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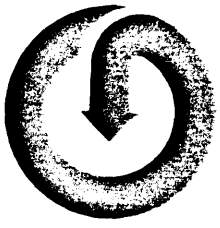

MINNOVA Inc.

MINNOVA INC./REA GOLD CORPORATION
SAMATOSUM JOINT VENTURE

CLOSURE PLAN AND BUDGET

Samatosum Division

Spring '92

2.7 GEOLOGY

2.7.1 REGIONAL GEOLOGY (Figure 2.12)

(excerpt from 1991 Report On Ore Reserves, Friesen 1991)

The Samatosum Deposit is located in the Adams Plateau district of British Columbia, which covers an area roughly bounded by the North and South Thompson Rivers to the south, west and north; and Adams Lake to the east. The area is underlain by Palaeozoic metasedimentary and metavolcanic rocks belonging to the Eagle Bay Assemblage, occupying the eastern two-thirds of the area; and the Fennell Formation, in the western one-third of the area. The Samatosum Deposit is located within Eagle Bay Assemblage rocks.

Eagle Bay rocks range in age from Early Cambrian to Late Mississippian, and as the result of a complex deformational history (described most recently by P. Schiarizza and V.A. Preto, 1987) involving multiple stages of thrust faulting and folding during the Jura-Cretaceous Columbian orogeny, produced strongly foliated and overturned rocks trending northwesterly and dipping to the northeast.

These Palaeozoic rocks are intruded by Mid-Cretaceous granodiorite and quartz monzonite (Baldy Batholith), and early Tertiary quartz feldspar porphyry, basalt and lamprophyre dykes. They are locally overlain by Eocene sedimentary and volcanic rocks of the Kamloops Group and by Miocene plateau lavas -represented in the area by occasional erosional remnants.

Base metal and precious metal deposits within the Eagle Bay Assemblage are generally hosted by felsic to intermediate metavolcanic rocks (Homestake Deposit), and metasedimentary rocks within mafic metavolcanic rocks (Rea and Samatosum Deposits).

2.7.2 LOCAL GEOLOGY (Figure 2.13)

(excerpt from 1991 Report On Ore Reserves, Friesen 1991)

The entire package of rocks hosting the Samatosum Deposit strikes northwesterly and dips 20 to 50 degrees to the northeast. From east to west, these include: the Tshinikan limestone, mafic volcanics, sediments and cherts (the "Sam Sediments and Turbidites"), more mafic volcanics and sediments (the Rea Horizon), turbidites and finally felsic volcanics. Recent structural studies by Glover

support an earlier concept that these units have been subjected to at least three phases of folding and are now overturned.

The Samatosum Deposit ("Silver Zone") is located within the Turbidite sequence near their contact with the Sam Sediments, structurally below the mafic pyroclastics. The Sam Sediments consist of argillites, cherts and mafic pyroclastics and their silicified and sericitic equivalents; whereas the Turbidite unit consists of argillites and wackes, and their sericitic, pyritic, and locally silicified equivalents (SERT, MUT). The MUT unit, is currently thought to represent a destructive, severely pyritized and often silica flooded portion of the Turbidite horizon (Friesen, 1989,1990), containing up to 60% or more pyrite, minor (1-3%) Zn-Pb-Cu and up to 60 g/t Ag over thicknesses of 10-15 meters.

Much of the orebody is a stratabound quartz/carbonate vein. Folding and thrusting the ore has produced an overturned, northeast dipping synformal structure with an overthickened hinge area. Continued thrusting from above the ore zone has sheared out all or part of the hangingwall. This "thrust zone", which places the relatively unaltered mafic pyroclastics structurally above the ore stratigraphy, is thought to eventually shear out the entire ore zone to the south at about Section 95+50mW. Northwards, it diverges away from the ore zone, cutting up into the mafic pyroclastic stratigraphy.

Although six different ore types have been recognized for grade and production controls during mining, all are related to quartz/carbonate veining. A seventh potential ore type--barite--is found locally in argillites/MUT from the Sam Sediment/Turbidite stratigraphy as small, dislocated lenses, separate from the ore structure. Silver assays from barite specimens may reach as much as 300-400g/t with about 1g/t gold and minor base metals.

All ore types contain the following economic minerals: tetrahedrite (var. freibergite), a copper-iron-zinc-silver-antimony sulfosalt and the principle silver-bearing mineral in the deposit; sphalerite, a zinc sulfide; galena, a lead sulfide; chalcopyrite, a copper-iron sulfide; and electrum, a gold-silver mixture almost exclusively associated with the tetrahedrite. The principle gangue minerals are pyrite (11%), an iron sulfide, quartz (32%), and dolomite(19%), a calcium-magnesium carbonate.

are pyrite (11%), an iron sulfide, quartz (32%), and dolomite(19%), a calcium-magnesium carbonate.

The flat dipping, tabular orebody averages approximately 6.0 meters thick (ranges from <1.0m to 15 meters) by 500 meters long by 100-150 meters of dip length; and nearly always occurs at or near the SERT/MUT interface of the Turbidite unit.

The genesis of the quartz vein orebody is the topic of much in-house controversy. It is thought to represent either an epigenetic, meso- or epithermal vein deposit resulting from an extensive and complex hydrothermal alteration system of regional proportions (Friesen, 1989, 1990); or alternatively, the vein component of an original volcanogenic massive sulfide environment--possibly genetically related to the Rea Gold horizon (e.g. Glover, 1989, 1990).