PROPERTY:

Т

MAP LOCATION NO. 9

COMMODITY:

COPPER, ZINC

LOCATION:

49° 50' North 123° 52' West, Vancouver Mining District, B.C. The property is on the north side of Treat Creek which flows into the east side of Jervis Inlet about 50 miles northwest of Vancouver, B.C.

ACCESS:

By boat or air from Vancouver.

TOPOGRAPHY:

The claims extend northerly along the west and southwest flank of the northwest trending ridge which reaches 5300 feet elevation between Perketts Creek to the north and Treat Creek to the south. The area of interest extends from 500 feet elevation to 2800 feet elevation. The slopes are moderate to cliff forming and are generally well timbered. The area is traversed by several good logging roads.

PROPERTY:

17 claims in good standing until 1981.

HISTORY:

The earliest reports of mining activity on Treat Creek are in 1971 when work was done on copper-iron skarn occurrences. This development work, which consisted of surface trenching and underground workings, continued until 1925. The property was relativily inactive from 1925 to 1959 when the area was mapped and a dip needle survey completed by Phelps Dodge. In 1965 a soil sample survey was done over this area. In 1968, Jervis Inlet Minerals Ltd., drilled four holes, each about 500 feet long at about 500 feet elevation, to check the pyrite and pyrrhotite content as a possible source of sulphur. The overall iron content averaged 7 to 10% and the sulphur from less than 1 to 2%. The copper and zinc content of these holes was very low.

The T Claims were staked in 1971 by W. Kuhn for El Paso Mining and Milling Company. The following fieldwork has been done by El Paso on the T Claims: in 1971 detailed geological mapping, soil sampling, EM-16 survey and magnetometer survey; in 1972 - further detailed geological mapping and soil sampling and diamond drilling; in 1973 completion of diamond drilling and regional geological mapping.

GEOLOGY:

A large northwest-trending pendant of volcanics and sediments of the Jarvis Group of probably Mesozoic age underlies the claims area. This pendant is one of many interspersed through the quartz diorite of the Jurassic Coast intrusions. The main intrusive contact is about one mile south of Treat Creek and apparently trends northwest-southeast. The intrusive contact on the northeast flank of the pendant is at least five miles to the north. The volcanic-sedimentary pendant includes several volcanic through sedimentary sequences from dark green to black massive basalt and andesite through fine grained andesites and foliated grainy andesites to tuffs and breccias. Intercalated with the pyroclastics are argillites and cherts in bands up to 50 feet thick.

GEOLOGY: (Continued)

The sediments generally strike northwest and dip steeply southwest; however, some northeast dips have been mapped indicating possible folding. An elongate quartz diorite plug intrudes the volcanics over an area 3500 feet long (N50°W)by 500-1000 feet wide. This intrusive carries disseminated pyrite with a little chalcopyrite and molybdenite in places.

Pyrite and pyrrhotite are widely disseminated over an area 7000 feet (NW-SE) by 2000 feet wide. However, massive sulfides are restricted to north and northeast-trending shears. In places, chalcopyrite, sphalerite and molybdenite are sparsely distributed. In the heavier sulphide areas, the rock has been altered with quartz, chlorite and epidote being the most common alteration products. In the southeast corner of T#7 claim, a small adit has been driven along a northeasterly shear for about 50 feet. The andesitic volcanics have been altered to skarn with fair magnetite, chalcopyrite and sphalerite developed along factures. About 1000 feet to the northeast, weak malachite lightly stains an easterly shear in fractured cherts. Very little pyrite or pyrrhotite is associated. A little further to the north, minor chalcopyrite occurs along siliceous zones in chloritized tuff. About 1200 feet northwest of the adit minor chalcopyrite, bornite and magnetite occur along a fracture trending N65 E/70 SE.

In the northwest end of T #10 claim, about 3400 feet northwest of the adit, massive pyrite and pyrrhotite with some magnetite occur in highly silicified and epidotized sections of tuff.

Four holes have been drilled to test the copper and zinc soil anomalies and the EM-16 anomalies. Hole T-1 was collared in the NE quadrant of T #7 claims and drilled N80°E for 1019 feet across one of the main copper soil and EM-16 anomalies. The best sections in this hole were: 462-467' (5') of 0.15% Cu and 0.63% Zn; and 760-770' (10') of 0.34% Cu and 0.10% zinc. Hole T-2 was located in the northwest corner of T #7 claim and drilled N70°E for 1132 feet across a marked gossan zone on the surface. This hole showed very low copper and zinc values throughout. Hole T-3,located in the SW corner of T #3 claim, was drilled N60°E for 296 feet across a copper soil anomaly but had to be abandoned due to heavy water flow. Hole T-4 was located 250 feet N60°E of T-3 and drilled N60°E for 889 feet. It cut 203 feet of volcanics grading 0.15% copper from 103 to 306 feet including 40 feet which assayed 0.23% copper.

GEOPHYSICS:

- (a) EM-16: Strong EM-16 anomalies correlate with zones of siliceous alteration and strong copper soil anomalies.
- (b) Magnetics: The magnetometer survey showed a few small scattered magnetic anomalies, but there is some question about the validity of this survey due to mal-functioning of the instrument.

GEOCHEMISTRY:

A number of large areas of anomalous copper zinc and silver values in soils extend northwesterly across the claim area for 6500 feet by 1000 feet.

RECOMMENDATIONS:

Four drill holes totalling 3000 feet are recommended. One of these holes should be drilled in the vicinity of drill hole T-1 to cut across the main intrusive; one hole should be drilled to check the mineralization intersected in hole T-4; and two holes should be drilled from the Perketts Creek road near the northwest end of the anomalous zone to cut across the large soil and EM-16 anomalies in that area.