



OPEN FILE MAP 1988-20
GEOLOGY OF THE SILVER KING - MOUNT CRONIN AREA
BABINE RANGE, WEST-CENTRAL BRITISH COLUMBIA

NTS 93L/15
Compiled by D.G. Macintyre and P.J. Desjardins

SCALE 1:20,000
SEDIMENTARY AND VOLCANIC ROCKS

LATE CRETACEOUS TO TERTIARY
uK1a siltstone, argillite, conglomerate; angular cherty clasts common in coarser beds; dark to light grey; medium to very thin bedded; tuffaceous and heterolithic at base.

LATE CRETACEOUS
KASALKA GROUP (BRIAN BORU FORMATION)

Upper Division
uKK2c massive, grey to maroon porphyritic hornblende-feldspar andesite; heterolithic streaks common; local breccia; very massive and resistant; sheeted jointing common; may be intrusive in places.
uKK2b grey, greenish grey and maroon crystal tuff, ash tuff, minor mudstone and volcanic breccia; hornblende and feldspar crystal fragments; thick bedded to faintly laminated.
uKK2a volcanic breccia and lapilli tuff; hornblende-feldspar porphyritic andesite clasts; grey to greenish grey; thick bedded; feldspathic matrix.

Lower Division
uKK1e maroon to red ash flow tuff, volcanic breccia, lapilli tuff, volcanic conglomerate, porphyritic andesite, lahar; maroon, green and cream coloured matrix and clasts; locally siliceous with welded clasts; thick bedded to massive.
uKK1d lapilli tuff; maroon and green volcanic clasts; feldspathic matrix; massive, thick bedded.
uKK1c augite phyric basalt; green to maroon; locally vesicular and amygdaloidal; massive, thick bedded; local flow breccia; lapilli-tuff and porphyritic andesite interbeds.
uKK1b lahar with feldspar porphyry clasts, epiclastic sandstone and siltstone, crowded feldspar porphyry flows; orange to yellow weathering; poorly sorted; medium to thick bedded.
uKK1a volcanic pebble conglomerate, tuffaceous sandstone; maroon and green; heterolithic; poorly sorted; rounded to subangular clasts of maroon and green tuffs.

EARLY TO LATE CRETACEOUS
luKs5 dark grey argillite, shale, siltstone, matrix supported pebble and boulder conglomerate; hornblende-biotite-feldspar porphyry clasts; moderate to thick bedded.
luKs4 grey siltstone, sandstone and pebble conglomerate; well bedded.
luKs3 orange-brown tuffaceous siltstone; dolomitic; flaser to wavy bedded.
luKs2 dark grey shale, siltstone; thin bedded; minor conglomerate beds.
luKs1 maroon and green phyllitic tuff or siltstone.

EARLY CRETACEOUS (Ablan?)
IKS pebble conglomerate; polystratified; clast supported; well rounded quartz, chert, argillite and grey tuff clasts; increasing dark grey sandstone and shale interbeds down section; medium to thin bedded; carbonaceous plant impressions; micaceous.

MIDDLE TO LATE JURASSIC
BOWSER LAKE GROUP (ASHMAN FORMATION)
muJA black shale, siltstone, quartzose wacke and pebble conglomerate; medium to thin bedded.

HAZELTON GROUP
SMITHERS FORMATION
mJS fossiliferous siltstone, sandstone, pebble conglomerate; greenish grey; glauconitic; well bedded.
NILKITWA FORMATION
IJN green to maroon augite phyric amygdaloidal basalt with red epiclastic or tuff interbeds; massive; thick bedded; grades up section into dark grey calcareous siltstone; brown pebble conglomerate and minor limestone.
TELKWA FORMATION
IJT green and maroon lapilli and crystal tuff, volcanic breccia, porphyritic andesite flows; minor rhyolite; massive; thick bedded.

INTRUSIVE ROCKS
rh cream to white, fine-grained rhyolite to dacite; locally porphyritic with quartz eyes
dr grey hornblende granodiorite to quartz diorite
gr dark greenish grey, coarse-grained diorite
mf dark grey, fine-grained, basalt or andesite

SYMBOLS
geological boundary (defined, approximate)
thrust fault
bedding (inclined, vertical)
S2 foliation (inclined, vertical)
quartz vein (inclined, vertical)
anticline
overturned anticline
silicified zone
1986 A.C.S. silt sample location
fossil locality
tranch

area of outcrop
fault (defined, approximate)
shear zone
S1 foliation (inclined, vertical)
minor fold axis
syncline
overturned syncline
pyritic gossan
rock sample location
major mineral occurrence (Minfile No.)
edit

ROCK GEOCHEMISTRY
MAP NO. AU AG CU PB ZN NI MO DESCRIPTION
1 +20 +0.5 19 19 63 36 +5 gossan, pyritic
2 +20 +0.5 23 37 99 8 gossan, pyritic
3 90 +0.5 38 56 85 19 altered andesite
4 +20 480.0 280 27000 21000 10 quartz veins; sp,al
4 +20 1000.0 217 27700 22000 4 quartz veins; sp,al
4 200 33.0 37 12000 2900 8 quartz veins; al,sp
4 +20 140.0 117 33000 19000 12 quartz veins; al,sp
4 +20 0.5 34 45 210 18 gossan, pyritic
5 +20 +0.5 23 12 50 24 gossan, pyritic
6 +20 +0.5 37 18 56 8 +5 gossan, siliceous tuff
7 +20 +0.5 35 18 110 35 +5 gossan, siliceous tuff
7 +20 +0.5 26 51 69 10 gossan, siliceous tuff
8 +20 +0.5 11 12 102 42 +5 argillite, pyritic
8 +20 0.5 5 9 20 2 quartz
9 40 0.8 9 5 20 2 gossan
10 +20 +0.5 41 101 141 6 gossan
11 +20 +0.5 26 15 84 18 +5 gossan
12 +20 4.0 3600 758 557 420 gossan, cp,py,mf
13 +20 +0.5 24 15 64 14 gossan
14 +20 +0.5 32 13 150 28 gossan, siliceous
15 650 420.0 2200 8 107 3 gossan, mf
16 +20 0.5 21 47 135 22 +5 siltstone, pyritic
17 +20 1.0 6 130 30 +5 quartz vein
18 +20 +0.5 15 11 39 +3 gossan, pyritic
19 +20 +0.5 13 13 42 6 gossan, pyritic
20 +20 +0.5 12 18 52 44 +5 gossan

1986 RGS SILT GEOCHEMISTRY
NO. ZN CU PB NI CO AG NI MO DE RE NG LU U F V O DB W BA NI AU
1 95 21 14 26 10 0.2 510 8.0 +2 3.51 35 3.6 3.5 200 30 +0.2 2.3 +0.05 -1 +00
2 115 27 11 56 11 0.2 520 16.0 +2 4.37 70 12.8 1.7 170 42 +0.2 4.1 +0.540 1 200
3 204 30 36 18 13 0.3 1100 10.0 +2 3.29 65 12.4 2.6 165 30 0.6 2.2 +0.704 1 200
4 820 40 302 26 14 3.0 700 60.0 +2 3.39 60 5.0 2.2 275 42 9.3 2.5 +0.557 1 +00
5 225 53 212 34 17 3.7 600 40.0 +2 3.89 60 6.8 3.2 230 28 1.4 1.8 5 2 066 2 +00
6 850 42 66 92 31 0.7 600 30.0 +2 3.40 60 12.6 5.6 340 34 6.7 3.8 +0.81 3 300
7 70 12 15 22 13 0.2 300 10.0 +2 3.52 30 3.4 1.8 180 34 +0.2 1.8 +0.270 +1 +00
8 130 34 19 27 16 0.4 700 30.0 2.54 35 6.2 3.6 385 22 0.7 1.3 +0.898 +1 300
9 306 37 24 38 18 0.3 200 14.0 +2 3.48 36 6.4 3.6 200 29 1.9 2.2 2 700 2 200
10 85 17 12 24 10 +0.2 300 4.0 +2 3.02 108 4.0 3.0 165 37 0.6 0.9 2 381 1 200
11 82 20 14 22 12 +0.2 300 4.0 +2 3.37 104 4.4 2.9 210 43 0.9 1.2 +0.800 3 300
12 100 29 11 30 13 +0.2 700 15.0 2 3.11 75 5.8 5.1 270 25 +0.2 0.5 1400 1 +00
13 80 22 15 22 11 +0.2 600 15.0 +2 2.99 60 7.0 3.7 225 34 +0.2 1.8 +0.85 2 0
14 94 26 14 32 14 +0.2 800 12.0 +2 3.15 86 6.6 3.7 225 35 +0.2 1.3 +0.800 2 +00
15 98 34 11 48 14 +0.2 700 17.0 +2 3.69 60 5.4 2.6 200 33 +0.2 1.1 +0.808 3 200

SOURCES OF INFORMATION
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