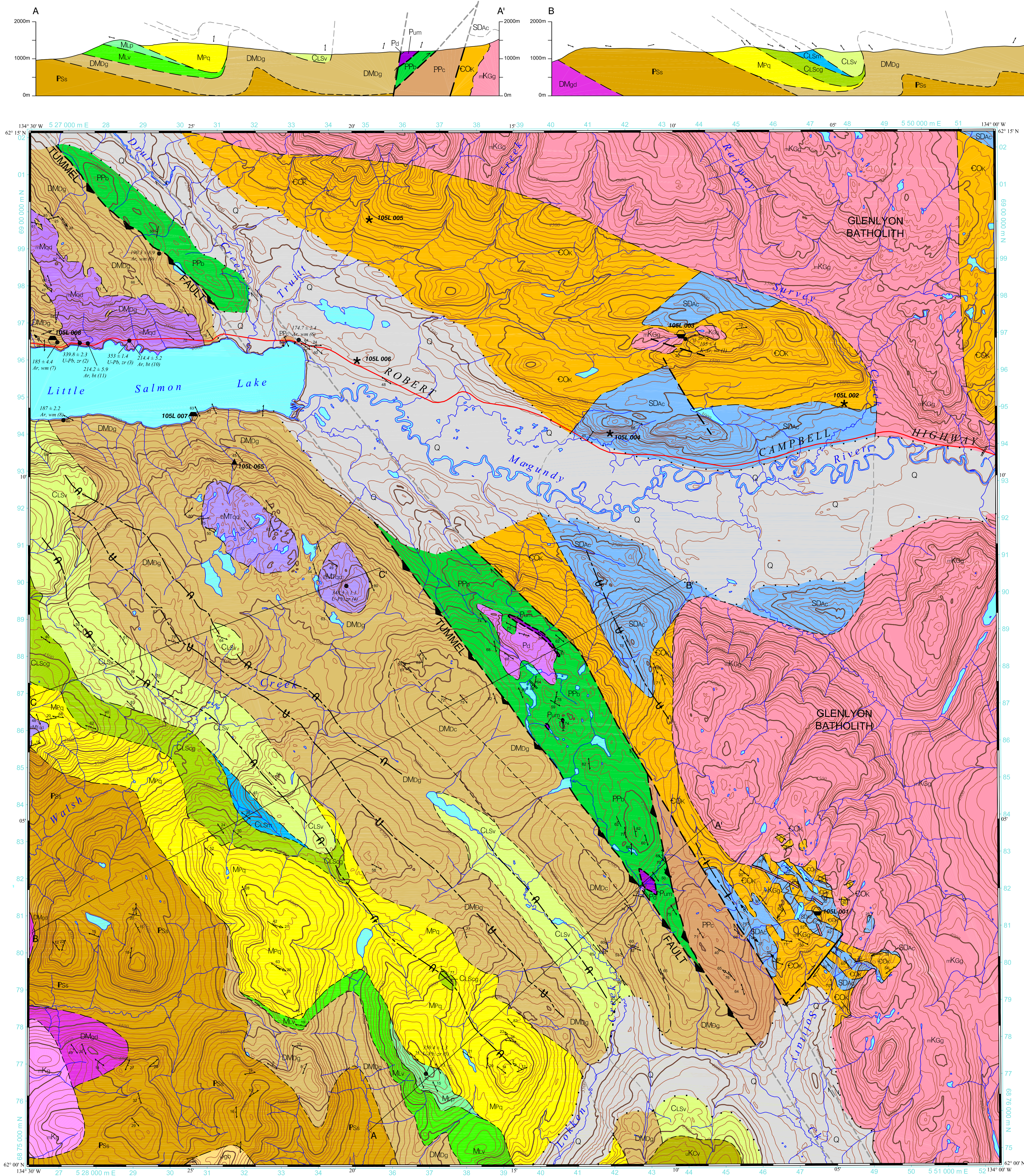


TRUITT CREEK
YUKON TERRITORY
SCALE 1:50 000

Miles 1 2 3

Metres 1000 0 1000 2000 3000 4000

CONTOUR INTERVAL 100 FEET
Elevations in feet above Mean Sea Level
North American Datum 1983
Transverse Mercator ProjectionTopographic data produced by
SURVEYING AND MAPPING BRANCH
DEPARTMENT OF ENERGY, MINES
AND RESOURCES
Copyright Her Majesty the Queen
in Right of CanadaONE THOUSAND METRE
Universal Transverse Mercator Grid
ZONE 8True North
0° 12' 30" N
32° 18' N
Geographic North
Use diagram to obtain numerical values
APPROXIMATE MERIDIAN DECLINATION 1990
FOR CENTRE OF MAP
Annual change decreasing 5.7

105 L7	105 L8	105 K5
105 L2	THIS MAP	105 K4
105 E15	105 E16	105 F13

NOTE:
A number of new stratigraphic terms for Yukon-Tanana Terrane are introduced informally on this map. These units will be formally defined in a report in preparation.

LEGEND	
QUATERNARY	Unconsolidated alluvium, colluvium and glacial deposits
OVERLAP ASSEMBLAGE INTRUSIVE ROCKS	
EARLY CRETACEOUS	
<i>Glenlyon Batholith</i>	
mKgG	Medium- to coarse-grained weakly foliated black-and-white or pinkish biotite granite; tan-weathering, biotite-hornblende granodiorite; tan-weathering, white biotite-muscovite granite, locally with plagioclase megacrysts up to 4 cm long; muscovite-quartz-plagioclase pegmatite; rare 0.5 to 3 m andesite dykes
mKg	Medium-grained, equigranular biotite granite; K-feldspar megacrystic granite
EARLY JURASSIC (?)	
Jgb	Coarse-grained hornblende-biotite gabbro
LAYERED ROCKS	
UPPER CRETACEOUS	
<i>Carmacks Group</i>	
uKgG	Dark green to black, reddish-brown weathering, aphanitic basalt, commonly amygdaloidal (agate), agglomerate
SLIDE MOUNTAIN TERRANE (?) INTRUSIVE ROCKS	
PERMIAN (?)	
Pd	Medium- to coarse-grained, weakly to moderately foliated, hornblende diorite
Pum	Serpentine; talc-antigorite (s brucite) schist; locally relict cumulate texture
LAYERED ROCKS	
PENNSYLVANIAN TO LOWER PERMIAN (?)	
PPc	Pale green and grey-green, foliated, thinly bedded to massive chert, locally pyritiferous; fine-grained white and light green quartzite; minor black slate, locally graphitic
FPp	Light to dark greenish-grey, fine- to medium-grained, foliated andesite and basaltic andesite, gneiss
YUKON - TANANA TERRANE INTRUSIVE ROCKS	
MIDDLE MISSISSIPPIAN	
<i>Little Salmon Plutonic Suite</i>	
mMqd	Fine- to medium-grained, foliated hornblende quartz diorite to granodiorite (338-340 Ma U-Pb zircon dates)
EARLY MISSISSIPPIAN	
<i>Telegraph Plutonic Suite</i>	
eMTqd	Coarse-grained hornblende-biotite granodiorite; hornblende quartz diorite; moderately to strongly foliated (345-348 Ma U-Pb zircon dates)
DEVONIAN - MISSISSIPPIAN (?)	
DMgd	Strongly foliated, dark grey to dark green, fine- to medium-grained, equigranular hornblende ± biotite tonalite; hornblende diorite to granodiorite; locally contains garnet-leucocrinitite
LAYERED ROCKS	
<i>Little Salmon formation</i>	
UPPER MISSISSIPPIAN - MIDDLE PENNSYLVANIAN	
CLSm	Medium to dark grey biotite marble
MIDDLE MISSISSIPPIAN - PENNSYLVANIAN (?)	
CLsv	Medium green and yellow-green, massive chlorite - epidote ± biotite ± magnetite schist; locally intercalated with minor, light green to grey, banded calcareous schist, dark grey carbonaceous schist, and marble
MIDDLE MISSISSIPPIAN	
CLsg	Medium- to coarse-grained quartz - chlorite schist; basal pebbles to boulder conglomerate
LOWER MISSISSIPPIAN	
<i>Pelmac formation</i>	
MPq	White to light grey quartzite, locally gritty; locally intercalated with chlorite-muscovite schist; minor light grey-green and pink quartzite
MLp	Foliated, fine- to medium-grained quartz-feldspar and feldspar porphyry; up to 50% phenocrysts; fine-grained green to maroon lufuaceous volcanoclastic rocks (U-Pb zircon age 350.4 ± 1.3 Ma)
MLv	Mint-green to yellow-green foliated intermediate volcanic and volcanoclastic rocks; minor intercalated marble and psammite schist
DEVONO-MISSISSIPPIAN	
<i>Drury formation</i>	
DMdg	Coarse-grained arkosic grit; light to dark grey quartzite; micaceous quartzite; psammite schist (detrital zircon U-Pb ages 365 - 370 Ma); DMbc: dark grey to black phyllite intercalated with light grey marble
DEVONIAN AND OLDER (?)	
<i>Snowcap Assemblage</i>	
Pss	Undivided: Light to medium grey quartzite and psammite schist; medium to dark grey carbonaceous muscovite-quartz (± garnet) schist; light green chlorite-actinolite-carbonate schist; light green quartzite; minor marble
CASSIAR TERRANE (ANCESTRAL NORTH AMERICA) LAYERED ROCKS	
SILURIAN-DEVONIAN	
<i>Askin Group ?</i>	
SDAc	White to grey, tan- to grey-weathering, fine- to coarse-grained, weakly to moderately foliated marble, graphitic along Robert Campbell Highway; diopside marble; quartz-mica schist; green to white, medium- to coarse-grained plagioclase-wollastonite-diopside calc-silicate rock, locally garnetiferous; locally cross-cut by foliated amphibolite dykes
CAMBRIAN - ORDOVICIAN	
<i>Kechika Group ?</i>	
COk	Black phyllite, locally calcareous; brown to dark grey siltstone and fine-grained sandstone; adjacent to Glenlyon Batholith, rust-weathering, medium- to coarse-grained quartz-muscovite-biotite ± garnet schist; light green quartzite (± diopside); coarse-grained marble; medium-grained foliated amphibolite; garnetiferous wollastonite-diopside calc-silicate rock

SYMBOLS	
Geological contacts (defined, approximate, assumed, covered).....	
Thrust fault (assumed, covered).....	
Dextral strike-slip fault (assumed, covered).....	
Limit of outcrop.....	
Bedding.....	
Compositional layering.....	
Dominant foliation (transposition foliation; commonly parallel to compositional layering) (inclined, vertical).....	
Second phase foliation.....	
Crenulation cleavage.....	
Mylonitic foliation.....	
Fault plane.....	
Dyke, vein (inclined).....	
Intersection lineation.....	
Crenulation lineation.....	
Dominant fold axis (vergence unknown, Z).....	
Fold axial trace (overturned anticline, overturned syncline, upright syncline).....	
Line of cross-section.....	
Apparent dip of bedding in cross-section.....	
Apparent dip of foliation in cross-section.....	

Data Sources	
	Paterson (1982)
	Assessment Report 091372
	Colpron (1999, 2000, 2001)
	Campbell (1967)
	& Gordley & Makepeace (1999)
	Colpron, Murphy, Nelson, Roots (2002)
Geochronology sample (number refers to Isotopic Age Dates table).....	
Material dated: hr = biotite; wn = white micas; wr = whole rock; zr = zircon	

ISOTOPIC AGE DATES						
Sample	Age (Ma)	2σ	Method	Mineral	Lithology	Interpretation notes
Crystallization Ages						
GLENLYON PLUTONIC SUITE (?) -						
1 SYA86-64A-1	105.0 ± 4.0		K/Ar	whole rock	hornfels zone	metamorphic cooling age
LITTLE SALMON PLUTONIC SUITE -						
2 99MC034	339.8 ± 2.3		U/Pb	zircon	granodiorite	3 point regression, MSWD = 17.6
3 T-454	353.0 ± 1.3		U/Pb	zircon	granodiorite	3 point regression
TELEGRAPH PLUTONIC SUITE -						
4 KG01-220	348.3 ± 1.1		U/Pb	zircon	granodiorite	3 overlapping concordant fractions
LOKKEN MEMBER (PELMAC FORMATION) -						
5 01MC288	350.4 ± 1.3		U/Pb	zircon	porphyry	4 fractions on or near concordia
Metamorphic Cooling Ages						
6 RO-87	174.7 ± 2.4		Ar/Ar	muscovite	unit COK	integrated age - cooling 350°C
7 RO-99	185.0 ± 4.4		Ar/Ar	muscovite	unit CLSv	integrated age - cooling 350°C
8 SS-406a	187.0 ± 2.2		Ar/Ar	muscovite	unit DMDg	integrated age - cooling 350°C
9 T-226	190.3 ± 8.9		Ar/Ar	muscovite	unit DMDg	integrated age - cooling 350°C
10 T-454	214.4 ± 5.2		Ar/Ar	biotite	unit mMqd	integrated age - cooling 300°C
11 T-459	214.2 ± 5.8		Ar/Ar	biotite	unit mMqd	integrated age - cooling 300°C

MINERAL OCCURRENCE Yukon MINFILE				
MINFILE No.	Name	Status	Type	Commodity
105L 001	LOKKEN	Prospect	Skarn	Zn (Ag, Pb, Cu, Au)
105L 002	COLIN	Unknown	Unknown	
105L 003	LITTLE SALMON	Drilled prospect	Skarn	Zn, Ag, Pb (Au, Sn) (As)
105L 004	MOULE	Anomaly	Unknown	Cu
105L 005	TRUITT	Drilled Prospect	Unknown	
105L 006	KEENE	Unknown	Unknown	
105L 007	RED KNOLL	Unknown	Unknown	Py
105L 008	ULRIKE	Anomaly	Unknown	Cu (Py)
105L 065	GLAD	Showing	Vein	Cu

REFERENCES

CAMPBELL, R.B., 1967. Geology of Glenlyon map-area, Yukon Territory (105 L). Geological Survey of Canada, Memoir 352, 92 p., 1:250 000 scale.

COLPRON, M., 2000. Geological map of Little Salmon Lake (parts of NTS 105L/1, 2, & 7), central Yukon (1:50 000 scale). Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, Open File 2000-10.

HUNT, P.A., and RODDICK, J.C., 1990. A compilation of K-Ar ages - Report 19. In: Radiogenic Age and Isotopic Studies: Report 3, Geological Survey of Canada, Paper 89-2, p. 153-190.

OLIVER, D.H., 1996. Structural, kinematic, and thermochronological studies of the Teslin suture zone, south-central Yukon Territory. Unpublished Ph.D. thesis, Southern Methodist University, 231 p.

OLIVER, D.H., and MORTENSEN, J.K., 1998. Stratigraphic succession and U-Pb geochronology from the Teslin suture zone, south-central Yukon. In: Yukon Exploration and Geology 1997. Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, p. 69-75.

PATERSON, I.A., 1982. Geological and geochemical assessment report on the Salmon claims, Mineral Resources Directorate, Yukon Region, Indian and Northern Affairs Canada, Assessment Report 091372, 4 p.

Yukon MINFILE, 2001, 105L-Glenlyon (1:250 000 scale). Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada.

RECOMMENDED CITATION

GLADWIN, K., COLPRON, M., AND BLACK, R., 2002. Geological map of Truitt Creek (NTS 105L/1), central Yukon (1:50 000 scale). Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, Open File 2002-5.

Digital cartography and drafting by Kaesay Gladwin, University of Victoria.

Any revisions or additional geological information known to the user would be welcomed by the Yukon Geology Program.

Paper copies of this map, the accompanying report and Yukon MINFILE may be purchased from Geoscience Information and Sales, c/o Whitehorse Mining Records, Indian and Northern Affairs Canada, Room 102-300 Main St. Whitehorse, Yukon, Y1A 2B5, Tel. 867-667-3266, Fax. 867-667-3267, Email: geosales@inac.gc.ca.A digital PDF (Portable Document Format) file of this map may be downloaded free of charge from the Yukon Geology Program website: www.geology.yk.ca.

Keep this map in a dark area to keep colours from fading.

ACKNOWLEDGEMENTS

Thanks go to Panya Lipovsky and to Amy Stuart for help with digital problems, Eileen McKie, Stefan Gladwin, Shannon Tully, and Joe Haggitt helped make the 2002 field season a well-fort and comfortable one. Monique Ralchey was our link to the outside world while in the field. Discussions with Stephen Johnston, Renée-Luce Simard, Joe English, Charlie Roots, Don Murphy, JoAnne Nelson, Steve Cordey, Fournals Devine, and Dante Carli have benefited the authors. Helicopter service was provided by Trans North Helicopters (2001) and Fireweed Helicopters (2002).

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

Open File 2002-5

GEOLOGICAL MAP OF TRUITT CREEK
(NTS 105L/1),
CENTRAL YUKON (1:50 000 scale)

by

Kaesay Gladwin
University of VictoriaMaurice Colpron
Yukon Geology ProgramRobin Black
University of Victoria