# 820751

### SKWIM PROJECT SUMMARY

**GEOLOGY** 

The area is underlain by a pendant of Mesozoic volcanic and sedimentary rocks surrounded and intruded by Cretaceous Coast Range granitoids. The pendant rocks are believed to be, in part at least, Lower Jurassic in age, based on the presence of ammonites identified as <u>Arnioceras kwakiutlanus</u> by H.W. Tipper of the Geological Survey of Canada. Faunal evidence suggests the Skwim Pendant stratigraphy to be time equivalent to the Bonanza Group of Vancouver Island.

All rock units are near vertical and strike in a north to north-west direction. Structural deformation has been intense with the early development of tight, steeply to moderately  $(60-20^{\circ})$  north plunging folds. These are characterized by the presence of a penetrative to fracture axial planar cleavage. Locally developed isoclinal folds may indicate an earlier period of folding. Late open style folds disrupt earlier phase folds and cleavages. Two shear directions predominate. One is sub-parallel to regional bedding – banding and is generally parallel to the penetrative foliation while a second set of shearing strikes  $060^{\circ}$  to  $100^{\circ}$  and is steeply dipping. Both appear to locally control zones of massive sulfide mineralization in the vicinities of the Upper and Lower Adits.

The degree of structural deformation and the lack of one continuous marker horizon has led to difficulties in correlating and/or distinguishing between units of similar lithologies. Apparent rapid facies changes along strike also add to the complexity. A schematic stratigraphic column is presented in Figure 1 and the units are described below.

From east to west the pendant consists of a series of interbedded siltstones, sandstenes, lapilli tuffs and siliceous, locally graphific argillites cut by medium to fine grained gabbro-diorites (Unit 1). Locally these intrusive rocks are sill-like and grade into cryptocrystalline, vesicular basalt-andesites. Westward, Unit 1 rocks become increasingly stlicified adjacent to a large mass of fine to medium

grained diorite and associated andesite-basalt pillow lavas (Unit 2). A thick gabbro-diorite body separates the pillowed horizon from a sequence of chlorite-rich andesitic flows and coarse lapilli tuff, banded felsic to intermediate siltstone, sandstone and lapilli tuffs. Unit 2 is contact with a recessive sequence of argillite, siliceous argillite and black chert (Unit 3) containing thin carbonate interbeds and andesitic to basaltic vesicular flows. The argillite is structurally and/or stratigraphically thickened in the northern part of the property (up to 400 m) while in the Lois River valley it crops out over an interval of only 50-100m. A thinly bedded (3-5 cm) siliceous siltstone, sandstone, argillite and black chert sequence with local andesite-basalt flows forms one of the most identifiably continuous units on the property (Unit 4). It dominates the Lois River Valley and crops out to the north of and in the region of Frozen Lake. It is cut by Coast Range chlorite-quartz diorite in the north-west and is overlain by finely laminated siliceous siltstone and chert (Unit 5) and coarse tuffaceous breccia and/or agglomerate (Unit 6) in the southwest portion of the property.

#### MINERAL IZATION AND ROCK GEOCHEMISTRY

Mineralization at the Skwim property includes: 1) Ag  $\pm$  Au bearing Cu-Pb-Zn locally massive sulphide zones, 2) Ag  $\pm$  Au bearing Pb-Zn sulphide impregnations and veins, 3) Ag  $\pm$  Au bearing Pb  $\pm$  Zn sphaleritechalcopyrite stockworks, 4) chalcopyrite-magnetite-pyrrhotite and/or veins. 5) veins and 6) gold-bearing pyrite gold quartz arsenopyrite-quartz veinlets.

# Cu-Pb-Zn-Ag + Au Mineralization

Pods and lenses of massive to semi-massive sphalerite, chalcopyrite, pyrrhotite, subordinate galena and minor arsenopyrite are discontinuously exposed in two areas (Upper and Lower Adit Zones) located 800 m apart and separated by 300 m vertical relief. Mineralization in the Upper Adit Zone is intermittently exposed in several trenches and one adit over a 150 m strike length and a 90 m width. Sulphide zones in the Lower Adit Zone have been exposed by 3 trenches and 1 adit for a distance of 100 m.

On a regional scale the mineralized pods are spatially related to the argillite (Unit 3), chlorite tuff (Unit 2) contact. They also appear to coincide with a series of subparallel EM conductors which can be intermittently traced from the Upper to the Lower Adit Zones. On an outcrop scale the sulphide zones are associated with sets of steeply dipping north  $(330^{\circ}-005^{\circ})$  range, and east-north-east  $(060^{\circ}-100^{\circ})$  range trending shear zones. Average assay values from the Upper and Lower Adits are 0.82% Cu, 0.72% Pb, 15.52% Zn, 156.9 g/t Ag, 1.53 g/t Au over 3 m, and 0.14% Cu, 0.79% Pb, 7.3% Zn, 78 g/t Ag, 1.67 g/t Au over 2.5 m respectively. A trench to the east of the upper adit averages 2.04% Cu, 0.28% Pb, 1.13% Zn, 250 g/t Ag and 0.30 g/t Au over 2.5 m.

Drilling by Anaconda in the Upper Adit region (9 holes totally 899 m) has outlined three main en echelon sulphide zones which contain silver and polymetallic sulphide-rich pods over a composite strike length of 130 m. Best drill intersections from the three sulphide zones are, from north to south: 2.1%Cu, 7.9% Pb, 2.5% Zn, 359.5 g/t Ag over 4.0 m, 0.6% Cu, 0.6% Pb, 1.2% Zn, 22.7 g/t Ag over 7.2 m and 0.3% Cu, 2.90% Pb, 1.5% Zn, 99.7 g/t Ag over 2.7 m.

# Pb-Zn-Ag + Au Mineralization

Veins, impregnations and disseminations of galena-sphalerite occur at the Mt. Diadem Adit and along a trench located 900 m north of the Upper Adit. Grab samples from the Mt. Diadem Adit yielded values as high as 17% combined Pb-Zn, 264 g/t Ag, 4.9 g/t Au while a 3 m chip sample from the second locality assayed >10,000 ppm Pb, >10,000 ppm Zn, 7200 g/t Ag and 863 ppb Au.

# Gold Mineralization

Narrow supliphide-bearing quartz veins with local visible gold cut Coast Range and pendant rocks near the headwaters of No Mans Creek. They assay up to 30 g/t Au.

Skwim Project Summary Page 4

Sporadic and discontinuous quartz-arsenopyrite veinlets and veins cutting Unit 2 rocks have been found over 1200 X 300 m area. One 0.25 m chip sample assayed 13 g/t Au.

## **GEOPHYSICS**

Main results are presented on the accompanying compilation plan. Magnetic highs coincident with Unit 2 rocks (diorite; chlorite-rich rocks) flank EM conductors which straddle the chlorite tuff-argillite contact. This contact zone is also the site of known precious metal - polymetallic sulphide zones. Multiple strong EM conductors detected over the central portion of the "rusty argillite unit" can be correlated with graphitic horizons within this sequence.

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