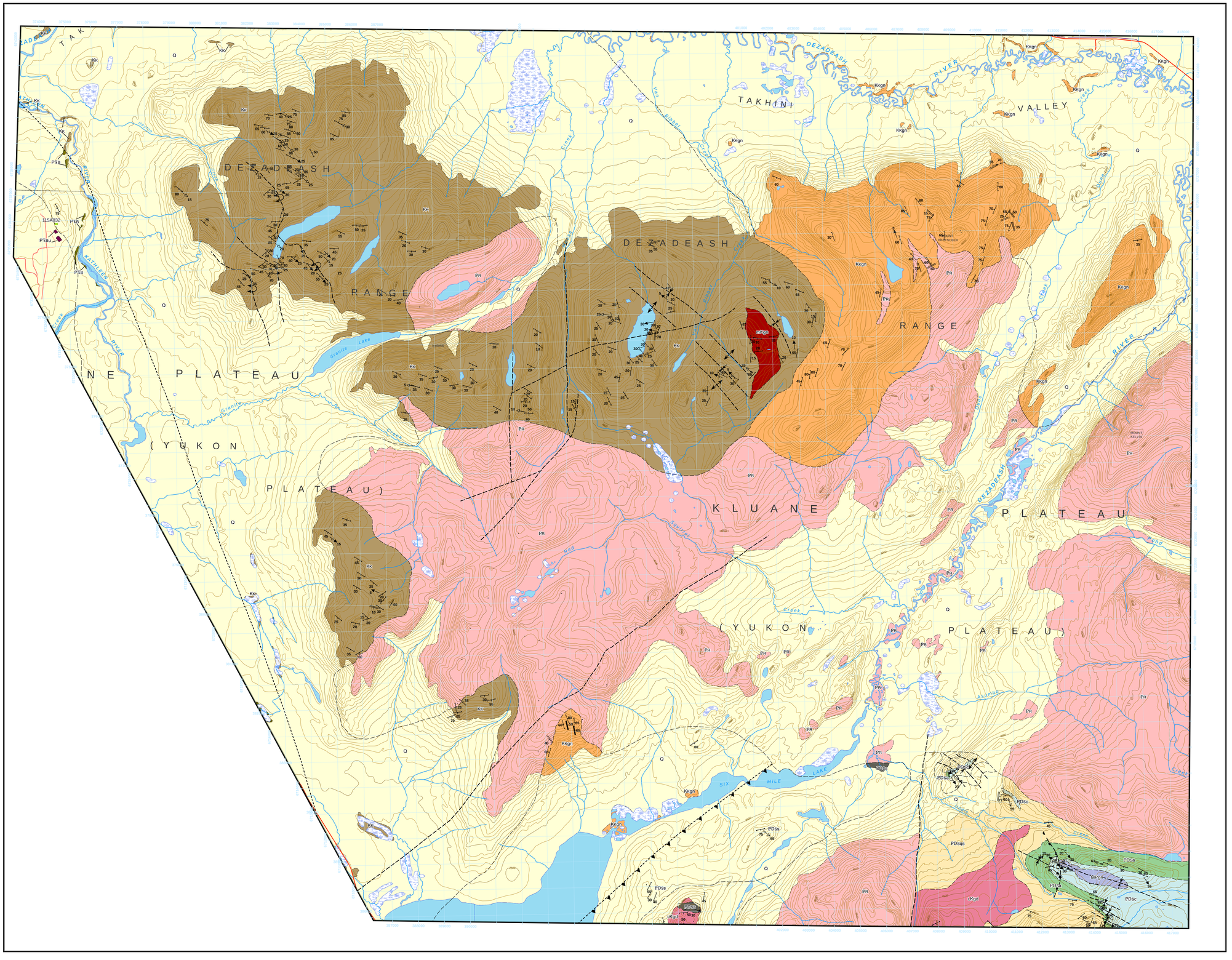
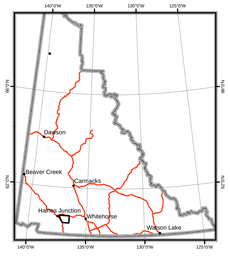
Yukon Geological Survey

Yukon
Energy, Mines and Resources





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

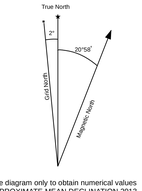
BEDROCK GEOLOGY

GRANITE LAKE AREA

YUKON

1 0 1 2 3 4 5
Kilometres

SCALE 1:50 000



Use diagram only to obtain numerical values
APPROXIMATE MEAN DECLINATION 2013
FOR CENTRE OF MAP

LEGEND

QUATERNARY

Q — unconsolidated glacial, glaciofluvial, and glaciolacustrine deposits; fluviatile silt, sand, and gravel, and local volcanic ash, in part with cover of soil and organic deposits

OVERLAP ASSEMBLAGES

PALEOCENE

RUBY RANGE BATHOLITH (ca. 64-57 Ma):

PR — fine to coarse-grained, salt and pepper, hornblende +/- biotite, quartz diorite, rare garnets; medium-grained, light grey to pinkish biotite +/- hornblende granodiorite; fine to medium-grained, beige to grey tonalite with distinctive smokey grey quartz; pinkish/grey, biotite granite; likely in part coeval with Rhyolite Creek volcanoplutonic complex

LATE CRETACEOUS (?)

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

MID-CRETACEOUS (?)

mKkgn — fine to coarse-grained, strongly to weakly foliated hornblende, biotite, quartz-diorite to granodiorite orthogneiss

KLUANE SCHIST:

Kk — dark grey, brown to black weathered, dark grey to black fresh, fine-grained, biotite, quartz, feldspar schist; local feldspar porphyroblasts; blocky weathered appearance

Kkgn — migmatitic paragneissic equivalents of Kluane Schist; medium to coarse-grained, dark grey to black weathered with orange to cream coloured leucocratic layers

TAKU TERRANE (?)

PERMIAN (?) TO TRIASSIC (?)

BEAR CREEK ASSEMBLAGE

PPsa — light to dark green and black serpentinite, meta-dunite and meta-pyroxenite; strongly deformed; locally abundant asbestos

PTb — strongly deformed and metamorphosed, mainly light to dark green and black basalt; lesser amounts of light grey/green andesite and dacite and dark grey to brown mudstone

YUKON-TANANA TERRANE

MISSISSIPPIAN (?) or PERMIAN (?)

MPgn — medium to coarse-grained hornblende-biotite quartz-diorite and diorite orthogneiss; dark grey, black to salt and pepper colour; abundant garnets found locally

UPPER DEVONIAN AND OLDER

SNOWCAP ASSEMBLAGE:

PDss — polydeformed and metamorphosed dark grey to black biotite, amphibolite schist; minor garnets; locally contains, thin light to dark grey banded quartzite layers

PDsc — light grey and cream weathered, fine to medium-grained calcsilicate schist; light grey to white, fine to medium-grained marble occurring as lenses and thick layers (up to several metres wide) within calcsilicate schist

PDsa — medium-grained, dark and light grey banded gneiss with abundant garnets, interlayered with fine-grained dark green to black garnet amphibolite

PDsqs — light to dark grey and brown weathered biotite, muscovite, quartz, garnet schist; locally abundant aluminosilicates (sillimanite, +/- kyanite); locally migmatitic

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 contacts (defined, approximate)

fault; movement not known (approximate, inferred)

thrust fault (inferred)

normal fault (approximate)

folds (upright antiform, upright synform)

(overturned antiform, overturned synform)

foliation (dominant, late)

elongation lineation

intersection lineation

crenulation lineation

fold axis (early, m-fold, s-fold, z-fold)

dike

joint

fault

field station

limited-use road or trail

MINFILE Occurrences

Number	Name	Deposit Type	Commodity/Status
115A032	REX	Ultramafic-hosted asbestos	asbestos

RECOMMENDED CITATION

Israel, S. and Kim, R., 2013. Preliminary geological map of the Granite Lake area, parts of NTS 115A/10, 11, 14 and 15 (1:50 000 scale), Yukon Geological Survey Open File 2013-17.

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.

Paper copies of this map may be purchased from the Yukon Geological Survey.
Energy, Mines and Resources, Yukon Government, Room 102-300 Main St., Whitehorse, Yukon, Y1A 2B5.
Ph. 867-667-3201
Email geology@gov.yk.ca

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/

Yukon Geological Survey
Energy, Mines and Resources
Government of Yukon

Open File 2013-17

Preliminary geological map of the Granite Lake area, parts of NTS 115A/10,11, 14 and 15

(1:50 000 scale)

by

Steve Israel and Rachel Kim