

**NOTES**

Mapping was carried out in the summer of 2018 by Rosie Cobbett and Halley Keevil for areas north of the Tinina fault. Additional geological data were provided by Greg Jison for the area between the Tinina fault and the Twopete fault and were used extensively in the interpretation of this region. Geology south of the Tinina fault is from YGS Open File 2002-9 (Colpron et al., 2002).

Two areas north of the Tinina fault are extensively thermally and hydrothermally altered. Near Kaizas Mountain a contact aureole alters rocks within a 0-2 km distance of the edge of the pluton mapped in the area. Pelitic rocks within the aureole exhibit porphyroblasts of andalusite and/or fine-grained biotite (hornfels). Limestone is recrystallized into white weathering marble and is commonly isoclinally folded. Hydrothermal alteration of rocks exposed on Dromedary Mountain occurs over an area approximately 5 x 2 km, however, no intrusive bodies are exposed in this area. Alteration includes light pink, light green and white bleaching along fractures and bedding surfaces of siltstone and silty limestone units. Quartz-pyrophyllite-diopside-pyrite-pyrrothite alteration assemblages occur as oolites, disseminations, veins and vein selvages in quartz granite and siliceous siltstone. A buried pluton is likely the source of heat and fluids linked to the hydrothermal alteration.

The interpretation of fault traces through areas of poor rock exposure (see inset maps 1 and 2 for extent of outcrop) was guided by a Yukon wide geophysical survey of magnetic data (Boulanger et al., 2016). Magnetic data are also particularly useful in delineating plutons in this region because they show up as distinct magnetic lows. Alteration on Dromedary Mountain is coincident with a magnetic low which has strengthened our interpretation of a buried pluton at this location (inset map 3).

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**RECOMMENDED CITATION**

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Digital cartography and drafting by Rosie Cobbett, Yukon Geological Survey.

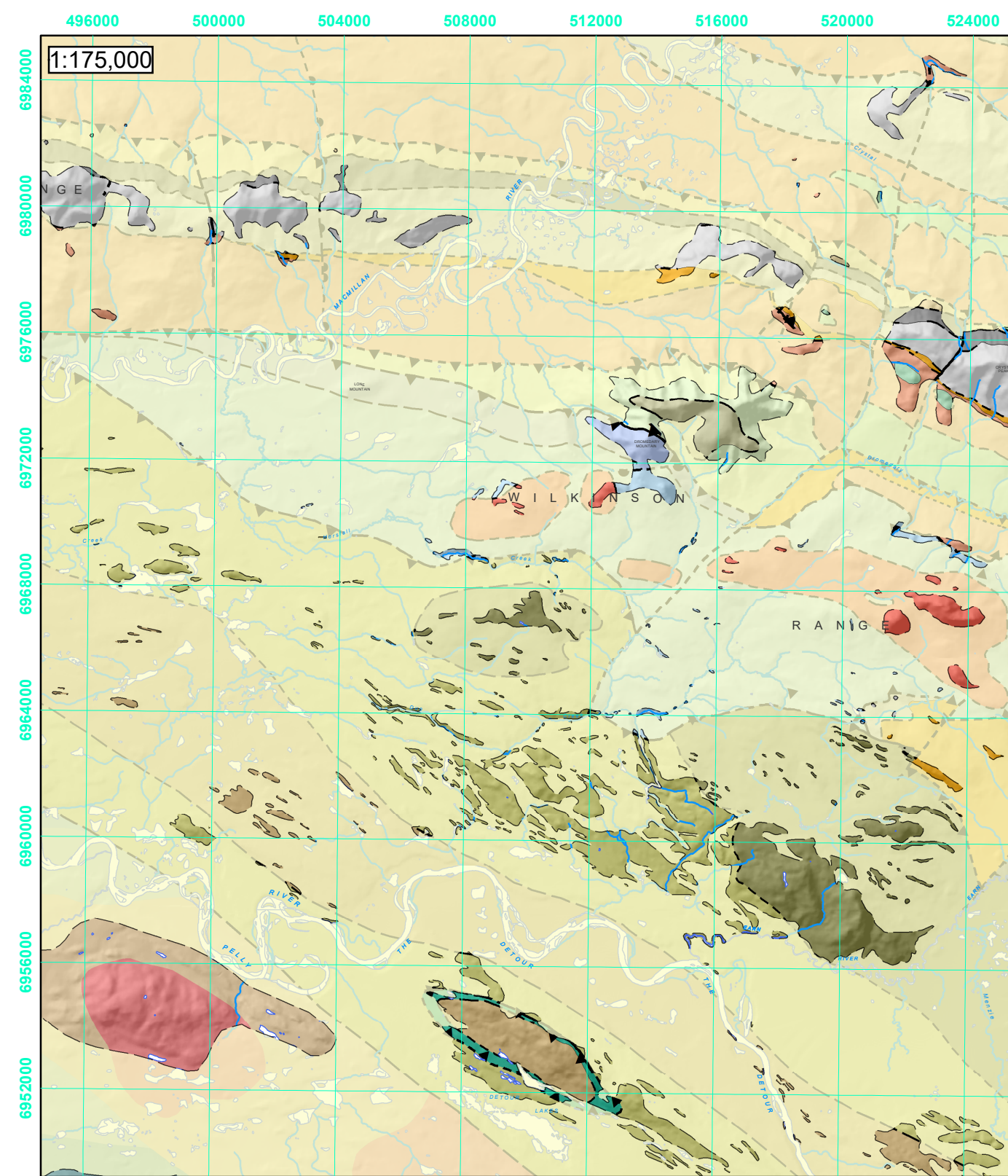
Any revisions or additional geological information known to the user would be welcomed by the Yukon Geological Survey.

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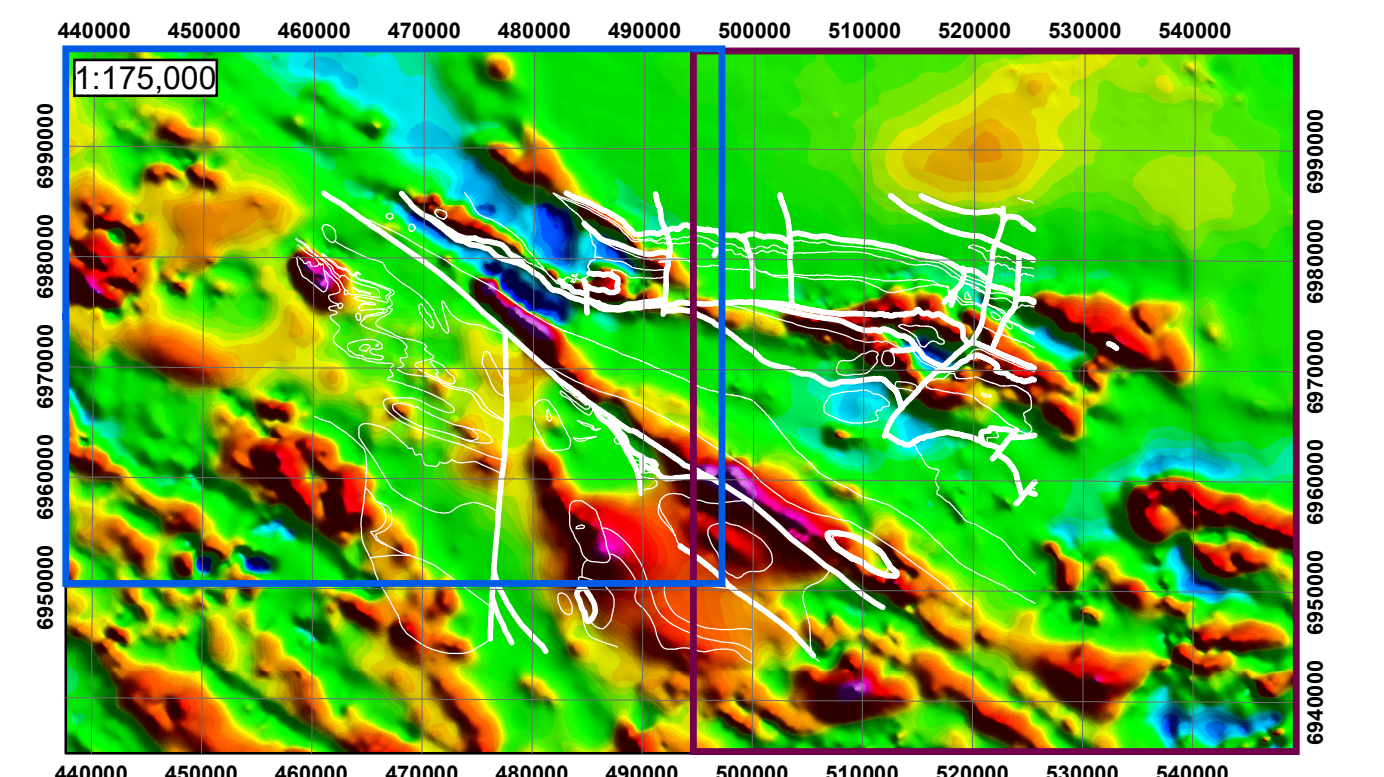
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**INSET MAP 2: Extent of outcrop**



**INSET MAP 3: Regional Aeromagnetics**



Bold white lines are faults and fine white lines are contacts



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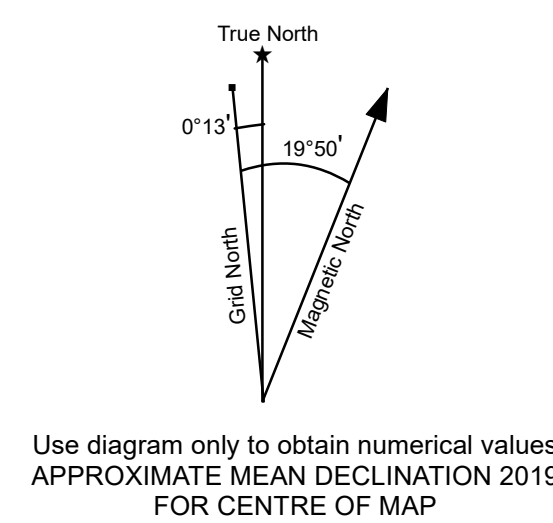
ONE THOUSAND METRE GRID  
Universal Transverse Mercator Projection  
North American Datum 1983  
Zone 9

**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



105M/03 SIDESLIP LAKE	105M/02 CLARKE HILLS	105M/01 MOOSE LAKE
105L/14 SAFETY PIN BEND (SHEET 1)	<b>THIS MAP (SHEET 2)</b>	105L/16 EARN LAKE
105L/11 RAGGED LAKE	DETOUR LAKES	105L/09 MENDIE CREEK

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Open File 2019-3

**Geology of northeastern Glenlyon area  
(Sheet 2 - NTS 105L/10, 15)  
scale 1: 50 000**

by  
Rosie Cobbett and Halley Keevil