

1865 PART 2

GEOLOGICAL REPORT

On

AAA MINERAL CLAIMS

PORT HARDY AREA

Nanaimo Mining Division
Vancouver Island, B. C.

Map Sheet 102-I-9

Longitude 128°5'W

Latitude 50°40'N

by

Wayne J. Roberts,
Geologist

and

Clyde L. Smith,
Director and Exploration Manager

SPARTAN EXPLORATIONS LTD.

February 15 -- March 21

LIST OF CLAIMS

<u>Claim Numbers</u>	<u>Grant Numbers</u>	<u>Date Received</u>
AAA 3-16	23091-23104	February 15, 1968
18	23107	February 15, 1968
21	23109	February 15, 1968
23	23111	February 15, 1968
25	23113	February 15, 1968
27	23115	February 15, 1968
29	23117	February 15, 1968
35-50	23123-23138	February 15, 1968

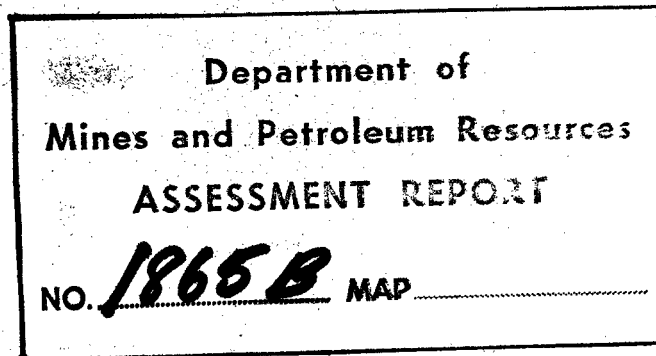
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ILLUSTRATIONS

Figure 1 -- Claim Group Location Map Pocket
Figure 2 -- Geology and Mineral Occurrences Pocket



INTRODUCTION

The AAA 1-50 claim group was staked in early February, 1968, to cover an area containing two mineral showings located by primary prospecting in a borad belt in the Quatsino-Holberg area of northern Vancouver Island. The showings are located in the area of the AAA #48 and #6 claims; consisting of small fracture systems in the volcanics filled with vein quartz containing minor amounts of bornite and malachite. The claim group lies in a very favourable position, underlain by the Karmutsen group of volcanics, and lying between the two highly potential areas helds by Quintana Minerals Corporation and Utah Construction and Mining Company.

LOCATION AND ACCESS

The AAA group is centered roughly at longitude 128°5'W and latitude 50°40'N, approximately 4 miles northwest of the town of Holberg in the northeastern corner of map sheet 102-I-9. The claim block is approximately centered on a northwest-southeast trending ridge drained on the north by the Stranby River and on the south by the Goodspeed River. The claim group is located on Branch 51; the northeast main road of the Holberg Logging Division of Rayonier Canada Limited.

Access is by logging roads connected to Branch 51, one of the main roads leading out of Holberg. The roads, belonging to Rayonier and British Columbia Forest Service, are restricted to evening and weekend use, but it is possible to obtain permits for wider use of the roads.

TABLE OF GEOLOGIC FORMATIONS

UPPER TRIASSIC

2. - calcite cemented arkose and lithic pebble conglomerate to fine grained argillaceous material

TRIASSIC - KARMUTSEN GROUP

1. - greenish to purplish amygdaloidal basalt.

GEOLOGY

The AAA group is underlain by northwest-southeast trending Triassic volcanics in contact with east-west trending Upper Triassic sediments along the northeastern boundary of the claim group, as shown on the accompanying geological map (figure 3). Thus, there appears to be two-fold division of the Mesozoic mapped in this area. Descriptions of the units from the oldest to the youngest are as follows:

Unit 1 was observed in all road cuts and pits within the claim boundary and consists mainly of greenish to purplish amygdaloidal basaltic rock which is generally fractured in all areas observed. It was mapped as the Triassic Karmutsen group. There does not appear to be any particular pattern to the many fractures and fillings consist mainly of calcite alteration associated with fracturing.

Unit 2 appears to overlie Unit 1 in the northeastern area and consists mainly of poorly sorted, calcite cemented sediments varying from arkosic sandstone to lithic pebble conglomerate. Along the southern portion of the claim block thin bedded fine grained argillaceous material exists. All sediments appear to be moderately fractured with fillings of calcite and with no major chemical alteration.

Some intrusive float was observed in a creek in the northwest corner of the claim block but no intrusive outcrop was located.

ECONOMIC GEOLOGY

Mineralization was observed in two localities as shown on the accompanying geological map (figure 3). Both mineral showings consisted of minor bornite and malachite disseminated in this quartz filled fracture in the Karmutsen volcanics and they are less than two inches wide. Since the quartz fracture fillings are very limited in occurrence and many are

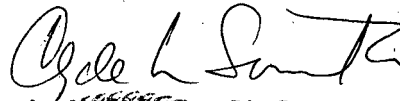
Economic Geology (Continued)....

barren, the presence of copper so far does not appear to be economically significant.

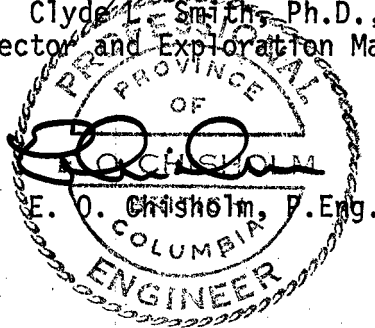
RECOMMENDATIONS

Although the mineral showings located so far do not appear to be of economic importance, the presence of copper mineralization in a favourable area of recent mining activity should be maintained for at least one more year. It is recommended that this area be more thoroughly accessed by geological, geophysical, and geochemical methods.

Respectfully submitted,



Clyde L. Smith, Ph.D.,
Director and Exploration Manager



APPENDIX ISUMMARY OF COSTS

	<u>Costs - \$</u>	<u>Sub Total</u>
1. <u>Property Examinations</u>		
Consulting Fees and Management	168.00	
Helicopter Support	120.00	
		<u>288.00</u>
2. <u>Prospecting</u>		
Wages, Salaries, Bonuses	1,227.00	
Supplies and Miscellaneous Equipment	22.50	
Travel and Accomodation	238.50	
Rental of Equipment	450.00	
Camp Support	137.00	
		<u>2,075.00</u>
3. <u>Geological Surveys/Mapping *</u>		
Wages, Salaries, Bonuses	175.00	
Supplies and Miscellaneous Equipment	6.00	
Travel and Accomodation	37.00	
		<u>218.00</u>
4. <u>Exploration Planning</u>		
Wages, Salaries, Bonuses	60.00	
		<u>60.00</u>
	GRAND TOTAL	<u>\$ 2,641.00</u>

* For itemized Geological Surveys and Mapping see Page 5(a)

Geological Surveys and Mapping (To accompany Section 3 of Summary of Costs)

Wages - \$175.00

<u>Name</u>	<u>Dates</u>	<u>Salary</u>	<u>Amount Paid</u>
I. Wilson	May 20-23	\$500.00 mo.	\$ 33.26
R. Woodsworth	May 25-26	\$17.30 hr.	\$ 36.59
L.L. Storey	May 25-26	\$25.96 hr.	\$ 54.95
A. MacKillop	May 27	\$600.00 mo.	\$ 25.00
D. Goodbrand	August 14	\$700.00 mo.	\$ 25.00
			<u>\$174.80</u>

Supplies and Miscellaneous Equipment - \$6.00

- purchase of aero maps and geological reports (Early Canada) from the Department of Energy Mines and Resources, for Port Hardy AAA mineral claims.

\$6.00

Travel and Accomodation - \$37.00.

- expenditures for vehicle transportation and accomodation purchased by R. Woodsworth at Port Hardy while doing geological work on AAA claims. An expense report with receipts has been submitted by Woodsworth as support of these charges.

\$37.00

A P P E N D I X I I

A F F I D A V I T

Supporting Summary of Costs

I, Clyde L. Smith, Director and Exploration Manager, Spartan Explorations Limited, of Vancouver, B. C., do hereby state that to the best of my knowledge and belief the statement of costs as presented in Appendix I of this report "Geological Report on the AAA Mineral Claim Group" is both true and correct.

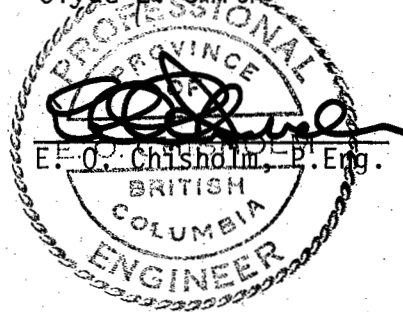
DATED AT Vancouver, British Columbia, this twenty-fourth day of February A. D. 1969.

SWORN BEFORE ME at Vancouver, British Columbia, this ~~24th~~ ²⁹ day of ~~February~~, A.D. 1969. *APRIL*

Jill Turner
A Commissioner for taking Affidavits in British Columbia.

SUB - MINING RECORDER

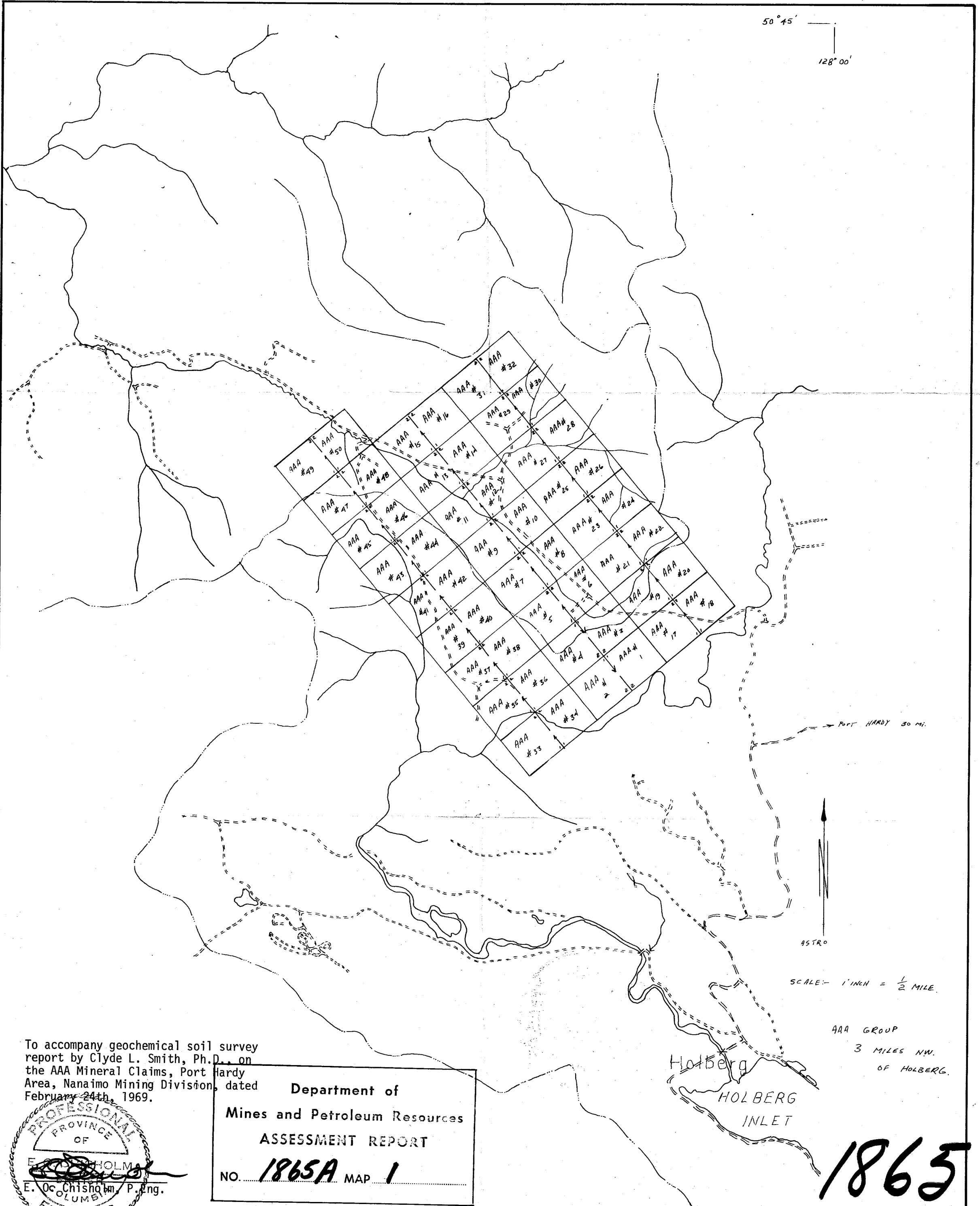
Clyde L. Smith
Clyde L. Smith



APPENDIX IIIPERSONNEL

<u>Name</u>	<u>Position</u>	<u>Address</u>
A. Racicot	Prospector	Richmond, B. C.
A. MacKillop	Prospector	North Vancouver, B. C.
L. Storey	Geologist	Port Hardy, B. C.

50° 45'
128° 00'



To accompany geochemical soil survey report by Clyde L. Smith, Ph.D., on the AAA Mineral Claims, Port Hardy Area, Nanaimo Mining Division, dated February 24th, 1969.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. **1865A** MAP 1

PROFESSIONAL
OF
E. O. CHISHOLM
E. O. Chisholm, P. Eng.
COLUMBIA

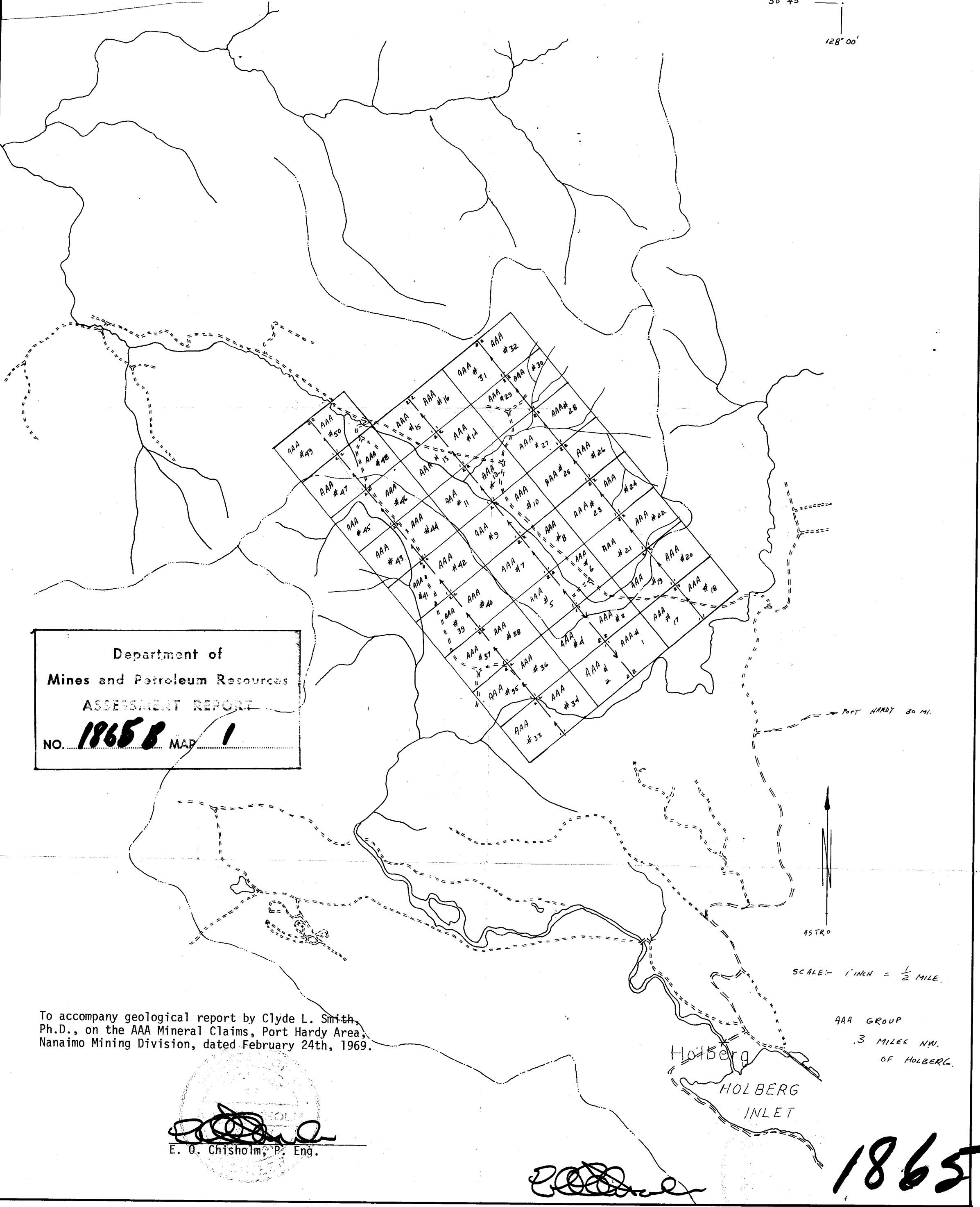
SCALE: 1" = 1/2 MILE

AAA GROUP
3 MILES NW.
OF HOLBERG.

Holberg
HOLBERG
INLET

1865

50° 45'
128° 00'



Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. **1865 B** MAP **1**

To accompany geological report by Clyde L. Smith,
 Ph.D., on the AAA Mineral Claims, Port Hardy Area,
 Nanaimo Mining Division, dated February 24th, 1969.

E. O. Chisholm
 E. O. Chisholm, P. Eng.

PORT HARDY 30 MI.

ASTRO


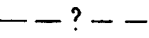
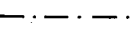
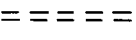

SCALE: 1" = 1/2 MILE

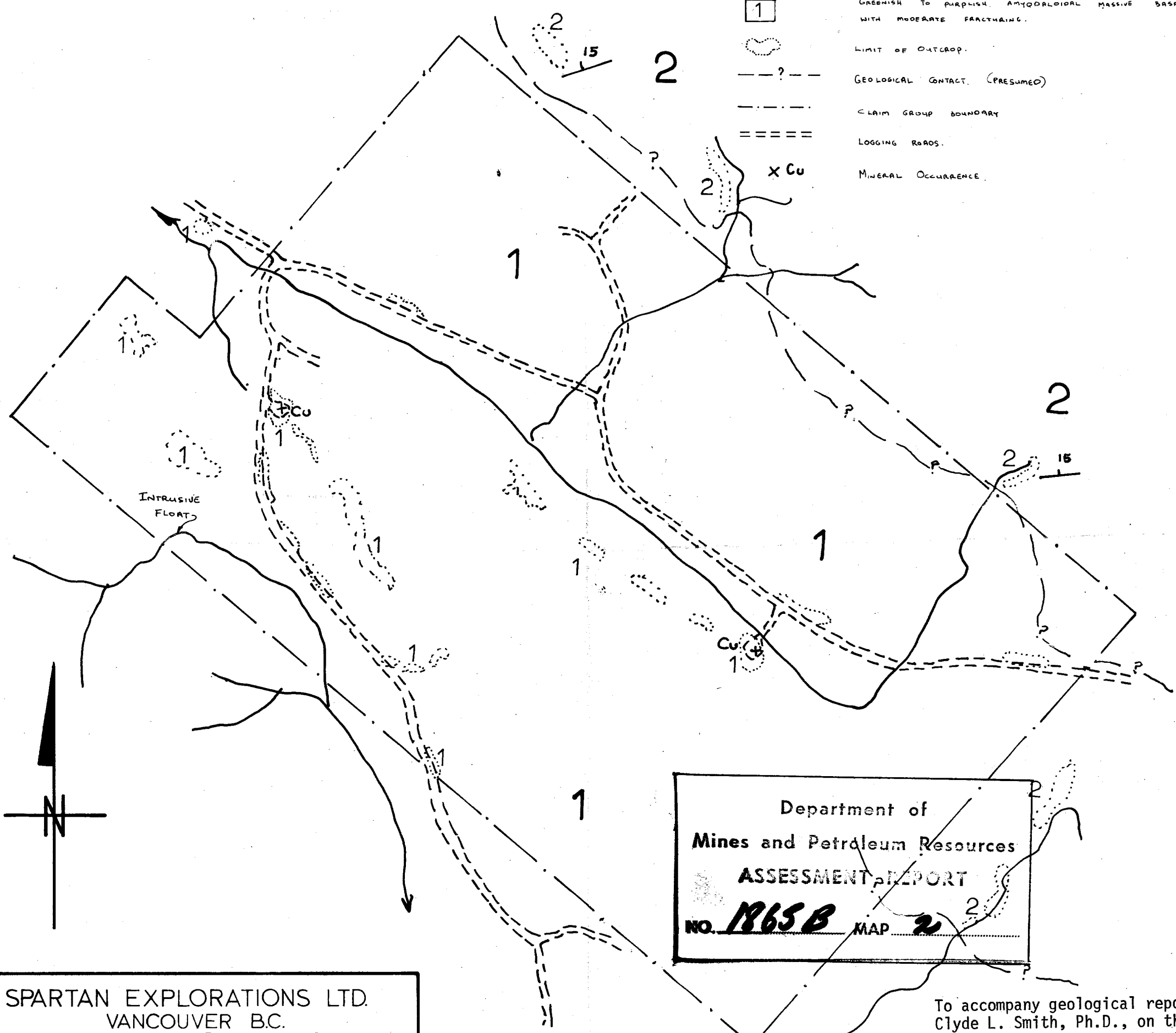
AAA GROUP
 .3 MILES NW.
 OF HOLBERG.

Holberg
 HOLBERG
 INLET

1865

LEGEND

- 2 POORLY SORTED, CALCITE CEMENTED ARKOSE AND LITHIC PEBBLE CONGLOMERATE TO FINE GRAINED ARGILLACEOUS MATERIAL.
- 1 GREENISH TO PURPLISH, AMYGDALOIDAL MASSIVE BASALT WITH MODERATE FRACTURING.
-  LIMIT OF OUTCROP.
-  GEOLOGICAL CONTACT (PRESUMED)
-  CLAIM GROUP BOUNDARY
-  LOGGING ROADS.
-  MINERAL OCCURRENCE.



Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 1865B MAP 2

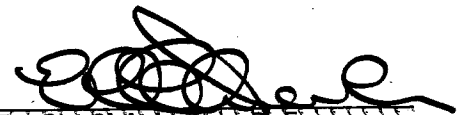
SPARTAN EXPLORATIONS LTD.
 VANCOUVER B.C.
 PORT HARDY PROJECT
 "AAA" CLAIM GROUP
 Geology and Mineral Occurrences Map

GEOLOGY : L.STORY. DRAWN BY : W.ROBERTS.
 DATE : FEBRUARY 17, 1969.

1500 0 1500 3000 4500
 Scale in feet

To accompany geological report by
 Clyde L. Smith, Ph.D., on the AAA
 mineral claims, Port Hardy Area,
 Nanaimo Mining Division, dated
 February 24th, 1969.

1865


 E. O. Chisholm, P. Eng.