

LEGEND

PALEOPROTEROZOIC

HURWITZ GROUP

PHW

WATTERSON FORMATION: Mixed siliciclastic-carbonate facies comprising mm- and cm-scale massive dololutite and stratified calcisiltite that is rhythmically interlayered with siliciclastic siltstone and mudstone, and occurs at the tops of very fine, parallel-stratified (± ripple drift cross-stratified) sandstone-siltstone-mudstone fining-upward sequences. Local gutter casts at base of fining-upward sequences filled with intraclastic calcirudite breccia. Abundant soft sediment deformation: load casts and flame structures; calcisiltite dykes with wall-parallel internal layering

----- unconformity -----

PHgb

Discontinuous coarse-grained gabbro sills, dykes. Feldspar megacrysts, commonly in layers concordant with bedding in adjacent units. 2111±0.6 Ma (Heaman and LeCheminant 1993). Post lithification of Ameto Formation; pre-deposition of Watterson Formation. Folded with Hurwitz Group

PHA

AMETO FORMATION: Frost-heaved mudrocks in map area, but immediately north at Hawk Hill Lake, varicoloured siltstone, mudstone, calcisiltite in fining-upward sequences

KINGA FORMATION

PHKh

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Hawk Hill Member: Discontinuous unit of bedded white chert, maroon chert and chert breccia

Whiterock Member

PHKW

Supermature quartz arenite. Lower part of section commonly massive, upper 200 m with ubiquitous wave ripples. Paleodepth calculations based on symmetric, vortex orbital ripples indicates depths of 2 cm to 2 m for the entire sequence (Aspler et al., 1994 a)

Maguse Member

PHKmu

Upper Maguse Member: Massive polymictic pebbly sandstone with angular to subrounded basement granules and pebbles (10-50%) dispersed in arkose matrix. Local parallel-stratified arkose and framework-intact pebble-cobble conglomerate with well-rounded clasts and arkose matrix

PHKmm

Middle Maguse Member: Maroon, pink, grey subarkose to quartz arenite; interbeds of white quartz arenite at top. Local black parallel and cross-stratified heavy mineral bands. Quartz pebble conglomerate with clasts of well-rounded spherical white quartz, jasper, blue and grey chert

PHKml

Lower Maguse Member: Parallel-stratified m-scale sheets of arkose, subarkose, and quartz arenite. Polymictic framework-intact and framework-disrupted pebble-cobble conglomerate. Local graded channels. Quartz-pebble conglomerate. 50 m interval near base: dcm- to m-scale beds of subarkose alternating with carbonate-rich beds comprising cm-scale layers of massive and microbial laminated dololutite (± chert laminae) and cm-scale siliciclastic sand lenses

PHP

PADLEI FORMATION: Stratified polymictic conglomerate; arkose; mm-cm-scale sandstone-siltstone rhythmites

----- unconformity -----

PALEOPROTEROZOIC OR ARCHEAN

MONTGOMERY GROUP

A-PM

At base: massive, thickly-bedded, framework-intact cobble-boulder conglomerate with local arkose lenses. Clasts (to 1 m) representative of subjacent basement; many with pre-depositional tectonic fabric. At top : mainly parallel- and cross-stratified arkose with local conglomerate

----- unconformity -----

ARCHEAN

Ag; Agn

Well-foliated biotite-hornblende granite, granodiorite Ag; locally gneissic Agn

----- intrusive contact -----

HENIK GROUP

Amf

Bimodal mafic-felsic volcanic rocks. Predominantly fine-grained flows, commonly pillowed, variolitic. Interlayered with felsic flows 1-10 m thick. Local inter-flow sedimentary rocks

Geological boundary (approximate)

Fault (defined, approximate)

Reverse fault (defined)

Normal fault (defined)

Axial trace, arrow indicates plunge
(anticline, syncline)

Outcrop

Frost heave; probable subjacent outcrop

Bedding
(inclined, overturned, tops unknown)

Bedding from pillow lavas

Layering in Hurwitz gabbro sills

Foliation (Hurwitz Group) (inclined)

Foliation (Montgomery Group) (inclined)

Foliation (Henik Group and related plutonic rocks;
(inclined, vertical)

Axial projection line

