## HURSTIS MINING CORPORATION LTD. (H.P.L.)

Geological Report on the Callaghan Mineral Claim - Vancouver M.D.

(formerly known as the Astra and Cambria Prospect)

Examined by Messra. Frank Cooke and Bob Chaplin between June 26th and July 5th. 1962.

The Callaghan claim, held by location in the Vancouver Mining Division, is owned by Mr. Leslie R. Harrison who lives in the Caribaldi area. The claim adjoins and lies to the south of Dority Creek approximately one mile upstream from Callaghan Creek (into which Dority Creek flows), and is about 2½ miles north of McGuire Siding on the P. G. E. Railway. The main showing is situated on a bench at the 3,200-foot elevation which forms part of the generally steep, rocky, wooded slope to Callaghan Creek. The means of access is by trail up Brandywine Creek to the old Blue Jack prospect and thence one mile in a northerly direction along Swede (Snow) Creek.

Previous work consists of several trenches and a 63-foot adit (the portal is now caved) described in the B. C. Dept. of Mines Annual Report for 1936. In 1942 C.M. & S. examined the property and in 1949 New Jersey Zinc Co. diamond drilled four EX holes totalling about 1,500 feet to test the vertical continuity of the main showings known as the No. 6 lead.

## GEOLOGY

A dioritic phase of the Coast Range Intrusives commonly includes remanents of older rock consisting essentially of chloritic schistose to green stone-like rock, and minor lenses of white crystalline limestone. On the

Callaghan claim a schistose to massive greenstone remoment can be traced on surface over a 500-foot by 300-foot area, striking approximately N.25°V. and is sub-parallel to the dominantly north trending topographic lineaments noted in serial photos. Forth trending, steeply inclined felsitic (quarts felspar porphyry?) dykes up to 100 feet thick intrude the diorite and truncate the pendent mass on the north side. A prominent north-south steeply inclined fracture pattern commonly contains narrow and widely spaced veinlets of quarts and iron carbonate with minor dieseminated pyrite.

rock and cilicified greenatone, especially where these rocks are spatially close to sheared and sericitized felattic dyke rock, and consists of pyrite, galena, sphalerite and chalcopyrite in decreasing order of abundance as disseminations within a lightly oxidized quartz-carbonate zone. Sulphide minerals are distributed as narrow discontinuous wisp-like lenses and veguely bounded patches of white carbonate in a milicified and moderately pyriticed area over widths commonly measuring several feet of relatively uniform low grade mineralization.

where the mineralised area is in steeply dipping schistose rocks, sulphides tend to occur at irregular intervals in distinct, spectacular veinlets up to 5 or 4 inchec wide, separated by sparsely mineralized material. Lack of outcrop partly obscures the exact nature of the mineralized area, which appears to be discontinuous along strike, however, subsurface testing appears to have been varranted. Dismond drill core is peorly stored, but enough core remains to indicate the general nature of subsurface conditions. Generally

there is an increase in the amount of dioritic rock apparently at the expense of greenstone and schistose material. The decreased amount of felaitic dyke rock at depth is particularly noticeable. The drilling indicates a peculiar lack of sheared rock below the J.C. #2 cut and the schistose rock below J.C. #1 cut is greatly diminished although the latter zone may not have been fully penetrated by drilling. The vertical extension of the mineralized zones is narrow and very low grade, particularly below the high grade zone in J.C. #2 cut.

A limited emount of prospecting in the surrounding area showed that the area is underlain mostly by district or districted rocks and no evidence of interesting emounts of mineralization or a replacement structure was seen in the well exposed rock-bound channel of Bority Creek.

## CONCLUSION:

The drilling indicates that the pendent rock is of shallow vertical extent and that the sheared felsitic dykes (which appear to be closely associated with the surface mineralization) narrow within the underlying predominantly district rock with the resultant disappearance of a structure fevorable for the deposition of a sulphide replacement some. The Astra cut and Footwall cuts contain insignificant amounts of mineralization.

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The following table lists the results of channel samples taken across the true widths of the sones sampled. The samples agree both with those reported in the 1936 report and the 1942 report mentioned above.

A map on the scale of one inch equals fifty feet accompanies this report.

SAUDIO RO.	LOCATION	ASEAX.				
		<u>Au.</u>	Act.	<u>Cu.</u>	Pb.	Zn.
(V <b>illi</b> ens) 16356	J.C. //2 cut 8.0'-13.0' (*)	0.04	4.4	1.90	13.7	7.32
16357	J.C.//2 out 13.0'-21.0'	0.01	1.6	0.90	4.20	3.95
16358	J.C. 62 out 0.0'-30.0'	0.01	1.8	0.85	<b>3.</b> 55	4.07
16359	No. 1 cut 7.0' (Is probably low for representative sample of No. 1 cut)	0.005	0.40	0.15	0.95	0.23
16360	J.G.#1 cut 25.0'	0.01	0.90	0.30	0.85	0.17

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<sup>(\*) -</sup> measurements in J.C.#2 out are taken from the west end of the out.

DOMINION OF CANADA:

PROVINCE OF BRITISH COLUMBIA.

To Wit:

## In the Matter of

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Evidence of Expenditures Incurred

Robert E. Chaplin

of Ruestis Mining Corporation Ltd. (N.P.L.)

in the Province of British Columbia, do solemnly declare that Frank Cooke and Robert E. Chaplin worked nine days on the Callaghan Mineral Claim. Vancouver Mining Division, between the dates of June 26th and July 5th, 1962 at a monthly salary rate of \$600.00 each comprising an expenditure of \$199.80 paid to each man, and constituting a total expenditure of \$399.60.

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the

of

in the

Province of British Columbia, this

day of

, A.D.

A Commissioner for taking Affidavits within British Columbia of

Sub-mining Records

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