feldspar schist; rare fine-grained chlorite schist
- PROTEROZOIC TO DEVONIAN**
SNOWCAP ASSEMBLAGE:
- 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 LKc and LKp
 - PDscs** fine to medium-grained calcareous, quartz-muscovite schist, calcisilicate schist, and garnet, diopside and epidote skarn
 - PDS** 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).....
 - fault, normal (approximate).....
 - foliation (dominant/early, late).....
 - cleavage.....
 - crenulation cleavage.....
 - mineral lineation.....
 - intersection lineation.....
 - crenulation lineation.....
 - fold axis (upright fold, s-fold).....
 - fold axial trace (upright anticline, overturned syncline, anticline).....
 - bedding.....
 - dike.....
 - fracture.....
 - field station.....
 - limited-use road or trail.....

MINFILE Occurrences

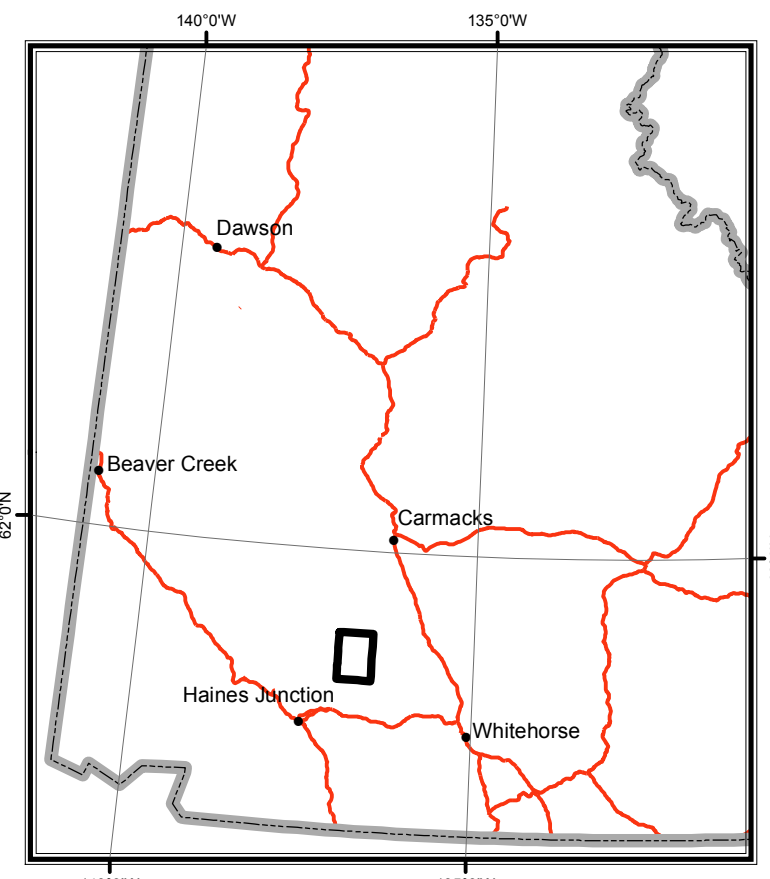
Number	Name	Deposit Type	Commodity
115H016	Gilitana	Cu-Skam	Cu, Mo
115H017	Aishihik	Cu-Skam	Cu
115H018	Janisaw	Cu-Skam	Cu
115H034	Hopper North	Cu-Skam/Porphyry	Cu, Au

RECOMMENDED CITATION
 Israel, S. and Borch, A., 2015. Preliminary geological map of the Long Lake area, Parts of NTS 115H/02 and 07 (1:50 000 scale), Yukon Geological Survey Open File 2015-32.

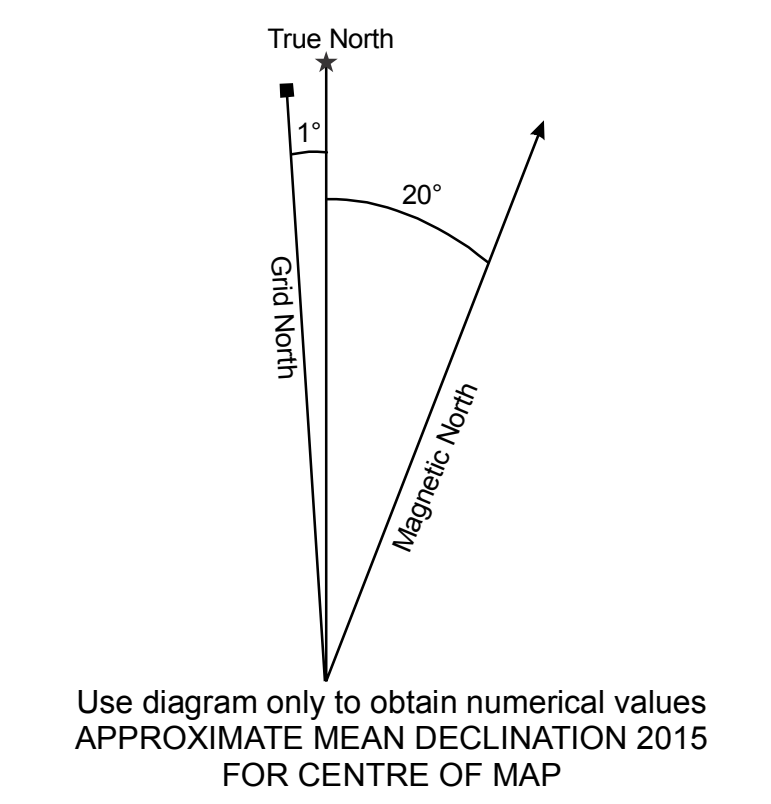
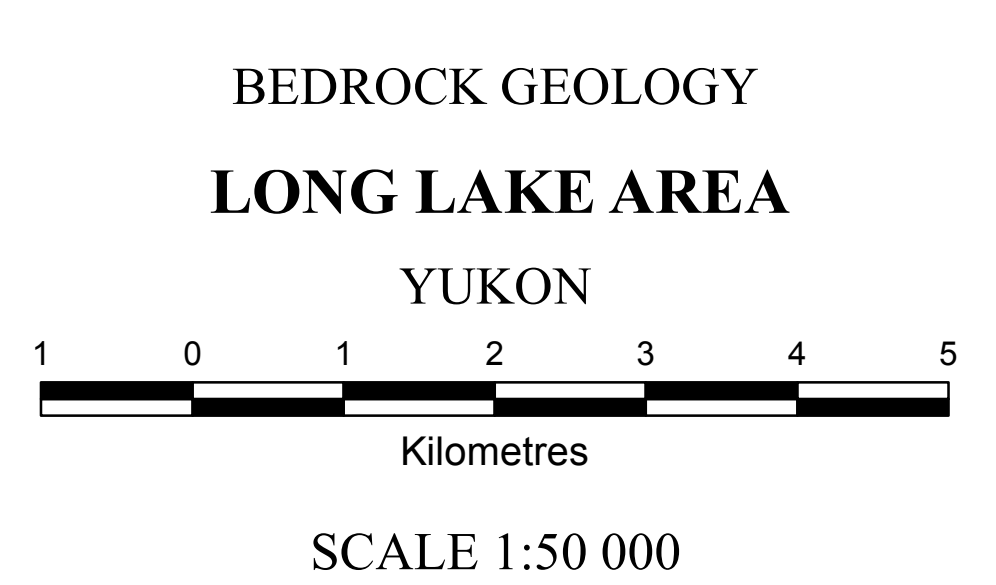
Digital cartography and drafting by Steve Israel, Yukon Geological Survey.

Any revisions or additional geological information known to the user would be welcomed by the Yukon Geological Survey.
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A digital PDF (portable document file) of this map may be downloaded free of charge from the Yukon Geological Survey website: <http://www.geology.gov.yk.ca/>



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



Yukon Geological Survey,
 Energy, Mines and Resources
 Government of Yukon
 Open File 2015-32
**Preliminary geological map of the
 Long Lake area, parts of NTS 115H/2 and 115H/7
 (1:50 000 scale)**
 by
 Steve Israel and Annie Borch