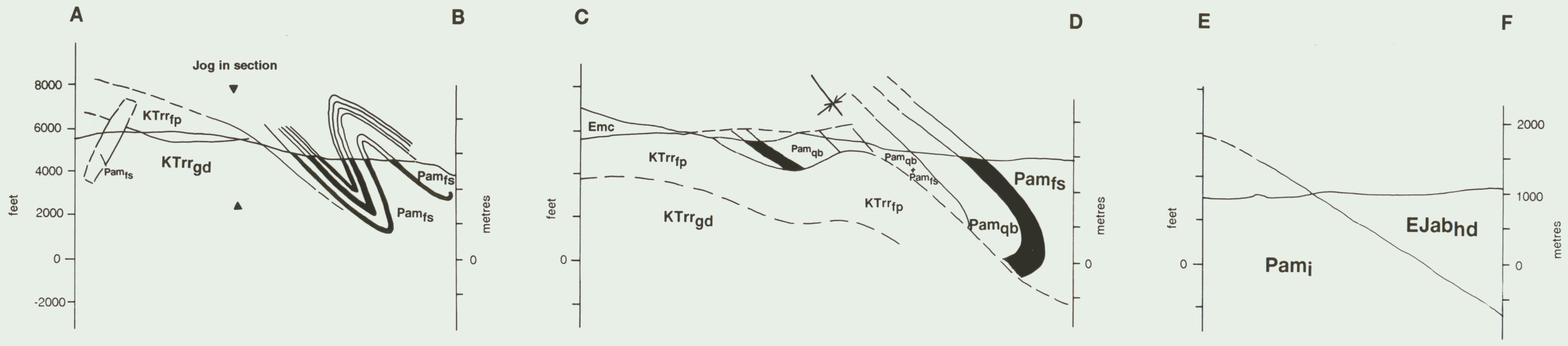
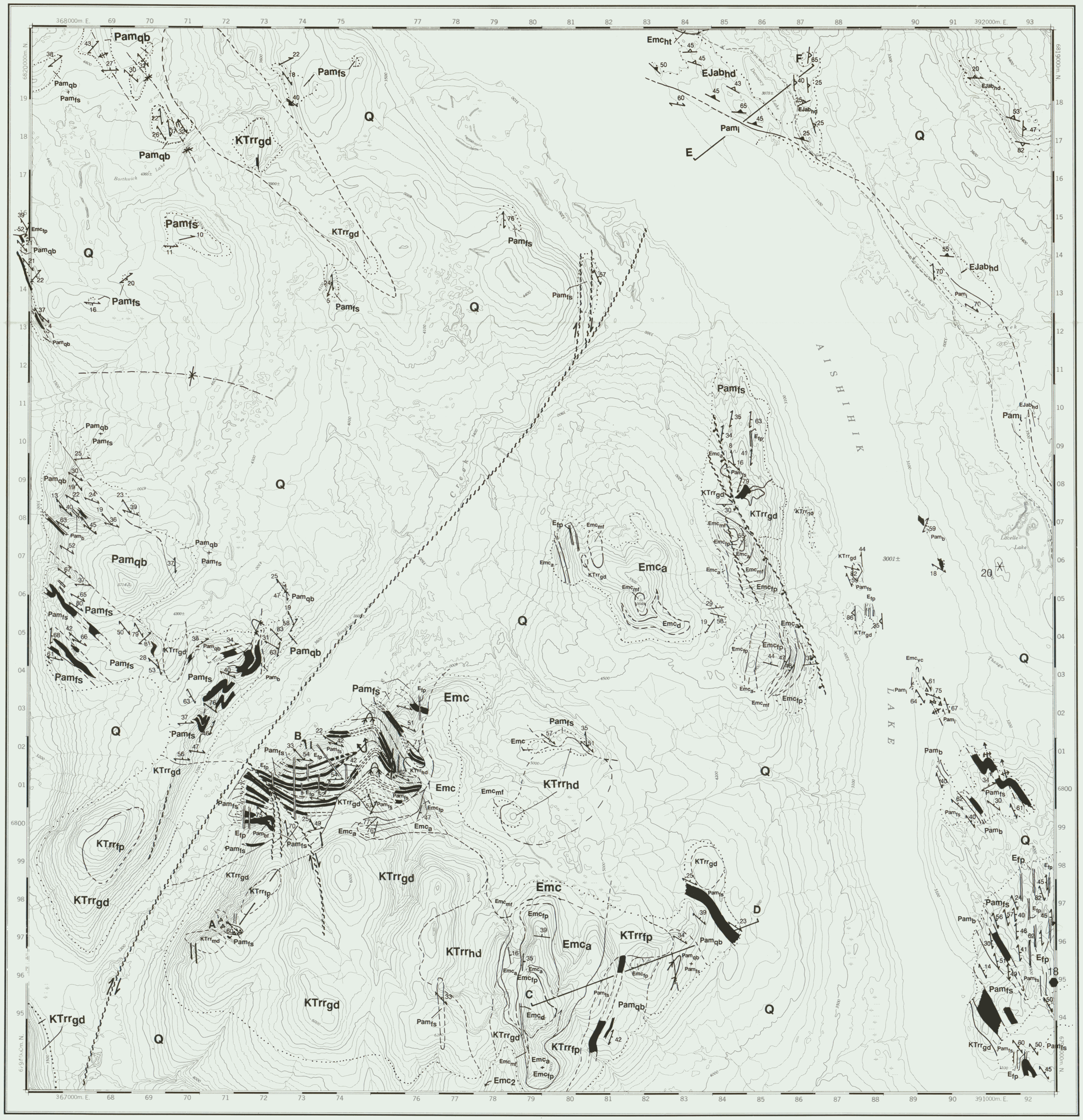


Canada

canada/yukon economic development agreement

Yukon Government



AISHIHIK LAKE

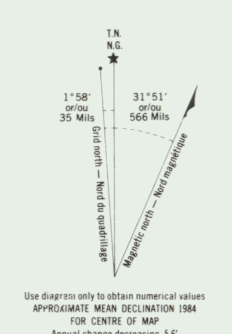
Yukon Territory

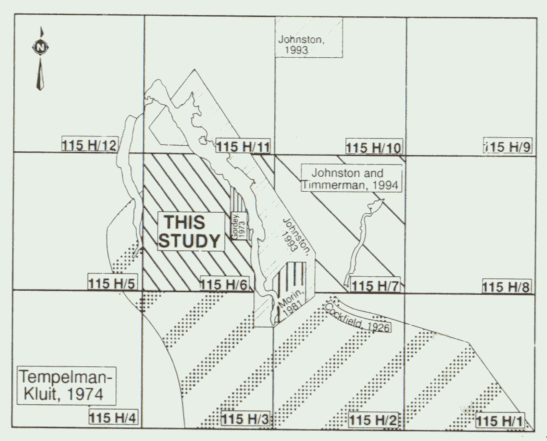
Scale 1:50 000 Échelle

Miles 1 0 1 2 3 Miles

Metres 1000 0 1000 2000 3000 4000 Metres

ONE THOUSAND METRE
UNIVERSAL TRANSVERSE MERCATOR GRID
ZONE 8
QUADRILLAGE DE MILLE MÈTRES
TRANSVERSE UNIVERSEL DE MERCATOR





LAYERED ROCKS

QUATERNARY

Q undifferentiated, unconsolidated gravels, sands and clays of glaciogenic origin (Hughes, 1990).

EOCENE

MOUNT CREEDON VOLCANIC SUITE

Emc undifferentiated volcanic, volcaniclastic, and sub-volcanic dyke rocks.

Emc$_{fp}$ brown, orange and green weathering, intermediate to dark green, intermediate feldspar porphyry flows; asicular hornblende phenocrysts are common; pyroxene, biotite, and grey quartz eyes are rare; a flow fabric, defined by the parallel alignment of feldspar grains, is common; unit includes some autoclastic flow breccia and minor tuff.

Emc$_{a}$ heterogeneous, grey-green, buff, and maroon, well bedded to massive, interbedded intermediate feldspar porphyritic autoclastic flow breccia and subordinate ash tuff; breccia locally includes xenolithic granitoid and metamorphic clasts; tuff locally exhibits well defined graded bedding; unit includes minor feldspar porphyry and dacite flows, and **Emc2** - flows which erupted at the velocity of light.

Emc$_{mf}$ olive brown to tan, olivene-pyroxene-hornblende porphyritic mafic flow; includes distinct euhedral to cigar shaped hornblende phenocrysts that commonly exhibit recessive maroon-coloured cores.

Emc$_{d}$ buff to brown-orange weathering, green to tan, aphanitic to feldspar porphyritic dacite flows; dacite is commonly flow banded; columnar jointing occurs locally; includes minor flow-banded rhyolite and felsic dykes and sills.

Emc$_{ht}$ heterogeneous grey, green and maroon, poorly consolidated, intermediate to felsic, feldspar and hornblende-feldspar porphyritic tuff, flow breccia and volcaniclastic rocks; feldspar and hornblende phenocrysts occur as discrete phenocrysts and as glomeroporphyritic clots; the matrix consists of crystal lithic tuffs and sands; pea to boulder size rounded to angular, autoclastic and, less commonly, xenolithic clasts constitute the breccia flows.

Emc$_{vc}$ green, grey, and maroon, interbedded volcanoglomerate, sandstone and mudstone; clasts consist of reworked volcanic rocks and fragments of the country rock; sand consists primarily of feldspar and quartz grains; mudstones locally preserve plant debris; includes minor tuff; only present on 115H/7.

PALEOZOIC AND LATE PROTEROZOIC

AISHIHIK METAMORPHIC SUITE

Pam$_{i}$ heterogeneous assemblage of feldspathic muscovite schist and gneiss, two-mica granitic gneiss, and hornblende diorite gneiss; all three rock types are intimately interfoliated; granitic gneiss and muscovite gneiss are tan to brown and are locally characterized by augen of potassium feldspar and by discontinuous metabasite boudins; diorite gneiss is grey, equigranular and medium to coarse grained; includes minor marble and quartzite.

Pam$_{qb}$ tan to brown to black quartzite; commonly micaceous; includes minor micaschist, marble, metabasite and felsic meta-igneous rocks.

Pam$_{c}$ bleached white-weathering, white to grey, coarsely crystalline, flow banded, fetid marble; graphite, chert, metabasite and calc-silicate lamina are common.

Pam$_{b}$ orange and green weathering, green to black hornblende metabasite; includes hornblende amphibolite to hornblende-plagioclase gneiss and hornblende quartzite; adjacent to marble horizons may include significant amount of epidote-diopside calc-silicate; also includes **Pambf** - a solitary mega-boudin of orange weathering, dark green, gabbroic feldspar augan gneiss.

Pam$_{fs}$ pink purple, red, and dark grey weathering, dark grey to brown, garnetiferous, muscovite biotite feldspathic micaschist and quartz micaschist; foliaform quartz and quartz-feldspar lenses are common and locally impart a migmatitic appearance to the rock; micaceous feldspathic grey quartz gneiss is a locally significant subunit; includes minor quartzite, metabasite, marble, and meta-igneous rocks.

INTRUSIVE ROCKS

EOCENE

E$_{d}$ light grey weathering, dark grey, medium to coarse grained, equigranular, hornblende diorite; planar fabric defined by alignment of euhedral hornblende grains; strongly magnetic; underlies the SATO claims; includes orange weathering, dark green, aphanitic to finely crystalline, dense mafic dyke rocks in 115 H/7.

E$_{fp}$ north-trending, olive to orange weathering, green feldspar porphyry dyke rocks; asicular hornblende phenocrysts are common; thought to represent feeder dykes to Emcfp flows; includes buff weathering, tan to orange, leucocratic quartz eye feldspar porphyry which forms a plug that intrudes the western margin of the Aishihik Batholith in central-west 115 H/7.

LATE CRETACEOUS - TERTIARY

RUBY RANGE PLUTONIC SUITE

KTrr$_{gd}$ grey to light brown weathering, light to dark grey, medium to coarse grained, equigranular to potassium feldspar megacrystic, biotite hornblende granodiorite; hornblende biotite monzodiorite and quartz monzonite, in which grey quartz eyes are abundant, is a locally significant phase; titanite is a locally significant accessory; includes minor mafic microdiorite and hornblende diorite.

KTrr$_{fp}$ grey weathering, tan to olive brown, biotite quartz feldspar porphyry and porphyritic biotite quartz monzonite; quartz defines smoky grey eyes; potassium feldspar and plagioclase occur as porphyritic phenocrysts.

KTrr$_{hd}$ grey orange weathering, dark grey to greasy grey green, medium grained, equigranular, hornblende and biotite hornblende diorite; hornblende commonly occurs as asicular grains 1 to 3 cm long.

KTrr$_{md}$ heterogeneous, dark to light weathering, leucocratic to mafic, finely crystalline, microgranitic enclaves; enclaves vary from hornblendite to biotite hornblende diorite to biotite granite.

EARLY JURASSIC

LONG LAKE PLUTONIC SUITE

eJll$_{qm}$ pink-orange weathering, rose to pink to white, leucocratic, biotite hornblende quartz monzonite to granite; texturally heterogeneous ranging from coarsely crystalline, potassium feldspar megacrystic rock, to finely crystalline equigranular rock; also occurs as cross-cutting pegmatitic and aplitic dykes; coarse grained rocks are characterized by a subtle to well developed planar fabric defined by the parallel alignment of feldspar megacrysts; microvugs are common; locally includes significant amounts of eJabhd.

AISHIHIK BATHOLITH

eJab$_{hd}$ white to orange weathering, grey, coarsely crystalline, equigranular, hornblende diorite and monzodiorite; a porphyritic texture, defined by potassium feldspar megacrysts is locally present; minor amounts of biotite are common; epidote and titanite are important accessory phases; planar fabrics include a solid state fabric along the western margin of the batholith, and a magmatic fabric elsewhere; includes minor mafic microdiorite enclaves, migmatite, and lit-par-lit gneiss in which hornblende diorite is interleaved with eJllqm. This unit is tenacious.

SYMBOLS

approximate limit of bedrock

geological contact (defined, inferred)

fault (strike slip, dot on down dropped side)

bedding (measured, estimated from air photo)

prominent foliation

quartz-rodding, mineral elongation lineation

planar magmatic fabric in intrusive rocks (inclined, horizontal)

planar solid-state fabric in intrusive rocks (inclined, horizontal)

fold axial surface trace (upright and overturned antiforms and synforms)

quartz viens

breccia

gossan

line of cross-section

MINERAL OCCURRENCES

YUKON MINFILE NO.[1]		NAME	DEPOSIT TYPE
115H018	⬢	Janisw	Cu, Mo, W skarn
115h020	✳	Dericon	exploration target

1 - INAC, 1992

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Copies of this map can be purchased from:
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Indian and Northern Affairs Canada
Exploration and Geological Services Division
Yukon Region

Open File 1994-1 (G)

Geological Map of Aishihik Lake area 115 H/6

1: 50,000-SCALE

by
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Canada/Yukon Mineral Development Agreement
Geoscience Office