H. S. HASLAM AND ASSOCIATES LIMITED

2144 NELSON AVENUE • WEST VANCOUVER, B.C., CANADA • (604) 922-2633
V7V 2P7

March 27th. 1975

In account with

Holberg Mines Ltd. (N.P.L.),
915-470 Granville Street,
VANCOUVER B.C.

Attention: Mr. Peter Wishart

TO: PROFESSIONAL SERVICES to date:

Compilation and writing Report, bound and in six (6) copies, entitled

"Preliminary Report on the Limestone Deposits at Holberg Inlet, Vancouver Island - March 27th. 1975",

following inspection and observations during visit to the property, and reviewing existing literature and previous reports.

TO: Numerous telephone calls with Holberg Mines Ltd. and with authorities of the B.C. Provincial Government concerning alternative plans in case of inability to obtain aerial photographs.

TO:
Instructing Pacific Survey Corporation Ltd. regarding over-flying of property for the production of aerial photographs, leading to Contract letter dated February 28th. 1975 from P.S.C. Ltd. to Holberg Mines Ltd., which was accepted by Holberg Mines Ltd.

TO:
Overseeing written certification that the work outlined in aforesaid letter was indeed carried out. The resultant information will be used to formulate the required topographical maps, which will be available two (2) weeks from March 27th. 1975.

OUR FEE:

3.25 days at the per diem rate of $275.00 - $893.75

H.S. Haslam,P.Eng.

HSH/mc

5413

HOLBERG MINES LTD. (N.P.L.)

VANCOUVER, BRITISH COLUMBIA

92L/12W

PRELIMINARY REPORT
ON THE LIMESTONE DEPOSITS AT
HOLBERG INLET, VANCOUVER ISLAND.

March 27th. 1975

H. S. Haslam and Associates Limited
Consulting Coal Mining Engineers
Vancouver, B.C.

TABLE OF CONTENTS

There now follow seven (7) Figures

of Pages numbered 13 to 23 inclusive.

1. INTRODUCTION

1.1 Holberg Mines Ltd. (N.P.L.) hold a number of claims near the head, and south, of Holberg Inlet, which is an extension of Quatsino Sound, in the north western area of Vancouver Island. They are in the Nanaimo Mining Division as defined by the Department of Mines and Petroleum Resources of the Government of the Province of British Columbia.

1.2 These claims include various deposits of high grade limestone, which outcrop on the property, and without overburden.

1.3 This Report gives the progress of exploration of these deposits to date and outlines a two-phase plan for continuing exploration and for gaining information necessary to assess the feasibility of economic exploitation.

1.4 The claims referred to, in particular, in this Report are the FOX Claims Nos. 1 to 20 inclusive.

2. LOCATION, ACCESS and TOPOGRAPHY

2.1 The location of the claims is shown in the attached maps:

FIGURE 1 General location of the claims in relation to Vancouver, Victoria and Prince Rupert, British Columbia, and delineates the area shown in FIGURE 2.

2.2 FIGURE 2 The location of the claims, on a larger scale, in relation to Quatsino Sound, Holberg Inlet, Port Hardy, Port Alice, Suquash and Coal Harbour.

2.3 The approximate centre of the claims area lies at the intersection of the meridian of Longitude 127degrees 56' West and of the parallel of Latitude 50 degrees 27' North. It will be noted that the claims are thus approximately three (3) miles east of the village of Holberg, and that they contact the south shore of Holberg Inlet.

The property location is to be found on National Topographic Reference Area 92L/12(w). Glerup Creek flows northwards from two small lakes lying within the claims area, and in the northern section of the area, there is N Native Creek. A water supply for drilling purposes is thus fairly close at hand. Pettagem Creek lies to the south of the area.
FIGURE 3.

2.4 The property may be reached by 32 miles of logging road from Port Hardy, and logging roads have been constructed

on a liberal scale across the area.

Port Hardy has an airport which is served by Pacific Western Airlines, with connections to Vancouver. An amphibian aircraft charter is available at Port Hardy for air travel to Holberg.

2.5 The proximity of the shoreline of Holberg Inlet will be found advantageous in that deep-draught ships can be accommodated almost adjacent to the plant for limestone processing.

Almost all of the claims area has been logged.

2.6 Elevations on the property range from sea level on the northern boundary to over 1,300 feet on the eastern boundary. There are two other high points, of over 1,100 feet. Mount Hansen, 1,993 feet high, lies to the west of the area, and overlooks the village of Holberg. There are two main ridges of hills whose axes are parallel to Holberg Inlet. The northernmost ridge has steep sides, whilst the southerly ridge has more gentle slopes. Glerup Creek lies between these two ridges.

3. TITLE TO THE CLAIMS

3.1 A total of twenty (20) full claims are concerned with this project.

Names, record numbers and due dates for the renewal of each claim are as follows:

Name	Record Numbers	No. of Claims	Due Date
Fox 1-10	34762 - 34781	20	Mar. 28/1975

Figure 4 shows the relative positions of these claims.

3.2 The site of the limestone deposit on these claims lies within an existing timber forest licence held by Rayonier Canada Limited. Because of this, the limestone cannot be staked under the Land Act or the Mineral Act.

3.3 The Fox claims have a Free-Use Mining Permit from the British Columbia Department of Lands, Forests and Water Resources, valid until August 5th. 1975, permitting the testing of the property through drilling. This allows timber to be cut in order to clear up to 20 drill sites, which must be located within 66 feet of existing logging roads crossing the claims area.

3.4 By letter dated August 16th. 1974, written by the British Columbia Forest Service to the Company's solicitors, it was confirmed that it is not a Departmental policy to accept an application for limestone over mineral claims from other than the owner of those claims.

3.5 It was further confirmed in that letter of August 16th. 1974 that an application for limestone from another party would constitute a conflict of interest since the Department takes the position that limestone and minerals may be inseparable.

3.6 Because of the foregoing, the Company and its solicitors believe that the Company is protected should it expend funds in the development of the property.

4. GEOLOGY

4.1 This is described in a publication of the Geological Survey of Canada, Paper 74-8, entitled "Geology and Mineral Deposits of Alert Bay - Cape Scott Map Area, Vancouver Island B.C.", by Muller J.E., Northcote K.E., and Carlisle, D., 1974.

The map accompanying this Memoir indicates that the claims cover an area of the Quatsino Formation, which consists of limestones. To the south and east there are areas designated as Parson Bay Formation, which consists of sedimentary rocks such as siltstones, limestones, greywacke, conglomerates and breccias, whilst to the north of the Quatsino deposits, and bordering Holberg Inlet, there are basaltic lavas, pillow lavas, breccias and aquagene tuffs of the Karmutsen Formation.

4.2 The older of these formations is the Karmutsen, which underlies the Quatsino and the younger Parson Bay Formations apparently conformably. All three formations are attributed to the Upper Triassic System. The Parson Bay formation was formerly known as the Bonanza Formation.. Major faulting defines the boundaries of these formations on the east and west sides of the Quatsino.

4.3 The limestone of the Quatsino Formation is described in general as being "coarse bioclastic, light grey and massive", and about 950 feet thick, plus or minus 100 feet. Thin sections of the limestone show grains of recrystallised calcite 0.01 mm to 0.02mm in size. The generally low dolomite and silicate

content is shown by analysis of samples taken by McCammon (1969) in the Alert Bay-Cape Scott Map Area, which show an average of only 1.15% MgO and 1.17% insolubles. These figures compare favourably with those from analyses made of samples of limestone from the claims area, given later in this Report.

4.4 The geology of the Coal Harbour-Port Hardy area has also been partially described in the British Columbia Mines Minister's Report for 1968, Page 85.

4.5 A geological report concerning 300 claims of Holberg Mines Ltd., lying in the general area of Holberg Inlet including the 60 claims herein referred to, was written by David R. Morgan, P.Eng. in March 1970, following his investigations in the field. He refers to the limestones of the local area, as it is the host rock for the mineralisation with which he was concerned at that time. He describes it on Page 16 of his report, and we quote, in part:

"Limestone: Apparently great thicknesses of limestone occur in the central part of the area mapped. These are the three main types:

(a) Grey Limestone: Grey weathering, pale grey to buff grey and asphanitic on the fresh surface, usually with a conchoidal splintery fracture. This limestone is almost lithographic in its asphanitic purity. Great thicknesses occur in the southwestern part of the carbonate belt.

(b) Dolimitic Limestone: This rock is typically buff weathering, pale buff grey and aphanitic on the fresh surface. It too has splintery conchoidal fracture.

(c) Dark Grey Limestone: Dark grey to black on the weathered and fresh surface due to argillaceous or carbonaceous inclusions. Occasional fossiliferous, it appears in the northern part of the carbonate belt ..... and is probably close to the bottom of the Quatsino."

5. QUALITY AND QUANTITY OF LIMESTONE

5.1 Quality

An analysis of grab samples of the limestone was made on April 9th. 1973 by General Testing Laboratories of Vancouver, and this is reproduced in FIGURE 5.
It will be noted that the Magnesia (MgO) is 1.19% and that the calcium carbonate, by calculation is 97.32%. The iron content is 0.14%. The limestone represented in this sample is thus of a high grade.

5.2 Quantity

Until definitive information from detailed geological mapping and from strategically-located drill holes covering the three limestone deposits which occur within the claims area is available, a reasonably accurate estimate of the tonnage of saleable limestone cannot be derived. The proposed expenditure to achieve this end includes a sum of money to perform this work.
However, we are satisfied that in general a large reserve of limestone exists in the westernmost deposit alone, on which some drilling has been done. These drill holes are named 74A-1, 74A-2, 74A-3, 74A-4, 74A-5, and were drilled during February and March 1974. (See Figure 3).
The logs of these holes are shown in FIGURE 6, and sections of strata passed through are depicted in FIGURE 7. These expose the presence of whitish, grey and dark grey-brown limestones and limey dolomites, some of which has been marbelised in places. Volcanic intrusions have also been found amongst the sedimentary beds.

Up to the present time, no holes have been drilled in the two limestone deposits to the south east and information on these is confined to surface outcrop observations.

5.3 Volume of Limestone in Place

Figure 3 shows the approximate area of the outcropping of the westernmost deposit of limestone. This represents some 470 acres. Assume a thickness of workable limestone of 70 ft., and that the limestone weighs 200 lbs. per cubic foot, we have some 140 million tons of product in place. The thickness of 70 feet is taken from the drillhole records shown in Figure 6.

It will be appreciated that since the estimated quantity in this one deposit is more than sufficient for even large scale exploitation, we have paid no serious attention to the other deposits of limestone within the claims area.

6. CERTIFICATION

6.1 This Report has been compiled and written by

HUBERT S. HASLAM

Consulting Mining Engineer and President of H.S. Haslam and Associates Limited, following a visit to the claims area of Holberg Mines Ltd. (N.P.L), consultations with the President of this Company and examination of Company and other reports upon the area in question and surrounding areas.

6.2 I hereby certify that:

(a) I hold the degree of Bachelor of Engineering in Mining, First Class, also the degree of Master of Engineering in the University of Sheffield.

(b) I hold, through examination, Fellowships in

The Institution of Mining Engineers
The Institution of Mechanical Engineers
The Institution of Civil Engineers

(c) I am a Registered Member of the Association of Professional Engineers of British Columbia, also of the Consulting Engineers Division of that body, in addition to similar registration in the Provinces of Alberta, Ontario and Quebec.

(d) I am a Member of

The Canadian Institute of Mining and Metallurgy
The Engineering Institute of Canada
The American Institute of Mining and Metallurgical Engineers

6.3 I hereby certify that I am

a practising consulting Mining Engineer and reside at 2144 Nelson Avenue, West Vancouver B.C.

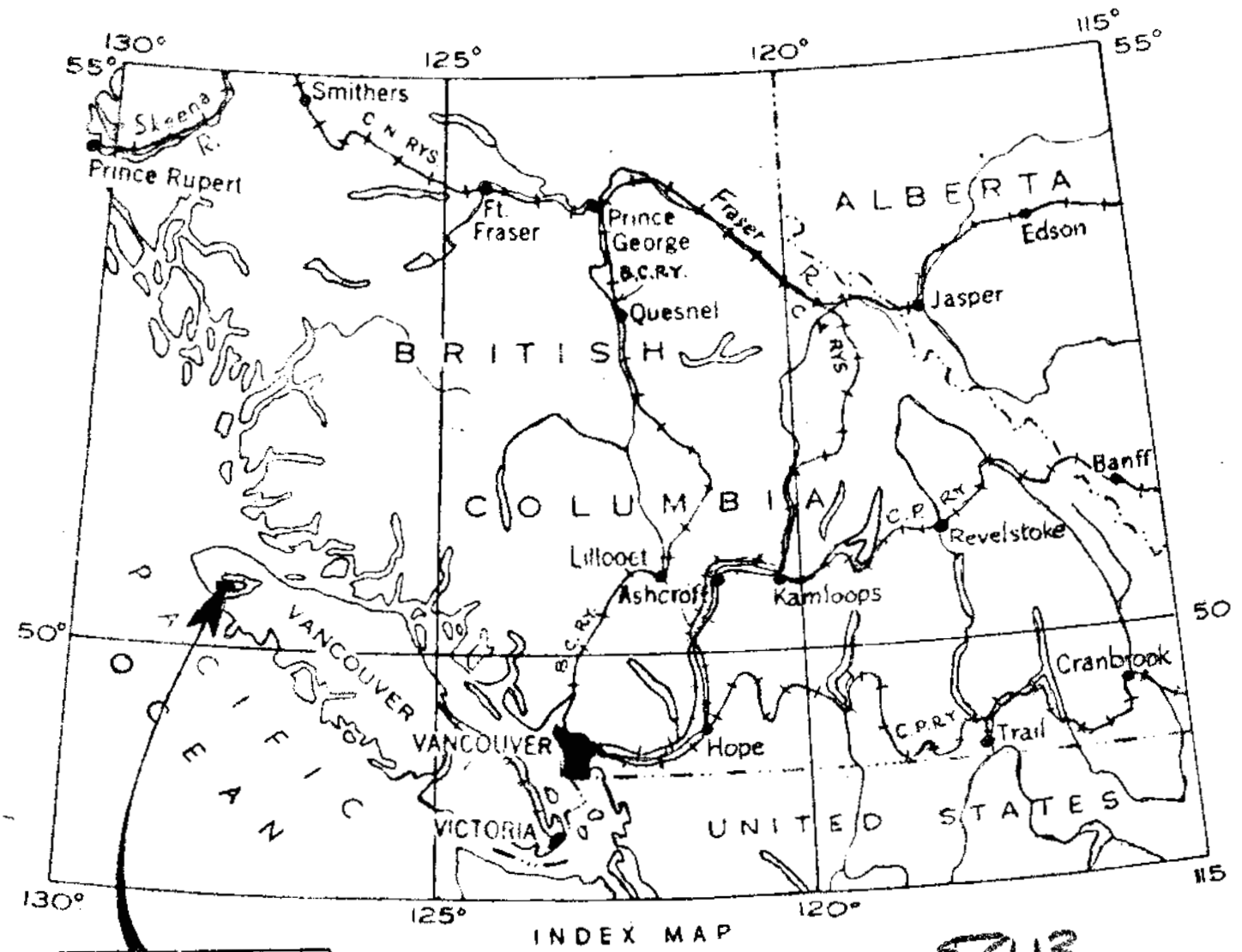
6.4 I hereby certify that

I have no direct or indirect interest whatsoever in Holberg Mines Ltd. (N.P.L.) nor in the mineral claims mentioned in this Report, nor do I expect to receive any interest, direct or indirect, in the properties of Holberg Mines Ltd. (N.P.L.) or any affiliate or any security of the company or affiliate.

Dated at West Vancouver, B.C., this 27th.day of March,1975

H.S. Haslam, P.Eng.

President,
H.S. Haslam and Associates Ltd.



HOLBERG MINES LTD (NPL)

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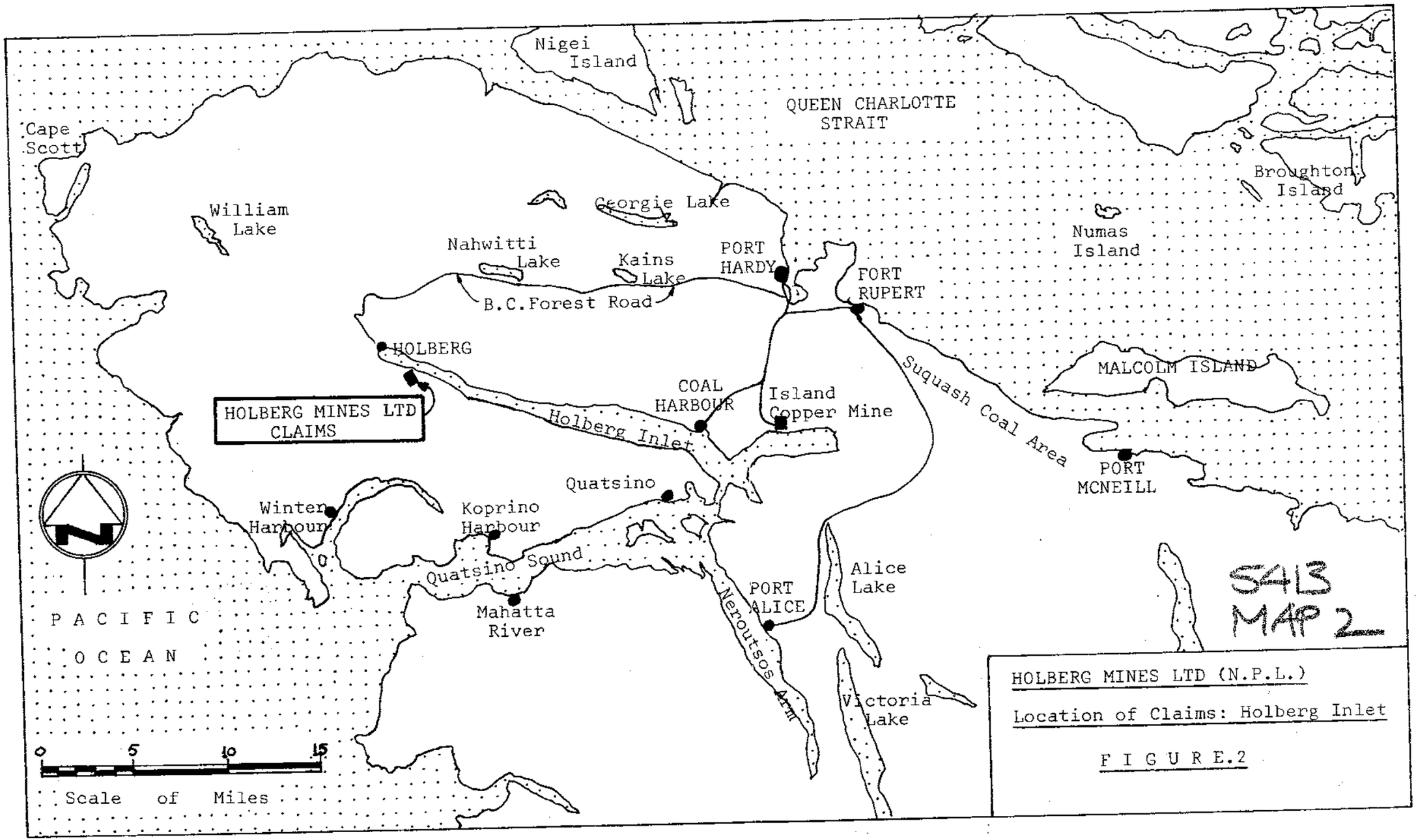
MAP 1

GEOGRAPHICAL LOCATION OF CLAIMS OF HOLBERG MINES LTD., NORTHERN VANCOUVER ISLAND, B.C.

FIGURE 1.

H. S. HASLAM AND ASSOCIATES LIMITED

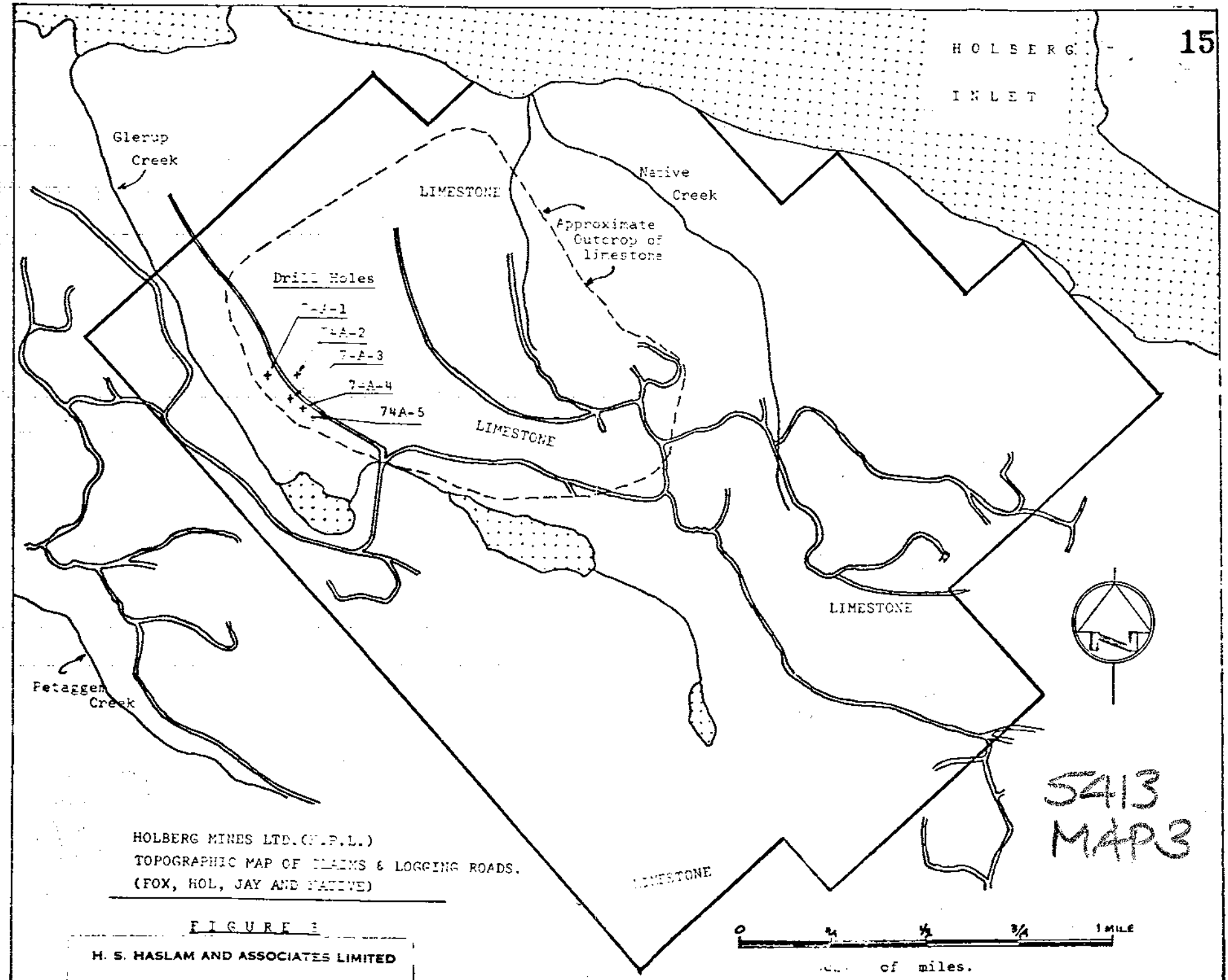


HOLBERG MINES LTD (N.P.L.)

Location of Claims: Holberg Inlet

F I G U R E. 2

H. S. HASLAM AND ASSOCIATES LIMITED



HOLBERG MINES LTD.(N.P.L.)
TOPOGRAPHIC MAP OF CLAIMS & LOGGING ROADS.
(FOX, HOL, JAY AND NATIVE)

FIGURE 3

H. S. HASLAM AND ASSOCIATES LIMITED

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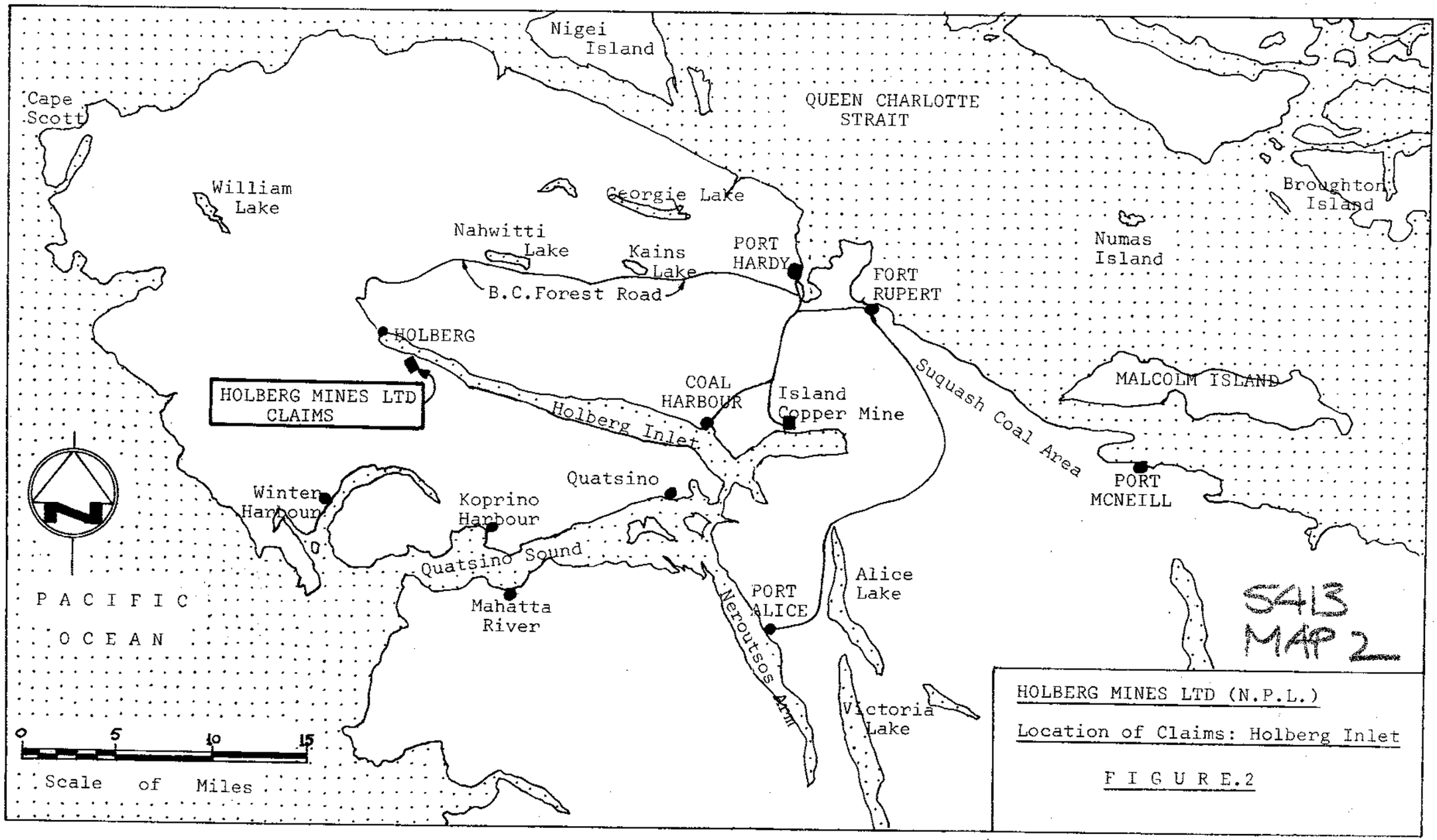
MAP 3


Nigei Island
Cape Scott
QUEEN CHARLOTTE STRAIT
William Lake
Georgie Lake
Broughton Island
Nahwitti Lake
Kains Lake
PORT HARDY
Numas Island
FORT RUPERT
B.C.Forest Road
HOLBERG
HOLBERG MINES LTD CLAIMS
COAL HARBOUR
Island Copper Mine
Holberg Inlet
Suquash Coal Area
MALCOLM ISLAND
Winter Harbour
Koprino Harbour
Quatsino
PORT MCNEILL
Quatsino Sound
Alice Lake
PORT ALICE
Mahatta River
Neroutsos Arm
Victoria Lake
PACIFIC OCEAN
0 5 10 15
Scale of Miles
S413 MAP 2
HOLBERG MINES LTD (N.P.L.)
Location of Claims: Holberg Inlet
F I G U R E.2

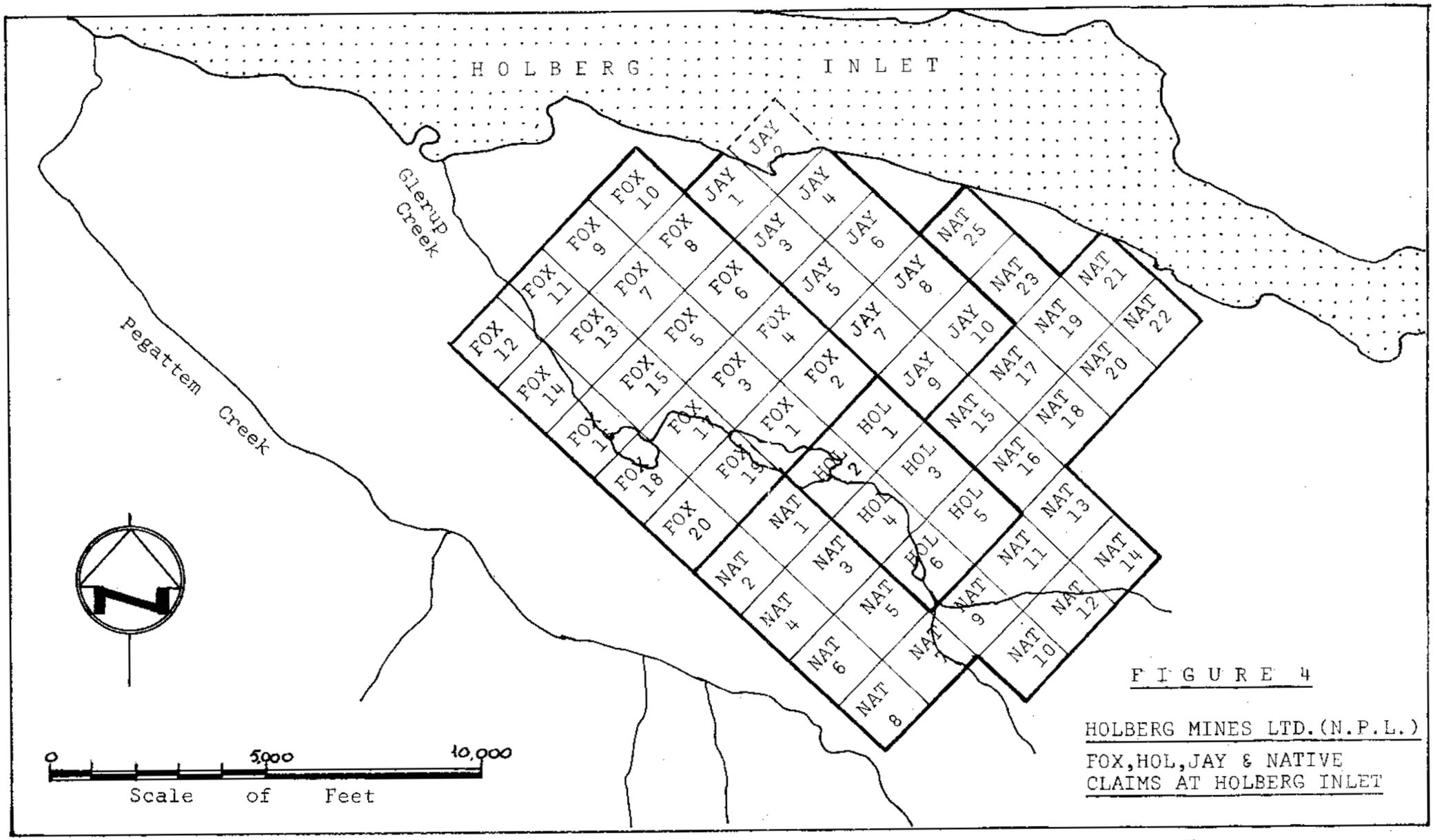


FIGURE 4

HOLBERG MINES LTD.(N.P.L.)

FOX,HOL,JAY & NATIVE CLAIMS AT HOLBERG INLET

5413

MAP 4

H. S. HASLAM AND ASSOCIATES LIMITED

GENERAL TESTING LABORATORIES

DIVISION SUPERINTENDENCE COMPANY (CANADA) LTD

1001 EAST PENDER STREET, VANCOUVER 6, B C CANADA
PHONE (604) 254-1647 TELEX 04-507514 CABLE SUPERVISE

SUPERVISE

TO:

HOLBERG MINES LTD.,
#103-709 DUNSMUIR ST.,
VANCOUVER, B.C.

CERTIFICATE OF ASSAY

No.: 7303-0557 | DATE: April 9,1973

I hereby certify that the following are the results of assays on: **Limestone Samples**

MARKED	UNMARKED SAMPLES						OZ/ST GR/MT	OZ/ST GR/MT
LOSS ON IGNITION (CO_2 etc.)	43.40							
SILICA (SiO_2)	0.51 %							
IRON (Fe_2O_3)	0.14 %							
ALUMINA (Al_2O_3)	0.20 %							
CALCIUM OXIDE (CaO)	54.53 %							
MAGNESIA (MgO)	1.19 %							
SULPHUR (S)	0.01 %							
PHOSPHORUS (P)	0.011%							
CALCIUM CARBONATE Calculated ($CaCO_3$)	97.32 %							

FIGURE 5

H. S. HASLAM AND ASSOCIATES LIMITED

HS/ak

NOTE: REJECTS RETAINED ONE MONTH. PULPS RETAINED THREE MONTHS. ON REQUEST PULPS AND REJECTS WILL BE STORED FOR A MAXIMUM OF ONE YEAR.

H. Sharples

H. Sharples — PROVINCIAL ASSAYER

ANNEX - A
18

DIAMOND DRILL HOLE RECORD

MINE Holberg Mines Ltd. (NPL) DATE 15th March 1974

HOLE No. 74 A - 1 SIZE XRP Co-ordinates of Collar

LOCATION Fox 12 South Side Lake Main Road - See Fig: 1

DIRECTION N 95° East N. E.

DEPTH 85 Feet DIP -55° STARTED 16 Feb 1974

POSITION Surface ELEV. COLLAR 475' ASL FINISHED 18 Feb 1974

SECTION FROM	TO	RECY	LOG	ASSAY NUMBER
	2.0	1.7	Limestone - Whitish	
2.0	61.0	57.5	Limestone - Grey to Dark Grey, veinlets of calcite, some rusty joints Ground in sections	
61.0	70.0	8.1	Limestone - Dark Grey some alteration - intercalated with volcanics in sections	
70.0	85.0	12.5	Basalt - Chloritic amygdules and blebs Calcite stringers and veinlets 82 - 83'; sheared 75 - 76; scattered sulphides especially in veinlets	
	85.0		End of Hole	

FIGURE 6
A.

H. S. HASLAM AND ASSOCIATES LIMITED

TOTAL 79.8 % 93.9%

DRILLERS N. Dootoff Drilling

REMARKS:

Core badly fractured in sections

EXAMINED BY W. J. Weymark P. Eng.

ASSAYER DATE

(OVER)

DIAMOND DRILL HOLE RECORD

MINE Holberg Mines Ltd. (NPL) DATE 15 March 1974

HOLE No. 74A - 2 SIZE XRP **Co-ordinates of Collar**

LOCATION North Side G1 - G2 Road see Fig: 1

DIRECTION North 50° West N. E.

DEPTH 60'. DIP -60° STARTED 19 Feb/74

POSITION Surface ELEV. COLLAR 470' FINISHED 20 Feb/74

SECTION FM	TO	RECY	LOG	ASSAY NUMBER
0	6.0	5.5	Limestone - Whitish	
6.0	60.0	33.0	Limestone - Greyish to darker grey in sections Some rusty joints - ground in sections cross calcite veinlets in places	
	60.0		End of Hole	

FIGURE 6

B.

H. S. HASLAM AND ASSOCIATES LIMITED

TOTAL 38.5 % 64.2%

REMARKS: Core badly fractured in sections

DRILLERS N. Dootoff Drilling

EXAMINED BY W. J. Weymark P. Eng.

ASSAYER DATE

(OVER)

DIAMOND DRILL HOLE RECORD

MINE Holberg Mines Ltd

DATE 15 March 1974

HOLE No. 74A - 3 SIZE XRP

Co-ordinates of Collar

LOCATION Fox 14 - South Side of Lake Main Road - See Fig: 1

DIRECTION North 95° East

N. E.

DEPTH 115' DIP - 65°

STARTED 21 Feb/74

POSITION Surface ELEV. COLLAR 465'

FINISHED 25 Feb/74

SECTION FROM	TO	RECV	LOG	ASSAY NUMBER
0	29.0	27.0'	Limestone - Whitish - marbelized - fractured in places.	
29.0	65.0	24.0	Limestone - grades from light grey to dark grey thru' to 65' Calcite veinlets - Ground and fractured	
65.0	94.0	10.0'	Basalt - Chloritic amygdules and blebs, Limy and calcite stringers - sheared 65 - 69'	
94.0	115.0	18.5'	Basalt - Amygdaloidal - calcite and some quartz some cross stringers of calcite scattered sulphides - cp 111- 115'	
	115.0		End of Hole	
			Assay 114 - 115' Copper - 0.01% ~~Gold - 0.005 oz~~ Silver - 0.10 oz Core Laboratories Certificate 1308 - 30 - 7031 ~~14 March 1974~~	

FIGURE 6

C.

H. S. HASLAM AND ASSOCIATES LIMITED

TOTAL 79.5 % 69.1%

DRILLERS N. Dootoff Drilling

REMARKS: Limestone sections fractured
Basaltic sections good core

EXAMINED BY W. J. Weymark P. Eng.

ASSAYER DATE

(OVER)

DIAMOND DRILL HOLE RECORD

MINE Holberg Mines Ltd (NPL) DATE 15 March 1974

HOLE No. 74A - 4 SIZE XRP Co-ordinates of Collar

LOCATION 50' East of 74A - 3, South Side Lake Main Rd - See Fig: 1

DIRECTION North 95° East N. E.

DEPTH 150' DIP -55° STARTED 26 Feb/74

POSITION Surface ELEV. COLLAR 465 ' ASL FINISHED 2 Mar/74

SECTION FROM	TO	RECY	LOG	ASSAY NUMBER
	2.0	2	Limestone - Creamy , weathered rusty	
.0	40.0	25'	Limestone - varies from light to dark grey ~~veinlets of calcite, brecciated~~ at 24': Sulphides @ 38'	
.0	53.0	12'	Andesite - Limy, Brecciated, stringers of Scattered sulphides	
.0	59.0	5	Limestone - Whitish with grey streaks - Blobs of sulphides some cp	
	63.0	3	Andesite - Limy - Calcite streaks and veinlets Brecciated some sulphides	
.0	76.0	12'	~~Andesite - fine grained some calcite stringers~~	
.0	150.0	70.'	Limestone - varies from whitish - 76- 86' to dark grey - ground - broken	
	150.0		End of Hole	

FIGURE 6

D.

H. S. HASLAM AND ASSOCIATES LIMITED

TOTAL 129 % 86%

REMARKS:

DRILLERS N. Dootoff Drilling

EXAMINED BY W. J. Waymark P. Eng.

ASSAYER DATE

(OVER)

DIAMOND DRILL HOLE RECORD

MINE Holberg Mines Ltd. (NPL) DATE 15 March 1974

HOLE No. 74A - 5 SIZE XRP Co-ordinates of Collar

LOCATION 50' East of 74A - 4, South Side of Lake Main Road - See FIG - 1

DIRECTION North 95° East N. E.

DEPTH 80' DIP - 35° STARTED 2 Mar/74

POSITION Surface ELEV. COLLAR 465' ASL FINISHED 4 Mar/74

SECTION TO	RECY	LOG	ASSAY NUMBER
5.0	4'	Limestone - Whitish to Light Grey, Rusty sections	
33.0	25'	Tuff - brecciated - sheared calcite stringers Sulphides 27' - 32' some cp Rusty joints	
48	13'	Basalt - Chloritic blebs - scattered calcite stringers medium grained	
69	18'	Andesite - grades in to Tuff - vesicular and progressively more limy with calcite stringers 64- 69'	
80	4'	Limestone - Whitish to light grey -intercalated with Tuff sections - Rusty sections broken - Lost core some sulphides and cp	
80		End of Hole	

FIGURE 6

E.

H. S. HASLAM AND ASSOCIATES LIMITED

TOTAL 64 % 80%

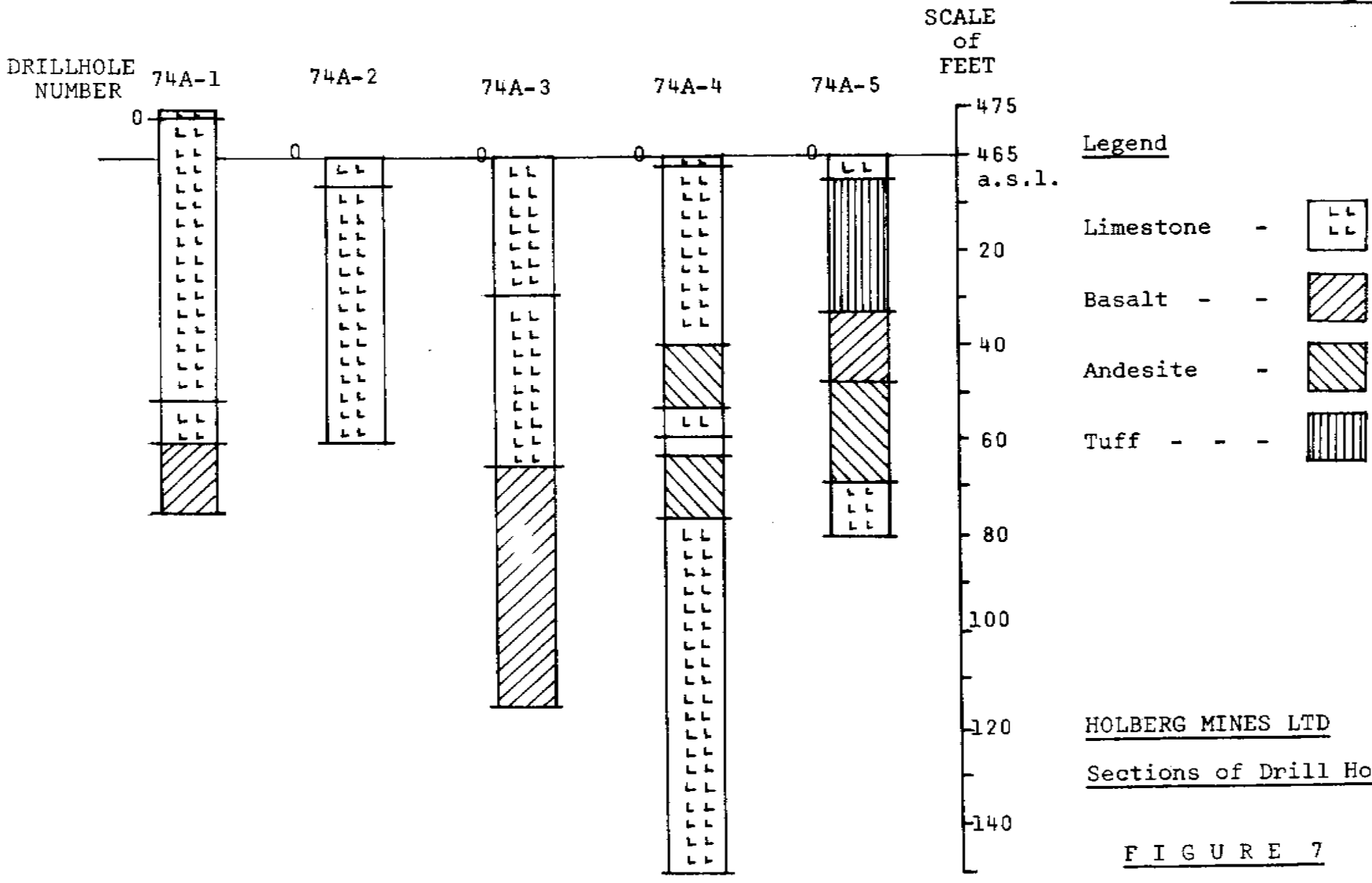
REMARKS: Lower section of hole fractured poor core recovery

DRILLERS N. Dootoff Drilling

EXAMINED BY W. G. Weymark P. Eng.

ASSAYER DATE

(OVER)



HOLBERG MINES LTD

Sections of Drill Holes

F I G U R E 7

Dip of Hole	-55°	-60°	-65°	-55°	-35°
Direction	N95°E	N50°W	N95°E	N95°E	N95°E