

LEGEND

INTRUSIVE ROCKS

- Quartz porphyry. Dark green, black and brown, medium-grained equigranular gabbro and pyroxenite.

CRETACEOUS

- Biotite-muscovite fine- to medium-grained equigranular granite. Medium-grained equigranular hornblende-biotite granite.

LAYERED ROCKS

- Grey- to orange-weathering hornblende and hornblende-feldspar crystal lithic tuff. Massive dark green to black, fine-grained basalt.

NORTH AMERICAN MIOGEOCLINE

- Massive light grey sandy bioclastic limestone. Dark grey phyllite with laminations and beds of brown weakly calcareous quartz siltstone and sandstone and sandy limestone.

PERMIAN

- Dark to light grey, black, green, and white chert.

DEVONIAN - MISSISSIPPIAN

- Dark grey prismatic carbonaceous phyllite, slate, quartz sandstone, chert-pebble conglomerate and chert; lesser quartzofeldspathic greywacke and grit.

CASSIAR PLATFORM

- Thin- to medium-bedded dark grey to black locally fossiliferous limestone; two-hole conoids.

SILURIAN - DEVONIAN

- Massive grey orthoquartzite. Sandy, cream-weathering dolostone and grey quartzite; the amount of quartzite increases upwards. Thinly laminated tan platy siltstone and silty limestone; locally sandy.

HANGING WALL OF 'INCONNU' THRUST

INTRUSIVE ROCKS

- Leucogabbro, gabbro, diabase. Brown-weathering, dark green to black, variably serpenitized ultramafic rock. Intrusive contacts locally preserved.

LAYERED ROCKS

- Red-brown to pale green matrix- and framework-supported polyblastic conglomerate, pale green sandstone, dark grey siltstone and shale, and basalt. Conglomerate clasts include porphyritic basalt, aphyric massive basalt, chloritic phyllite, muscovite-quartz phyllite, siliceous carbonaceous phyllite, carbonate, white bull quartz and meta-chert. Clasts of dacite, andesite, basalt and scoria have been reported from this unit elsewhere (Mortensen et al., 1999). Mid-Permian conodonts and U-Pb age dates have been reported from this unit in Watson Lake map area (J. Mortensen, pers. comm., 2000).

EARLY PERMIAN

- Medium to dark green basalt; generally massive, locally pillowed or fragmental; locally hornitized and interbedded with reddish, sparsely siliceous. Thin- to medium-bedded pink, green and white chert and lesser interbedded siliceous phyllite of the same colour. Carbonaceous phyllite and grey quartzite.

FOOTWALL OF JULES CREEK THRUST

CARBONIFEROUS?

- Green, pink and brown muscovite-quartz phyllite, locally with quartz and feldspar augen (felsic meta-volcanic rocks). Variably foliated dark grey and rarely pink phyllite; grey, white and rare pink ribbon chert; dark quartz sandstone, quartzofeldspathic sandstone, grit and conglomerate, and chert-pebble conglomerate. Dark green, chlorite-feldspar-quartz phyllite (intermediate meta-volcanic rocks). Massive grey crinoidal limestone.

HANGING WALL OF JULES CREEK THRUST

- Massive to subtly layered, plagioclase-chlorite phyllite or schist, locally with biotite and actinolite porphyroblasts; lesser carbonaceous phyllite, tan muscovite-quartz phyllite (felsic meta-volcanic rocks), grey quartzite and marble. Rare orange-brown-weathering carbonate-clast pebbles to cobble conglomerate.

UNCONFORMITY ON BOTH HANGING WALL AND FOOTWALL OF MONEY CREEK THRUST

- Interbedded tan- to brown-weathering biotite-muscovite-feldspar quartz psammitic schist and quartz-biotite-muscovite metapelite schist. Thin intervals of marble and calc-schist not mappable at 1:50 000-scale occur locally. Grey to orange-brown micaceous marble, calcareous schist and lesser carbonaceous phyllite. Biotite-plagioclase-actinolite-chlorite schist similar to Dr found locally near top of unit D4. Feldspar muscovite-quartz schist (felsic meta-volcanic rock).

HANGING WALL OF MONEY CREEK THRUST

INTRUSIVE ROCKS

- Generally unfoliated biotite-hornblende granite and quartz monzonite, locally faulted, chloritized and hornitized. M3q: strongly foliated and lined mylonitic M3q.

LATE DEVONIAN - EARLY MISSISSIPPIAN

- Mafic-poor, quartz-porphyrific granite. Cross-cutting relationships between granite and subvolcanic feeder dykes to Dr basalts flows suggests that granite and basalt are corral and that granite is likely corral with unit Dr.

LAYERED ROCKS

- Brown-weathering, dark green to black variably serpenitized ultramafic rock. Gabbro and/or pyroxenite locally present. The unit is generally spatially associated and inferred to be in intrusive contact with Dr.

PENNSYLVANIAN

- Massive brown to grey quartz sandstone/quartzite.

UPPER MISSISSIPPIAN TO MID-PENNSYLVANIAN

- Massive grey bioclastic crinoidal limestone.

LOWER MISSISSIPPIAN

- Green to white chlorite-muscovite-quartz phyllite of intermediate and lesser felsic compositions; locally quartz and feldspar augen present.

UPPER DEVONIAN

- Foliated and lineated chloritic phyllite; lesser carbonaceous phyllite, grey quartzite and marble. In roof pendant of M3q (105GB), unit Dr comprises tilted yet undeformed massive to pillowed basalt, maroon and green fragmental basalt, pink and green shale and cherty shale, tan greywacke and a middle member of pink to brown, locally quartz-porphyrific phyllite (Dr1). Contradictory cross-cutting relationships between dykes feeding unit Dr basalt and dykes of D3q feeding unit Dr1 mylonite indicate that they are approximately corral. Outside of the pendant, the unit is foliated and lineated, and contains mappable bands of carbonaceous phyllite and quartzite, and grey marble (Dr1q).

FOOTWALL OF MONEY CREEK THRUST

- Chloritic phyllite occurring discontinuously beneath unit P1. Thinly interbedded (cm-scale) massive to granular siliceous rock and light coloured phyllite (metatuff and exhalite). Siliceous rock is pale-coloured, locally massive and bedded on metre-scale at base where associated with baritic iron formation; darker near top where intercalated phyllite is dark grey. One band of platy brown limestone in upper part of unit. Tan, grey and brown, variably altered muscovite-quartz phyllite (M1v) and quartz-feldspar augen phyllite (meta-porphyr). Carbonaceous phyllite and quartz sandstone. Salt and pepper, grey to dark grey, coarse-grained feldspathic meta-sandstone, grit and carbonaceous phyllite.

UNCONFORMITY

INTRUSIVE ROCKS

- Generally unfoliated, medium- to coarse-grained granitic to monzonitic meta-volcanic rock. Generally equigranular, although augen texture (M3q) locally present. Locally discordant with earliest foliation. Foliated hornblende-biotite meta-diorite. Brown-weathering, dark green to black, variably serpenitized ultramafic rock. The unit is generally spatially associated and inferred to be in intrusive contact with Dr. The unit is also locally surrounded by unit D4, also presumably with intrusive contacts.

LAYERED ROCKS

- Massive, white to mauve quartzite. Chloritic phyllite, locally with round mm-scale calcite blebs inferred to be amygdalae. Carbonaceous phyllite and grey quartzite. Quartzofeldspathic-pebble metaconglomerate.

UPPER DEVONIAN (TO LOWER MISSISSIPPIAN?)

- Massive, white to mauve quartzite. Chloritic phyllite, locally with round mm-scale calcite blebs inferred to be amygdalae. Carbonaceous phyllite and grey quartzite. Quartzofeldspathic-pebble metaconglomerate. Kutuz Zo Kayah felsic meta-volcanic unit. Undifferentiated foliated feldspar-muscovite-quartz schist or phyllite, massive pale siliceous muscovite-quartz schist or phyllite, locally with quartz amygdalae; feldspar- and rarely quartz-augen schist or phyllite (meta-porphyr), and thin calcite-plagioclase-biotite schist. Intervals of carbonaceous phyllite are common. Magnetite iron formation occurs locally near the top of the unit in carbonaceous phyllite and thin felsic schist. Leuc-amphibolite (meta-gabbro) and amphibolite (meta-pyroxenite). Brown-weathering, dark green to black, variably serpenitized ultramafic rock. The unit is generally spatially associated and inferred to be in intrusive contact with Dr. The unit is also locally surrounded by unit D4, also presumably with intrusive contacts.

UPPER DEVONIAN AND OLDER?

- Interbedded tan- to brown-weathering biotite-muscovite-feldspar quartz psammitic schist and quartz-biotite-muscovite metapelite schist. Thin intervals of marble and calc-schist not mappable at 1:50 000-scale occur locally. Grey to orange-brown micaceous marble, calcareous schist and lesser carbonaceous phyllite. Biotite-plagioclase-actinolite-chlorite schist similar to Dr found locally near top of unit D4. Feldspar muscovite-quartz schist (felsic meta-volcanic rock).

MINERAL OCCURRENCES Yukon MINFILE (2001) table with columns: MINFILE No., Symbol, Name(s), Deposit Type, Status, Map Unit. Lists various mineral occurrences across the Yukon region.

ISOTOPIC AGE DATES table with columns: Sample, Date ± 2 sigma, Mineral, Comments, Reference. Lists radiometric age dates for various geological samples.

FOSSILS table with columns: Sample, Fossils, Period, Reference. Lists fossil specimens and their geological contexts.

SYMBOLS section containing diagrams for geological features like faults, folds, and unconformities, along with a REFERENCES section listing geological literature.

REFERENCES section listing geological literature, including works by Mortensen, J.K., Erntner, P., and others, covering topics like the Slide Mountain Terrane and the Cassiar Platform.

ACKNOWLEDGEMENTS section thanking funding agencies like the Geological Survey of Canada and the Geological Survey of Yukon.

RECOMMENDED CITATION section providing a formal citation for the geological map and associated data.

REFERENCES - ISOTOPIC AGE DATES section listing radiometric age dates and their corresponding references.