

LEGEND

OVERLAP ASSEMBLAGES

PALEOCENE

Ruby Range (ca. 64-54 Ma)

PR medium to coarse-grained equigranular, light grey to white biotite +/- hornblende granodiorite to quartz-diorite; locally contains garnet; generally massive and weakly to moderately foliated near contacts

LATE CRETACEOUS

LKgd medium-coarse grained quartz, biotite, plagioclase, hornblende granodiorite to quartz-diorite; almost protogneissic locally with some banding that appears more felsic or mafic

LKgn compositionally layered medium to coarse-grained locally mylonitic brownish biotite, quartz, plagioclase, hornblende +/- garnet diorite gneiss interlayered with creamy white quartz plagioclase tonalite with trace biotite throughout; locally grades into coarse grained garnet amphibolite

EARLY-LATE CRETACEOUS

Blanchard River Assemblage (120 Ma and younger)

Kbs fine-grained dark grey to rusty weathered quartz, biotite schist with primary bedding features preserved; locally abundant in garnet, staurolite and aluminosilicates (kyanite, sillimanite and locally andalusite); locally more fissile or blocky depending on proportions of garnet and biotite; foliation is parallel to bedding; throughout unit there is an ~5-7 cm layer of quartz, hornblende, plagioclase tonalite (?) of unknown affinity

YUKON TANANA TERRANE

PROTEROZOIC TO DEVONIAN

Snowcap Assemblage

PDSa fine to medium-grained well foliated amphibolite schist with garnet porphyroblasts <1 mm to 3 mm diameter; generally green/black with rusty-brown weathering surfaces; locally dark green to black massive metabasalt

PDSsp fine to medium-grained quartz, muscovite, garnet psammitic schist; locally abundant kyanite porphyroblasts

PDSs fine to medium-grained quartz, muscovite, garnet schist with locally abundant kyanite and sillimanite porphyroblasts; grey to rusty weathering appearance

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 of Group or Formation rank

SYMBOLS

geologic contact (defined, approximate, inferred).....

thrust fault (inferred).....

foliation (dominant/early).....

mineral lineation.....

intersection lineation.....

crenulation lineation.....

fold axis (upright fold).....

bedding.....

field station.....

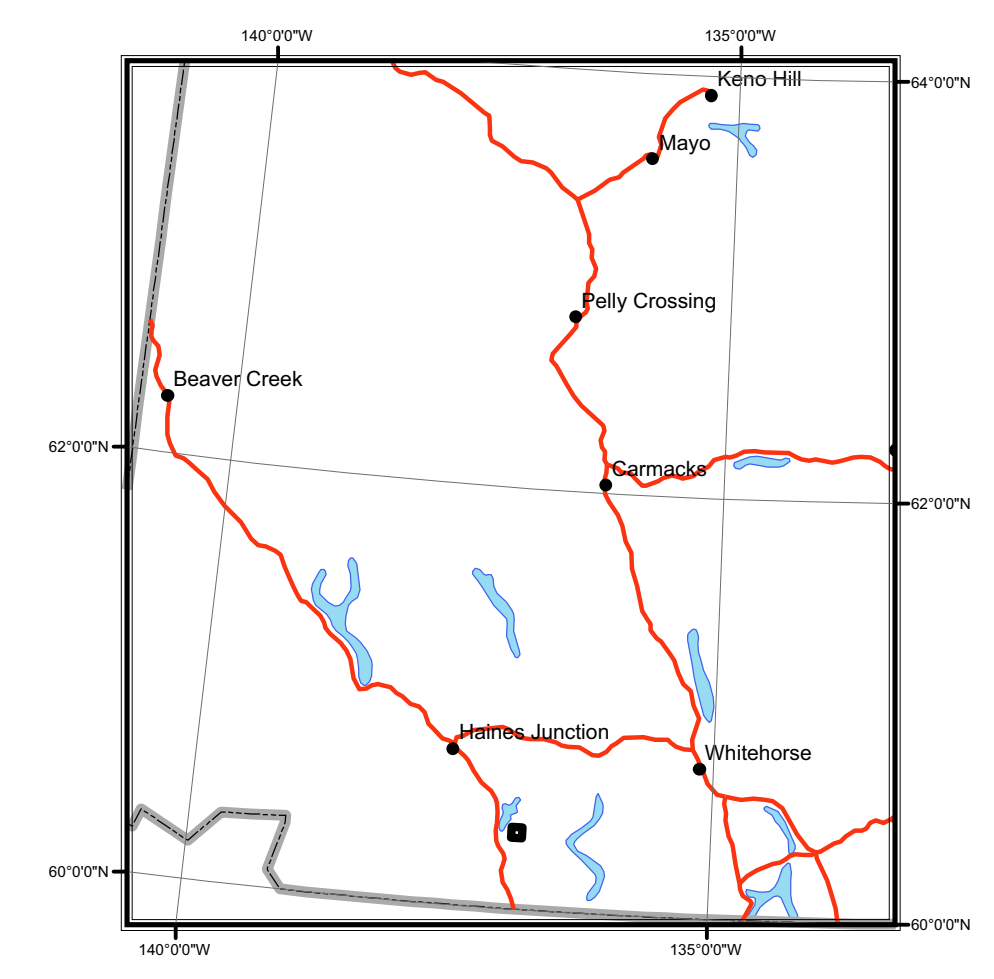
cross section line..... A B C

REFERENCES

Bordet, E., Israel, S. and Moynihan, D., 2015. Geology of the Takhanne River (NTS 115A/2) and Klukshu River (115A/7) map areas, southwest Yukon. In: Yukon Exploration and Geology 2014, K.E. MacFarlane, M.G. Nordling and P.J. Sack (eds.), Yukon Geological Survey, p. 1-16.

Kindie, E.D., 1952. Dezadeash Map-Area, Yukon Territory. Geological Survey of Canada Memoir 268, 68 p.

Digital cartography and drafting by Lianna Vice and Steve Israel.



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

CONTOUR INTERVAL 100 Feet
 Elevations above Mean Sea Level

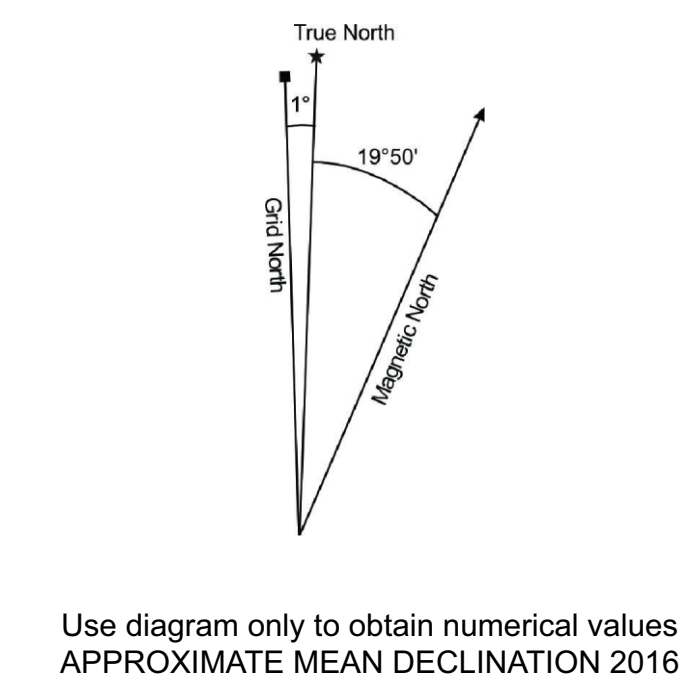
BEDROCK GEOLOGY

KLUKSHU PEAK AREA

YUKON

0.5 0 0.5 1
 Kilometres

SCALE 1:10 000

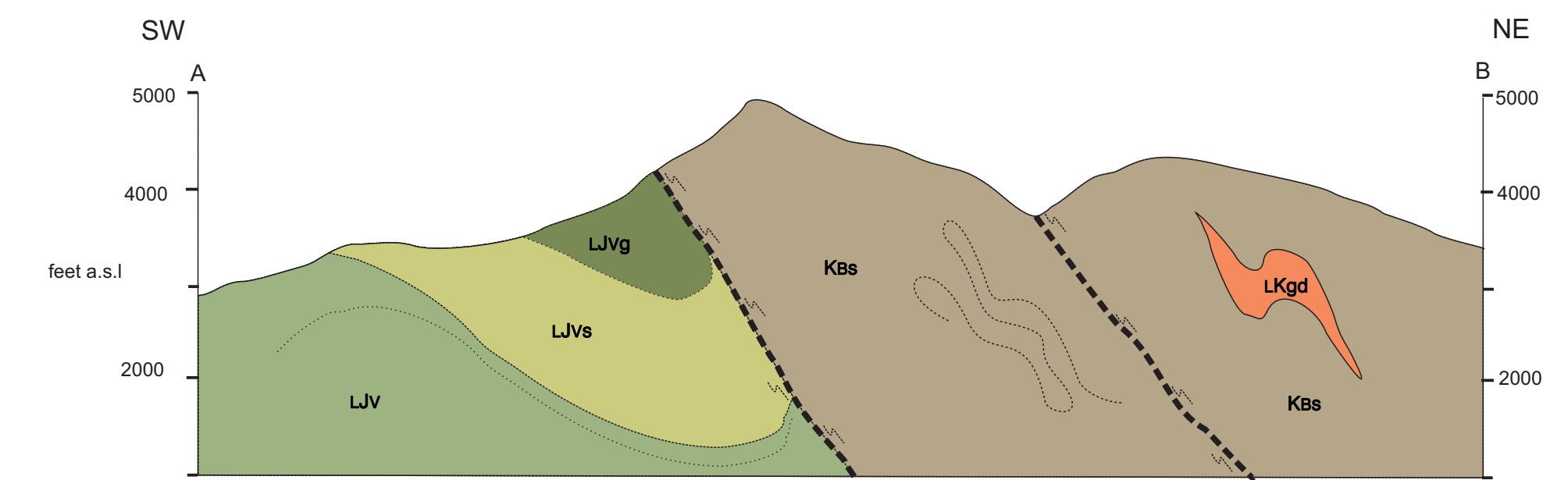


Yukon Geological Survey
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Bedrock Geology of the Klukshu Peak Area, Yukon.
 part of NTS 115A/02 and 115A/07

(1:10 000 scale)
 by
 L Vice, S Israel and H D Gibson.

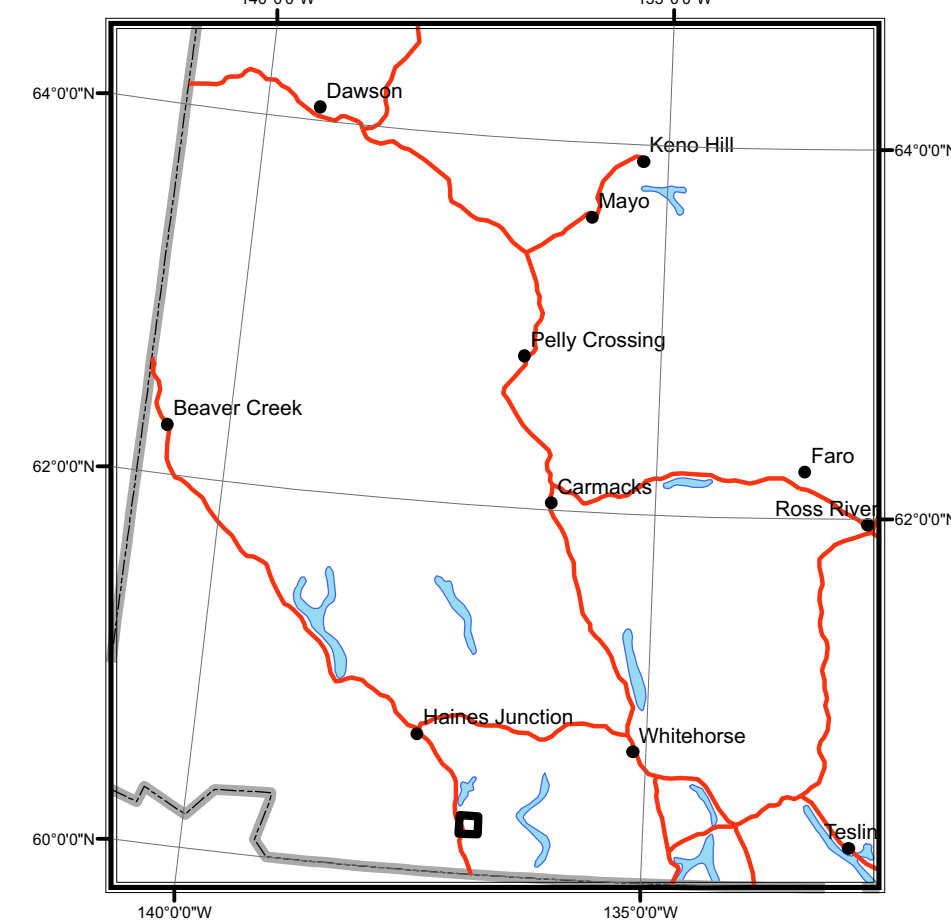
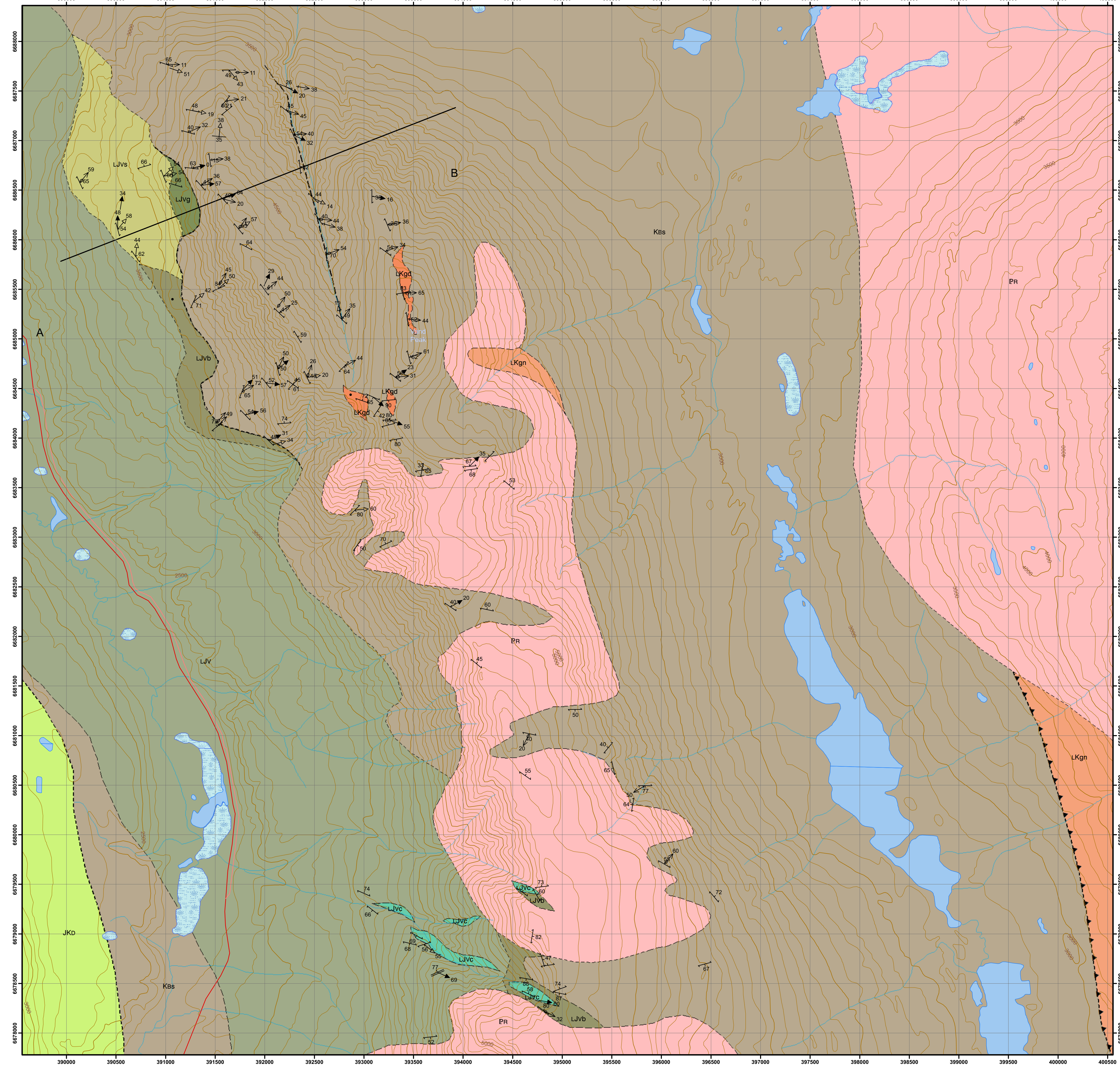


- ### LEGEND
- OVERLAP ASSEMBLAGES PALEOCENE**
Ruby Range (ca. 64-54 Ma)
 PR medium to coarse-grained equigranular, light grey to white biotite +/- hornblende granodiorite to quartz-diorite, locally contains garnet; generally massive and weakly to moderately foliated near contacts
- LATE CRETACEOUS**
 LKgd medium-coarse grained quartz, biotite, plagioclase, hornblende granodiorite to quartz-diorite; almost prograde locally with some banding that appears more felsic or mafic
 LKgn compositionally layered medium to coarse-grained locally mylonitic brownish biotite, quartz, plagioclase, hornblende +/- garnet diorite gneiss interlayered with creamy white quartz plag tonalite with trace biotite throughout; locally grades into coarse grained garnet amphibolite
- EARLY-LATE CRETACEOUS**
Blanchard River Assemblage (120 Ma and younger)
 Kbs fine-grained dark grey to rusty weathered quartz, biotite schist with primary bedding features preserved; locally abundant in garnet, staurolite and aluminosilicates (kyanite, sillimanite and locally andalusite); locally more fissile or blocky depending on proportions of garnet and biotite; foliation is parallel to bedding, throughout unit there is an ~5-7 cm layer of quartz, hornblende, plagioclase tonalite (?) of unknown affinity
- LATE JURASSIC TO EARLY CRETACEOUS**
Dezadeash Formation:
 JKd dark to light grey to rusty weathering; blocky interbedded very fine-grained mudstone to siltstone and greywacke
- TRIASSIC TO MIDDLE JURASSIC**
Bear Creek Assemblage (?)
 LJVc medium grained creamy beige coloured marble; locally grey and interlayered with green mafic material; strongly deformed
 LJVg fine grained highly fissile chlorite metasilstone to mudstone schist; locally highly strained with quartz veins and highly folded; green to grey weathering appearance
 LJVb green-black serpentinized hornblende metagabbro to ultramafic; hornblende crystals are up to 2 cm in diameter in a groundmass of highly serpentinized material; grey-black to green appearance and chunky weathering
 LJV fine grained green-grey metabasalt and felsic metavolcaniclastic material
 LJV undifferentiated amalgamation of coarse grained green-black rusty weathered hornblende chlorite metabasite, metagabbro, quartzite and metabasalt with creamy to rusty coloured felsic metavolcanics and weathered highly strained chlorite schist

- ### 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 of Group or Formation rank

- ### SYMBOLS
- geologic contact (approximate, inferred).....
 - fault; movement not known (approximate).....
 - thrust fault (inferred).....
 - foliation (dominant).....
 - mineral lineation.....
 - intersection lineation.....
 - crenulation lineation.....
 - fold axis (upright fold).....
 - dike.....
 - field station.....
 - road, limited-use road or trail.....
 - cross section line..... A B C

- ### REFERENCES
- Bordet, E., Israel, S. and Moynihan, D., 2015. Geology of the Takhanne River (NTS 115A/2) and Kluhini River (115A/7) map areas, southwest Yukon. In: Yukon Exploration and Geology 2014, K.E. MacFarlane, M.G. Nordling and P.J. Sack (eds.), Yukon Geological Survey, p. 1-16.
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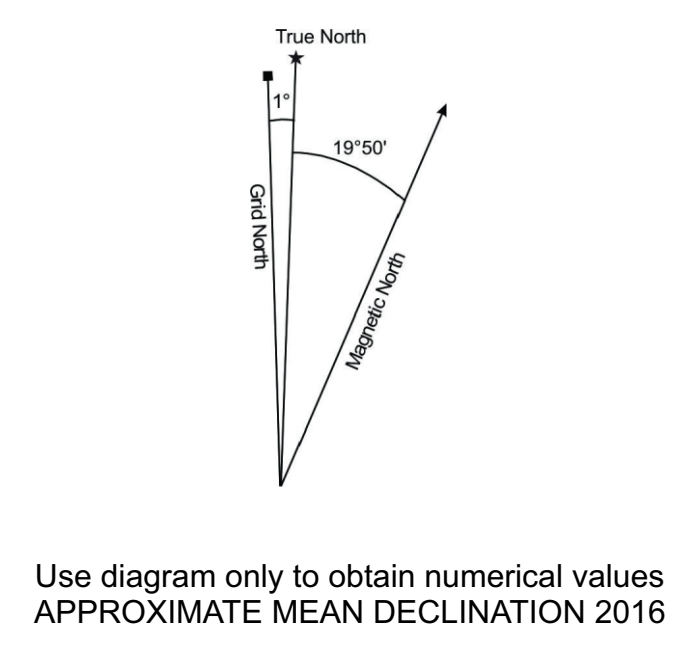
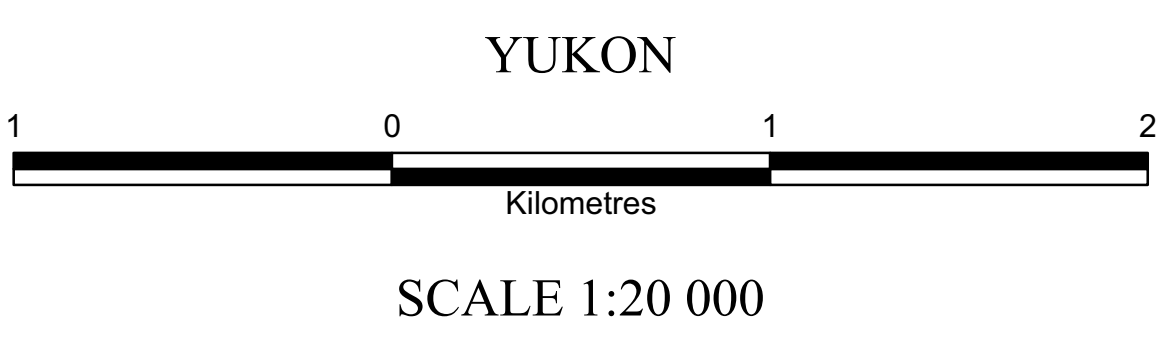


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ONE THOUSAND METRE GRID
 Universal Transverse Mercator Projection
 North American Datum 1983
 Zone 8

CONTOUR INTERVAL 100 Feet
 Elevations above Mean Sea Level

**BEDROCK GEOLOGY
 VAND PEAK AREA**



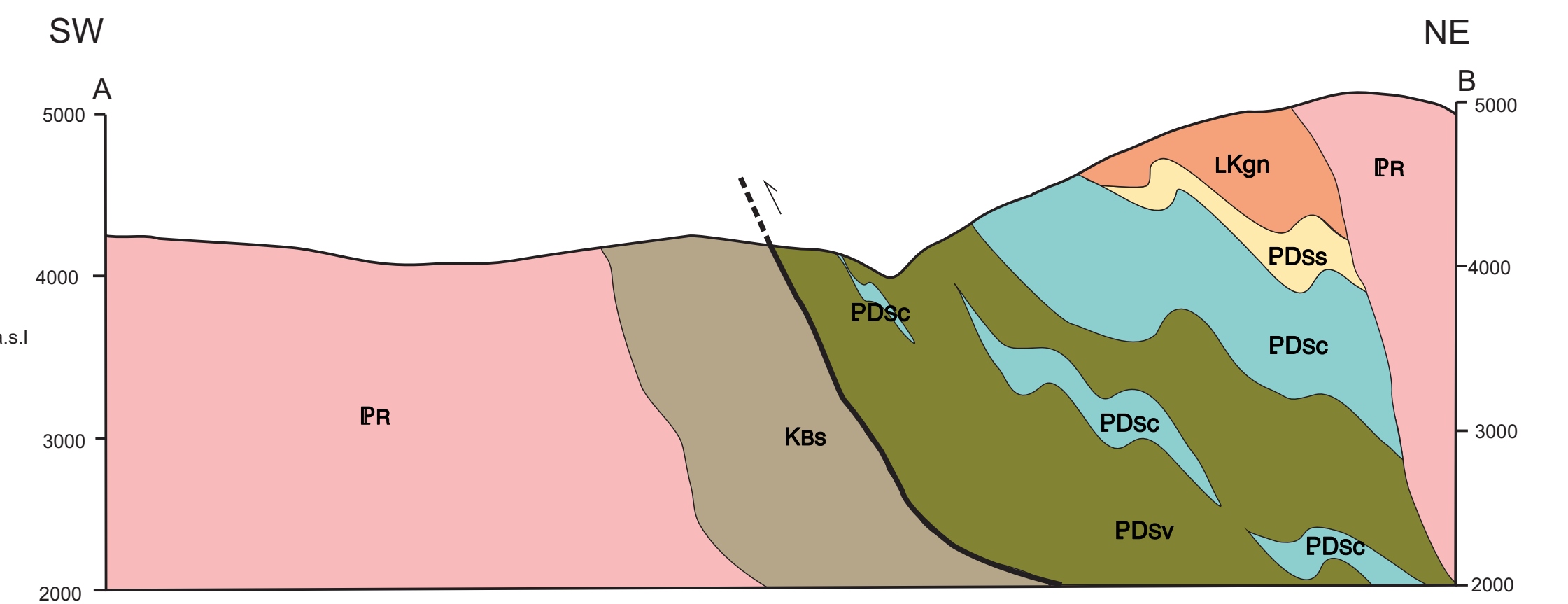
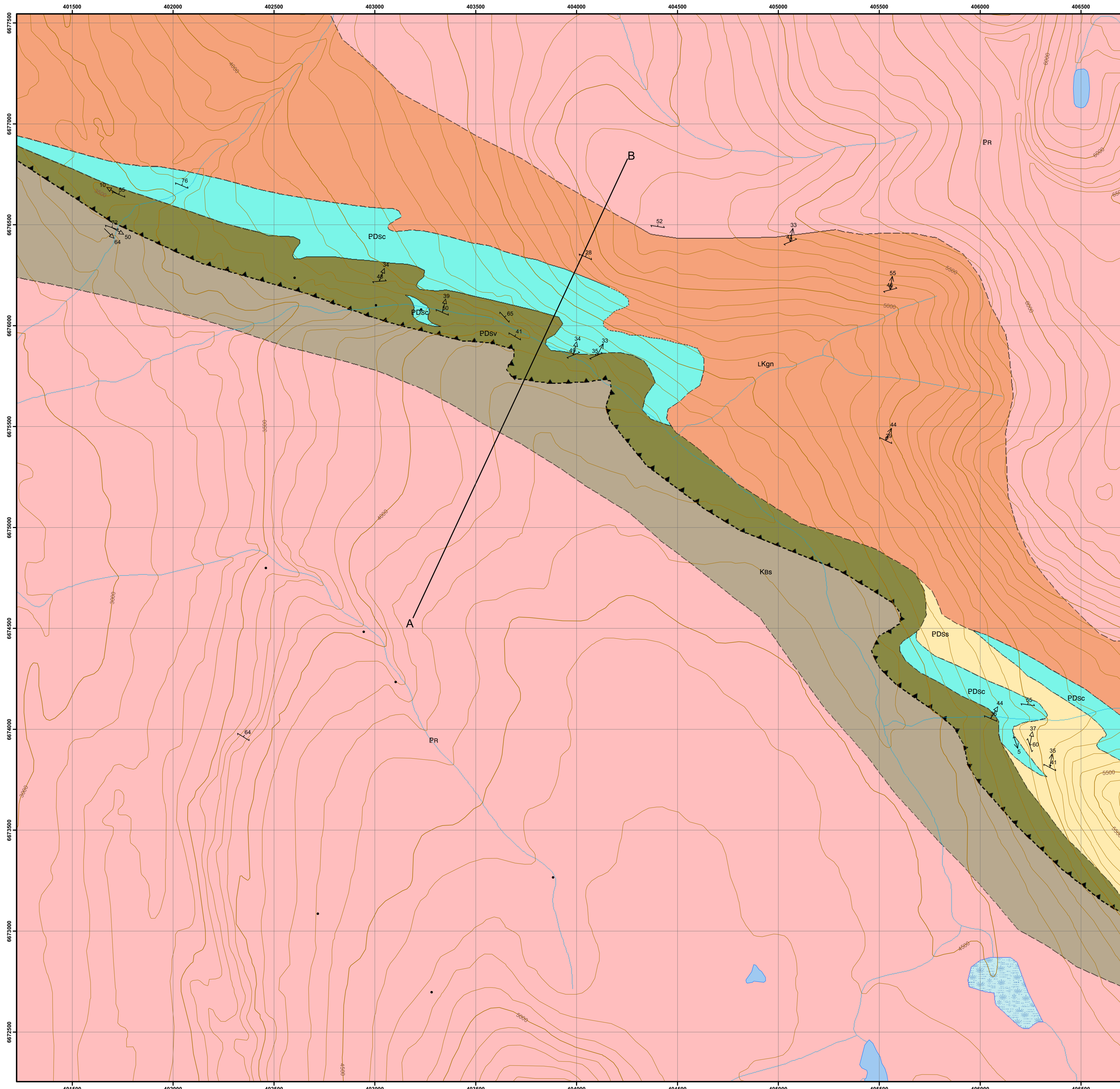
Government of Yukon
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 Energy, Mines and Resources

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**Bedrock Geology of the
 Vand Peak Area, Yukon.**
 part of NTS 115A/02 and 115A/07

(1:20 000 scale)

by
 L Vice, S Israel and H D Gibson,



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- OVERLAP ASSEMBLAGES**
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- LKgn** compositionally layered medium to coarse-grained locally mylonitic brownish biotite, quartz, plagioclase, hornblende +/- garnet diorite gneiss interlayered with creamy white quartz plagioclase with trace biotite throughout; locally grades into coarse grained garnet amphibolite
- EARLY-LATE CRETACEOUS**
- Blanchard River Assemblage (120 Ma and younger)**
- Kbs** fine-grained dark grey to rusty weathered quartz, biotite schist with primary bedding features preserved; locally abundant in garnet, staurolite and aluminosilicates (kyanite, sillimanite and locally andalusite); locally more fissile or blocky depending on proportions of garnet and biotite; foliation is parallel to bedding; throughout unit there is an ~5-7 cm layer of quartz, hornblende, plagioclase tonalite (?) of unknown affinity
- YUKON TANANA TERRANE**
- PROTEROZOIC TO DEVONIAN**
- Snowcap Assemblage**
- PDSv** brown-rusty weathered and highly deformed; dark grey metavolcanic sandstone and rusty weathered conglomerate with rounded clasts up to 4 cm; dark grey-green garnet-biotite metabasalt; interlayered with marble of the Snowcap assemblage (PDSs)
- PDsc** fine to medium-grained, creamy white to grey marble occurring as lenses and thick layers within the PDSv, and LKgn; strong internal deformation
- PDSs** fine to medium-grained quartz, muscovite, garnet schist to psammitic schist with locally abundant kyanite and sillimanite porphyroblasts; grey to rusty weathering appearance

- 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 of Group or Formation rank

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- thrust fault (inferred).....
- foliation (dominant/early).....
- intersection lineation.....
- crenulation lineation.....
- field station.....
- cross section line..... A B C

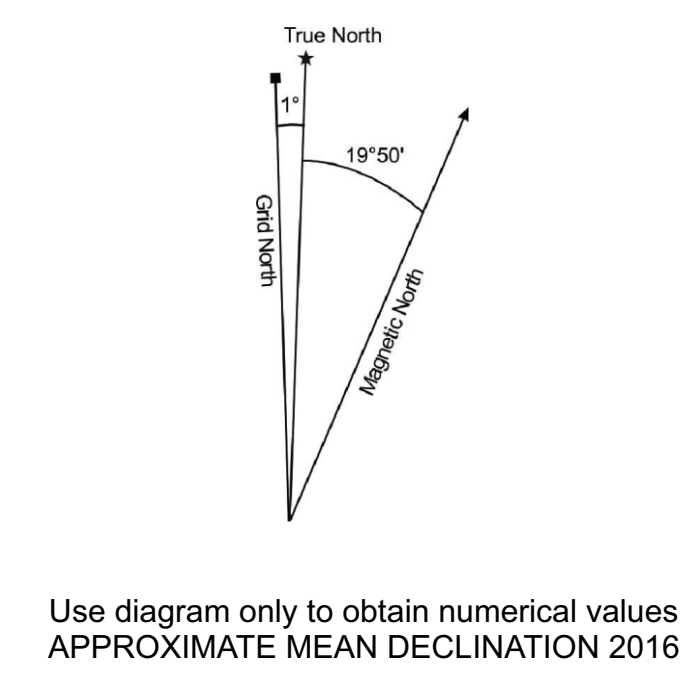
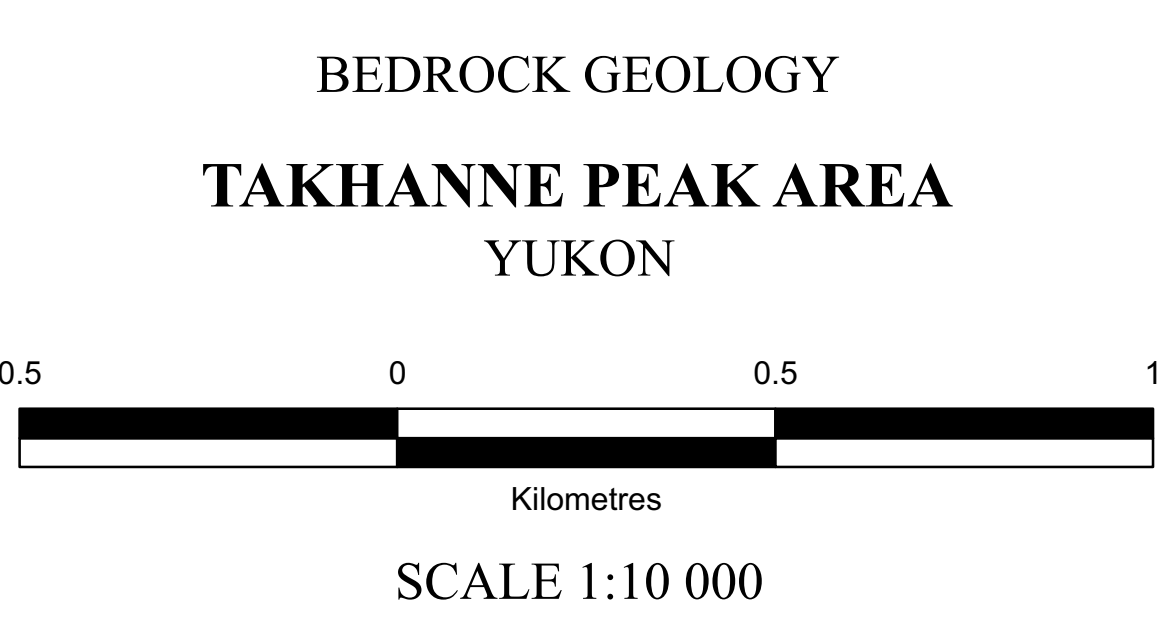
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- Digital cartography and drafting by Lianna Vice.



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North American Datum 1983
Zone 8

CONTOUR INTERVAL 100 Feet
Elevations above Mean Sea Level

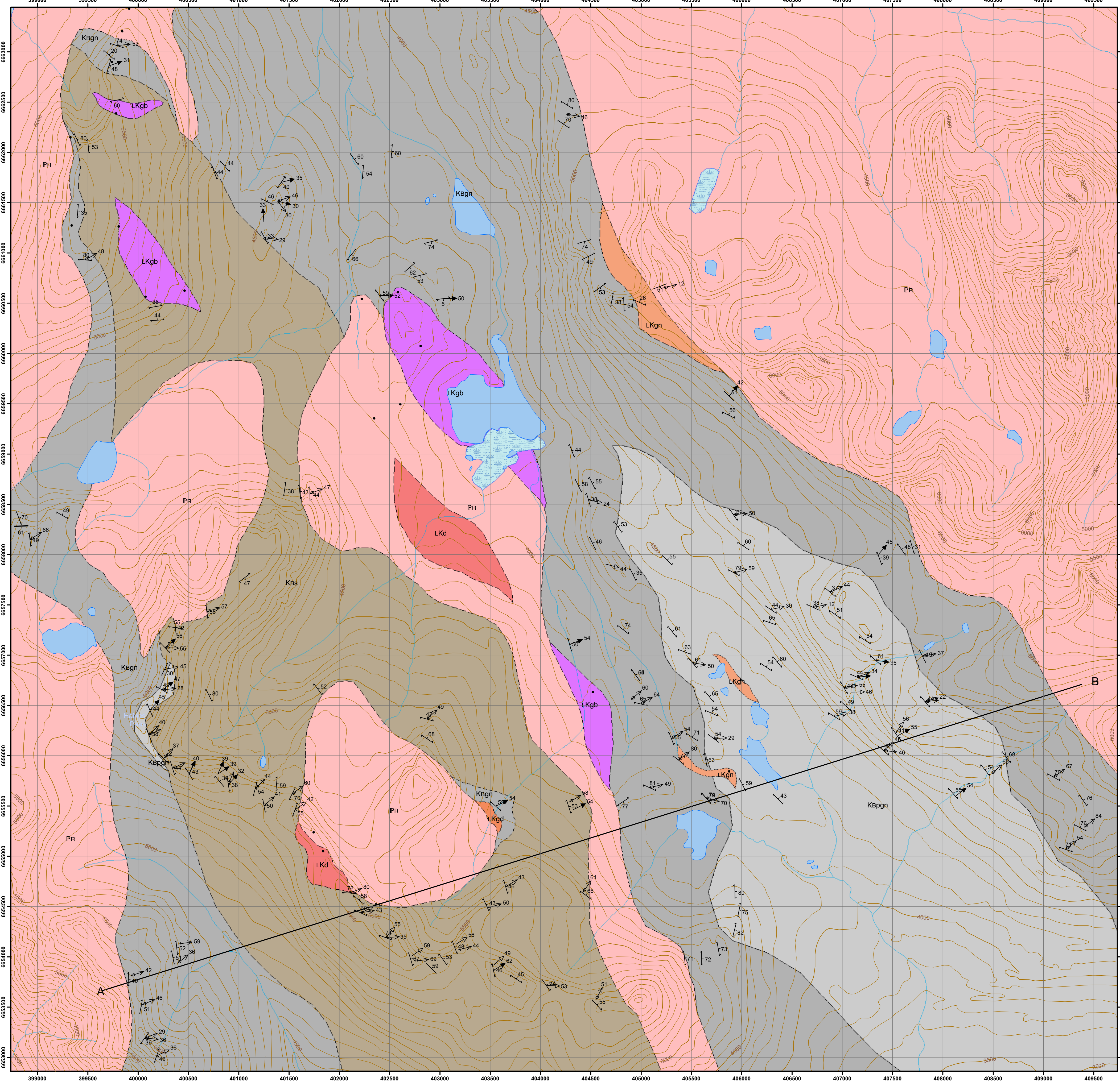
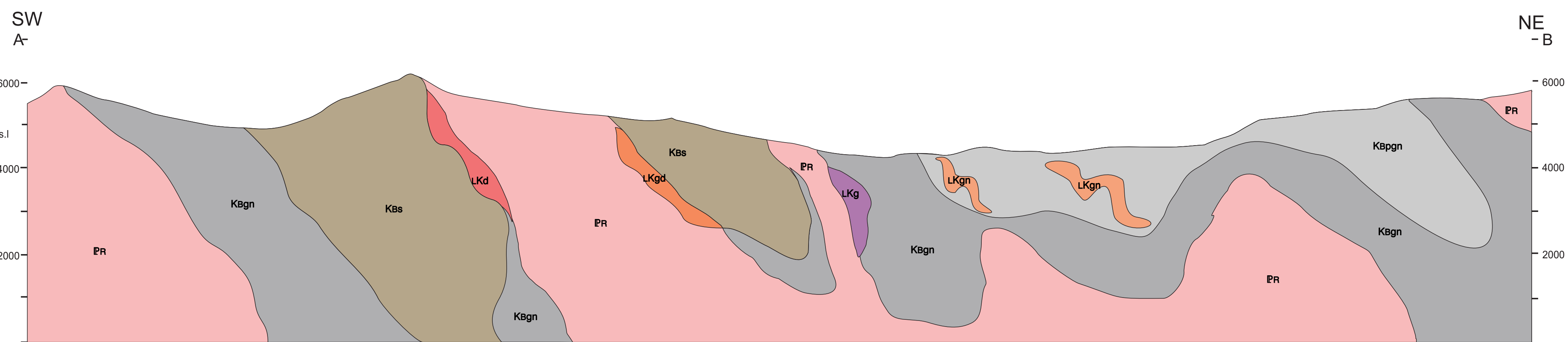


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**Bedrock Geology of the
Takhanne Peak Area, Yukon,
part of NTS 115A/02 and 115A/07**

(1:10 000 scale)
by
L Vice, S Israel and H D Gibson,



LEGEND

OVERLAP ASSEMBLAGES

PALEOCENE

Ruby Range (ca. 64-54 Ma)

- PR** medium to coarse-grained equigranular, light grey to white biotite +/- hornblende granodiorite to quartz-diorite; locally contains garnet; generally massive and weakly to moderately foliated near contacts

LATE CRETACEOUS

- LKgn** medium-coarse grained quartz, biotite, plagioclase, hornblende granodiorite to quartz-diorite; almost protogneissic locally with some banding that appears more felsic or mafic
- LKgd** compositionally layered medium to coarse-grained locally mylonitic brownish biotite, quartz, plagioclase, hornblende +/- garnet diorite gneiss interlayered with creamy white quartz plagioclase tonalite with trace biotite throughout; locally grades into coarse grained garnet amphibolite
- LKg** coarse-grained, dark brown-black hornblende +/- biotite, plagioclase, pyroxene, gabbro
- LKd** fine to coarse-grained hornblende diorite to tonalite with abundant garnets

EARLY-LATE CRETACEOUS

Blanchard River Assemblage (120 Ma and younger)

- Kbs** fine-grained dark grey to rusty weathered quartz, biotite schist with primary bedding features preserved; locally abundant in garnet, staurolite and aluminosilicates (kyanite, sillimanite and locally andalusite); locally more fissile or blocky depending on proportions of garnet and biotite; foliation is parallel to bedding; ~5-7 cm layers of quartz, hornblende, plagioclase tonalite (?) of unknown affinity appear
- KBpgn** medium-grained recrystallized variably biotite rich semi-pelitic proto-gneiss with locally abundant porphyroblasts of garnet staurolite and kyanite replaced by cordierite, sillimanite; locally injections of up to three generations of melting can be observed; coarsening of grain size and alignment of biotite is observed throughout
- KBgn** fine to medium-grained recrystallized variably quartz or biotite rich semi-pelitic paragneiss with locally abundant garnet, staurolite and kyanite replaced by cordierite, sillimanite and andalusite; locally injections of up to three generations of melting can be observed; alignment of biotite locally observed; appears to coarsen and increase in gneissosity towards intrusive Ruby Range suite

LEGEND EXPLANATION

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- LAYERED ROCK ASSEMBLAGES:** regionally mappable units of Group or Formation rank

SYMBOLS

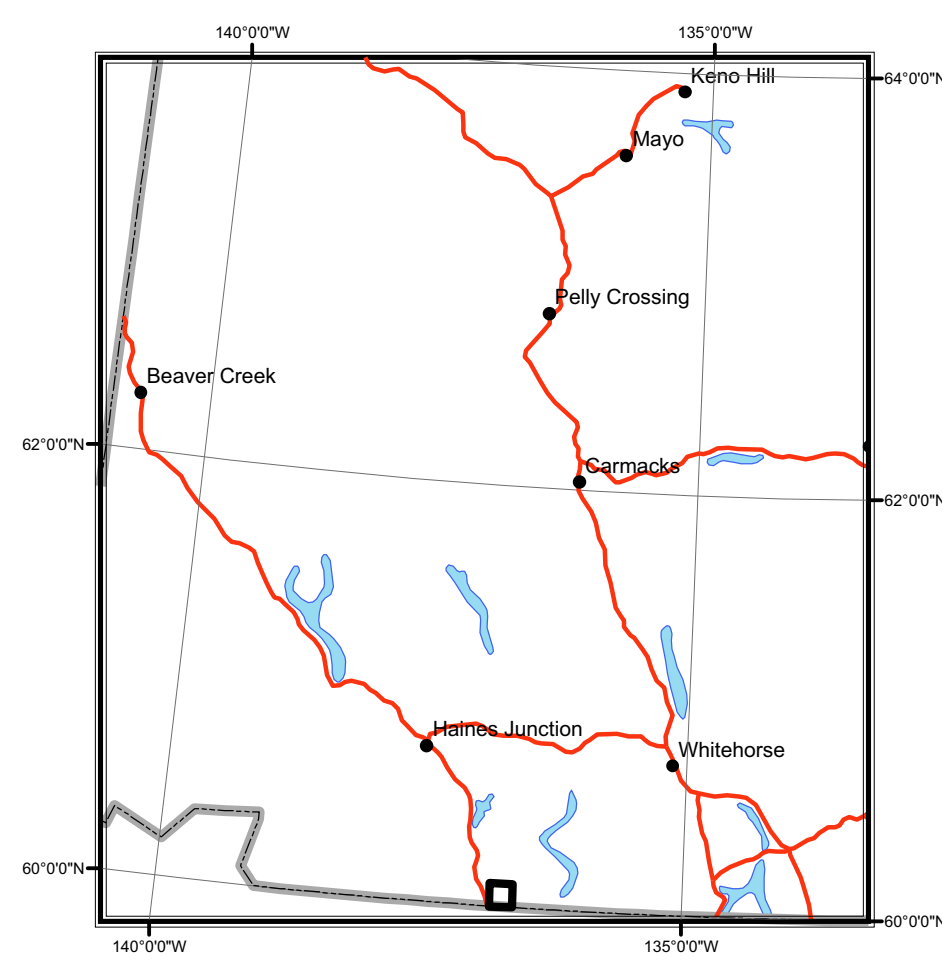
- geologic contact (defined, approximate, inferred).....
- foliation (dominant).....
- mineral lineation.....
- intersection lineation.....
- crenulation lineation.....
- fold axis (upright fold).....
- field station.....
- cross section line..... A B C

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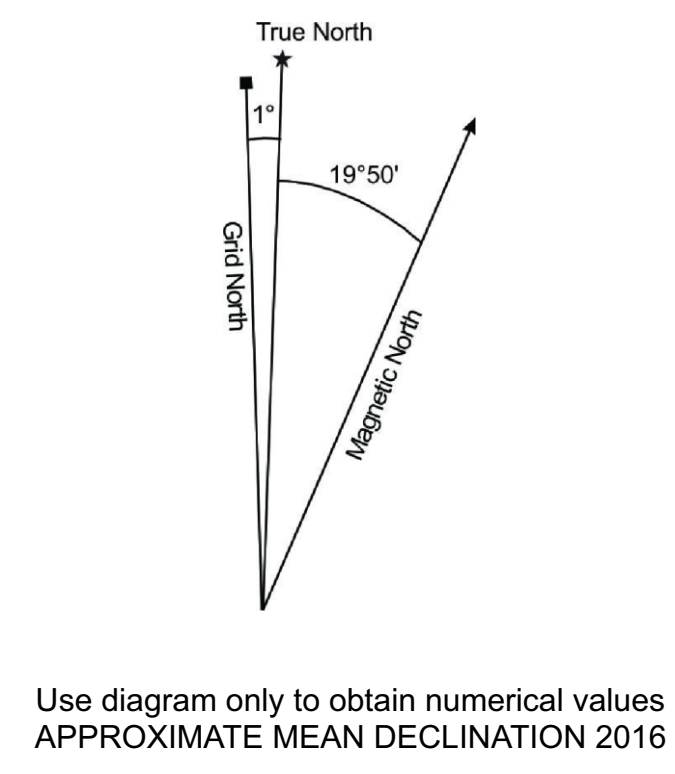
CONTOUR INTERVAL 100 Feet
Elevations above Mean Sea Level

BEDROCK GEOLOGY

HAINES PEAK

YUKON

SCALE 1:20 000



Yukon Geological Survey
Energy, Mines and Resources
Government of Yukon

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Bedrock Geology of the Haines Peak Area, part of NTS 115A/02 and 115A/07

(1:20 000 scale)

by
L Vice, S Israel and H D Gibson,