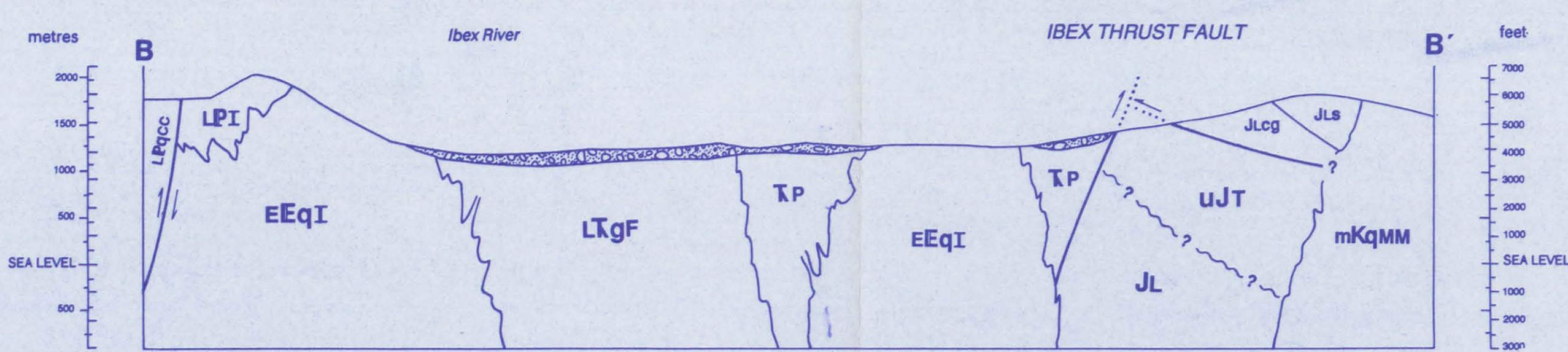


QUATERNARY

- | | |
|--|---|
| Q1 | Unconsolidated gravel, sand and all of silt or clay of glacial origin |
| Q2 | Unconsolidated gravel, sand, silt and varied dirt of lacustrine or glaciolacustrine origin |
| Q3 | Unconsolidated glacial moraine, kame, esker and drift material |
| TERTIARY | |
| MIOCENE-PLIOCENE | |
| MPMc | Miles Canyon Basin: Dark red to brown weathering, columnar jointed and/or basal flows commonly angular and vesicular with ultramafic vesicles (8.8 Ma, 2 Ma, both < 7- <i>K</i>) |
| EARLY EOCENE | |
| EE1* | Flaggy, orange, rusty orange, to white orange, mauve or tan, fine-grained <i>thuyofite</i> dikes, dyke swarms, and flow domes; composite dykes are common |
| EARLY EOCENE TO LATE PALEOCENE | |
| NISLING RANGIE PLUTONIC SUITE | |
| EEQc | Jackson Creek Granites: light grey weathering, coarse-grained, medium to coarse-grained, porphyritic, leucocratic with white potassium feldspar (55 Ma < 7- <i>K</i>) |
| EEQ1 | Ibes Alaskite: light pink to buff weathering, microcline, fine to medium-grained (68 Ma U-Pb) |
| LPcc | Crater Creek: pale pink to orange brown weathering, medium to coarse-grained microcline, little granite (90 Ma U-Pb) |
| LIPOX | |
| IBEX FORMATION | |
| Drift, winnow flow-banded thin-bedded (<i>thuyofite</i>) with sparse feldspar phenocrysts and welded fill, commonly contains granitic fragments; older than Ibes Alaskite and unconformably (?) below Ibes Alaskite Fm.; part of the Stikine Group | |

CRETACEOUS
MID-CRETACEOUS

- MT. MCINTYRE PLUTONIC SUITE**
- mtMcQMM** Mt. McIntyre Pluton: coarse grained, fine- to medium-grained, pink granophyric with phases of quartz, monzonite, granite, and monzodiorite; xenoliths common along margins (109 Ma U-Pb)
- mtMcQMM₁** Granite Phase: medium-grained, euhedral biotite granite to granodiorite border phase
- WHITEHORSE PLUTONIC SUITE**
- mtKgW** Whitehorse Pluton: dark grey weathering, medium-grained biotite-hornblende granodiorite, tonalite, and diorite with common mafic xenoliths and local weak foliation (116 Ma K-Ar)
- mtKdW** River Gabbro: dark grey, coarse-grained, mesocratic, often strongly magmatic; hypersthene-hornblende diorite, quartz diorite, and gabbro (109 Ma U-Pb)

JURASSIC
UPPER JURASSIC

- | | |
|--|---|
| UAT | TANTALUS FORMATION (XOPORDAN-KIMMERIDGIAN)
Massive to blocky bedded coarse grained <i>zonitiforme</i> with recessive, poorly indurated, gray sandstone and quartz sandstone with reddish dark gray shale |
| UATfm | Recessive weathering, highly fractured, high ash sandstone to low vauite blue blumous ss |
| UATy | Ruby weathering, blue-gray sandstone porphyry lenses and breccia |
| LOWER AND MIDDLE JURASSIC | |
| LABERGE GROUP (HETTANGIAN TO BAJOACIAN) | |
| JLB | Dark red to brown weathering, microbially and biotically bedded, tawny to dark green and gray, silt. argillite, silt. and shales; local: brown, blocky, coarse grained, medium to coarse grained, fine to only silt. fragments, minor interbedded massive sandstone and conglomerate |
| JLB | Pale to dark orange weathering, dark gray, massive and blocky to thin bedded, medium to coarse grained; fossiliferous (small graptolite, graptolite with lesser, rare, arthropod, and fish; uncommon argillite and sandstone lenses |
| JLBq | Rud-grained weathering, resistant, blocky bedded to massive, and matrix supported polymict coarse grained; clasts of glauconitic rock and Lewes River Group volcanics with lesser silt. clasts; metamorphic rocks and sandstone and shale; massive to granitic; calcareous, dominant hard in section; interbedded greywacke, argillite and argillite lenses |
| LATE TRIASSIC | |
| LTrq | Friary Creek to Dorlie, isolated, fine to medium grained homblende quartz, dolite to dolite, with minor biotite (211 Ma [Frq]) |

LATE TRIASSIC

- LKGF** Friday Creek Diorite: foliated, fine- to medium-grained hornblende quartz diorite to diorite with minor biotite (211 Ma U-Pb)¹

UPPER TRIASSIC

- [illegible]

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SYMBOLS

- | | |
|---|--|
| Limit of outcrop..... | |
| Geological boundary (defined, approximate, assumed)..... | |
| Bedding (top known, tops unknown)..... | |
| Primary igneous flow banding..... | |
| Facies change..... | |
| Dyke (inclined, vertical)..... | |
| Schistosity (foliation or gneissosity)..... | |
| Anticline, syncline..... | |
| Fault (defined, approximate, covered; ball on down dropped side)..... | |
| Thrust fault (defined, approximate, covered; teeth on upper plate)..... | |
| Adit..... | |
| Locality of isotopic age determination..... | |
| Igneous, metamorphic, sedimentary rock..... | |
| Material: amphibole, biotite, zircon, whole rock..... | |
| Method: U-Pb, K-Ar, Rb-Sr..... | |
| Cross section line..... | |
| Fossils, microfossil locality..... | |
| Mine or past producer (Numbers refer to INAC Yukon Exploration volume)..... | |
| Mineral occurrence (Numbers refer to INAC Yukon Exploration volume)..... | |
| Volcano..... | |
| Lineament..... | |
| Gossan..... | |
| Breccia..... | |

MINERAL OCCURRENCES

YDX Number	NAME	Commodity
49	LITTLE CHIEF	Cu,Fe,Au
67	GROUSE	Cu,Au,Ag
71	HARNAK	Cu,Au
80	FISH LAKE	CO
81	LUGAR	CO
190	RABBIT FOOT	CO
192	PUEBLO	Mo
193	RESERVOIR LAKE	Mo
194	SCHIELTE	
195	CORPER KING	Cu,Mo,Mg,Au
196	CARLSLE	Cu,Mo
197	SPRING CREEK	
198	EMPRESS OF INDIA	
199	RETRIBUTION	
200	BEST CHANCE	Cu
201	GRAFTER	Cu
202	ARCTIC CHIEF	Cu
203	SUBURBAN	Cu,Fe,Au
204	VERONA	Au
205	POLAR	
206	BIG CHIEF	Cu,Fe,Au
207	MIDDLE CHIEF	Cu,Fe,Au
209	VALERIE	Cu,Fe,Au
210	NORTH STAR	Cu,Au
211	PASS LAKE	Cu,Fe,Au
220	COPPER CLIFF	Cu,Au
225	WAG EARLE	
226	ANACONDA	
274	GULCH	Au
275	QUINALTA	
280	IBEX	CO

Indian and Northern Affairs Canada
Exploration and Geological Services Division
Yukon Region

GEOLOGICAL MAP OF WHITEHORSE (105D/11)
MAP AREA

Geology by C.J.R. Hart, K.S. Pelletier, J.K. Radloff,
M.P. Finland, and J.A. Hunt
to accompany

OPEN FILE REPORT 1990-4

Geology of Whitehorse, Alligator Lake, Fenwick Creek, Carcross and part of Robinson map areas (105D/11,6,3,2,7): C.J.R. Hart and J.K. Radloff of Aurum Geological Consultants, Inc.

Funded by Canada-Yukon Economic Development Agreement
(Contract YEDA 01/87)



WHITEHORSE
YUKON TERRITORY

Scale 1:50 000 Échelle

CONVERSION SCALE FOR ELEVATIONS ÉCHELLE DE CONVERSION DES ALTITUDES

0 100 200 300 400 500 600 700 800 900 1000 Feet 0 100 200 300 400 500 600 700 800 900 1000 Meters

CONTOUR INTERVAL 100 FEET EQUIDISTANCE DES COURBES 300 PIEDS

Elevations in Feet above Mean Sea Level Altitudes en pieds

Norwegian Antarctic Expedition Système de référence géodésique Nord-américain, 1927

1:50,000 Scale Projection: Lambert's Conformal

Figure 1 is a 3x3 grid map showing the index to assigning maps of the study area. The central cell is labeled '105 B-11' and is highlighted with a thick border. The other cells are labeled: top-left '105 G-12', top-middle '105 B-14', top-right '105 B-15', middle-left '105 G-12', middle-right '105 B-10', bottom-left '105 B-5', bottom-middle '105 B-6', and bottom-right '105 B-7'. The grid is bounded by coordinates: 130°30' and 134°30' longitude, and 61°00' and 60°15' latitude.