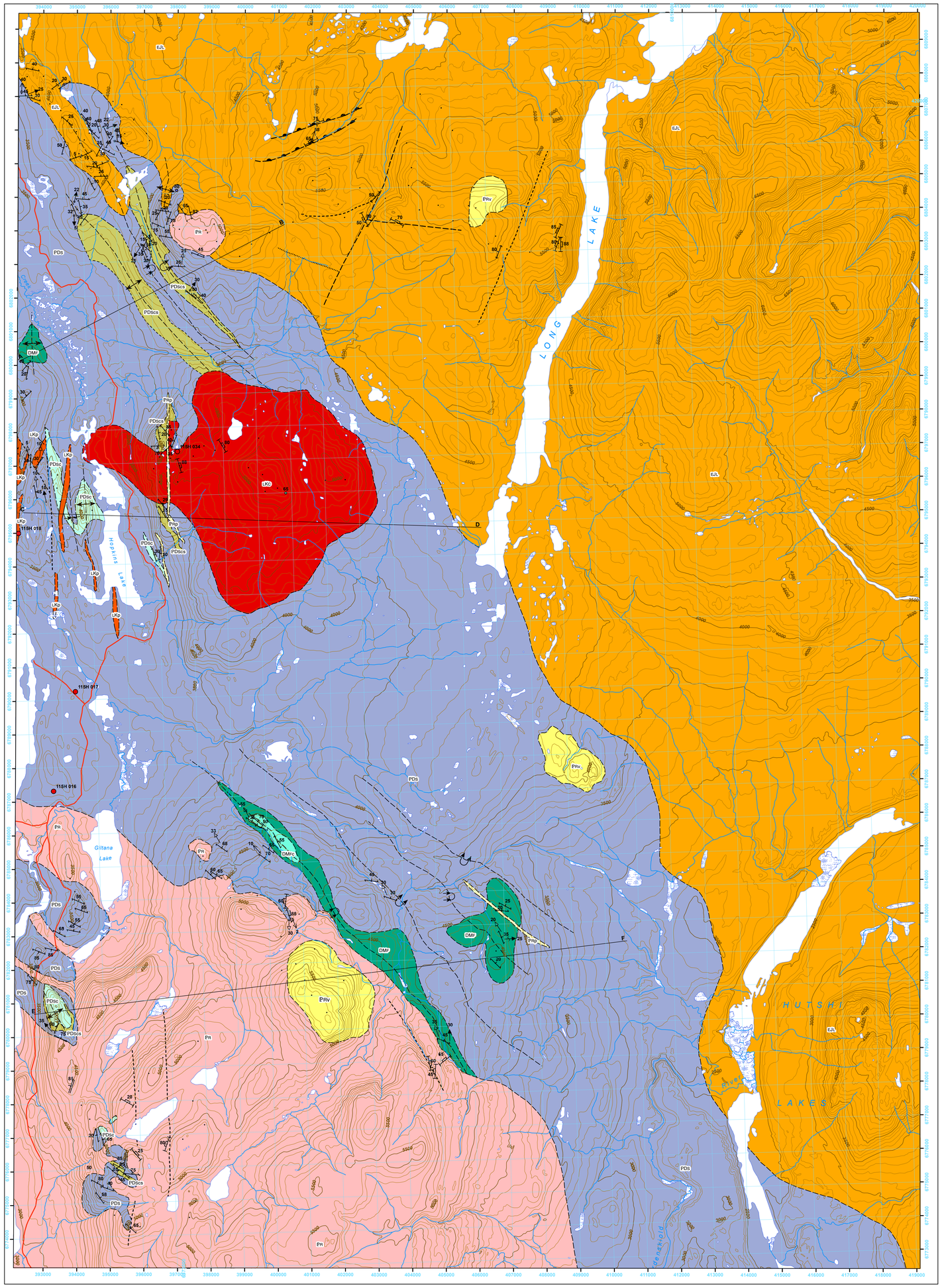
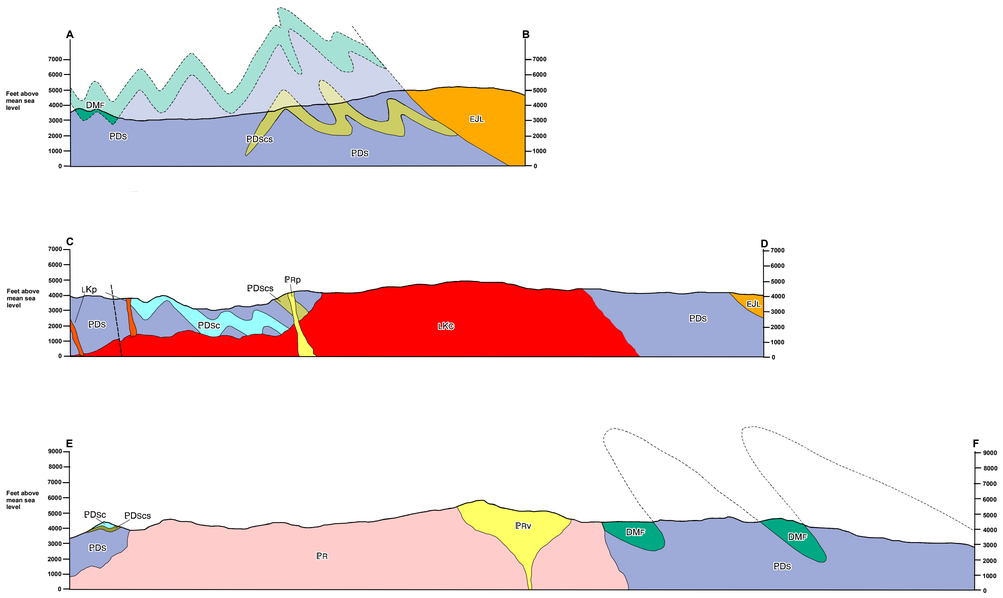




LEGEND

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):

LKG — 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

AISHIHIK DIKES (ca. 78 Ma):

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 psammitic schist; locally abundant layers of biotite-rich, quartz-felspar 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, calcsilicate 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)

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	Giltana	Cu-Skarn	Cu, Mo
115H017	Aishihik	Cu-Skarn	Cu
115H018	Janisaw	Cu-Skarn	Cu
115H034	Hopper North	Cu-Skarn/Porphyry	Cu, Au

RECOMMENDED CITATION

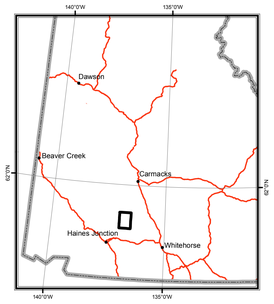
Israel, S. and Borch, A., 2015. Preliminary geological map of the Long Lake area, Parts of NTS 115H/02 and 07 (1:50 000 scale), Yukon Geological Survey Open File 2015-32.

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.

Paper copies of this map may be obtained from the Yukon Geological Survey, Energy Mines and Resources, Government of Yukon; 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/



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

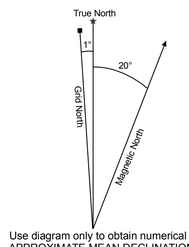
BEDROCK GEOLOGY

LONG 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 2015
FOR CENTRE OF MAP

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