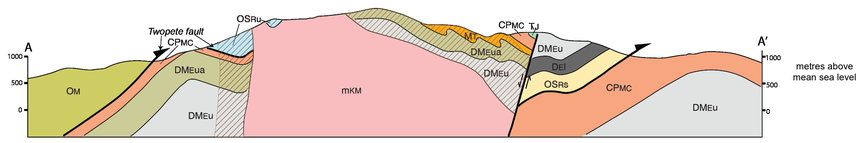
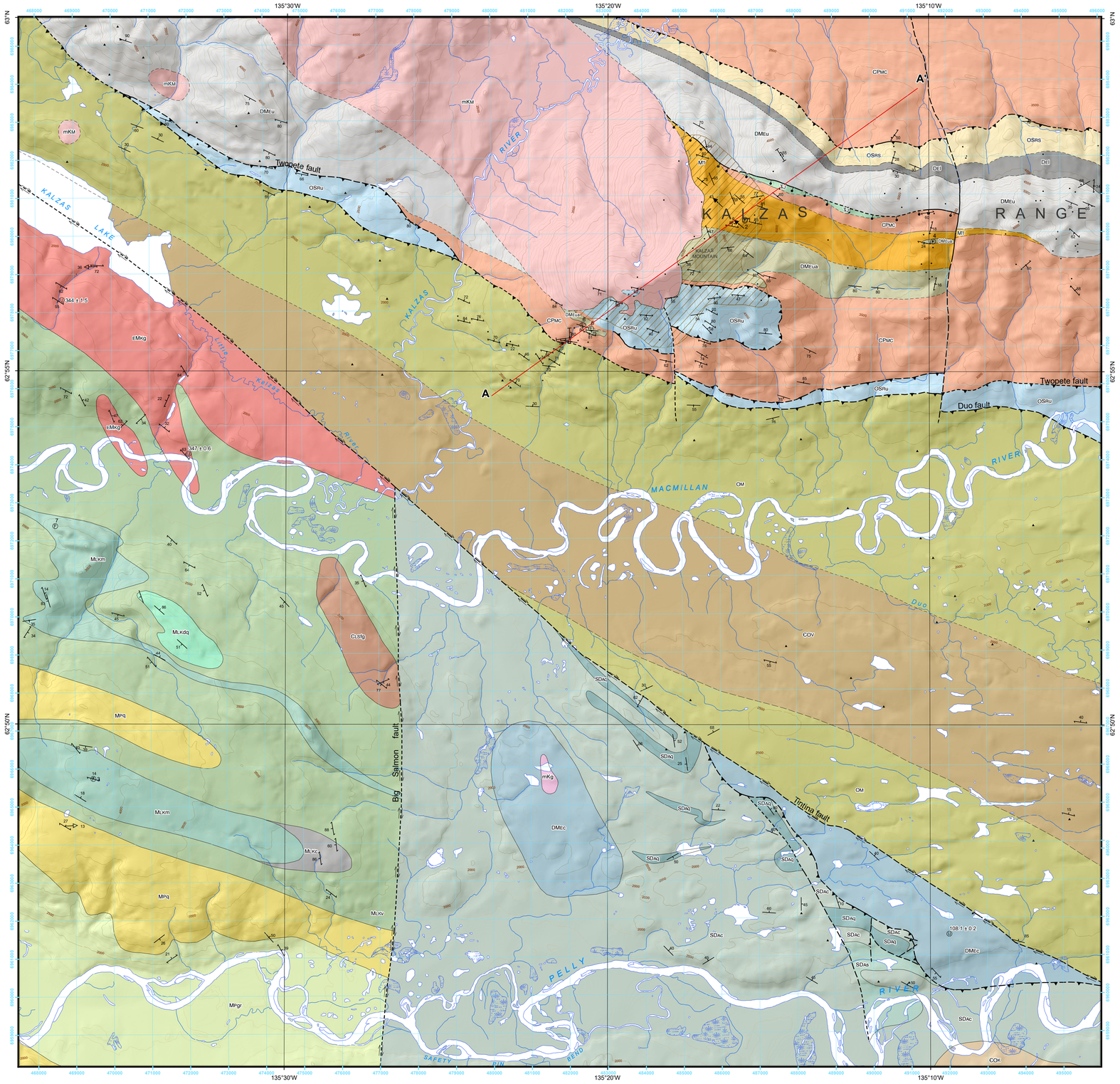


Locality	Sheet	Sample/Curation #	Age	Fossil	Reference
1	1	C-81689	Tournaisian	Microfossil	OF-1992-5, Orchard, M.J.
2	1	C-81691	Early Carboniferous	Microfossil	OF-1992-5, Orchard, M.J.
3	1	C-304130	Ordovician-Triassic	Microfossil	GSC fossil report MJO-1999-4, Orchard, M.J.
4	1	18HK154-1	Frasnian-Famennian	Macrofossil	preliminary data
5	1	18RC191-1	Late Devonian	Macrofossil	preliminary data
6	1	18RC192-1	possibly Permian	Microfossil	YGS fossil report - YGS2019-1, Cordey, F.
7	1	98MC158	Early? Carboniferous	Microfossil	GSC fossil report MJO-1999-5, Orchard, M.J.
8	2	C-107906	Ashgillian	Macrofossil	O-S 17-BSN-1982, Norford, B.S.
9	2	C-089927	late Middle or late Ordovician	Macrofossil	O-D-2-BSN-1983, Norford, B.S.
10	2	C-081685	Ordovician-Triassic	Microfossil	OF-1992-5, Orchard, M.J.
11	2	S-00569	Mississippian	Microfossil	YGS fossil report - MJO-MS-2017-1, Orchard, M.J.
12	2	C-089948	Famennian-Tournaisian		OF-1992-13, Orchard, M.J.
13	2	C-102600	Mississippian	Microfossil	OF-1992-11, Orchard, M.J.
14	2	C-102651	Ladinian-Carnian	Microfossil	OF-1992-11, Orchard, M.J.
15	2	C-102736	Mississippian	Microfossil	OF-1992-11, Orchard, M.J.
16	2	C-103768	probably Permian	Microfossil	OF-1992-11, Orchard, M.J.
17	2	C-176041	probably Ladinian-Carnian	Microfossil	OF-1993-43, Orchard, M.J.
19	2	S-00571	Mississippian	Microfossil	YGS fossil report - MJO-MS-2017-1, Orchard, M.J.
20	2	S-00568	Late Triassic, early? Carnian	Microfossil	YGS fossil report - MJO-MS-2017-1, Orchard, M.J.
21	2	16RC068-1	Permian	Microfossil	YGS fossil report - MJO-MS-2017-1, Orchard, M.J.
22	2	16RC068-2	Late Carnian	Microfossil	YGS fossil report - MJO-MS-2017-1, Orchard, M.J.
23	2	18RC090-1	possibly Permian	Microfossil	YGS fossil report - YGS2019-1, Cordey, F.
24	2	18RC106-1	Gzhelian-Asselian	Microfossil	YGS fossil report - YGS2019-1, Cordey, F.



LEGEND

NORTH OF TINTINA FAULT

CRETACEOUS

Mayo suite

mKM — salt and pepper, medium and coarse-grained biotite granodiorite to tonalite

ANCESTRAL NORTH AMERICA

LATE DEVONIAN

Dg — pyroxene diorite (U/Pb zircon 364.44 ± 0.11 Ma)

TRIASSIC

Jones Lake Formation

TJ — grey-brown to beige weathering, medium-bedded calcareous siltstone and sandstone, dolomitic, bioturbated muddy siltstone, cross-bedded grainstone; Kalzas Mountain: brown weathering, medium-bedded siltstone, fine-grained, calcareous quartz-rich sandstone, packestone, pebble conglomerate cemented with calcite

CARBONIFEROUS TO PERMIAN

Mount Christie Formation

CPMc — orange and grey weathering, thin-bedded, black, grey, and grey-brown, chert; siltstone, shale and silty chert

MISSISSIPPIAN

Tay Formation

MT — light grey weathering, massive to thick-bedded, fossiliferous limestone with minor lozenge-shaped black chert horizons; Kalzas Mountain: medium-bedded silty limestone with variably fossiliferous siltstone interbeds

DEVONIAN TO MISSISSIPPIAN

Earn Group

Upper

DMEua — Dromedary Mountain: sugary quartz arenite; Kalzas Mountain: quartzose siltstone, calcareous and non-calcareous quartz arenite, fossiliferous siltstone; rusty to grey weathering, massive to very thin bedded siltstone interbedded with beige, sugary, fine to medium-grained quartz arenite; dark blue-grey, medium to coarse-grained quartz-rich sandstone

DMEua1 — dark grey and rusty weathering, massive to thin-bedded siltstone with minor interbeds of grey, recrystallized limestone

DMEu — chert pebble to cobble conglomerate, quartz-chert greywacke; minor cross-bedded quartz arenite

Lower

DEl — orange and dark grey recessive weathering, fine-grained quartz-rich sandstone interbedded with siltstone

ORDOVICIAN TO SILURIAN

Road River Group

Steel Formation

OSRs — orange-brown weathering, thin and medium bedded dolomitic siltstone with fine-grained dolomitic sandstone interbeds, asymmetric ripples, cross-beds, wispy laminations and bioturbation common

Undivided

OSRu — orange and grey weathering, rhythymically bedded mudstone to fine-grained siltstone; brown weathering, siltstone with black chert nodules; brown weathering, laminated, calcareous, fine-grained sandstone, siltstone, calcareous and non-calcareous phyllite; dark grey weathering siltstone with plant stem fossils; dark grey to black, thick-bedded sandy siltstone with interbeds of conglomerate dominated by chert and shale clasts; Kalzas Mountain: dark grey weathering phyllite and siltstone, silty limestone, chert-pebble conglomerate, white weathering marble; Dromedary Mountain: grey to brown weathering, thick-bedded, coarse-grained greywacke with pebble lags and shale chips, laminated to massive quartz arenite, graptolitic siltstone; commonly cross-bedded, top of sandstone beds commonly exhibit symmetric ripples

ORDOVICIAN

Menzie Creek Formation

OMv — pyroxene-bearing basalt, volcaniclastic siltstone, sandstone and breccia, crystal-lithic tuff; basalt interleaved with chlorite schist

OM — orange weathering, resistant, thick-bedded flows to massive bodies of green, medium to coarse-grained basalt interlayered with phyllite, calcareous phyllite and grainstone; minor siltstone, sandstone and mudstone

CAMBRIAN TO ORDOVICIAN

Vangorda formation

COV — calcareous mica schist; calc-silicate schist and marble

COVa — dark green to grey weathering, fine-grained, dark grey, dark green and purple amphibolite schist

Rabbitkettle Formation

COR — beige-brown weathering, thin-bedded, grey silty limestone interbedded with dark grey weathering, maroon-grey siltstone, light grey weathering, dark grey limestone interbedded with siltstone

SOUTH OF TINTINA FAULT

CRETACEOUS

Cassiar suite

mKg — medium-grained, equigranular biotite granite; K-feldspar megacrystic granite

mKGg — medium to coarse-grained biotite granite, biotite-muscovite granite, biotite-hornblende granodiorite, muscovite-plagioclase pegmatite

YUKON-TANANA TERRANE

MISSISSIPPIAN

Simpson Range suite

EMKg — fine and medium-grained, medium to dark green, variably foliated, biotite ± K-feldspar granodiorite gneiss, locally K-feldspar megacrystic; coarse-grained biotite granite strongly foliated (U-Pb dates — 343–347 Ma)

MIDDLE MISSISSIPPIAN

Little Salmon formation

CLSfg — coarse-grained, K-feldspar crystal grit and conglomerate (youngest detrital zircons 347 Ma — U-Pb)

LOWER MISSISSIPPIAN

Little Kalzas formation

MLKdq — white, green and pink dolomitic quartzite; buff weathering dolomitic marble

MLKv — medium grey to greenish grey, plagioclase-phyric meta-andesite; minor felsic quartz-muscovite-feldspar schist and metarhyolite (U-Pb zircon dates — 344–345 Ma); light green quartz-muscovite-chlorite phyllite and light green quartzite and grit (volcaniclastic rocks); metabasalt (chlorite-epidote-actinolite-plagioclase schist); minor carbonaceous phyllite and micaceous quartzite

MLKm — light grey to white marble, locally dolomitic and/or cherty, crinoidal packestone; carbonate breccia, phyllitic marble

MLKc — pale green to grey chert and argillite; grey marble

Pelmac formation

MPq — massive, white to light grey quartzite, locally gritty; minor dark grey to black carbonaceous phyllite and micaceous quartzite, locally calcareous; minor brown weathering dolomitic marble

MPgr — beige weathering, medium to dark grey quartz-muscovite dolomite schist; dark grey dolomitic quartzite; coarse-grained quartz grit with dolomitic cement; minor light green quartz-muscovite-chlorite-dolomite (± biotite) schist; quartz pebble to cobble conglomerate

ANCESTRAL NORTH AMERICA
CASSIAR

DEVONIAN - MISSISSIPPIAN

Earn Group

DMEc — dark grey, recessive weathering, thin-bedded, black siliceous slate with interbeds of quartz-chert greywacke, chert granule grit and chert pebble to cobble conglomerate; chert; minor limestone and mafic volcanic rocks; barite

SILURIAN TO DEVONIAN

Askin Group

SDAq — medium to thick-bedded to massive, grey orthoquartzite

SDAc — medium grey to buff weathering, medium to thick bedded dolomite, silty and sandy dolomite, limestone; light to medium grey to black, fine- to coarse-grained marble, locally graphitic, minor quartzite

SDAs — dark grey argillite, locally dolomitic; rare andesite

CAMBRIAN TO ORDOVICIAN

Kechika Group

COK — thin-bedded, lustrous, calcareous, grey to black slate, phyllite; thin buff weathering dolostone interbeds

LEGEND EXPLANATION

PLUTONIC SUITES: grouping of plutonic rock units based on age, regional distribution and/or composition

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

SYMBOLS

geologic contacts (defined, approximate, inferred)

fault; movement not known (defined, approximate, inferred)

thrust fault (defined, approximate, inferred)

dextral strike-slip fault (defined, approximate, inferred)

normal fault (defined, approximate, inferred)

bedding (tops unknown, upright, overturned) — 34, 83, 71

foliation (dominant, late) — 83, 23

crenulation cleavage — 44

fault — 12

fold axis (dominant phase, s-fold) — 54, 18

slickenline — 36

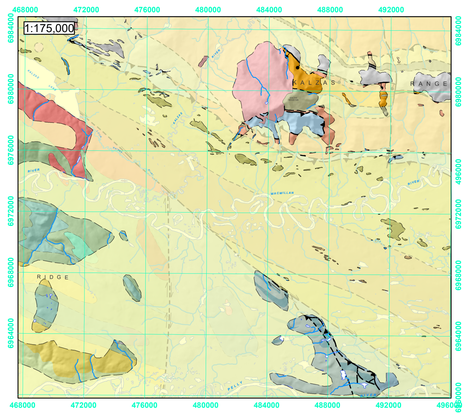
intersection lineation — 25

radiometric date (U/Pb) (age in Ma, ± 2σ) — 351 ± 1

field station (Cobbett/Keevil 2019, Jilson/Jennings 1978)

metamorphic contact aureole

INSET MAP 1: Extent of outcrop



Quaternary: unconsolidated glacial, glaciofluvial and glaciolacustrine deposits; fluviatile silt, sand and gravel, and local volcanic ash, in part with cover of soil and organic deposits

1:50 000-scale topographic base data produced by CENTRE FOR TOPOGRAPHIC INFORMATION, NATURAL RESOURCES CANADA

30 metre shaded relief from GEOMATICS YUKON www.geomaticsyukon.ca

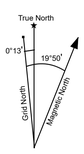
ONE THOUSAND METRE GRID
Universal Transverse Mercator Projection
North American Datum 1983
Zone 8

BEDROCK GEOLOGY
NORTHEASTERN GLENLYON
YUKON

SCALE 1:50 000

0 1 2 3 4 5
Kilometres

CONTOUR INTERVAL 100 FEET
Elevations in metres above Mean Sea Level



Use diagram only to obtain numerical values
APPROXIMATE MEAN DECLINATION 2019
FOR CENTRE OF MAP

105M/04 WOODBURN LAKE	105M/03 SIDESLIP LAKE	105M/02 CLARKE HILLS
105L/13 LITTLE KALZAS LAKE	**THIS MAP (SHEET 1)**	105L/15 DROMEDARY MOUNTAIN **(SHEET 2)**
MICA LAKE 105L/12	RAGGED LAKE 105L/11	DETOUR LAKES 105L/10

Yukon

Yukon Geological Survey
Energy, Mines and Resources
Government of Yukon

Open File 2019-3

Geology of Northeastern Glenlyon area (Sheet 1 - NTS 105L/13, 14)

(scale 1:50 000)

by

Rosie Cobbett and Halley Keevil