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CONFIDENTIAL

REPORT ON THE HILL CLAIM, HORNE LAKE AREA, NANAIMO MINING DIVISION, B. C.

July 9th, 1979

J. P. Elwell, P.Eng.

Harold -

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REPORT ON
THE
HILL CLAIM
HORNE LAKE AREA,
NANAIMO MINING DIVISION, B. C.

for

CHATANOOGA GAS CO. LTD.

Suite 8 - 784 Thurlow Street
Vancouver, B. C.

by

J. P. ELWELL, P.Eng.

1030 - 510 West Hastings Street
Vancouver, B. C.
V6B 1L8

July 9th, 1979

TABLE OF CONTENTS

MAPS

REPORT ON THE HILL CLAIM,
HORNE LAKE AREA,
NANAIMO MINING DIVISION, B. C.

SUMMARY

The Hill claim, consisting of the 16 metric units is located on Mt. Mark to the north of Horne Lake in the Nanaimo Mining Division of B. C. Access is by paved highway and logging roads to the mineral showings which are at an altitude of 1300 feet.

The claim covers a prospect which dates from the 1920's consisting of some outcropping of massive sphalerite with pyrite and arsenopyrite occuring in crystaline limestone of the Sicker Group which is in contact with volcanics of the Karmutsen formation.

Development work in the early years consisted of three shafts, one of which is reported to be 100 feet deep, and some trenching. In 1964 the mineral zone was mapped by Cominco Ltd. and four short diamond drill holes were put down.

The mineralization has the appearance of a replacement type deposit, and there is ample scope for more mineralization to be found than is known at present.

An exploration program for the property is recommended, to consist initially of some bulldozer stripping, soil sampling, geological mapping, and a limited I.P. survey. This would be followed up if successful by a program of diamond drilling.

The initial phase is estimated to cost $25,000, with a second phase of $50,000, for a total of $75,000.

INTRODUCTION

On June 28th, 1979 the writer examined the mineral showings on the Hill claim located on Mt. Mark above Horne Lake in the Nanaimo Mining Division of B. C. A previous attempt had been made to examine this property on May 8th, but at this time the access road was impassable and an attempt to reach the showings by an alternative route was unsuccessful. The Legal Corner Post of the claim was examined however, and some of the claim boundaries checked.

At the time of the recent examination, a two man crew was in the process of opening up the old showings, and drilling and blasting fresh trenches for sampling.

This report was prepared for Chatanooga Gas Co. Ltd., #8 - 764 Thurlow Street, Vancouver, B. C.

LOCATION AND ACCESS

The Hill claim is located on Mt. Mark to the north of Horne Lake. The Legal Corner Post is located on the roads which follows the north shore of the lake and the claim is staked 4 units north and 4 units east of this point.

The showings are at an elevation of 1300 feet and are reached from Nanaimo via the Island Highway north for 57.4 km. to the Horne Lake turnoff, then good gravelled logging roads for 10 km. and 6 km. of abandoned logging road passable to four-wheel drive vehicles to a point 700 m. from the showings. The old road continues up to the

showings but is washed out in places.

A location map accompanies this report.

TOPOGRAPHY, ETC.

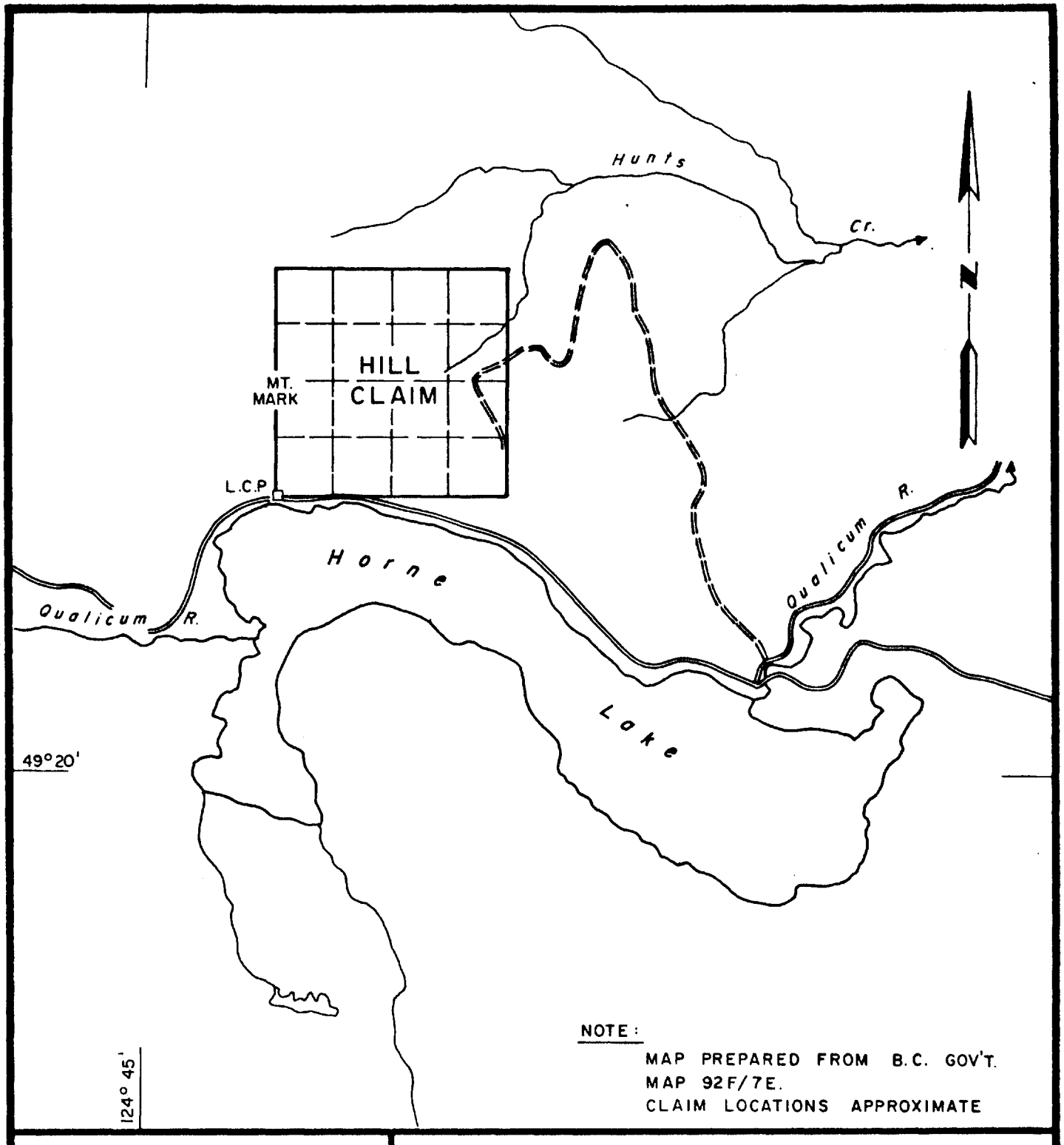
The area of interest is located on a plateau of moderate relief at an altitude of about 1300 ft. overburden and dense second growth timber covers the area. A small creek would supply water for exploration purposes.

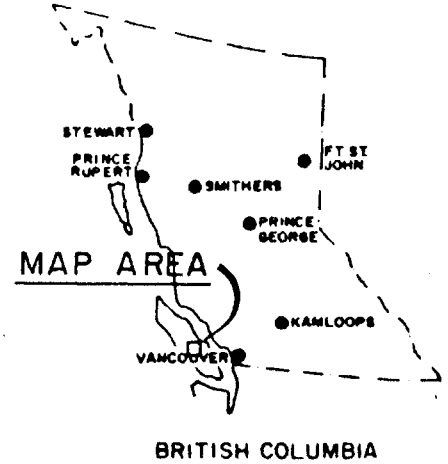
PROPERTY

The Hill claim consists of 16 units, Record No. 330, January 3rd, 1979 Nanaimo Mining Division, B. C. and transferred by Bill of Sale dated February 2nd, 1979 from John Kruzick to Chatanooga Gas Co. Ltd.

EARLY HISTORY

Although there has been considerable work done on this property in the past, its history is somewhat obscure. The first mention is in the B. C. Minister of Mines Report for 1927 when it was known as the P.D. group of two claims. In this report the showing is described as a vein striking north-south (mag) in crystaline limestone close to the contact with the Vancouver group volcanics. The full width of the vein exposed in a trench was 24.5 feet, of which the 14 feet on the footwall assayed 2.0% Zn. A 100 foot shaft was sunk in the hanging wall with a cross-cut from the bottom of the shaft across the vein and some good zinc mineralization





CHATANOOGA GAS CO. LTD.

LOCATION MAP OF HILL CLAIM

HORNE LK. AREA, NANAIMO MINING DIVISION B.C.

Scale = 1:50,000

JULY 1979

J.P. ELWELL, P. Eng.

was reported on the shaft dump. Several other old trenches are reported, one of which was said to assay 20% Zn over 8 feet.

In the 1960's Cominco staked the Horn Group of 4 claims covering the showings and some mapping, sampling, and 4 diamond drill holes totalling 323 feet was completed in 1964. The map prepared by Cominco which is reproduced in this report, shows three shafts as well as the trenches mentioned in the 1927 report. The map also shows the 4 diamond drill holes drilled on a westerly bearing across the structure. The claims were abandoned by Cominco and the ground was restaked by John Kruzick in December 1978.

GENERAL AND ECONOMIC GEOLOGY

The mineral occurrences are contained in a block of Permian crystaline limestone classified as the Buttle Lake formation of the Sicker Group which, according to Map 17-1968 (Alberni), is in contact to the east, west, and north with Karmutsen Formation basalts and related volcanics, the contact being just to the north of the known mineral showings.

The mineralization identified to date consists of lenses and pods of massive, to disseminated sulphides composed of sphalerite, with lesser amounts of pyrite and arsenopyrite.

EXAMINATION OF THE PROPERTY

On arrival at the property June 28th, it was found that the exploration crew had located all the old trenches and workings shown on the Cominco map, but only two of the trenches had been re-opened by blasting, most

of the work being concentrated on the main trench to the east of the shaft.

The dense brush, overburden and moss cover in the area makes prospecting extremely difficult, and it is thought very probable that there are a number of other mineral showings other than those which have been discovered by the exploration in the early years.

Of the three shafts shown, the north shaft is filled almost to the surface, but is shown on the Cominco map as being 40 feet deep. The other two shafts to the west of the main trench are both open and there are remains of ladders and stagings in them. One of these would be the 100 foot shaft with cross-cut mentioned in the 1927 M.M. report. The other shaft, which could be about the same depth is only 18 feet from the first, and it is not known why, or by whom it was sunk. The trenches were all sloughed in and overgrown with moss, but mineralization was examined in two trenches which were being re-opened and in a trench about 120 feet to the north of the shaft which is believed to be the one mentioned in the 1927 report as assaying 20% Zn over 8 feet.

In the main trench to the east of the shaft, the mineralization consists of massive to disseminated sulphides, predominently sphalerite, arsenopyrite, and pyrite in crystaline limestone. On the shaft dump some large pieces of massive sulphide were found consisting of solid sphalerite with disseminated pyrite and arsenopyrite. (This material presumably came from the cross cut at the bottom of the shaft.)

A number of boxes of drill core were found on the shaft dump. This core appeared to consist entirely of white crystaline limestone but any mineral

sections may have been removed for assay.

Four samples were taken from different showings on the property and assayed for copper, zinc, gold, and silver. These samples cannot be considered truly representative of the grade of the material of the showings, as the full width of mineralization had not been opened up, and the massive, blocky nature of the material made it impossible to cut a true channel sample with the tools available. The location of each sample is shown on the accompanying map.

Sample #	oz Au/ton	oz Ag/ton	% Cu	% Zn
69509	.003	0.46	0.10	9.76
69510	.003	0.54	0.11	11.30
69511	.003	0.32	0.03	8.37
69512	.005	0.30	0.01	0.43

The sampling indicates that the principal economic mineral present is zinc, although the silver values could be of importance in a large tonnage operation at todays prices. Sample #09512 was lower than expected, but it was from an old trench which had not been opened up by blasting, and it is considered probable that much of the zinc mineralization had been leached out.

EVALUATION OF THE PROPERTY

The examination of the property on June 28th confirmed the writer's first impression of the property gained from its description in the Minister of Mines Report of 1927, that is, that the mineral occurrences were a replacement type deposit rather than a "vein". The trenching has not exposed the full extent of any of the pods and lenses of heavy sulphides, but it is expected that they will be irregular in shape and

and go to undetermined depth. According to the old report, the shaft was sunk in the "hanging wall" and a cross-cut at a depth of 100 feet cut a good intersection of sphalerite and arsenopyrite (sample #69509 may represent this material). This would indicate that the main shaft showing has a plunge to the east and goes to at least 100 feet in depth.

The other showings have only been partially opened up by trenches, and there is no reason to suppose that all the outcroppings of sulphides have been discovered, as the overburden, and dense brush and moss cover makes surface prospecting futile. In addition, if these deposits are true replacement types, there could be "blind" lenses in the limestone which do not outcrop to the surface, but which might be located by geophysical methods.

In general, the geological aspects, mineralization, and ease of access make this property an interesting prospect which deserves further exploration. The initial phases of the recommended work are outlined below.

RECOMMENDATIONS

Phase I

1. Repair the last section of the access road, and with a bulldozer, strip the area around the known mineral showings to determine their size and trend. Continue trenching mineral outcrops.

2. Locate the known showings in relation to the claim boundaries, and map the volcanic-limestone contact.

3. On the basis of the above mapping cut grid lines across the favourable formation and conduct a soil sampling program, with analysis for zinc and arsenic.

4. After analysis of (1), (2) and (3), conduct an I.P. survey over a selected area. Although sphalerite is non-conductive, there appears to be sufficient disseminated pyrite and arseno-pyrite in the sulphide bodies to make this system effective.

Phase II

1. Based on an analysis of the results of Phase I, probe the mineral zones by diamond drilling to establish grade, volume, and continuity.

2. Further work will be planned as justified by the results of the above.

ESTIMATE OF COSTS

Phase I

1. Bulldozer work - road repairs and stripping - allow 100 hours @ $50/hr.		$ 5,000.00
2. Drilling and blasting of trenches		1,000.00
3. Geological mapping and survey		1,500.00
4. Line cutting and soil sampling - allow 20 km. of line @ $100/km. and 400 samples @ $5.00 ea.		4,000.00
5. I.P. survey allow 10 km. @ $600/km.		6,000.00
6. Line cutting for (5) 10 km. @ $200/km.		2,000.00
7. Sampling and assaying		800.00
8. Camp and crew maintenance		1,000.00
9. Consulting services		1,500.00
10. Travel and administration		1,200.00
11. Contingencies		1,000.00
	Total Phase I	$25,000.00

Phase II

1. Diamond drilling - allow 2000 feet @ $21/ft.		$42,000.00
2. Mobilization and demobilization of drill		800.00
3. Sampling and assaying		1,200.00
4. Engineering and supervision		3,000.00
5. Contingencies		3,000.00
	Total Phase II	$50,000.00

REFERENCES

B. C. Minister of Mines Report 1927

Maps and data from Cominco Ltd.

G.S. Map 17-1968 - Alberni

CERTIFICATE

I, James Paul Elwell, of 4744 Caulfield Drive, West Vancouver, B. C. do hereby certify that:

1. I am a Consulting Mining Engineer residing at 4744 Caulfield Drive, West Vancouver, B. C., and with an office at 1030 - 510 West Hastings Street, Vancouver, B. C. V6B 1L8.

2. I am a graduate in Mining Engineering from the University of Alberta in 1940, and am a Registered Professional Engineer in the Province of British Columbia.

3. I have no personal interest, directly or indirectly in the properties examined or in Chatanooga Gas Co. Ltd. securities, nor do I expect to receive directly or indirectly any interest in such properties or securities.

4. The findings in the report are from data obtained from the reports and maps referred to and from a personal examination of the property on June 28, 1979.

5. In the area examined I found the staking to be in accordance with the Mineral Act.

DATED at VANCOUVER, B. C. this 9th day of July, 1979.

J. P. Elwell, P.Eng.

JAMES P. ELWELL, P ENG.
CONSULTING MINING ENGINEER

HONE: 682-2120
ES: 922-2551

1026 [redacted] - 510 W. HASTINGS ST.
VANCOUVER, B.C.
V6B 1L8

October 21, 1980

Chatanooga Gas Co. Ltd.
Suite 8, 784 Thurlow Street
Vancouver, B.C.

Subject: Hill Claim Horne Lake Area,
Nanaimo Min. Div., B.C.

Dear Sirs:

This letter concerning the above mentioned claim may be considered as an addenda to my report dated July 9th, 1979.

To the best of my knowledge, no work has been carried out on the claim since the date of my report, and I consider the recommendations made at that time to be still valid. However, the cost of the program will have increased somewhat due to inflation during the last year and I have revised the amounts allowed in certain items of the Estimate of Costs to reflect these increases. The updated estimates are as follows:-

Phase I

1.	Bulldozer work - road repairs and stripping - allow 100 hrs. @ $75.00/hr.	$ 7,500.00
2.	Drilling and blasting of trenches	1,200.00
3.	Geological mapping and survey	1,500.00
4.	Line cutting and soil sampling, allow 20 km. line @ $100.00/km., and 400 samples @ $6.00 each.	4,400.00
5.	I.P. Survey, allow 10 km. @ $600.00/km.	6,000.00
6.	Line cutting for (5), 10 km. @ $200.00/km.	2,000.00
7.	Sampling and assaying	1,000.00
8.	Camp and crew maintenance	1,200.00
9.	Consulting Services	1,500.00
10.	Travel and administration	1,500.00
11.	Contingencies	1,200.00
	Total Phase I	$ 29,000.00

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Phase II

1.	Diamond drilling - allow 2000 ft. @ $25.00/ft.	$ 50,000.00
2.	Mobilization and demobilization of drill	1,000.00
3.	Sampling and assaying	1,400.00
4.	Engineering and supervision	3,500.00
5.	Contingencies	3,100.00
	Total Phase II	$ 59,000.00

This letter, and my report dated July 9th, 1979 may be reproduced in full in the Company's Prospectus.

Yours very truly,

J.P. ELWELL, P.Eng.

JPE:ddh

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PD

MINERAL OCCURRENCE #44

"P. D. Showing" (Mt. Mark)

GENERAL INFORMATION:

Location and Access:

About 1 mile north of Horne Lake and about ½ mile NE of Mount Mark. North of our section of Land Grant (See map for #43). Either in Block 251 or in 356, 1000' above lake.

Reports and References:

B.C.Minister of Mines: Annual Report, 1927, page 351.

CPOG: The Mineral Resources of E & N Land Grant, page 104.

Work done by Gunnex Limited, 1963/64/65:

Not visited, no work done.

Standing:

4 claims by C.M. & S., still in good standing, Aug., 1965. Railway Company has rights to iron only in Block 251, but to all minerals on Block 356 except Au and Ag, originally staked in 1927.

GEOLOGY:

Not mapped by us. A zinc showing entirely in Sicker Group (Permian) limestone, but not far from its contact Of Vancouver group volcanics.

"The replacement zone has a width of 24½ feet and is heavily mineralized with arsenopyrite and some sphalerite. The Zn values seem to be concentrat in the hanging wall side, where a 14-foot section assayed 2% Zn.

SUMMARY OF WORK:

Since original staking in 1927 considerable work has been done on this property, consisting of surface trenching and a shaft sunk to a depth of 100 feet and also a cross-cut. The extent of additional work, if any, by C.M. & recently is not known.

COMMENTS:

Could be visited.

H. Lannela ↔ GUNNEX
February, 1966.

HL:s