



BRITISH COLUMBIA
Ministry of Energy and Mines

Geoscience Map 2003-3

Geology of the Anyox Mining Camp
NTS 103 P 5W, 12W

Compilation by D.J. Aldrick

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Scale 1:20,000

LEGEND

- QUATERNARY**
- Qal Glacial till, alluvium, colluvium
- LAYERED ROCKS**
- TERTIARY**
- Tv Volcanic breccias and flows, volcanic- and granite-pebbles to cobble conglomerate
- MESOZOIC**
- MIDDLE TO LATE JURASSIC**
- BOWSER LAKE GROUP**
- mJbt Silstone (st), mudstone (md), shale (sh), fine and medium grained sandstone (fsd, msd) with rare ripple marks (rm), graded beds (gb) and cross beds (cb). Minor coarse grained sandstone (csd), waste (wk) and fine pebbles conglomerate (pgcl). Turbidites (td). Local dismembered pyrite (py) and pyrite laminations (pyln). Local calcite cemented sandstone (bsd), sandy limestone (ls) and fine concretions (fc). One fossil site (f). Biotite hornfels (bh) developed adjacent to intrusions.
- EARLY TO MIDDLE JURASSIC**
- HAZELTON GROUP**
- ANYOX FORMATION**
- emJHA Undifferentiated volcanic, sedimentary and intrusive rocks
 - emJHAa Diorite (dr). Fine to coarse grained sills. Thin aphanitic mafic dikes (Bd).
 - emJHAb Gabbro (gb). Medium to coarse grained sills.
 - emJHAc Pyroxenite (pxnt). Coarse grained sill.
 - emJHAd Minor sedimentary members, including turbidite (td), sandstone (sd), siltstone (st), mudstone (md) and chert (ch).
 - emJHAE Minor tuffaceous beds (Tt) and metamorphic equivalent chlorite schist (cs) and Klotze schist (ks).
 - emJHAF Pillow basalt flows (Bp), pillow breccias (Bpx), massive basalt flows (BF).
- EARLY TO MIDDLE JURASSIC**
- emJv Extensive complex of meta-volcanic, meta-sedimentary and meta-plutonic rocks. Detrital brown U-Pb age <186 Ma (Evershick and McNeil, 2002); correlative with Anyox Formation. Mafic flows (BF), pillow basalt (Bp), pillow breccia (Bpx), volcanic breccia (vb), chlorite schist (cs), sandstone (msd), siltstone (msl), gill (mg), conglomerate (mcgl) and mafic intrusive rocks (mfr). Marble crops out west of map area.
- INTRUSIVE ROCKS**
- TERTIARY**
- EOCENE**
- COAST PLUTONIC COMPLEX**
- MOLY MAY STOCK**
- EMM Garnet +/- muscovite granite
 - EMMA Quartz stockwork
- HYDER PLUTON**
- EH Hyder Batholith. Medium grained biotite +/- hornblende quartz monzonite, granodiorite and granite. Local potassium feldspar megacrysts.
 - EHa Hyder Dikes: Granodiorite (gd), diorite (dr), felsite (fs), porphyritic amphibole (hp), pyroxene-feldspar assemblage (pfa), lamprophyre (lp). Aphyric andesite (Ad) and basalt (B). Flow-banded (fbd).
 - Eld Laramie Island Dike Swarm. Fine to medium grained, equigranular (gd) to foliated porphyritic (fgd) granodiorite dikes, also felsite (fs) and lamprophyre (lp).
- MIDDLE JURASSIC**
- MJc Brocciated biotite granite (grb) to granodiorite (gdb). U-Pb age 176.6 +/- 0.2 Ma (Evershick and McNeil, 2002). Fault-bounded contacts. Cracks to mosaic to open framework breccia, calcareous fabric. Includes lenses of mafic meta-volcanic rock (mv) and lenses of volcanic breccia, sedimentary rocks (s), gabbro (gb) and felsite plutonic rock.
- DEVONIAN**
- Dcu Ultramafic rock (ulc). Fine rhythmic laminations (tectonic T); commonly brecciated. Protolith likely Devonian; age of deformation uncertain.
 - Dcm Mafic intrusive rocks. Diorite (dr) to gabbro (gb). Massive to gneissic (gn); locally mylonitic. U-Pb age 263 +/- 3 Ma (Chibwe, 1997).

- SYMBOLS**
- Geological contacts:
- Inferred
 - - - Approximate or compiled from sources in reference list
 - - - Fault (defined, approximate)
 - - - Bedding (inclined, vertical, overturned)
 - - - Foliation (inclined, vertical)
 - - - Cleavage (inclined, vertical)
 - - - Axial trace of upright anticline, syncline
 - ⊗ Fold axis of minor fold
 - ⊙ Fossil locality
 - ⊙ Isotopic age site (U-Pb)
 - ⊙ Station location
 - ⊙ Orebody: Hidden Creek Mine (Inset 1)
 - ⊙ Open pit outline: Hidden Creek Mine (Inset 1)
 - ⊙ Chert: Hidden Creek Mine (Inset 1)
 - ⊙ Sulphide horizon: Hidden Creek Mine (Inset 1)
 - ⊙ Orebody projected to surface: Bonanza Mine (Inset 2)
 - ⊙ Limonite
 - ⊙ 28 Mineral occurrence and number
 - ⊙ Minor mineral occurrence (copper)
 - ⊙ Minor mineral occurrence (molybdenum)
 - ⊙ Surface vein prospect (from Falconer, 1959)
 - ⊙ Quartz work (adi, trench)
 - ⊙ Chert
 - ⊙ Siliceous pyritic contact zone
 - ⊙ Road
 - ⊙ Railway bed
 - ⊙ Slag heap

- ABBREVIATIONS**
- | | | | |
|-----|----------------------|-----|----------------------------------|
| A | - andesite | gn | - gneiss, gneissic |
| Ad | - andesite dike | gr | - granite |
| Adf | - andesite flow | grb | - granitic breccia |
| agf | - agate | gs | - gossan |
| ah | - aphanite | h | - hornblende |
| B | - basalt | hbt | - hornblende |
| bf | - basalt flow | (h) | - potassium feldspar phenocrysts |
| BF | - basalt flow | (h) | - potassium feldspar megacrysts |
| Bp | - pillow basalt | hd | - lamprophyre dike |
| Bpx | - pillow breccia | hsd | - heavy sandstone |
| bs | - basaltic sandstone | ht | - hornblende |
| bsd | - mafic dike | ht | - hornblende |
| bsf | - mafic dike | ht | - hornblende |
| bsl | - mafic dike | ht | - hornblende |
| bsm | - mafic dike | ht | - hornblende |
| bsn | - mafic dike | ht | - hornblende |
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