

# ZENITH - WEAVER LAKE AREA HARRISON LAKE

# $\frac{\text{New Westminster District, B. C.}}{\text{N.T.S. 92-H-5W}}$

Vancouver, B.C. June 1972

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Report on

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New Westminster District, B. C.

D. H. Brown and G. Harper

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## Introduction

This report is the result of interest in the area being renewed through the work being currently conducted by Cominco on their optioned Zenith property. G. Harper and D. H. Brown spent two days (May 2nd and 4th, 1972) carrying out a reconnaissance survey of the Weaver Lake ground in the light of knowledge obtained of the favorable ore-bearing horizon at Zenith and the general geological environment. In 1965 Brian Lowes spent two weeks prospecting and sampling the area for the Company and wrote a report which can be found in N.T.S. file 92-H-5. In 1971 Cominco took an option on the Zenith property straddling Chehalis River and carried out surveys including a mercury survey which seemed to indicate anomalous areas. One lens of semi-massive to massive pyrite-chalcopyrite-sphalerite mineralization was discovered near surface in a favorable tuff horizon. Current drilling is investigating mercury anomalies downdip from the discovery zone.

#### Location and Access

The Weaver Lake area lies about twelve miles north of the Fraser River and four to eight miles west of Harrison Lake. Access is by logging road from the Sasquatch Inn on Highway 7 (Agassiz to Mission). Two good logging roads enter the area, one from the Hemlock Valley road on the west and the other which approaches on the east side of Weaver Lake. The range in elevation is between 800 ft. and 4600 ft. Considerable logging has been carried out in the area and outcrop forms upward of 30% of the terrain.

# Property Ownership

The claims surrounding Weaver Lake are the LUV, D.S. and Stoney claims which are held by D. S. Ashe of Delta and P. W. Dunsford of North Vancouver as shown on the accompanying claim map. The Zenith property optioned to Cominco is also shown for reference.

### Geology

The Zenith-Weaver Lake area of the Harrison Lake district (N.T.S. 92-H-5W) bounded by the Chehalis River on the west, the Fraser River on the south, and Harrison Lake on the east is underlain chiefly by Middle and Upper Jurassic volcanics and sediments and is bounded almost conformably at a distance of approximately one mile on the west by granitic intrusives, the age of which is still questionable.

Available information, both gathered and communicated, suggests the presence of at least three volcanic centres in the area between the head of Chehalis River and its mouth on the west and Harrison Lake on the east.

The Harrison Formation, the older of the Middle Jurassic formations, consists, in decreasing age, of acid tuffs and chert, rhyodacite, porphyritic dacite, massive andesite and volcanic fragmentals. The younger Fire Lake Formation consists mainly of limestone, conglomerate and shale. The Harrison Formation is cut by younger rhyodacite dykes.

The Harrison Formation between Chehalis River and Harrison Lake forms two lobes probably representing two volcanic centres: one with which the Zenith mineralization is associated on the west and the other centred about a mile north of Weaver Lake. The Zenith lobe appears to dip weakly to the east-southeast and strikes approximately N30W on the west and N20E on the east. The Weaver Lake lobe appears to dip weakly to the south-east and strike N20°E on the south and N70°E on the northeast and north.

The two-day reconnaissance carried out by Harper and Brown was concentrated chiefly on the Weaver Lake area. At the point where the

Weaver Lake road takes off from the Harrison Lake road is a good exposure of cherty and rhyolitic tuff, both thinly bedded and thickly bedded and similar to the horizon which is mineralized on the Zenith property.

At the Weaver Lake location small lenses of semi-massive to massive pyrite are present, although chalcopyrite and sphalerite were seen only in traces.

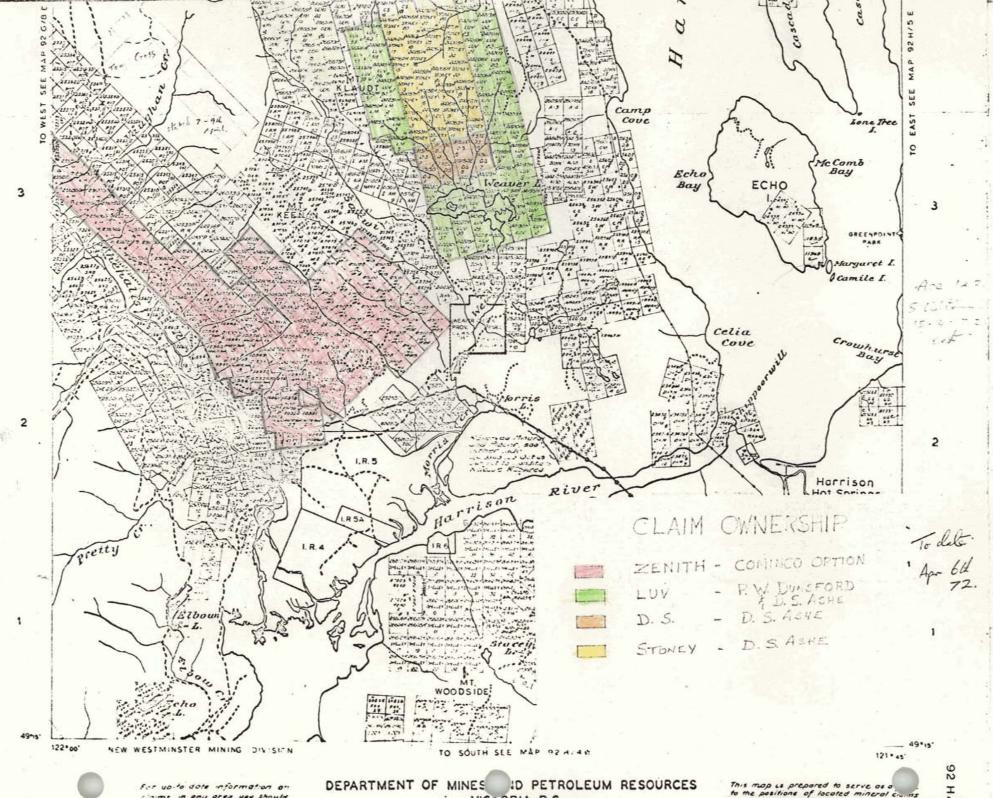
Along a road cut a mile north of Weaver Lake, a cliff face consisting of porphyritic dacite is strongly altered, showing a high degree of K-feldspathization and strong development of hematite and jarosite(?). Along a quarter-mile stretch (1300'+) of this unit, anomalous amounts of dark brown marmatitic sphalerite occur in two fracture systems trending north by northwest. Strong pyrite and minor chalcopyrite accompany the sphalerite.

Major faults in this vicinity appear to be  $N10-20^{\circ}W$  and  $N70^{\circ}E$  dipping at steep angles. One major fault trending  $N60^{\circ}W$  at a low angle to the northeast was also noted. A 1:50,000 plan of the area showing reconnaissance geology is appended hereto.

#### Conclusions

On the basis of our rather cursory reconnaissance, but strikingly apparent, the Weaver Lake area appears to be the locus of a volcanic centre with all the elements required for strata-controlled massive-sulphide mineralization being present. The area has been staked and held for some years by the same group of claim holders. With the current interest shown by Cominco on the optioned Zenith property to the west, the claims in the vicinity of Weaver Lake take on a more urgent interest. Cominco's current drilling is based on mercury anomalies ranging downdip from a subcommercial massive pyrite-chalcopyrite-sphalerite deposit. If adequate exploration funds were available the writers would recommend optioning the significant claims in the Weaver Lake area.

G. Harper



coms in any area yes should cooly to the Mining Recorder

VICTORIA, B.C.

This map is prepared to serve as a to me positions of located mineral counts and Placer Mining Leases only. Unsurveying Claims and leases are publical from locations

