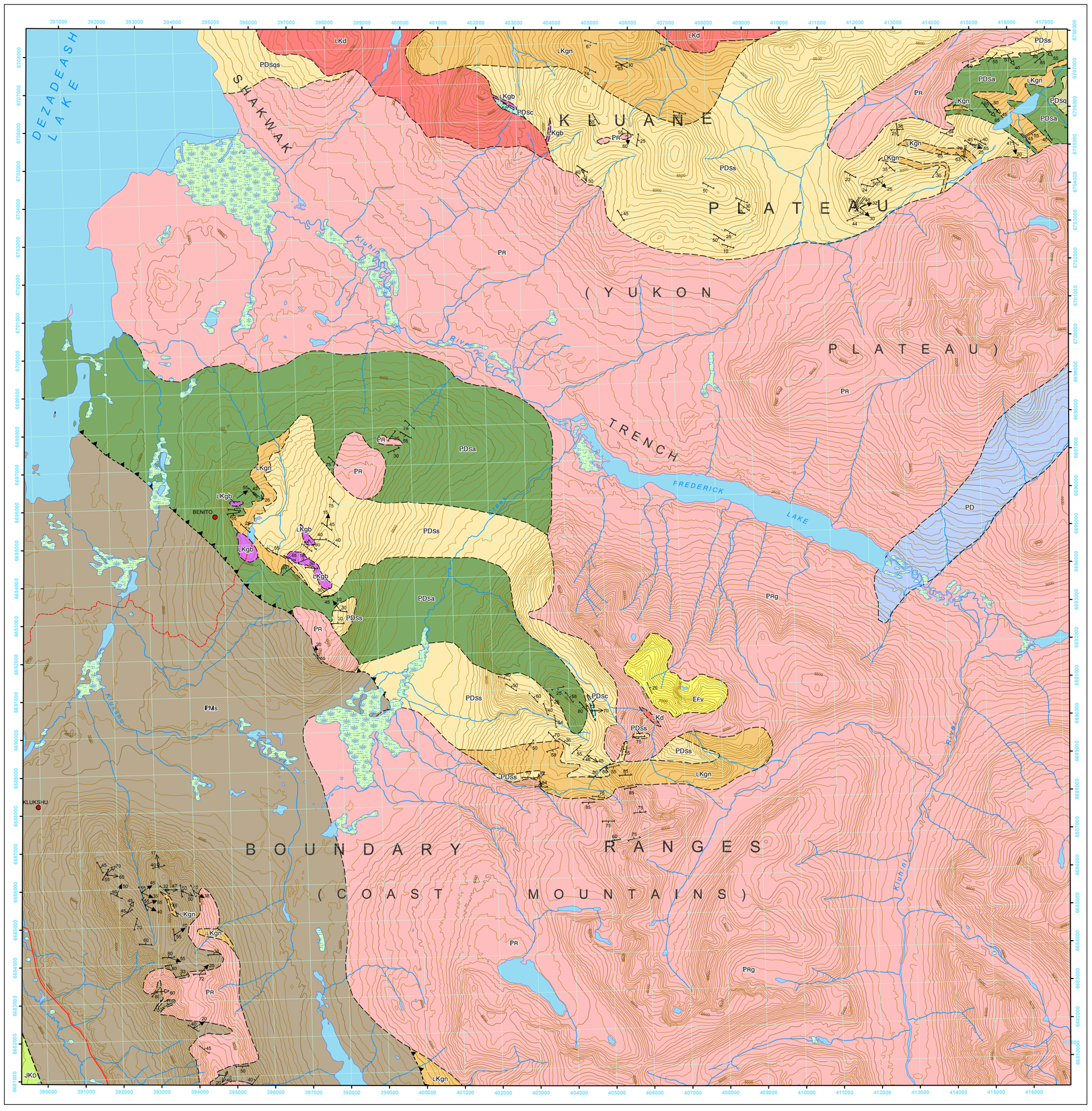
Yukon Geological Survey

Yukon
Energy, Mines and Resources




## LEGEND

### OVERLAP ASSEMBLAGES

**EOCENE (?)**

**FREDERIC LAKE VOLCANIC COMPLEX:**

EFv — coherent flow-banded andesitic to dacitic lavas and subvolcanic intrusions; silicic tuff and lapilli

**PALEOCENE**

**RUBY RANGE BATHOLITH (*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 (?)**

LKgb — coarse-grained, dark brown-black, hornblende +/- biotite, plagioclase, pyroxene, grabbroic dikes and intrusions

LKd — fine to coarse-grained hornblende diorite to tonalite with abundant garnets; locally grading into garnet amphibolite

LKgn — medium to coarse-grained, mylonitic to weakly deformed, biotite, quartz +/- garnet, orthogneiss; dark grey weathered, dark- and light-grey banded fresh; commonly interlayered with biotite- schist or amphibolite of Snowcap Assemblage; inferred Late Cretaceous in age, but could be as old as Permian

**LATE JURASSIC TO EARLY CRETACEOUS**

**DEZADEASH FORMATION:**

JKD — interbedded light to dark buff-grey lithic greywacke, sandstone, siltstone, thin dark grey shale, argillite and conglomerate; mass-flow conglomerate; rare light grey tuff

**PALEOZOIC-MESOZOIC**

PMs — fine to medium-grained, garnet-biotite schist and medasedimentary rocks; brown to rusty weathered, dark grey fresh; layers variably richer in quartz or biotite; may result from low-grade metamorphism of rocks part of the Dezadeash Formation

PMgn — medium to coarse-grained, orange weathered, dark grey to black, biotite-quartz-feldspar +/- kyanite-sillimanite paragneiss; fine-grained, banded grey to dark grey metasedimentary rocks

### YUKON-TANANA TERRANE

**PROTEROZOIC TO PERMIAN**

PPY — undivided Yukon Tanana terrane rocks; intensely deformed schist, orthogneiss, and calc-silicates rocks; greenschist to amphibolite facies

**PROTEROZOIC TO DEVONIAN**

**SNOWCAP ASSEMBLAGE:**

PDSq — medium-grained, sugary, massive to banded and strongly folded light grey weathered quartzite; silicic metavolcanic rocks and biotite psammitic schist

PDSc — fine to medium-grained, grey-cream weathered, light grey to white metacarbonate rocks occurring as lenses and thick layers (up to several metres wide) within schist, orthogneiss, metavolcanic or metasedimentary rocks; locally associated with ultramafic rock lenses; internally strongly deformed

PDSa — medium-grained, dark and light grey banded amphibolite gneiss with abundant garnets; fine-grained dark green to black garnet amphibolite schist; fine to medium-grained, rusty-brown weathered, dark green massive metabasalt

PDSs — fine to medium-grained, 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 contact (defined, approximate)
- fault; strike-slip, dextral (approximate)
- fault; movement not known (approximate)
- thrust fault (inferred)
- foliation (dominant/early, late)
- mineral lineation
- intersection lineation
- crenulation lineation
- fold axis (microfold, z-fold)
- bedding
- dike
- field station
- limited-use road or trail

**MINFILE Occurrences**

| Number | Name | Deposit Type | Commodity/Status |
|---|---|---|---|
| 115A022 | KLUKSHU | Volcanogenic Massive Sulfide | undetermined |
| 115A023 | BENITO | Unknown | undetermined |

### REFERENCES


Kindle, E.D., 1952. Dezadeash map-area, Yukon Territory (1:253 440 scale), Geological Survey of Canada Memoir 268.


### RECOMMENDED CITATION

Israel, S. and Bordet, E., 2014. Preliminary geological map of the Kluhini River area, NTS 115A/07 (1:50 000 scale), Yukon Geological Survey Open File 2014-17.

Digital cartography and drafting by Steve Israel and Esther Bordet, 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.
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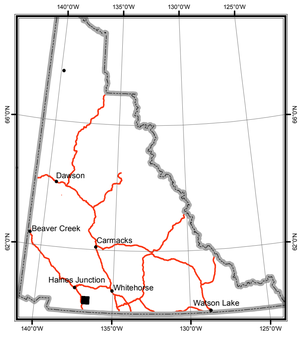



*1:50 000-scale topographic base data produced by CENTRE FOR TOPOGRAPHIC INFORMATION, NATURAL RESOURCES CANADA*

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

CONTOUR INTERVAL 100 Feet
Elevations in feet above Mean Sea Level

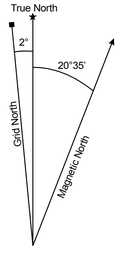
BEDROCK GEOLOGY

# KLUHINI RIVER AREA

YUKON

1 0 1 2 3 4 5
Kilometres

SCALE 1:50 000




Use diagram only to obtain numerical values
APPROXIMATE MEAN DECLINATION 2014
FOR CENTER OF MAP

Yukon Geological Survey
Energy, Mines and Resources
Government of Yukon

Open File 2014-17

**Preliminary geological map of the Kluhini River area, NTS 115A/07**

**(1:50 000 scale)**

by
Steve Israel and Esther Bordet