

2.

EXPLORATION OF THE HUDSON RIVER VOLCANICS

2.1 INTRODUCTION - PREVIOUS WORK

Rocks which are assigned to the Hudson River Volcanics outcrop along a 1-5km wide northerly trending belt which extends from Elliott Bay to the Wanderer River, some 18km to the north (fig 3). The eastern boundary of the Hudson River Volcanics is marked by the Elliott Point porphyry, a distinctive coarse-grained quartzo-feldspathic biotite porphyry. In the southern portion of the E.L. the Hudson River Volcanics occupy a 5 km wide coastal belt which is bounded by the Lower Rocky Point granite to the west and the aforementioned porphyry to the east.

In the main, they are a sequence of acid pyroclastics and lavas with an overall rhyolite-dacite composition. According to Large (1981) they differ from the Wart Hill Pyroclastics due to the greater abundance of true tuffaceous sedimentary units and their higher chlorite content. Some problems are encountered with the precise location of the boundary of this unit with the Wart Hill Pyroclastics and indeed whether there is sufficient justification for this bipartite subdivision of the Lewis River Volcanics. The older age of the Hudson River Volcanics is assumed on the grounds that the stratigraphy at Elliott Bay is upward facing and youngs progressively to the west.

The intercalations of true sedimentary depositional cycles with periods of volcanicity suggests a good potential for distal (Rosebery style) Cu-Pb-Zn-Ag stratiform mineralization. Previous exploration by Geopeko has resulted in the recognition of nine anomalous areas, defined by airborne geophysical surveys, stream sediment sampling and geological mapping (Large 1981).