

QUATERNARY

Q Undifferentiated, unconsolidated gravels, sands and clays

EARLY LATE CRETACEOUS (?)

TOMBSTONE INTRUSIONS
Ktq Ktq: buff to grey dykes, sills and small plugs of apite and granite; locally quartz- feldspar and/or biotite phync; minor arsenopyrite. Kt: rare fine- to coarse-grained light grey biotite lamprophyre dykes, locally feldspathic.

UPPER PROTEROZOIC

HYLAND GROUP
Py Yusezy Formation: foliated tan to grey meta-sandstone, muscovite-chlorite phyllite, blue-grey quartz and cherty white feldspar, pebbly meta-sandstone (grit), pebbly meta-conglomerate and uncommon sandy marble.

TOMBSTONE STRAIN ZONE UPPER BOUNDARY

Pyy Yusezy Formation: prominently foliated and lineated muscovite-chlorite phyllite, quartzofeldspathic and micaeous psammite, grey psammite and rare calc-silicate rock and marble. Pyy: mainly phyllite. Pyp: mainly psammite. Diagonal ruling indicates areas of carbonate rock.

ROBERT SERVICE THRUST

TRIASSIC

Td Foliation-concordant podiform to lenticular bodies of fine- to medium-grained green amphibole-chlorite-plagioclase meta-siltstone or meta-gabbro

MISSISSIPPIAN

Mk Keno Hill quartzite: finely to coarsely foliated and lineated, light to dark grey, locally mottled vitreous quartzite, subordinate dark grey carbonaceous phyllite, and rare green-grey phyllite (felsic metacarbonate, possible arkose (cf.) and calcareous quartzite

DEVONO-MISSISSIPPIAN

EARN GROUP
DMEv Foliated greenish-white to green-grey quartz-sericite-chlorite phyllite locally with mm-scale quartz augen, inferred to be felsic metavolcanic, minor grey carbonaceous phyllite
DMEp Grey carbonaceous phyllite, siliceous carbonaceous meta-sandstone, rare calcareous meta-greywacke

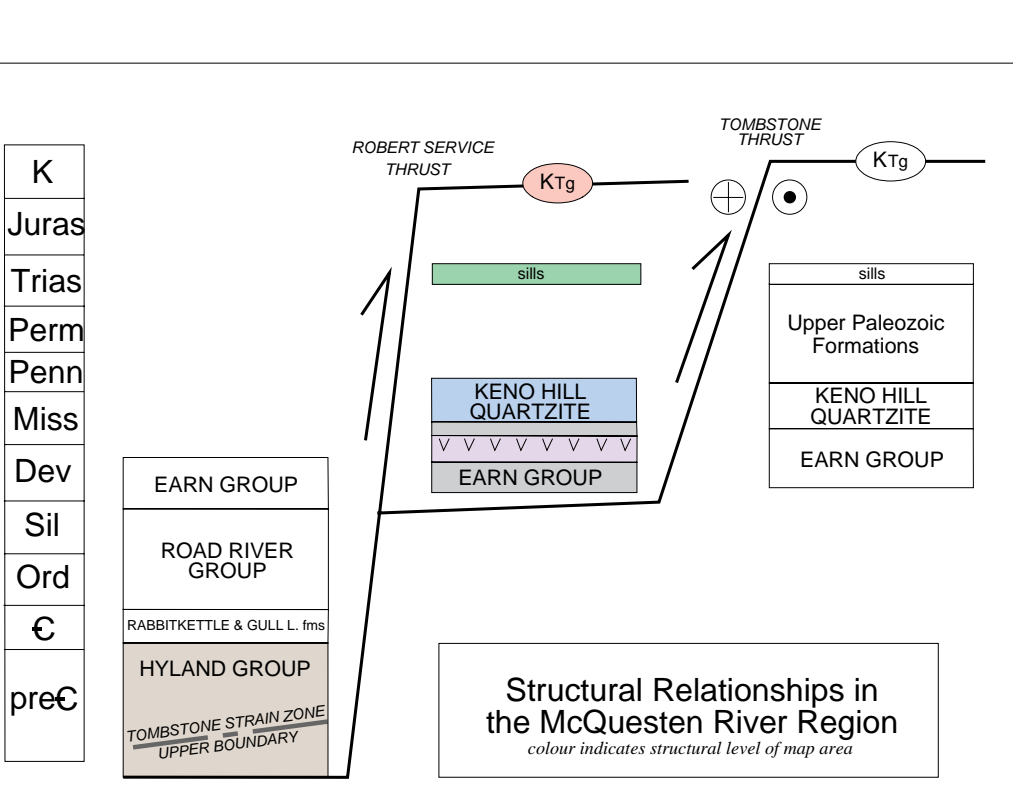
K-Ar age determinations from quartz-biotite porphyritic granite sills (Ktq): 1.6 km southwest of the peak of Mt. Haldane: 82 ± 5 Ma (GSFC 05-45); Warrens et al. 1987; Future Creek: 600m northwest of Mt. Haldane: 89 ± 2 Ma (GSFC 80-76; Stevens et al. 1981). U-Pb age determinations on nearby intrusions range from 91-94 Ma (L.K. Munksgaard and M.L. Bevier, University of British Columbia).
 Hyland Group and Yusezy Formation are defined by Gossley and Anderson (1993) based on work in Haldane map area 1:50,000.
 Yusezy Formation is intruded by pre-kinematic intermediate to mafic sills and dykes of unknown age that are generally too small to portray at the scale of mapping (m).
 Relative Mississippian Devonian and Mississippian U-Pb age determinations have been obtained from this unit in northern Mayo map area by M.L. Bevier and Jim Mortenson, University of British Columbia. The unit here correlates with unit hosting the MARG VMS deposit in Nash Creek map area (Milestone 106 D009).

SYMBOLS

- Geological contact (defined, approximate, assumed and/or covered).....
- Fault: displacement unknown (defined, approximate, assumed and/or covered).....
- Thrust fault: teeth on hanging wall (defined, approximate, assumed and/or covered).....
- Normal fault: circle on downthrown side (defined, approximate, assumed and/or covered).....
- Fold axial surface trace (upright anticline, syncline, overturned syncline, anticline).....
- Limit of outcrop.....
- Bedding (known: upright, overturned, unknown).....
- Foliation (one tick indicates earliest phase of deformation, two or more indicates subsequent phase(s) of deformation and mineral or clast elongation lineation).....
- Line of cross-section.....
- Apparent dip of measured bedding, foliation (in cross-section).....
- Foliation form lines in cross-section.....

LEGEND

MINERAL OCCURRENCES		
Yukon Millfile		
Veins:		
105 M1a	↳ Husky SW	Ag, Pb, Zn
105 M1b	↳ Silver King	Ag, Pb, Zn
105 M26	↳ Geritzki	Ag, Pb, Zn
105 M27	↳ Titan	Ag, Pb
105 M28	↳ Shanghai	Ag, Pb, Zn
105 M29	↳ Wayne	Ag, Pb, Zn, Au, W
105 M31a	↳ Strebchuck	Sn, Ag, Pb, W
105 M31b	↳ Jounbira	Pb, Ag, Sn, W
105 M32	↳ Mount Haldane	Ag, Pb, Zn
105 M33	↳ Laysier	Ag, Pb
105 M54	↳ Chance	Sb
105 M56	↳ Sundown	Ag, Pb
105 M72	↳ Beley	Zn
106 D21	↳ Rex	Ag, Pb, Zn, Au, Sb
Skarns/replacement:		
105 M29	↳ Wayne	Au, W
Work targets:		
105 M30	★ Argent	unknown
105 M58	★ Halfway	unknown
105 M60	★ Neway (Aurex)	unknown
105 M67	★ Corkery	unknown
105 M68	★ Weasel	unknown



RECOMMENDED CITATION

HUNT, J.A., MURPHY, D.C., ROOTS, C.F. and POOLE, W.H., 1996. Geological map of Mt. Haldane area, Yukon (105 M/13). Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Map 1996-4, scale 1:50 000.

This map accompanies MURPHY, D.C., 1996. Geology of the McQuesten River region, northern McQuesten and Mayo map areas, Yukon (115 P/14, 15, 16 and 105 M/13, 14). Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 6.

Digital cartography and drafting by Will van Randen, Yukon Geology Program.

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

Copies of this map, the accompanying report and Yukon Millfile may be purchased from Geoscience Information and Sales, Exploration and Geological Services Division, Indian and Northern Affairs Canada, Room 102-300 Main St. Whitehorse, Yukon Y1A 2B5 Ph. 867-667-3264 Fax 867-667-3267.

Store the map in a dark area to prevent colours from fading.

Map last revised August 1997.

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

Geoscience Map 1996-4

Geological map of Mount Haldane area, Yukon (105 M/13)

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