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R. H. SERAPHIM ENGINEERING LIMITED
Geological Engineering

427 — 470 GRANVILLE STREET
VANCOUVER 2, B.C.

REPORT
on the
DOK and THELMA CLAIMS
for
EMPIRE MERCURY CORPORATION LTD.
of
202 - 569 Howe St.,
Vancouver, B.C.

by
R.H. SERAPHIM, Ph.D., P.Eng.
427 - 470 Granville St.,
Vancouver, B.C.

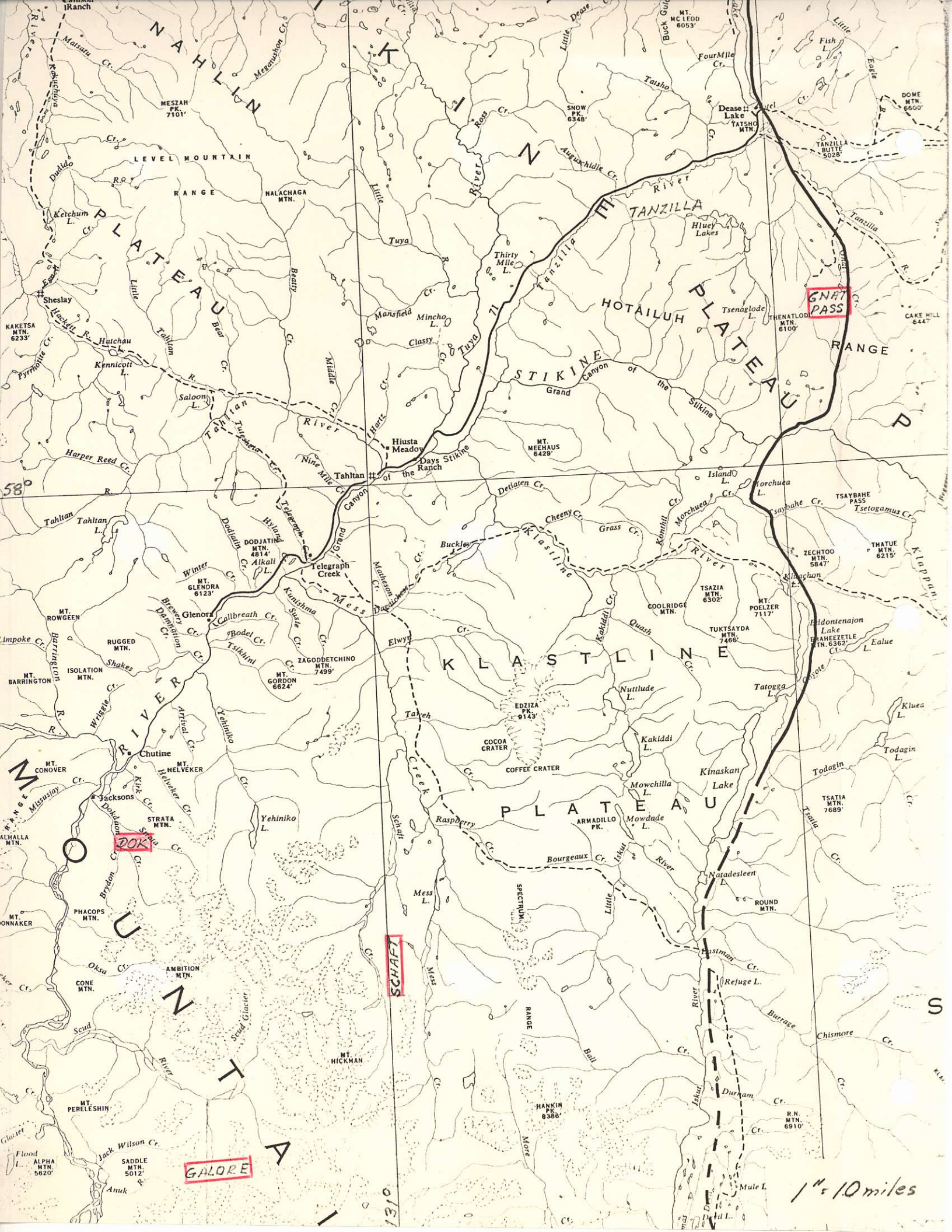
October 3, 1969.

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SNAT PASS

DOK

SCHAF

GALORE

1" = 10 miles

58°

1310

R. H. SERAPHIM ENGINEERING LIMITED
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427 — 470 GRANVILLE STREET
VANCOUVER 2, B.C.

DOK and THELMA CLAIMS

STIKINE AREA

LIARD N.D.

SUMMARY and CONCLUSIONS

The Dok and Thelma claims - (Dok Group) are situated in the Stikine area. This area has difficult and expensive access and transportation, but contains some relatively large and undeveloped copper deposits. The subject claims cover a copper mineralized area in Triassic volcanics near the border of a syenitic stock, which is considered a particularly favorable environment. The mineralization is poorly exposed, and oxidation precludes determining its true grade at surface. Several short drill holes have failed to add diagnostic information on the size and grade of the deposit or deposits. The width and grade indicated by surface sampling, over 100 ft of 0.78% Cu, the favorable geological environment, and the encouraging results obtained in the geochemical test all make detailed work on the claims inviting in spite of the access problem.

RECOMMENDATIONS

Stage 1

The Hudson Bay prospectors who located the original showings undoubtedly searched the area visually for mineralized outcrop and float, but obviously did not cut grid lines and check the area through detailed geologic, geochemical, and geophysical surveys. This work is recommended as the logical next step on the property. A base map at say 400 ft to the inch made from aerial photographs would facilitate the surveys.

Stage 2

Further work would of course be dependant upon the results of these basic surveys. Longer, and angled diamond drill holes appear the best method of finally establishing the grade and configuration of the mineralization if decision is made for continued exploration. However, diamond drilling would be very expensive in the location and conditions pertaining, and some less expensive alternative or supplement to diamond drill information should be sought. The feasibility of making a short winter landing strip in the valley bottom for an Otter aircraft (1000 ft length if approaches are open) should be investigated next season (during Stage 1) so that a small 'cat' and fuel can be flown in. This would permit building a permanent landing strip in the following spring, which

would greatly reduce subsequent transportation costs. The 'cat' would then be used to build a road up to and trench the mineralized area, and would facilitate diamond drilling if the trenching is favorable. One should recognize that the above procedures remain relatively expensive, and are essentially long range.

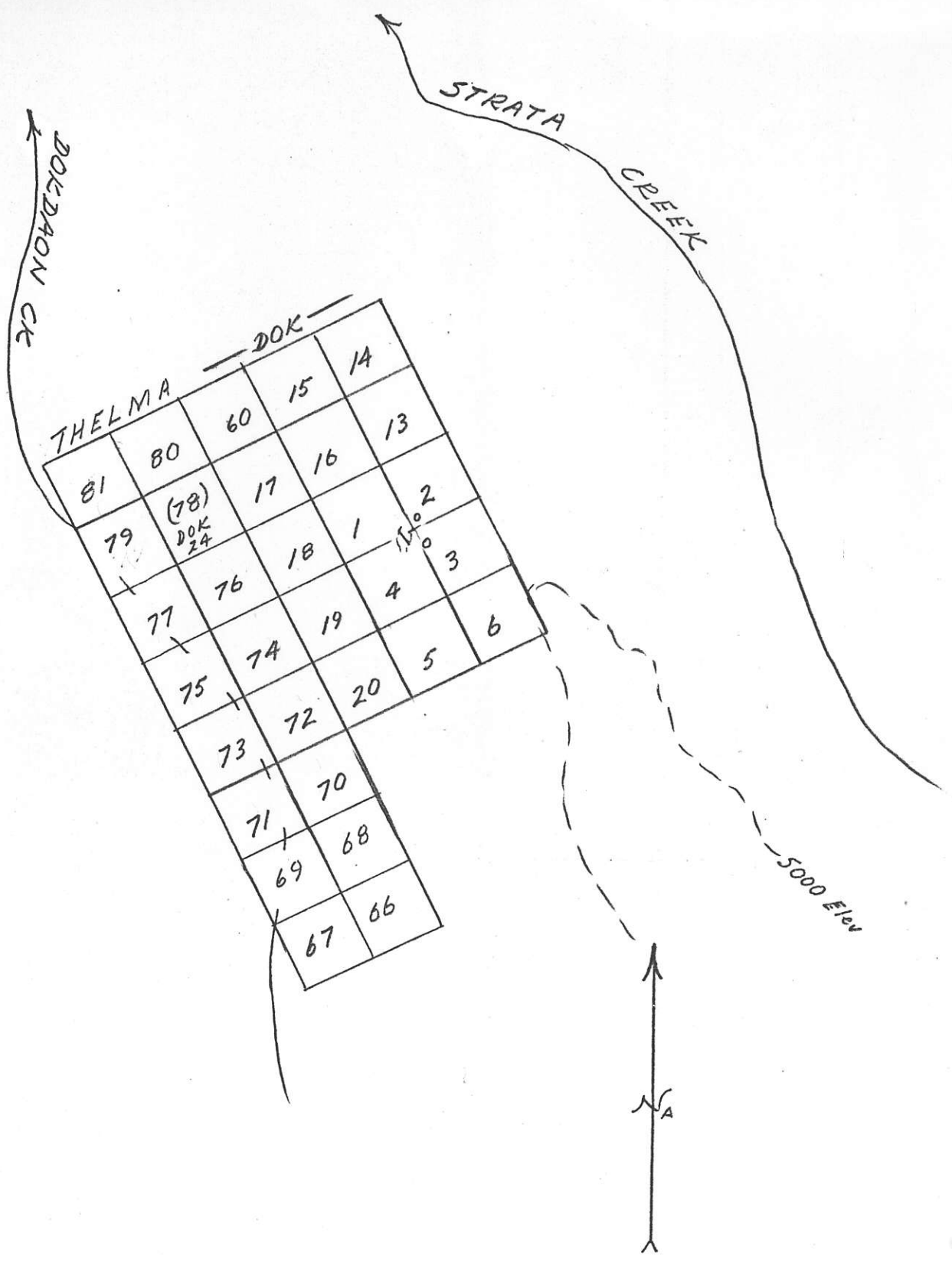
COSTS

Stage 1

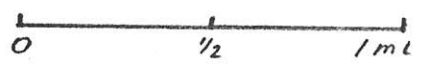
Map from aerial photographs	\$1,000.
Line cutting - 2 base lines 5,000 ft long approx. at right angles to contours and 12 lines 10,000 ft long paralleling the contours	2,000.
Geochemical survey and assays	3,500.
Geological mapping	1,000.
Magnetics and I.P.	10,000.
Expedition, transportation, and helicopter support	5,000.
Supervision and consulting	3,000.
Equipment and supplies	2,500.
	<hr/>
	\$28,000.
Contingencies at 20% - say	6,000.
	<hr/>
Total	<u>\$34,000.</u>

Stage 2 (Contingent on favorable results from Stage 1)

Flying B-4 or equivalent in and out (based on previous experience)	\$11,000.
Fuel landed at site	2,000.
Bulldozing 500 hours	12,000.
Supervision	3,000.
Diamond drilling to check grade beneath oxidation - assume 3 holes at 500 ft at \$20 per foot overall cost	30,000.
	<hr/>
	\$58,000.
Contingencies	10,000.
	<hr/>
Total	<u>\$68,000.</u>
	<hr/>
Grand Total - Stages 1 and 2	<u><u>\$102,000.</u></u>



DOK AND THELMA
CLAIM SKETCH



Oct/69

RHS.

INTRODUCTION

The Dok group of claims was examined on site Aug 31 and Sept 1, 1969. Dr. P.H. Sevensma, one of the owners, guided the examination and provided information concerning the property. The examination consisted of a brief visit to and sampling of some of the mineralized exposures, and a traverse through scattered outcrop north and east of them.

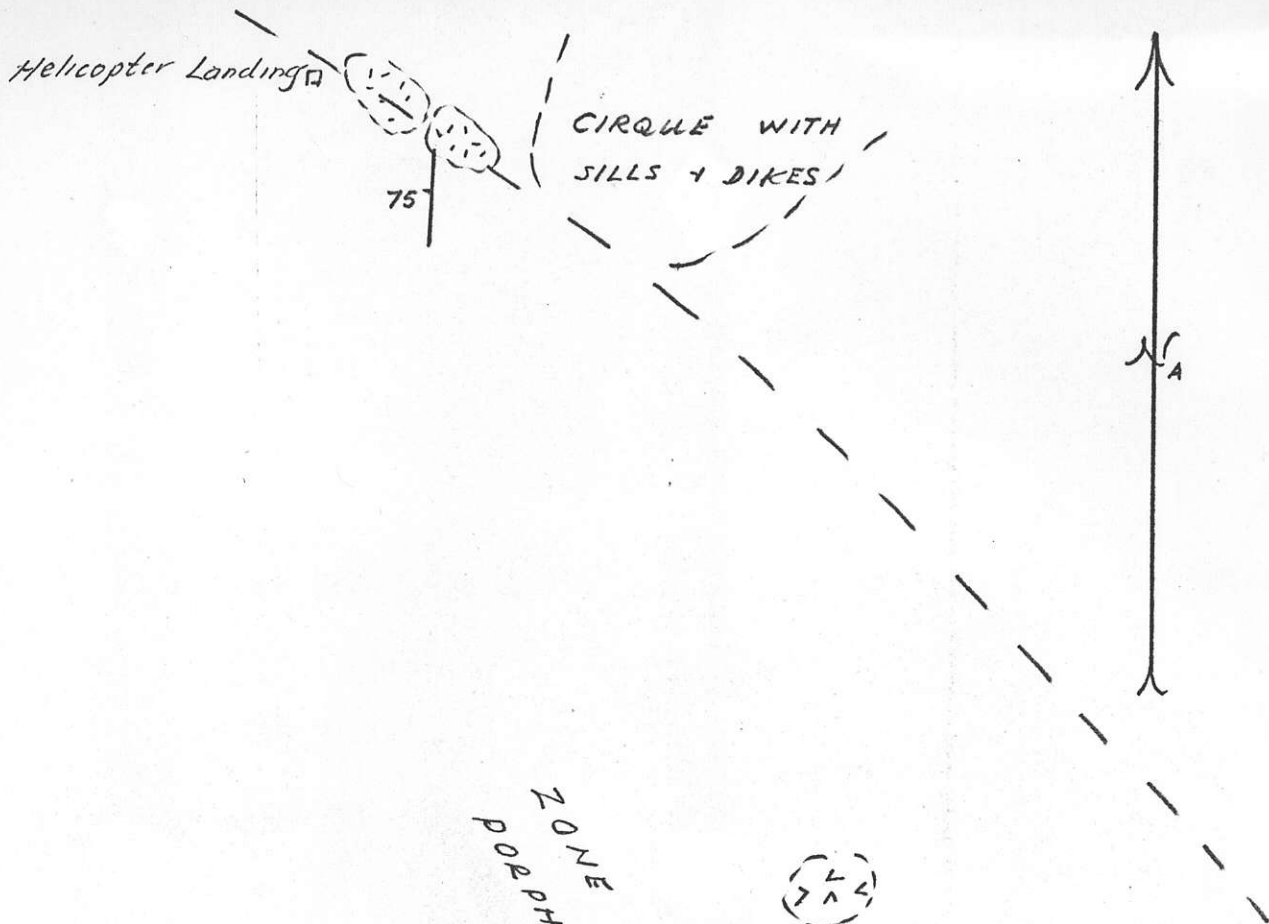
LOCATION, ACCESS, and TOPOGRAPHY

The claim group is in the eastern part of the Coast Mountains, and on the southwest facing slope of Dokdaon Creek valley. Dokdaon Creek flows into the Stikine River at Jackson's Landing, which is 28 miles southwest of Telegraph Creek, B.C. Access to date has been via helicopter. The Stikine is navigable to Jackson's Landing, but Dokdaon Creek canyon is very narrow and precipitous below the claim group. The claim group extends from 1900 ft to about 5000 ft elevation, and the showings are at 3600 ft, approximately 1700 ft above the Dokdaon valley bottom.

CLAIMS

The property consists of 32 contiguous claims listed as follows:

<u>Claim</u>	<u>Record No.</u>	<u>Tax No.</u>	<u>Current Owner</u>
Dok 1-4	11074-11077	450758-450761	(1/2) William Buchholz
Dok 13-16	11086-11089	450780-450783	(1/2) B.W. McFadden
Dok 17-19	Records not	749818-749920	J.N. Anderson
Dok 60	yet rec'd.	749821	J.N. Anderson
Dok 5-6	" "	749822-749825	(J.N. Anderson agent
Dok 20-21	" "	749824-749823	(for P. Sevensma
Thelma 66-81	" "	682664-682614	Mike Elson

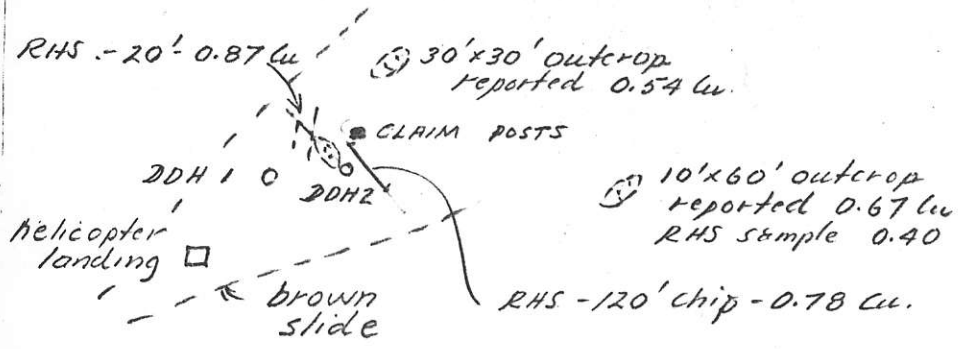


magnetite and chalcopyrite outcrop
reported 1.18 Cu
reported 2.70 Cu

ZONE OF DIKES ACIDIC PORPHYRY

x abundant float reported 0.96 Cu.

DDH 3



400'

[1-2] altered volcanics

[L17] syenite

DOK SHOWINGS
DOKDAON CREEK
LIARD M.D.
400' = 1" sketch
Oct/69
RHS after
P.H.S.

Thelma 78 apparently overlaps Dok 24 claim almost completely.

HISTORY

The showings were discovered by prospectors working for Hudson Bay Mining and Smelting Co about 1955. Hudson Bay diamond drilled three holes totalling 507 ft in 1963, and subsequently returned the property to the prospectors. The property has been inactive since 1963.

GEOLOGY

The property lies in the broad 'Stikine Arch' which contains many areas of Triassic and Jurassic volcanics intruded by stocks and plugs of monzonite, granite, diorite and syenite (G.S.C. Map 9-1957). The syenitic rocks appear particularly favorable for copper mineralization; the major mineral deposits at Calore Creek, Schaft Creek, and Gnat Pass are found in their vicinity, on or near the contacts with Triassic volcanics.

The geological environment of the Dok group is similar to the above. Triassic volcanics are intruded by an irregular stock or stocks of syenite, and by quartz-porphry and dioritic sills or dykes. Feldspathization and biotite alteration were observed. The trend of the observed contacts and predominant fracturing is northerly.

MINERALIZATION

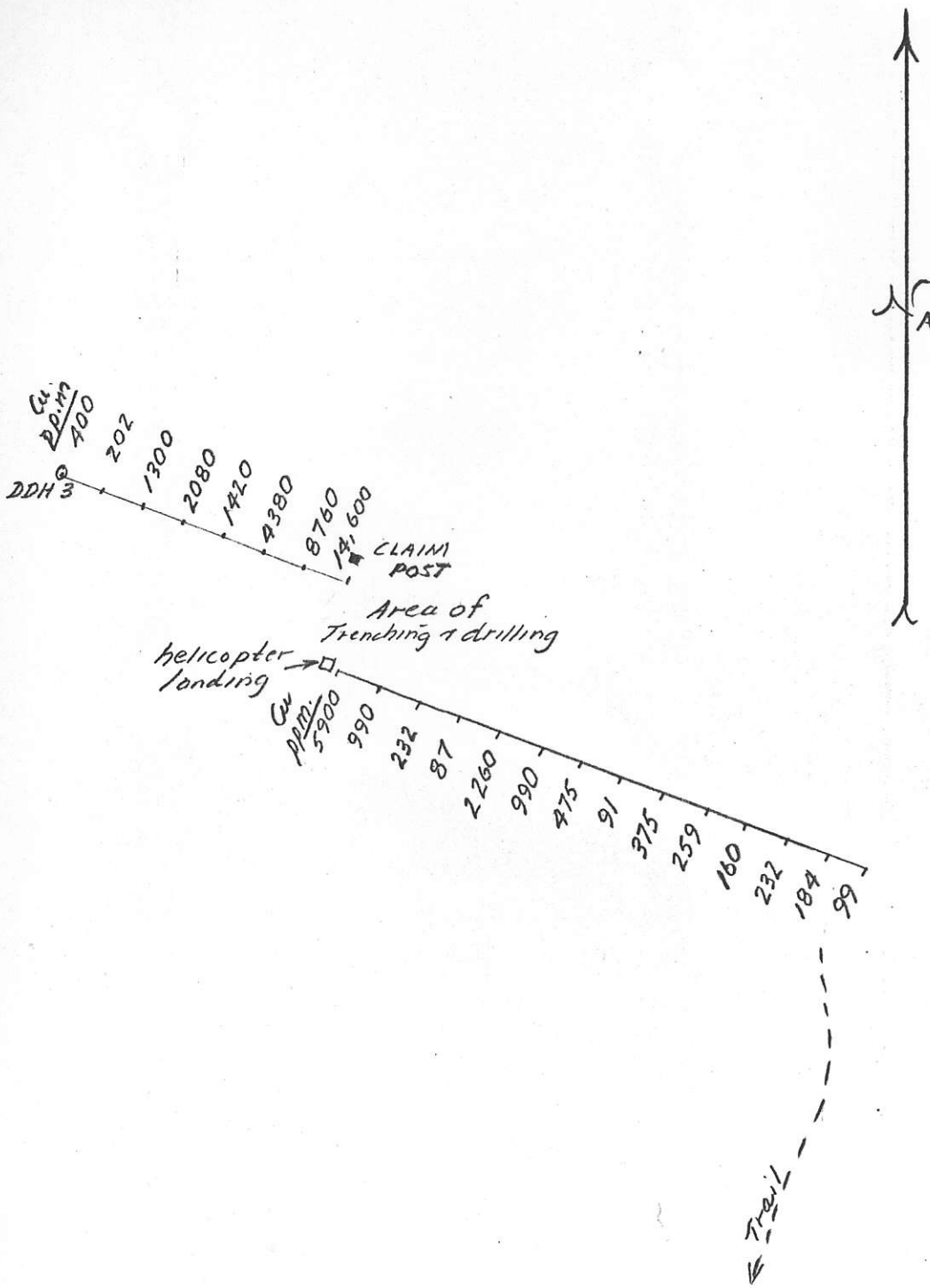
Chalcopyrite and secondary copper minerals are exposed in several outcrops and shallow trenches in shattered volcanics near the syenitic rocks as shown in the accompanying sketch. The hillside is mostly covered with talus above the showings and both talus and brush below the showings, thus the extent and configuration of the mineralization are indeterminate at present. The above mentioned northerly trend is considered the most likely to pertain under the present information.

Several samples were taken by others prior to the writers examination, and are shown on the sketch, together with the writers check samples which were as follows:

<u>Location</u>	<u>Width</u>	<u>Au oz</u>	<u>Ag oz</u>	<u>Cu %</u>
10' x 60' outcrop, E. of main showing	30' chip	0.01	1.5	0.40
20' to 140' S.E. of Claim Post	120'	0.01	0.5	0.78
100' N.W. of Claim Post	20'	0.01	0.4	0.87

The assays obtained are from oxidized and broken surface material, thus not dependably representative of fresh material. They do indicate the area is worth further detailed work.

The three drill holes completed by Hudson Bay (see results appended) are neither long enough nor well enough located to give conclusive information on the size and grade of the copper mineralized body. Holes No. 1 and



400 ft.

GEOCHEMICAL TEST
 DOK SHOWING
 DOKDAON CREEK
 LIARD M.D.
 400' = 1" sketch
 Oct/69 R.H.S. after
 M.E.

3 are outside of the well mineralized zone; hole No. 2 averaged less than 50% core recovery, but the last 19 feet of hole (13.5 ft of core) averaged 0.6% Cu.

Close inspection revealed that the general zone contains erratic mineralization; several small outcrops between the 10' x 60' outcrop and the long trench were observed to be either very low grade or barren, but some copper was found in others.

GEOCHEMISTRY

A test line of geochemical sampling at 100 ft intervals was run near and beneath the main area of showings. (See sketch). This test indicates that either the copper background is abnormally high, or that copper mineralization is widespread in the vicinity of the main showing. Copper above 100 ppm is usually considered anomalous in the general area.

October 3, 1969.

R. H. Seraphin
R.H. Seraphin,
Ph.D., P.Eng.

R. H. SERAPHIM ENGINEERING LIMITED
Geological Engineering

427 — 470 GRANVILLE STREET
VANCOUVER 2, B.C.

CERTIFICATION

I, Dr. R.H. Seraphim, of the City of Vancouver, Province of British Columbia, hereby certify as follows:

1. I am a geological engineer residing at 4636 West 3rd Avenue, Vancouver, B.C., and with office at 427-470 Granville Street, Vancouver 2, B.C.
2. I am a registered Professional Engineer of British Columbia. I graduated from the University of British Columbia in 1947, and from Massachusetts Institute of Technology in 1951.
3. I have practiced my profession for twenty-two years.
4. I have no interest in the Dok and Thelma claims or in the securities of Empire Mercury Corporation Ltd.
5. The above report is based on an Aug 31 and Sept 1, 1969 examination of the claims, and from information gathered by other engineers and technicians, as well as the available reports published on the area.
6. The writer has examined claim posts, including those covering the important known showings, and found them to be in accordance with the requirements of the mineral act.

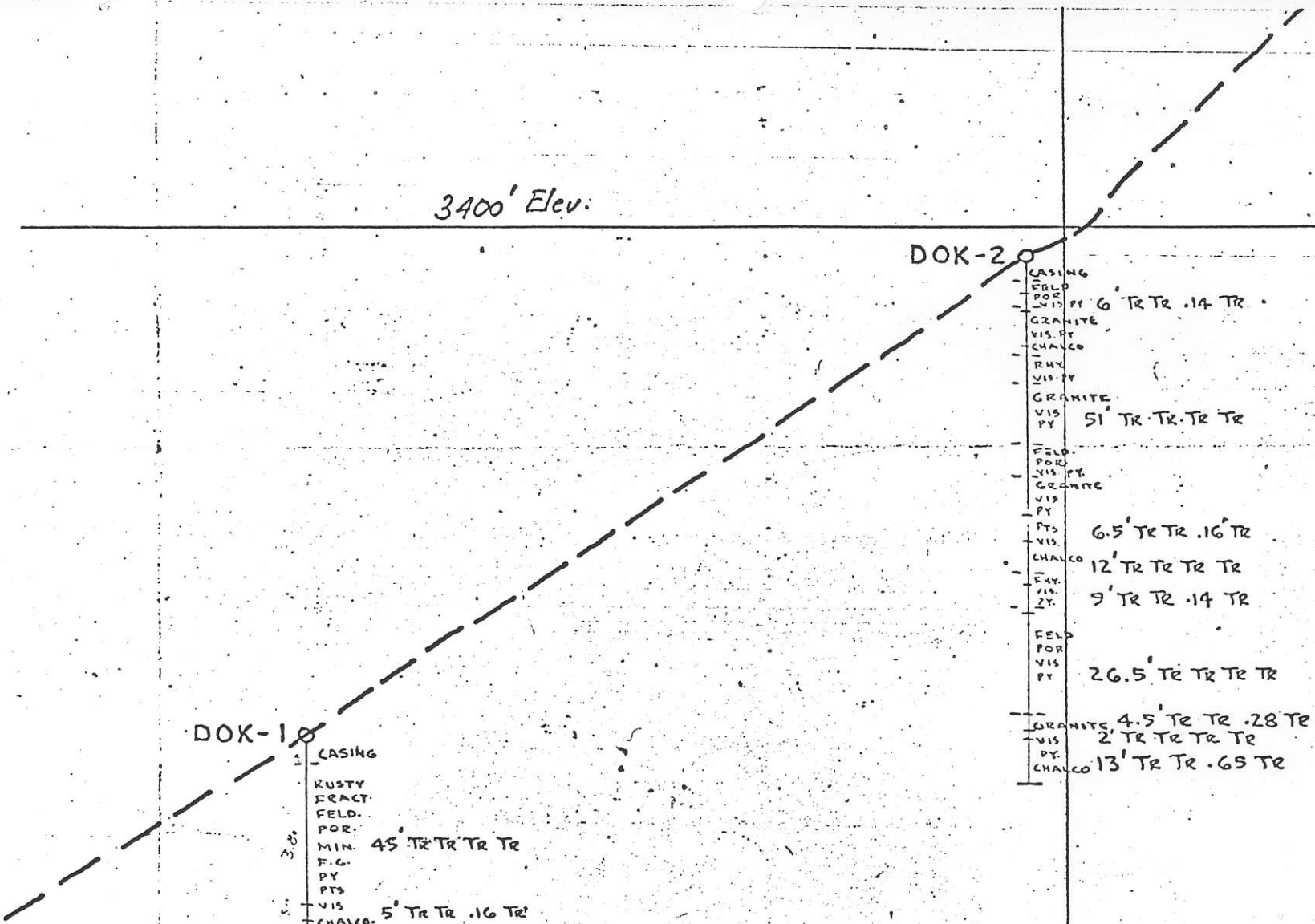
DATED at Vancouver, B.C., this 3rd day of
October, 1969.


Dr. R.H. Seraphim, P.Eng.

3400' Elev.

DOK-2

DOK-1



CASING
 FELD
 POR
 VIS PY 6' TR TR .14 TR
 GRANITE
 VIS PY
 CHALCO
 RHY
 VIS PY
 GRANITE
 VIS PY 51' TR TR TR TR
 FELD
 POR
 VIS PY
 GRANITE
 VIS PY
 PY
 PTS 6.5' TR TR .16 TR
 VIS
 CHALCO 12' TR TR TR TR
 ERY
 VIS
 PY 9' TR TR .14 TR
 FELD
 POR
 VIS
 PY 26.5' TR TR TR TR
 GRANITE 4.5' TR TR .28 TR
 VIS
 PY 2' TR TR TR TR
 CHALCO 13' TR TR .65 TR

CASING
 RUSTY
 FRACT
 FELD.
 POR.
 MIN. 45' TR TR TR TR
 F.G.
 PY
 PTS
 VIS
 CHALCO 5' TR TR .16 TR

F.G.
 GRANITE
 SL.F.G.
 PY
 PTS VIS
 CHALCO 72' TR TR TR TR
 FELD.
 POR
 VIS PY
 GRANITE
 VIS PY
 CHALCO

3200' Elev.

Note claims Drilling, 1963

104-G-12.

1" = 40'

Fig. 5.



PHONE: 876-4111
 TELEX: 50353
 CABLE ADDRESS: ELDRICO

TO:

R.H. Seraphim,

427-470 Granville St.,

Vancouver, B.C.

Certificate of Assay COAST ELDRIDGE

PROFESSIONAL SERVICES DIVISION
 WARNOCK HERSEY INTERNATIONAL LIMITED
 125 EAST 4TH AVE. VANCOUVER 10, B.C., CANADA

FILE NO. A.3.5.1-69-8336

DATE September 18/69

We Hereby Certify that the following are the results of assays made by us upon submitted ORE samples

MARKED	GOLD		SILVER	Copper (Cu)		PER CENT.	PER CENT.	PER CENT.	PER CENT.
	OUNCES PER TON	VALUE PER TON	OUNCES PER TON	PER CENT.	PER CENT.				
		\$							
36533	0.01	0.35	1.8	0.40	30' chip				
36534	0.01	0.35	0.5	0.78	120' chip				
36535	0.01	0.35	0.4	0.87	20' chip				

Gold calculated at \$ per ounce

/BE

Note. Rejects retained one week.
 Pulps retained one month.
 Pulps and rejects may be stored for a maximum of one year by special arrangement.

Unless it is specifically stated otherwise, gold and silver values reported on these sheets have not been adjusted to compensate for losses and gain inherent in the fire assay process.

Provincial Assayer