

LEGEND

VOLCANIC AND SEDIMENTARY ROCKS

INTRUSIVE ROCKS

UNDATED

U UNDATED and/or UNASSIGNED: Hypabyssal and plutonic rocks lacking distinctive classes or distinguishing petrographic characteristics that have not been assigned to recognized suites.

U: Roushfield Porphyry: Light gray, coarse biotite and feldspar phenocrysts in dacitic groundmass.

QUATERNARY

6 UNCONSOLIDATED SEDIMENTS: Alluvium; glaciifluvial deposits; moraine, till, landslide debris.

5 STIKINE VOLCANICS: Basaltic flows, tuff, scoria; olivine and plagioclase porphyry. (Not identified in Sulphurites area.)

JURASSIC

4 BOWSER LAKE GROUP: Marine basin turbidites. Black siltstone, fine-grained sandstone and conglomerate.

4x Athian Formation: Dark grey, thin-bedded siltstone; minor chert pebbles; conglomerate and compositionally similar fine to coarse sandstone.

LOWER TO MIDDLE JURASSIC

3 HAZELTON GROUP: Mainly calccalcian andesite and derived volcanoclastic sedimentary rocks.

3SR Salmon River Formation: Dark grey, well-bedded siltstone with minor sandstone, intercalated, silty laminae and pale siliceous siltstones (Tytana beds).

3MD Mount D'Entremont formation: Light-washing, intermediate to felsic pyroclastic rocks, including dust, ash, crystal, lava, lapilli and welded tuff.

3MC Betty Creek formation: Heterogeneous, purple, maroon, grey and green, massive bedded pyroclastic and sedimentary rocks; yellow lava.

3UR Uruk River formation: Green and grey, intermediate tuffs and flows; feldspar + hornblende porphyry with locally thick interbeds of fine-grained immature sedimentary rocks; minor conglomerate and limestone.

3T Shubel - Hazelton Transition unit: Immature, felsic sedimentary rocks; volcanic conglomerate and breccia; granite cobble to boulder conglomerate; minor intermediate to mafic volcanoclastic rocks.

TRIASSIC

2 STIKINE GROUP: Basalt, andesite and grey, mixed sedimentary rocks interbedded with mafic to dark green, intermediate to intermediate volcanic and volcanoclastic rocks (pyroxene + hornblende + biotite porphyry). Minor intermediate to felsic tuffs and limestone lenses.

PERMIAN AND OLDER

1 STIKINE ASSEMBLAGE: Coralline reef limestone and intercalated mafic to felsic flows and volcanoclastic rocks; siliceous siltstone, turbidite, chert and conglomerate. In part, penetratively deformed. (Not identified in Sulphurites area.)

GOSSANOUS ALTERATION ZONES

B1 Pyrite + quartz + sericitic = carbonate + clay; locally foliated to schistose.

B2 Disseminated pyrite in intermediate to felsic volcanic rocks.

B3 Wedge Lake Porphyry: Light green, fine-grained plagioclase + quartz phenocrysts in dacitic groundmass.

B4 South Mitchell Stock: Green to pink, K-feldspar + plagioclase porphyry, monzonite, quartz monzonite and granite.

B5 Mitchell Ridge Stock: Green-grey, pink and red, medium to coarse-grained, subporphyritic (K-feldspar, plagioclase), subsub, monzonite and quartz monzonite. With increasing rock grade into a felsic granitic.

B6 Mitchell-Sulphurites Gold Camp Porphyry: Medium to dark green, coarse K-feldspar and plagioclase + hornblende phenocrysts in andesitic groundmass. "Premier Porphyry" equivalent. (Narrow dyke phases not shown.)

B7 Walker Porphyry: Medium grey, medium-grained plagioclase (+ fine feldspar) phenocrysts in dacitic groundmass with fine-grained (microdioritic) cognate xenoliths.

B8 Sulphurites Gneiss: Greenish grey, medium-grained, porphyritic hornblende monzonite, locally gneissic, with numerous small felsic xenoliths and monzonitic, chlorite to monzogneiss. Northwestern part includes felsic porphyry with fine-grained to aplite groundmass.

B9 Wedge Lake Porphyry: Light green, fine-grained plagioclase + quartz phenocrysts in dacitic groundmass.

B10 Knipe Porphyry: Coarse white glomeroporphyritic plagioclase phenocrysts set in grey dacitic groundmass.

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F STIKINE VOLCANIC SUITE: Olivine-plagioclase porphyritic basaltic dykes of the Stikine Volcanic Belt. (Not identified in Sulphurites area.)

QUATERNARY

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E LATE-TECTONIC DYKES: Lamprophyre dykes and dyke swarms. (Narrow, not shown.)

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D COAST PLUTONIC COMPLEX: Granitoid batholith and stocks. Medium to coarse-grained, biotite granite; biotite = hornblende granofels; minor quartz diorite.

D1 Lee Branch Stock: Light grey to pink, K-feldspar porphyritic, hornblende-biotite quartz monzonite.

JURASSIC

MIDDLE TO UPPER JURASSIC

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C THREE SISTERS PLUTONIC SUITE: Medium to coarse-grained gabbro and diorite. (Not identified in Sulphurites area.)

EARLY TRIASSIC

B TEXAS CREEK PLUTONIC SUITE: Fine to coarse-grained quartz diorite, monzonite, quartz monzonite; syn to post-volcanic intrusions; porphyritic to phaneritic textured; includes hypabyssal equivalents of Hazelton Group extrusive rocks.

B1 Atikas Porphyry: Grey-green hornblende and feldspar porphyritic andesite, may be a thick flow.

B2 Iron Cap Stock: Green to pink K-feldspar porphyry monzonite and quartz monzonite intruded by red, equigranular, hypersthene-olivine-gneiss.

B3 Mitchell Glacier Stock: Green to pink, K-feldspar + plagioclase porphyry, monzonite, quartz monzonite and granite.

B4 South Mitchell Stock: Green to pink, K-feldspar + plagioclase porphyry, monzonite, quartz monzonite and granite.

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B9 Wedge Lake Porphyry: Light green, fine-grained plagioclase + quartz phenocrysts in dacitic groundmass.

B10 Knipe Porphyry: Coarse white glomeroporphyritic plagioclase phenocrysts set in grey dacitic groundmass.

A STIKINE VOLCANIC SUITE: Foliated to massive, fine to medium-grained hornblende-biotite quartz diorite. (Not identified in Sulphurites area.)

SYMBOLS

Geological boundary (defined, approximate, assumed)

Bedding, tops known (horizontal, inclined, vertical, overthrust)

Bedding, tops unknown (horizontal, inclined, vertical)

Bedding, estimated orientation (moderate, steep dip)

Igneous layering (inclined, vertical)

Strike and dip of layers, tops known

Strike and dip of pillows, tops unknown

Compositional layering (deformed bedded, foliation, schistosity, grossosity (inclined, vertical))

Inclusions (infoliated, metacrystallized, metasedimentary, metamorphic)

Mineralization (veins, lenses, segregations, etc.)

Quartz veins (obsidian, cherts, etc.)

Mineral spring (e.g., cold spring; v.v. = warm spring); C.S. = cold spring, V.V. = warm spring

Approximate limit of outcrop; isolated outcrop

Fossil locality; with GSC catalogue number, or other identifier, if listed in table

Geologic station


RGS stream sediment sample location, with sample number

Assay stream sample location, with sample number; see table for analyses

Whole-rock sample location, with sample number; see table for analyses

Locality where age has been determined, in millions of years

Geological station



$56^{\circ} 40'$

