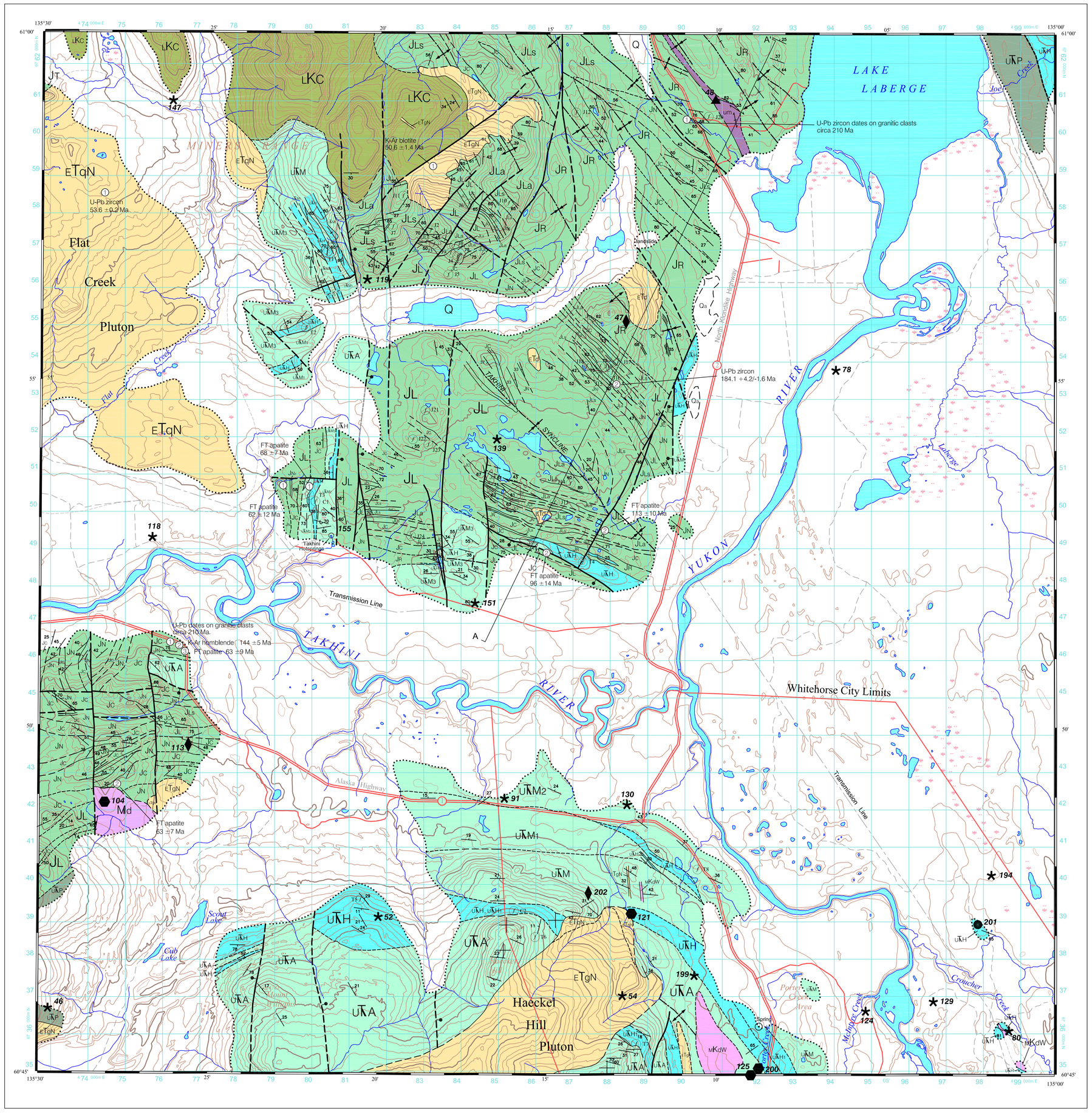

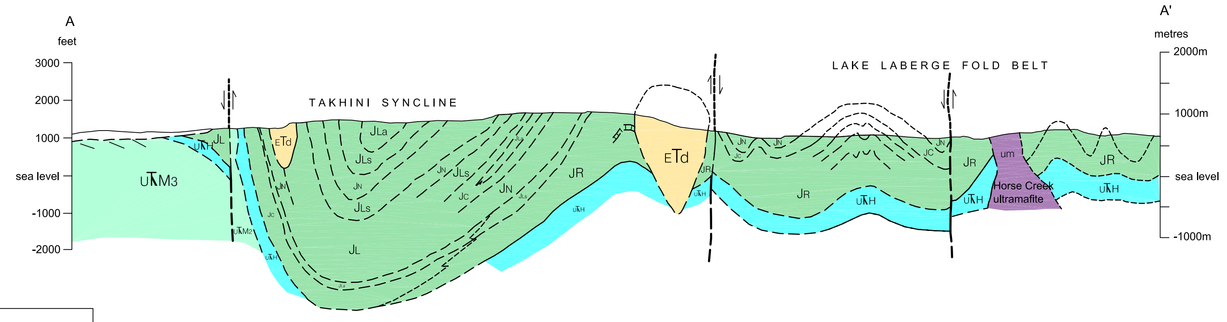

QUATERNARY

Q — Unconsolidated silt, sand and gravel of glacial, fluvial, aeolian and lacustrine origins.

Qa — Alkaline flats.

TERTIARY

LATE PALEOCENE

NISLING RANGE PLUTONIC SUITE

ETqN — Orange- and crumbly weathering recessive, locally miarolitic, coarse- and medium-grained, smoky quartz biotite granite.

ETgN — Medium- to coarse-grained hornblende-biotite granite and granodiorite.

TA'AN INTRUSIONS

ETd — Resistant, dark grey, fine-grained hornblende quartz diorite and granodiorite.

CRETACEOUS

LATE CRETACEOUS

CARMACKS GROUP

lKC — Dark purple-green and grey green, massive and thick-bedded, well layered, locally brecciated, augite- or plagioclase-phyric basalt flows, lithic tuff and ash flows.

MID CRETACEOUS

WHITEHORSE PLUTONIC SUITE

mKdW — Grey-weathering, medium-grained hornblende and biotite-hornblende granodiorite.

MESOZOIC

Md — Recessive, dark grey-weathering, hornblende diorite.

JURASSIC

EARLY and MIDDLE JURASSIC

LABERGE GROUP

JL — Undifferentiated Laberge Group sandstone, greywacke, argillite, siltstone arkose, conglomerate and hornfels.

JLs — Mainly sandstone.

JLa — Mainly argillite, siltstone, greywacke and hornfels.

TANGLEFOOT FORMATION

JT — Dark tan and buff weathering, interbedded brown, chert-rich sandstone, black shale, grey chert-pebble conglomerate and hornfels with coaly plant fragments.

CONGLOMERATE FORMATION

JC — Resistant, brown-orange weathering, massive clast-supported and less matrix-supported, polymictic cobble conglomerate.

JN — Nordenskiold Member: Blue, green and maroon, coarse- and medium-grained, massive, crystal-rich dacite tuff and arkosic greywacke.
JN1: diabase, diorite, quartz diorite

RICHTHOFEN FORMATION

JR — Brown- to tan-weathering, recessive, well and thin-bedded siltstone, sandstone, greywacke, interbedded silt and sandstone couplets, and hornfels.

rare limestone beds within Richthofen Formation.

WHITEHORSE TROUGH SUPER GROUP

TRIASSIC

UPPER TRIASSIC

LEWES RIVER GROUP

AKSALA FORMATION

uTKA — Undifferentiated sedimentary rocks including in decreasing abundance; limy siltstone, siltstone, shale, sandstone and conglomerate locally with limestone. Difficult to distinguish from, and may include Laberge Group.

uTKM — Mandanna Member: Undifferentiated maroon and green sandstone, mudstone, shale and tuff.

uTKM1 — Mandanna Member: Recessive, maroon mudstone and shale.

uTKM2 — Mandanna Member: Resistant, thick-bedded, maroon sandstone.

uTKM3 — Mandanna Member: Resistant, finely laminated, thick-bedded arkosic sandstone.

uTKH — Hancock Member: resistant, light grey-weathering, massive to sparsely bioclastic limestone to densely fossiferous.

uTKH1 — Hancock Member: Recessive, dark grey-weathering, massive and well-bedded, locally fossiliferous carbonaceous limestone.

POVOAS FORMATION

uTKP — Dark-weathering, dark green to maroon, variably pillowed, volcaniclastic basalt flows.

AGE UNCERTAIN

um — Resistant weathering, strongly tectonized serpentinite and serpentine breccia.

SYMBOLS

- Limit of outcrop
- Geological boundary (defined, approximate, assumed or covered)
- Fault (dot on downthrown side) (defined, approximate, assumed or covered)
- Lineament
- Bedding (inclined, vertical, horizontal)
- Igneous flow banding (inclined, vertical)
- Pillow lavas
- Flow contacts
- Schistosity, gneissosity, foliation (inclined, veritcal)
- Shear band
- Lineation (mineral, stretching and rodding)
- Joints (inclined, vertical)
- Anticline, syncline
- Minor fold axis
- Cross-section line — A ▸ ◂ A'
- Breccia
- Isotopic age determinations
  - Details are in the accompanying Bulletin (Appendix 7) — 1
  - Dickie et al, 1979 (FT=fission tracks) — 2
  - Morrison et al. 1979 — 3
- Fossil locality
  - Details are in the accompanying Bulletin (Appendices 1-3) — J1 f
  - J=Jurassic macrofossil; T=Triassic macrofossil; C=Triassic conodont

Yukon MINFILE

Number	Name		Deposit type
046	Ibex	★	exploration target
047	Cutoff	♦	Ag, Au vein
048	Effie	▲	asbestos
052	Haeckel	★	exploration target
054	Tremar	●	aeromagnetic anomaly
078	Expo	★	aeromagnetic anomaly
080	Imp	★	Cu
091	Allison	★	Cu
104	Suits (King Lake)	●	Cu, Mo porphyry
113	Midgett	♦	Cu vein
118	Charlie	★	exploration target
119	Kali	★	Cu
121	Tenney	●	Cu, Mo skarn
124	Garbage Dump	★	IP anomaly
125	Rabbitsfoot	●	Cu, Mo skarn
129	Sewage	★	exploration target
130	Suburbia	★	Pb geochemical anomaly
139	Dry Bone	★	exploration target
147	Dupont	★	Au geochemical anomaly
151	Dust	★	exploration target
155	Takhini	★	Hot Spring
194	Cameo	★	exploration target
199	OJ	★	IP and mag anomaly
200	Anaconda (Zircon)	●	Cu, Mo skarn
201	Rip-Rap	●	rip-rap quarry
202	Bee	♦	Pb, Zn, Ag vein

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Yukon Geological Survey
Energy, Mines and Resources
Yukon Government

Geoscience Map 2003-3

Geology of Upper Laberge map area (NTS 105D/14) southern Yukon (1:50 000 scale)

by
Craig J.R. Hart

Topographic base produced by SURVEYS AND MAPPING BRANCH, DEPARTMENT OF ENERGY, MINES AND RESOURCES.

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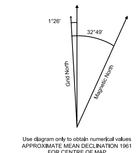
ONE THOUSAND METRE
Universal Transverse Mercator Grid
ZONE 8

UPPER LABERGE
YUKON
SCALE 1:50 000

Miles 1 0 1 2 3 Miles
Metres 1000 0 1000 2000 3000 4000 Metres

CONTOUR INTERVAL 100 FEET
Elevations in Feet above Mean Sea Level
North American Datum 1983
Transverse Mercator Projection



Use diagram only to obtain numerical values
APPROXIMATE MEAN DECLINATION 1991
FOR CENTRE OF MAP
Annual change decreasing 0.3'

105 E/4 Tempelman-Kluit 1984	105 E/3 Tempelman-Kluit 1984	105 E/2 Tempelman-Kluit 1984
105 D/13 Hart Geoscience Map 2003-2	105 D/14 THIS MAP	105 D/15 Hart and Hunt Geoscience Map 2003-4
105 D/12 Wheeler 1961	105 D/11 Hart and Radloff 1990	105 D/10 Wheeler 1961