Paper No. 7-5 —
The Volcanogenic Massive Sulphide Potential of the

Western Cordilleras.

C.J. SULLIVAN, Consulting Geologist, Toronto, Ont.

The volcanogenic massive sulphide potential of the Western Cordilleras is very large, but it has been partly neglected because of the emphasis on porphyries — which were themselves formerly neglected; also, massive sulphide buffs have been enamoured of the Precambrian Shield.

To realize this potential, geologists should be more conscious of the environments of massive sulphide ores, including the basic Sanbagawa environment, as well as the acid volcanic association.

Government geologists and all concerned need to note the importance of, inter alia, acid fragmentals, explosion breccias, bird's-eye quartz porphyry, volcanic sedimentary transition zones, rusty formations and nearby basic plugs.

A greater use of airborne and ground electromagnetic and magnetic systems is recommended. Geochemistry and float tracing are effective, though care must be taken not to neglect anomalies which look weak by porphyry copper standards.

In addition to copper, lead and zinc, the author believes that there is an immense silver (and, to a lesser extent, gold) potential in the volcanic belts of the west.

CIM Van act 14/76

Kutcho C 675193