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GEOLOGICAL REPORT

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EAGLE-MAY QUEEN GROUP

MAPLE BAY COPPER MINES LTD.

PORTLAND CANAL, BRITISH COLUMBIA

A. G. Pentland,
Vancouver, B. C.

EAGLE-MAY QUEEN GROUP

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REPORT BY:

A. G. Pentland,
Vancouver, B. C.

May 1969

CERTIFICATE

1. I, Arthur G. Pentland, certify that I am a Consulting Geologist and that I reside at 4544 West 1st Avenue, Vancouver 8, B. C.
2. I am a member of the Association of Professional Engineers of the Province of British Columbia and a Fellow of the Geological Association of Canada. I have the degree of M.A. in geology and Ph.D. in geology and mining engineering. I have practised my profession for more than 30 years.
3. That I have no direct nor indirect interest in the securities of Maple Bay Copper Mines Ltd., nor do I expect to receive any.
4. This report is based on a personal visit to the property on April 26th to 28th, 1969 and on a detailed study of reports and maps prepared by the Geological Survey of Canada, the Reports of the Minister of Mines, and a report by A.C.A. Howe International Ltd., Consulting Geologists.
5. That the most important showings are covered by Crown-granted Mineral Claims, and that all posts that were encountered during my examination were in good order.

Arthur G. Pentland

May 1969

LETTER OF CONSENT

I hereby consent to have the information contained in my report on the Eagle-May Queen Group of Claims, which is situated on the east shore of Portland Canal in the Skeena Mining Division of British Columbia, published in the Prospectus of Maple Bay Copper Mines Ltd.

A. G. Pentland

THE EAGLE-MAY QUEEN GROUP

MAPLE BAY COPPER MINES LTD.

PORTLAND CANAL, BRITISH COLUMBIA

1. SUMMARY . The Eagle-May Queen group of claims is situated on the east side of Portland Canal about 35 miles south of Stewart, British Columbia. It is close to the eastern boundary of the Coast Range batholith and on the same structure as Anyox. A series of veins, which consist of broken country rock, accompanied by quartz, chalcopryrite, pyrrhotite, and a small amount of pyrite, strike in a general northeasterly direction and dip at high angles to the southeast. Some of the veins have been traced on the surface for several thousand feet, and are more than twenty feet wide in some places. Copper ranges from a fraction of one percent to more than ten percent.

The veins have been prospected spasmodically since 1902 with most of the work concentrated on surface trenches. Three veins have had a limited amount of diamond drilling.

The Eagle-May Queen vein is the strongest, judging by the results of work to date. Granby Consolidated Mining, Smelting and Power Company drilled a few holes across this vein and concluded that they had outlined a probable tonnage of 522,000 tons of 1.70% copper and a possible tonnage of 590,000 tons of 1.40% copper. Surface trenches show that the vein continues for some distance beyond their drilling.

It is proposed that an adit be driven along the vein for a distance of 2,000 feet starting at an elevation of 2,300 feet. This drift is along the bottom of the section that Granby considered to be ore. This drift should have an excellent chance of finding ore, and would be used at a later date as one of the haulage levels if the work is successful in developing an orebody of economic size.

It is estimated that this drift will cost \$198,000.00 and should be completed during the coming summer and autumn providing an early start is made.

2. PROPERTY AND OWNERSHIP The Eagle-May Queen group is owned by the Maple Bay Copper Mines Ltd., 85 Richmond Street West, Toronto, Ontario.

The Group consists of 15 Crown-granted claims and 18 held by location. The Crown-granted claims are as follows:-

Princess May	Lot No.	489
Princess Alexandria		500
Bluebell		571
Rose		575
Thistle		576
May Queen		577
Eagle		578
Scotland Forever		579
Duck Fraction		938
Comstock		2877
Anaconda		2878
Gertie		2879
Lizzie		2880
Maple Bay Fraction		2881
Comstock Fraction		2882

The claims and fractions held by location are the O.S. numbers 1 to 18.

The climate is usually mild and the Portland Canal remains free of ice throughout the winter. However, rain is abundant and turns to snow at the higher levels. Tree line is about two thousand feet at the property. Above this level bedrock is well exposed except that snow covers the area during much of the year. Therefore, prospecting at the higher levels must be confined to a few months during the summer and early autumn.

The mountains rise steeply from the shore of the Canal to an elevation of 5,400 feet at Mt. Tournay, a short distance to the northeast of the property. The average slope from water's edge to the peak of this mountain is nearly 30° but there are a number of places on the mountain side where the slopes are 45° or even vertical cliffs.

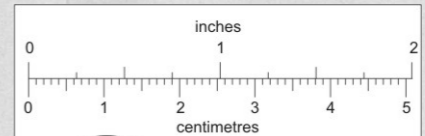
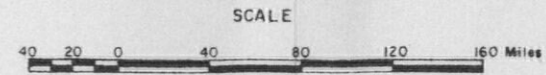
Water is plentiful because of the heavy rainfall and the accumulation of snow at the higher levels. There should be no water problem here. Timber is plentiful from water's edge to timber line.

ACCESS

The Eagle-May Queen group is situated in the Skeena Mining Division of British Columbia at 55° 25' north latitude and 130° 00' west longitude. It is at Maple Bay on the east side of the Portland Canal about



BRITISH COLUMBIA
LOCATION MAP



This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.



85 miles north of Prince Rupert or 35 miles south of the town of Stewart. Amphibious or float-equipped aircraft can land in Maple Bay and a helicopter can land on the beach or at various places on the side of the mountain. Freight and heavy equipment may be hauled to Maple Bay by tug and barge, and unloaded on the shore, or lifted up the side of the mountain by helicopter using a sling.

4. HISTORY

According to the Minister of Mines Reports, W. Noble located the Eagle group at Maple Bay in 1902. The Brown Alaska Company, which mined ore on the neighbouring Outsider group, held a bond on this property during 1905 and 1906. It was bonded to the Sir Donald Mann interest in 1910.

Between 1910 and 1922 spasmodic work was done on several veins. The Eagle-May Queen vein was reported to have been traced 3,000 feet on the surface by trenches, and a crosscut at an elevation of 2,300 feet exposed vein across 25 feet. Assays are reported to have run from 1% to 3.5% copper in the crosscut.

Granby Consolidated Mining, Smelting and Power Co. held the property under bond during 1923. They drilled four holes, totalling 1,500 feet, on the Eagle Claim, and calculated a probably tonnage of 522,000 tons of 1.71% copper and a possible tonnage of 590,000 tons of 1.4% copper from the results of surface samples and the four drill holes. However, this was considered to be too low grade at that time and the option was thrown up in 1924.

Maple Bay Copper Mines Ltd., with headquarters in Toronto, started work on the property in 1955 and continued into 1957. During this time they drilled 16 holes totalling just over 3,400 feet on the Princess and Anaconda veins. Both of these veins showed encouraging results.

5. DEVELOPMENT A number of veins have been mapped on the property. Of these, the most prominent are the United, Comstock, Eagle-May Queen, Thistle, Anaconda, Princess, Gertie, Lizzie and Bluebell. All of these have had surface trenching, and in addition the Eagle, Anaconda, and Princess veins have had some diamond drilling. There is a record of one crosscut adit on the Eagle-May Queen vein at an elevation of about 2,300 feet.

6. GEOLOGY

George Hanson, in G.S.C. Memoir 175, p. 102, gives the following Table of Formations in the Portland Canal area of British Columbia: -

Modern	Recent & Pleistocene	Gravel, sand, silt, varved clay, marine or estuarine clay, boulder clay, glacial drift
Tertiary		Basaltic lava flows
Early Cretaceous or Jurassic		Dykes Granodiorite
Jurassic and perhaps in part Triassic and Early Cretaceous	Hazelton Group	Argillite, quartzite, greywacke, limestone, tuffaceous sediment, breccia, tuff, augite, porphyrite, feldspar, amphibolite, gabbro

The Maple Bay Group is situated in an embayment of amphibolite, sediments and volcanics in granodiorite of the Coast Range batholith. It is generally considered that intrusive rocks have been the source of many metalliferous deposits. With this in mind, a great amount of prospecting in British Columbia has been concentrated along the borders of the Coast Range batholith or on bands of sediments and volcanic rocks that have been caught up on the batholith itself. Anyox is situated on part of the same embayment as the Maple Bay Group. It is just over the ridge and only a few miles away.

The veins generally consist of broken country rock that has been impregnated with quartz. The quartz contains chalcopyrite and pyrrhotite. Pyrite is not abundant in the veins, and galena and sphalerite are scarce. Gold and silver are very low.

The Eagle-May Queen vein is one of the most important in the group. It consists of quartz, which is banded in part with country rock. The strike is northeast and the dip about 80° to the southeast. The vein has been traced on the surface for a distance of 3,000 feet between elevations of 2,200 and 3,500 feet. The vein is up to 25 feet wide. Chalcopyrite is the most important economic mineral, with minor amounts of pyrrhotite and pyrite. Assays range from a fraction of one percent to over ten percent in local pockets.

The Thistle vein has been traced on the surface for a distance of 500 feet. It consists of quartz, up to 25 feet wide, and is well mineralized with chalcopyrite locally. It is on the strike of the Eagle-May Queen vein and may be a continuation of it to the southwest.

The Anaconda and Princess veins lie to the southeast of the Eagle-May Queen. They are roughly parallel to one another and to the Eagle-May Queen, and consist of quartz with chalcopyrite, pyrrhotite and pyrite. Eleven

diamond drill holes were drilled on the Princess vein and 16 holes on the Anaconda during 1955 and 1956. These indicate that there is some fairly high grade copper but that the veins are narrower than the Eagle-May Queen.

7. PROPOSED EXPLORATION AND COSTS The Eagle-May Queen vein appears to be the widest and strongest of all the veins in this group of claims. It has been prospected by a series of trenches extending over a horizontal distance of 3,000 feet and a vertical distance of 1,500 feet. Granby Consolidated Mining, Smelting and Power Company drilled a series of diamond drill holes through this vein in 1923. From the results of surface work and the drill holes, Granby calculated that there are 522,000 tons of probable ore with a grade of 1.70% and 590,000 tons of possible ore with a grade of 1.40%. This does not take into account the northeastern part of the vein where no drilling has been done. Details are shown in the longitudinal section and the cross sections that accompany this report.

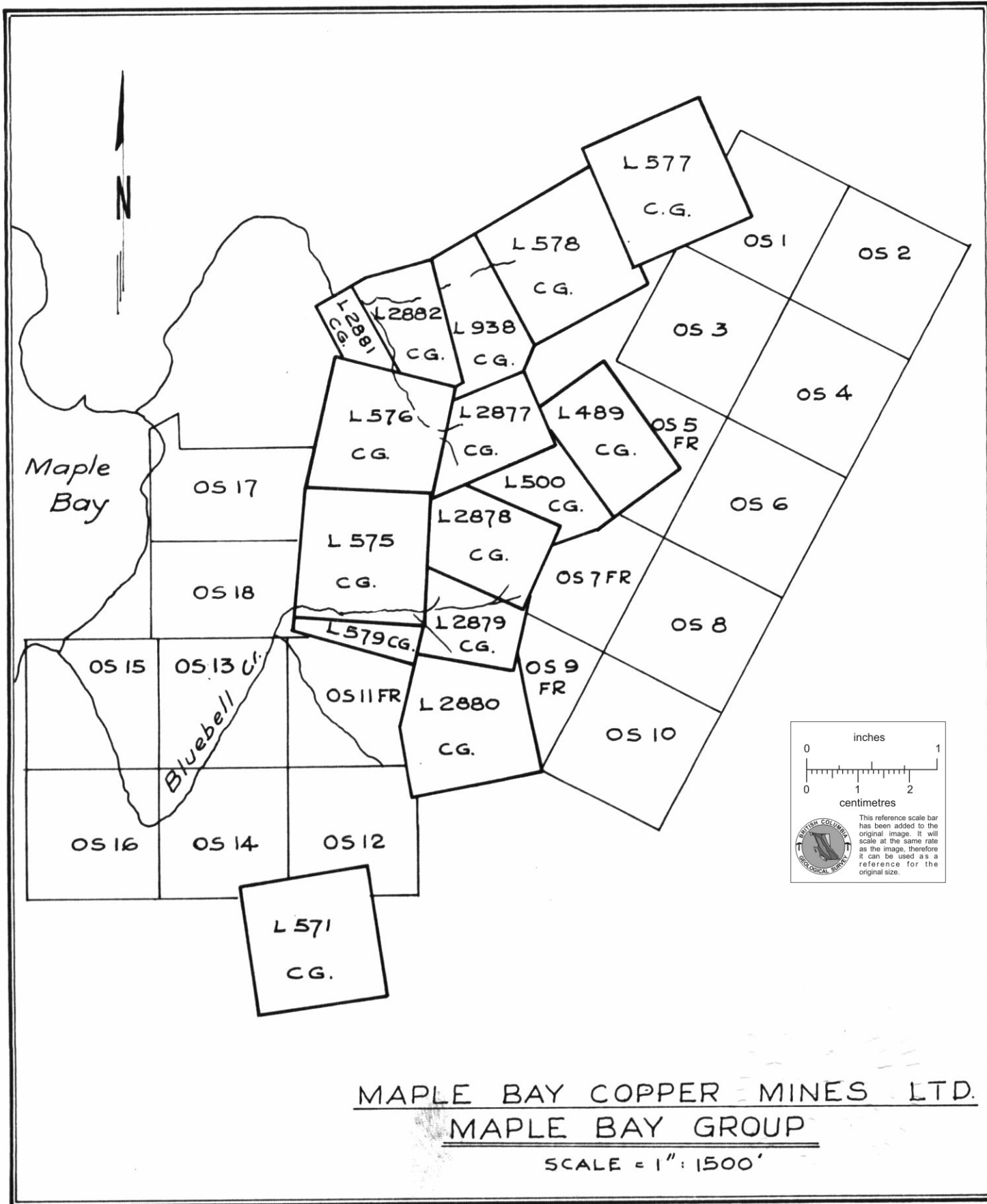
The work that has been completed suggests that the vein is fairly wide and that it contains some good grade copper ore. However, it does not give sufficient information to prove the tonnage and grade of ore, nor does it develop any of the ore to the stage where it can be mined. Therefore, it is proposed to drift on the vein, starting from an old crosscut adit situated at an elevation of 2,300 feet and drift a distance of 2,000 feet to the northeast. This drift is shown near the bottom of the longitudinal section and coincides with the bottom of the "possible ore" as calculated by Granby. It will go a long way towards proving the ore that is present in this vein, and will serve at a later date as one of the main levels for mining the ore.

It is suggested that an early start should be made on this work in order to complete it during the summer and autumn months. If the vein proves to be as good as is indicated, it may be an advantage to set up something more than a temporary camp, such as will be used for the first part of the drift before winter sets in in order to continue exploration for the rest of the year.

An estimate of the cost of the proposed work is as follows:

2,000 feet of drift @ \$85.00 per foot	\$ 170,000.00
Engineering, travelling, and assays	10,000.00
	<u>180,000.00</u>
Contingencies @ 10%	18,000.00
	<u>198,000.00</u>
Total	\$ <u>198,000.00</u>

A. G. Pentland
 May 12, 1969



MAPLE BAY COPPER MINES LTD.
MAPLE BAY GROUP
 SCALE = 1" : 1500'

N.B. Information copied from blue print of map bearing Title of Granby Consolidated Mining, Smelting & Power Co Ltd dated Nov.22'1923

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LONGITUDINAL SECTION

EAGLE, MAY QUEEN VEIN

SCALE: 1" = 200'

TONNAGE

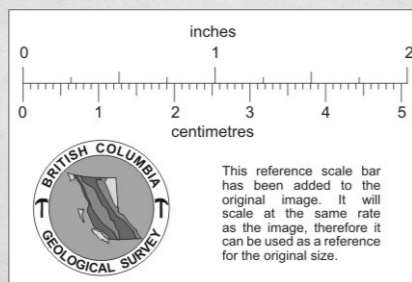
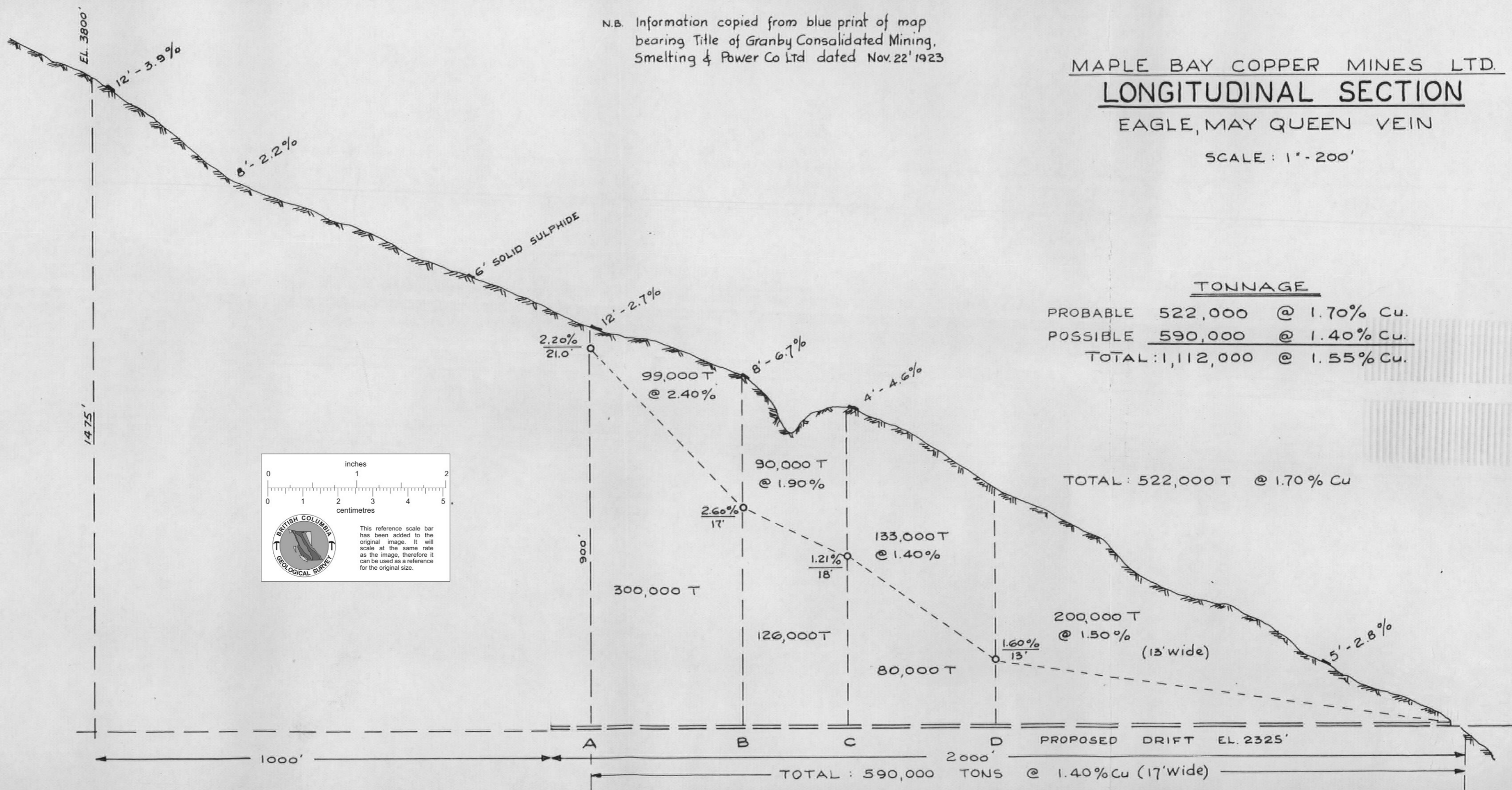
PROBABLE 522,000 @ 1.70% Cu.

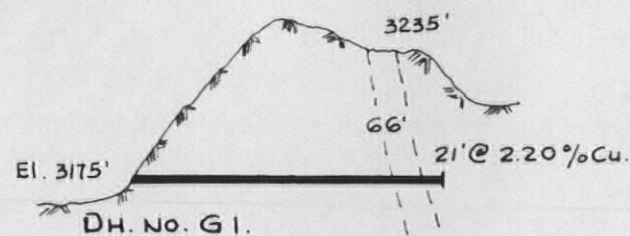
POSSIBLE 590,000 @ 1.40% Cu.

TOTAL: 1,112,000 @ 1.55% Cu.

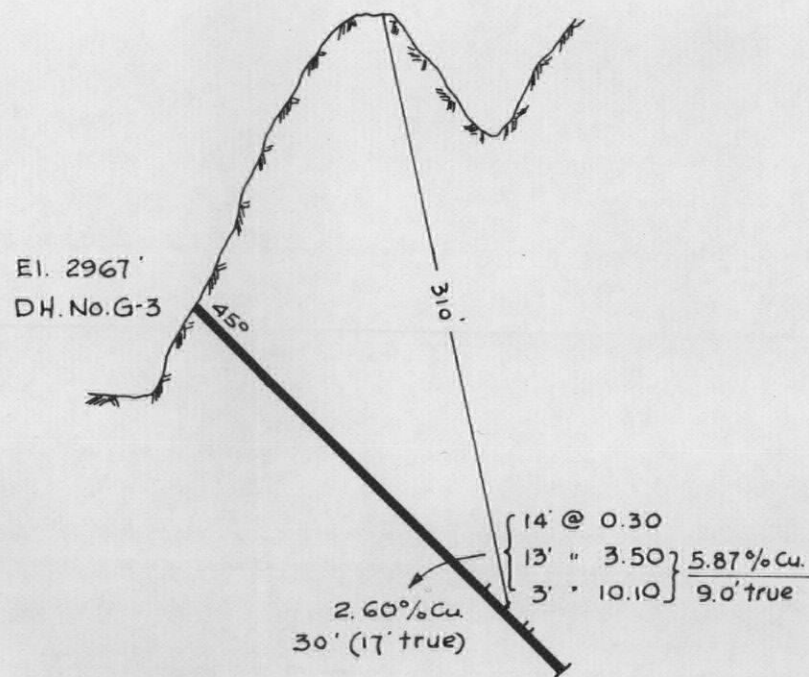
TOTAL: 522,000 T @ 1.70% Cu

TOTAL: 590,000 TONS @ 1.40% Cu (17' wide)

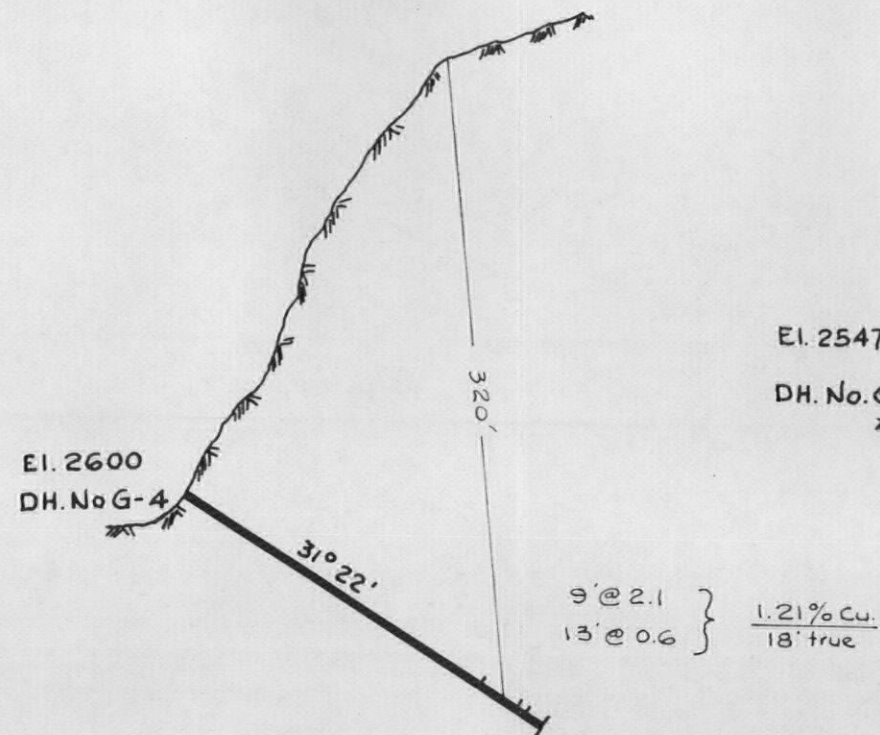




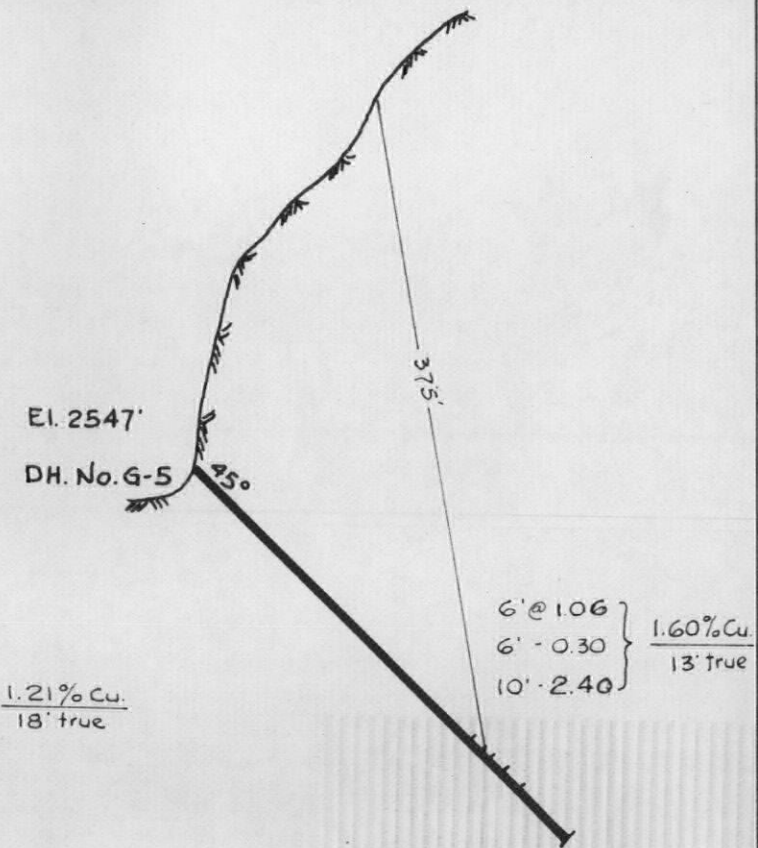
SECTION A-A



SECTION B-B

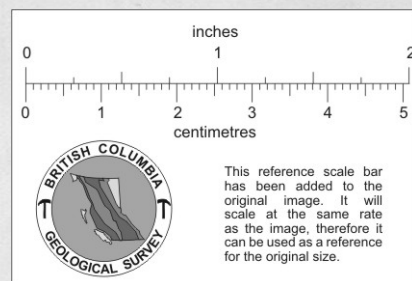


SECTION C-C



SECTION D-D

FROM	TO	TRUE WIDTH	PER C CU	PER C INSOL.
D. D. H. No 1				
125	126		4.49	
126	129		-	
129	135		2.24	
135	140		2.45	
140	145		2.18	
145	150		1.87	
AVERAGE				
129	150	21	2.20	



FROM	TO	TRUE WIDTH	PER C CU	PER C INSOL.
D. D. H. No 3				
228	233		0.30	96.5
233	240		DYKE	
240	242		0.20	96.0
242	244		2.76	76.0
244	247		2.52	82.0
247	255		4.12	73.0
255	258		10.10	37.8
AVERAGE				
228	258	17	2.60	
242	255	6	3.53	
255	258	1.5	10.10	

FROM	TO	TRUE WIDTH	PER C CU	PER C INSOL.
D. D. H. No 4				
198	201		1.40	89.0
201	207		2.44	83.6
207	212		0.16	94.0
212	220		0.96	77.2
220	226		DYKE	
AVERAGE				
198	207	7	2.09	
207	220	10.0	0.65	
198	220	17.0	1.24	

FROM	TO	TRUE WIDTH	PER C CU	PER C INSOL.
D. D. H. No 5				
208	212		0.84	63.2
212	214		1.52	88.8
214	220		0.28	92.4
220	230		2.40	82.0
230	245		0.24	96.0
245	251		0.32	91.8
251	256		0.20	92.2
AVERAGE				
208	230	13	1.60	

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SECTIONS
 EAGLE, MAY QUEEN VEIN
 SCALE: 1" = 100'