

QUATERNARY

Unconsolidated glacial, glaciofluvial and glaciolacustrine sediments; fluvial silt, sand and gravel deposits; volcanic ash, partly covered by soil and organic deposits

VOLCANIC ROCKS

UPPER CRETACEOUS

rhyolite, dacite

PLUTONIC AND METAPLUTONIC ROCKS

CRETACEOUS

quartz eye diorite: abundant pyrite; post-dates Red Mt. Mo mineralization  
 altered porphyritic quartz monzonite with abundant sheeted quartz veins; host to Red Mt. Mo deposit  
 quartz, feldspar and biotite-phyllic rhyolite; commonly flow-banded  
 porphyritic (plagioclase, biotite) dacite  
 muscovite-biotite granite, leucogranite; mostly equigranular  
 porphyritic to megacrystic biotite granite

TRIASSIC-JURASSIC

hornblende, hornblende-biotite pegmatite  
 granodiorite, local hornblende  
 Rosy Lake metagabbro; metagabbro, metadiorite

PERMIAN

quartz and feldspar augen schist

LATE DEVONIAN - MISSISSIPPIAN

metagranodiorite with abundant white mica, epidote  
 schistose metatonalite; micaceous, garnet-bearing  
 porphyritic biotite granite with abundant K-spar augen  
 metadiorite, quartz diorite, hornblende; lesser metatonalite  
 leucotonalite. Commonly contains sparsely-distributed amphibole pseudomorphs  
 hornblende-bearing tonalite, leucotonalite, quartz diorite, diorite. Includes minor quartzite, greenschist and metasedimentary schist

YUKON-TANANA TERRANE

MAFIC: mafic breccia, lapilli tuff, amphibole-biotite schist  
 S.F.V: finely layered chloritic phyllite, greenschist  
 S.P.V: thinly layered sulphide-rich greenschist; includes thin (mm-cm thick) siliceous layers

CARBONIFEROUS: coral-rich limestone; calcite and dolomite marble

UPPER DEVONIAN - MISSISSIPPIAN Livingstone Creek succession: calc-schist, greenschist, micaceous schist, quartzite/metachert, dolomitic quartzite

UPPER DEVONIAN - MISSISSIPPIAN Willey succession: tuffaceous carbonate, amphibole schist, compositionally banded greenschist; lapilli tuff  
 greenschist; includes intervals of compositionally banded greenschist and lapilli tuff  
 marble, calc-silicate schist

PROTEROZOIC - MISSISSIPPIAN Slate Mountain succession: quartzite and micaceous quartzite, lesser calc-silicate and marble, minor greenschist  
 grey weathering, white marble; calc-silicate  
 calc-phyllite and schist, commonly chlorite-rich, calcareous quartzite, graphic phyllite  
 green, coarse-grained amphibole-bearing calc-silicate  
 grey and black quartzite (metachert?)  
 graphic phyllite, minor quartzite  
 hornfelsed graphic phyllite, minor quartzite

PROTEROZOIC-MISSISSIPPIAN Flat Creek succession: metabasalt  
 marble, calc-silicate  
 micaceous quartzite, quartzite, local grit  
 graphic phyllite, schist, minor quartzite

SEMENOF BLOCK (Boswell assemblage)

MIDDLE MISSISSIPPIAN - LOWER JURASSIC Gungait succession: lapilli tuff, block tuff, ash tuff, sandstone, siltstone

UPPER DEVONIAN - MIDDLE MISSISSIPPIAN Rosy succession: undivided; interlayered metachert and calc-schist/tuff; graphic phyllite, greenschist, calc-silicate and marble  
 metachert; grey, pale brown, green or pink  
 graphic phyllite  
 greenschist  
 yellow to orange, brecciated dolomitic marble  
 grey and cream marble; calc-silicate

UPPER DEVONIAN - MIDDLE MISSISSIPPIAN Sawtooth succession: metagabbro, greenschist, minor leucogabbro  
 pale green, finely layered, variably siliceous chlorite-muscovite schist; minor impure marble  
 greenschist; lesser metagabbro

- Structural symbols**
- dominant foliation (sn)
  - cleavage (sn+1)
  - intersection lineation (ln)
  - mineral lineation or elongation lineation (ln)
  - fold axis (fn)
  - fold axial plane (fn)
  - fold axis (fn+1)
  - fold axial plane (fn+1)
  - dike (with dip)
  - fault plane (with dip)
  - stickline (with plunge)

**Lithological contacts**

- fault, approximate
- fault, covered
- fault, defined
- fault, inferred
- intrusive, approximate
- intrusive, covered
- intrusive, defined
- intrusive, inferred
- stratigraphic, approximate
- stratigraphic, covered
- stratigraphic, defined
- stratigraphic, inferred

**Radiometric dates**

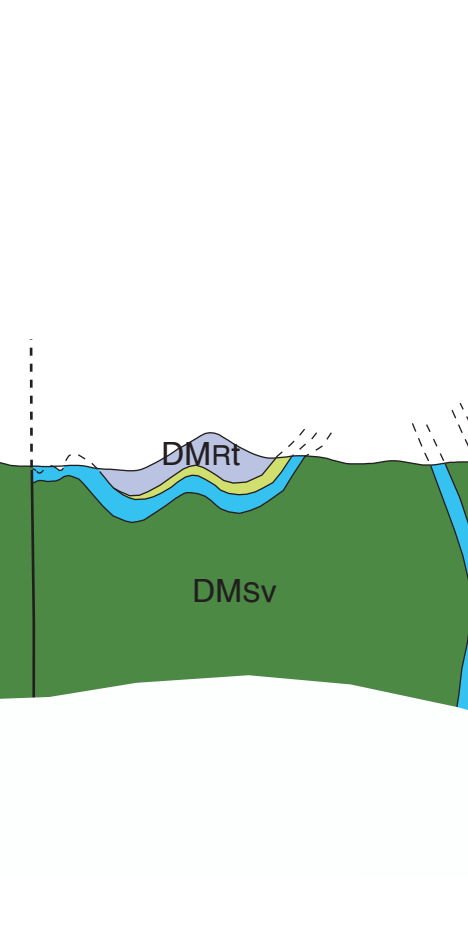
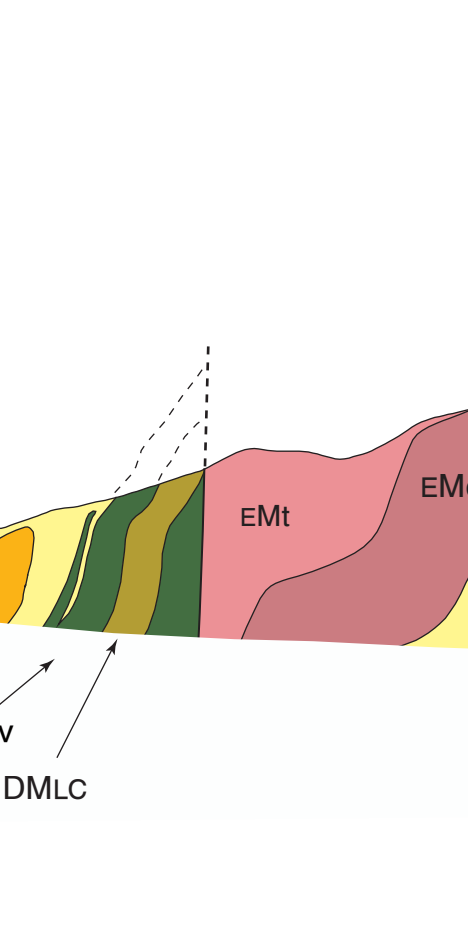
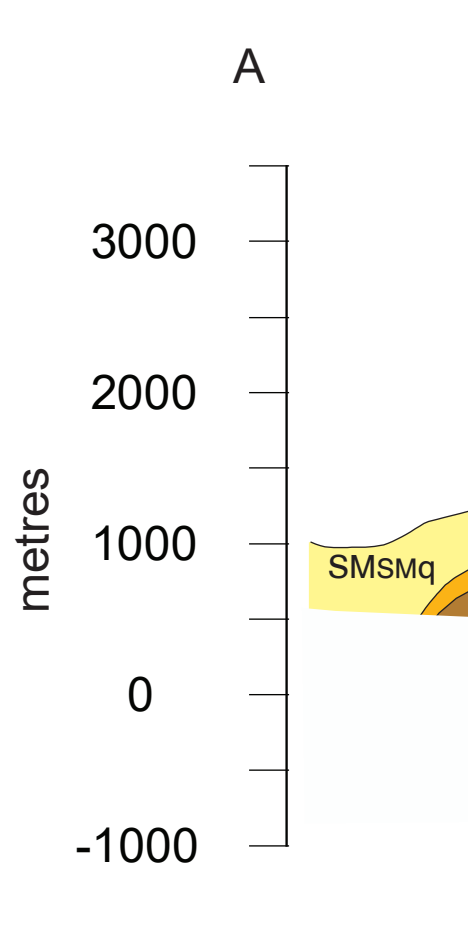
- K-Ar or <sup>40</sup>Ar/<sup>39</sup>Ar date
- U-Pb date

**MINFILE occurrences/deposits**

- Porphyry Cu-Mo-Au
- Vein Polymetallic Ag-Pb-Zn-Cu
- Unknown

**Folds**

- anticline, F<sub>1-2</sub>
- antiform, F<sub>n</sub>
- syncline, F<sub>1-2</sub>
- synform, F<sub>n</sub>



**TABLE OF RADIOMETRIC DATES**

Map label	Sample number	Map unit	Rock type	Method	Mineral	Analytical technique	Date	Latitude	Longitude	Reference	Comments
18591-218	18591-218	EMd	quartz monzonite	U-Pb	zircon	CA-TIMS	185,369.07 Ma	60.61717° N	-133.05612° W	Stevens et al., 2002	mean MSWD = 1.41
28591-421	28591-421	EMd	hornblende tonalite to quartz diorite	U-Pb	zircon	TIMS	193,214.2 Ma	60.21605° N	-133.750196° W	Stevens et al., 1993	<sup>206</sup> Pb/ <sup>238</sup> U date from 2 concordant overlapping fractions
35591-218	35591-218	EMd	hornblende tonalite to quartz diorite	U-Pb	zircon	TIMS	182,210 Ma	-	-	Hunt and Roddick, 1993	2 dates representing 90% of released gas
35591-218	35591-218	EMd	hornblende tonalite to quartz diorite	U-Pb	zircon	TIMS	179,212 Ma	-	-	Hunt and Roddick, 1993	2 dates representing 90% of released gas
35591-218	35591-218	EMd	hornblende tonalite to quartz diorite	U-Pb	zircon	TIMS	188,181.3 Ma	60.01182° N	-133.08429° W	Hunt and Roddick, 1992	2 dates representing 90% of released gas
45591-218	45591-218	EMd	hornblende tonalite to quartz diorite	U-Pb	zircon	TIMS	185,201.9 Ma	60.00433° N	-133.08709° W	Hunt and Roddick, 1992	2 dates representing 90% of released gas
8591-278A	8591-278A	EMd	metachert	U-Pb	zircon	TIMS	341.1517 Ma	60.00217° N	-133.40605° W	Stevens et al., 1993	<sup>206</sup> Pb/ <sup>238</sup> U date from lower intercept of 4 discordant fractions
10591-14	10591-14	EMd	metachert	U-Pb	zircon	TIMS	360.2 Ma	61.15161° N	-134.29999° W	Stevens et al., 1992	60.1% radiogenic <sup>206</sup> Pb
3591-79-12	3591-79-12	EMd	metachert	U-Pb	zircon	TIMS	360.2 Ma	60.98167° N	-133.7376° W	Stevens et al., 2015	2 absolute, 84.3% released gas; MSWD = 0.519
8591-90-18	8591-90-18	EMd	metachert	U-Pb	zircon	TIMS	312.205 Ma	-	-	-	2 absolute, 81.4% released gas; MSWD = 1.272
10591-30	10591-30	EMd	metachert	U-Pb	zircon	TIMS	344.405 Ma	-	-	-	2 absolute, 84.3% released gas; MSWD = 0.378
10591-30	10591-30	EMd	metachert	U-Pb	zircon	TIMS	373.342 Ma	60.98773° N	-133.74192° W	Hunt and Roddick, 1997	2 absolute, 84.3% released gas; MSWD = 1.378
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11591-502	11591-502	EMd	metachert	U-Pb	zircon	TIMS	261.4521 Ma	60.96949° N	-133.77889° W	Moyhinan and Crowley, 2022	weighted mean <sup>206</sup> Pb/ <sup>238</sup> U date; mean ± 1σ; MSWD = 0.7
12591-043	12591-043	EMd	metachert	U-Pb	zircon	TIMS	261.4521 Ma	60.96949° N	-133.77889° W	Moyhinan and Crowley, 2022	weighted mean <sup>206</sup> Pb/ <sup>238</sup> U date; mean ± 1σ; MSWD = 1.7
12591-043	12591-043	EMd	metachert	U-Pb	zircon	TIMS	335.243 Ma	60.97877° N	-133.92897° W	Moyhinan and Crowley, 2022	weighted mean <sup>206</sup> Pb/ <sup>238</sup> U date; mean ± 1σ; MSWD = 1.5
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