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VANCOUVER 8, B.C.

1732

GEOCHEMICAL REPORT

GB #2 GROUP OF MINERAL CLAIMS

5 miles SSW of Port Hardy, Nanaimo M.D., B.C.

50° 127° NW

by

GAVIN A. DIROM, P. ENG.

for

TRO-BUTTLE EXPLORATION LTD. (NPL)

DATE OF REPORT January 4, 1969

DATE OF FIELD WORK May, 1968

TABLE OF CONTENTS

ATTACHMENTS

INTRODUCTION

The following report summarizes a geochemical soil survey completed on the GB #2 Group during May 1968. The purpose of this report is to submit the information obtained for assessment purposes.

The writer is Consulting Engineer for Tro-Buttle Exploration Ltd. (NPL). He was on this ground briefly in April 1968 prior to the soil survey. He also visited some other properties in the district on the same trip.

The survey was completed by Peter F. Bland, a full time prospector for Tro-Buttle Exploration Ltd., who was working under the direction of George A. Burdett, Exploration Manager. The field team was fully competent to conduct the survey.

The analyses (Cu & Zn) were all run by Chemex Labs Ltd., North Vancouver, B.C.

The writer feels that this survey fully qualifies for acceptance as bona fide assessment work. Affidavit Form B was filed on December 20, 1968 claiming a total credit of $ 2200 for this survey, - this to be applied @ $ 100 each on all 22 claims, viz. GB 15 to 30, 69 & 70, and 77 to 80.

GENERAL CONCLUSION

The survey failed to indicate a worthwhile exploration target.

PROPERTY & OWNERSHIP

The GB #2 Group consists of the following claims:

GB 15 to 30	Record Date	Dec. 22, 1967	Record Nos.		22186-22201
GB 69 & 70	"	" Jan 30, 1968	"	"	22836 & 837
GB 77 to 80	"	" Jan 30, 1968	"	"	22840-843.

All are recorded in the name of Tro-Buttle Exploration Ltd. (NPL), 118-815 West Hastings St., Vancouver 1, B.C. for whom they were staked and recorded by Geo A. Burdett as agent.

Some additional claims, viz. GB 88 to 90 Fractions and GB 91-to 94 and GB 95 Fraction, Record Nos. 25071-078, were recorded on June 4, 1968. No work is applied on these at this time.

LOCATION, ACCESS & TOPOGRAPHY

This group is located about 5 miles SSW of Port Hardy and extends up to 5 claim lengths west from the Port Hardy to Coal Harbour Highway. Access is from the latter and a branch road off the Quatse lake road to the south.

This group is bounded on the west by DD claims of North Island Mines Ltd.; and on the north by a block of Deb claims owned by Utah Construction & Mining Co. These adjoining properties are prior locations.

The additional claims recorded on June 4, 1968 adjoin the original GB #2 Group claims on the NW and north & south. See attached claim Map.

Elevations range from 200' to 900' in the surveyed area. The claims have been logged off and are covered by second growth.

GEOLOGY

Regional geology is briefly discussed by J.E. Muller in GSC Paper 67-1 Pt A, pp 81-83 which includes a geological sketch-map of the Quatsino-Port McNeill area.

According to Muller's sketch-map, the GB #2 Group is underlain by NW-trending, SW-dipping, Bonanza & Karmutsen group volcanics, with the contact cutting northwesterly through the property. An area of granitic intrusives is shown immediately south of the latter and extends into the NW corner of the property where it outcrops in creeks on GB 77 to 80 claims.

The Quatsino limestone horizon, if present, should lie between the Karmutsen and the Bonanza groups on this property but no Quatsino outcrops are known.

Magnetically the property is underlain by a relative low.

GEOCHEMICAL SURVEY

Field Work

The field work was performed during May 1968 by a crew of four men under the supervision of Geo A. Burdett, Exploration Manager. The field crew was headed by Peter F. Bland. Total of 64,200' of taped and flagged grid was put in. Line spacing was 800' and sample interval was 200'. 314 soil samples were taken.

Majority of samples were taken using an auger and consisted, wherever possible, of the "B" horizon. The samples were packaged in standard, high wet strength, kraft paper, soil sample bags.

The samples were shipped to Chemex Labs Ltd., North Vancouver, B.C. where they were dried, screened and analysed, - 87 for Cu & Zn, and 227 for Cu only, - on May 28 & June 6, 1968. Attached hereto, as Appendix #1, is a brief synopsis dated April 2, 1968 from Chemex Labs Ltd. covering their laboratory procedures.

Costs

The following figures are approximate but are reasonably correct:

Wages & Salaries - Field Personnel:		$ 980
	Geo A. Burdett	
	Peter F. Bland	
	Craig Forfar	
	Kelvin Phillips	
	Norman Headley	

Costs Cont'd

Accomodation & Board	300
Transportation	165
Geochemical Analyses	460
Consulting Engineer - Field trip & Report	315
	$2220

Results

The soil survey grid and Cu & Zn values are plotted on accompanying maps #2 & 3. The Concentration Frequencies are illustrated on Figures #1 & 2.

Copper: Only 3.5% of the samples exceed the threshold of 100 ppm, and highest value is only 195 ppm.

Zinc: Analyses for zinc were run only on the final batch of samples which were from three lines on the west and two lines on the east. Only 3 samples out of 65 exceed the threshold, which here seems to be 65 ppm. Highest value is only 100 ppm.

Conclusion: The soil sample results fails to indicate anything of exploration interest. However, zinc analyses should be run on all samples south of the base line as Bonanza and Quatsino beds probably cut across this area in a NW direction.

Respectfully submitted,

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA G.A. DUFOM

Gavin A. Dufom, P. Eng.

CHEMEX LABS LTD.

1416 CROWN STREET
NORTH VANCOUVER, B. C.
988-6955

Laboratory Processing and Analyses of Soil and Stream Sediment Samples

1. Samples are sorted, recorded and dried at 60°C.

2. Dried samples are sieved to -80 mesh fraction in nylon and stainless steel sieves.

3. 1 gram of -80 mesh fraction is weighed into test tube and digested with hot 70% perchloric and concentrated nitric acid.

4. Digested samples are diluted to 50 ml. volume with demineralized H_2O and mixed throughly. Solutions are settled until clear.

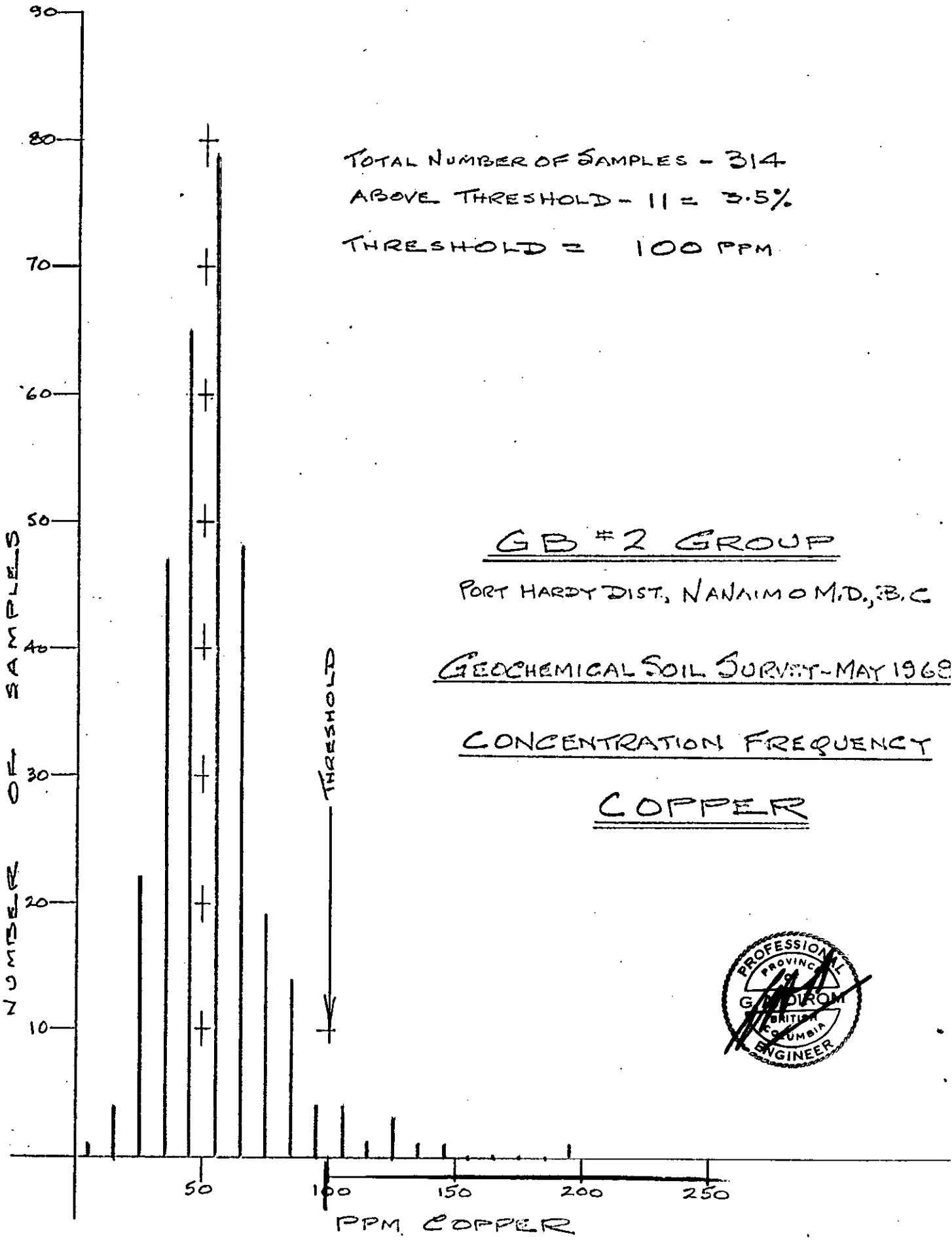
5. Copper and Zinc are analyzed in aqueous solution with Techtron A-A-3 Atomic Absorption Unit - Detection Limit in soils and stream sediments is 1 p.p.m.

6. Molybdenum is analyzed colorimetrically, with stannous chloride - ammoniom thiocyanate extraction and "Moly" complex is read on Bausch and Lomb Spectronic -20. Detection Limit - 1 p.p.m.

April 2, 1968

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA

Appendix #1
To accompany Report by
E. A. Dixon P.Eng.
January 9, 1969



TOTAL NUMBER OF SAMPLES - 314

ABOVE THRESHOLD - 11 = 3.5%

THRESHOLD = 100 PPM

GB #2 GROUP

PORT HARDY DIST., NANAIMO M.D., B.C.

GEOCHEMICAL SOIL SURVEY - MAY 1968

CONCENTRATION FREQUENCY

COPPER

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA G. GIROUX

TO ACCOMPANY REPORT BY G. GIROUX, P.ENG. JANUARY 4, 1969

FIGURE # 1

TOTAL NUMBER OF SAMPLES - 87
(RUN FOR ZN)

ABOVE THRESHOLD -- 3 = 3.5%

THRESHOLD = 65 PPM

(NOTE: ONLY 87 SAMPLES OUT OF TOTAL OF 314 WERE RUN FOR ZN; BUT ALL FOR CU)

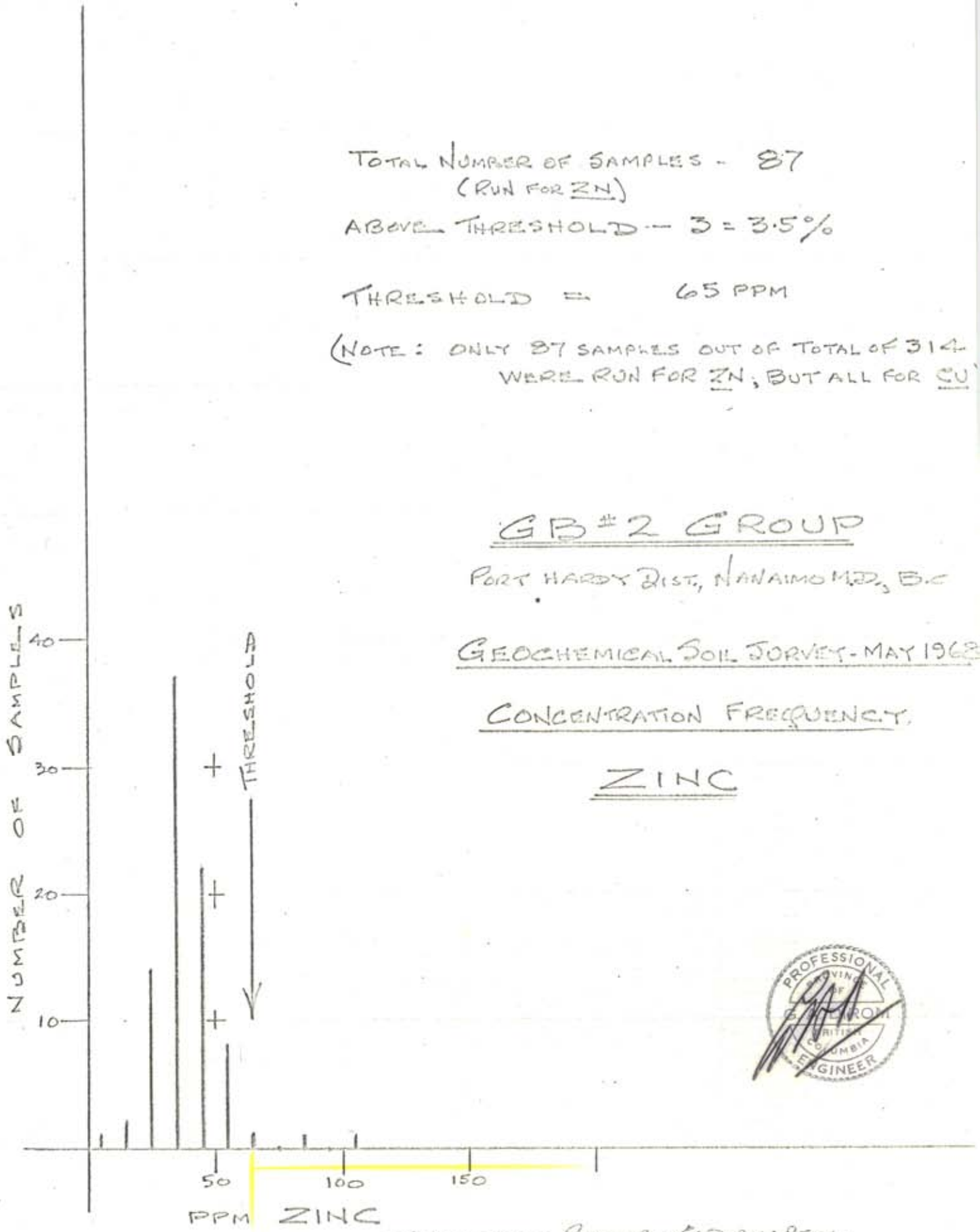
GB #2 GROUP

PORT HARDY DIST, NANAIMO M.D., B.C

GEOCHEMICAL SOIL SURVEY - MAY 1968

CONCENTRATION FREQUENCY.

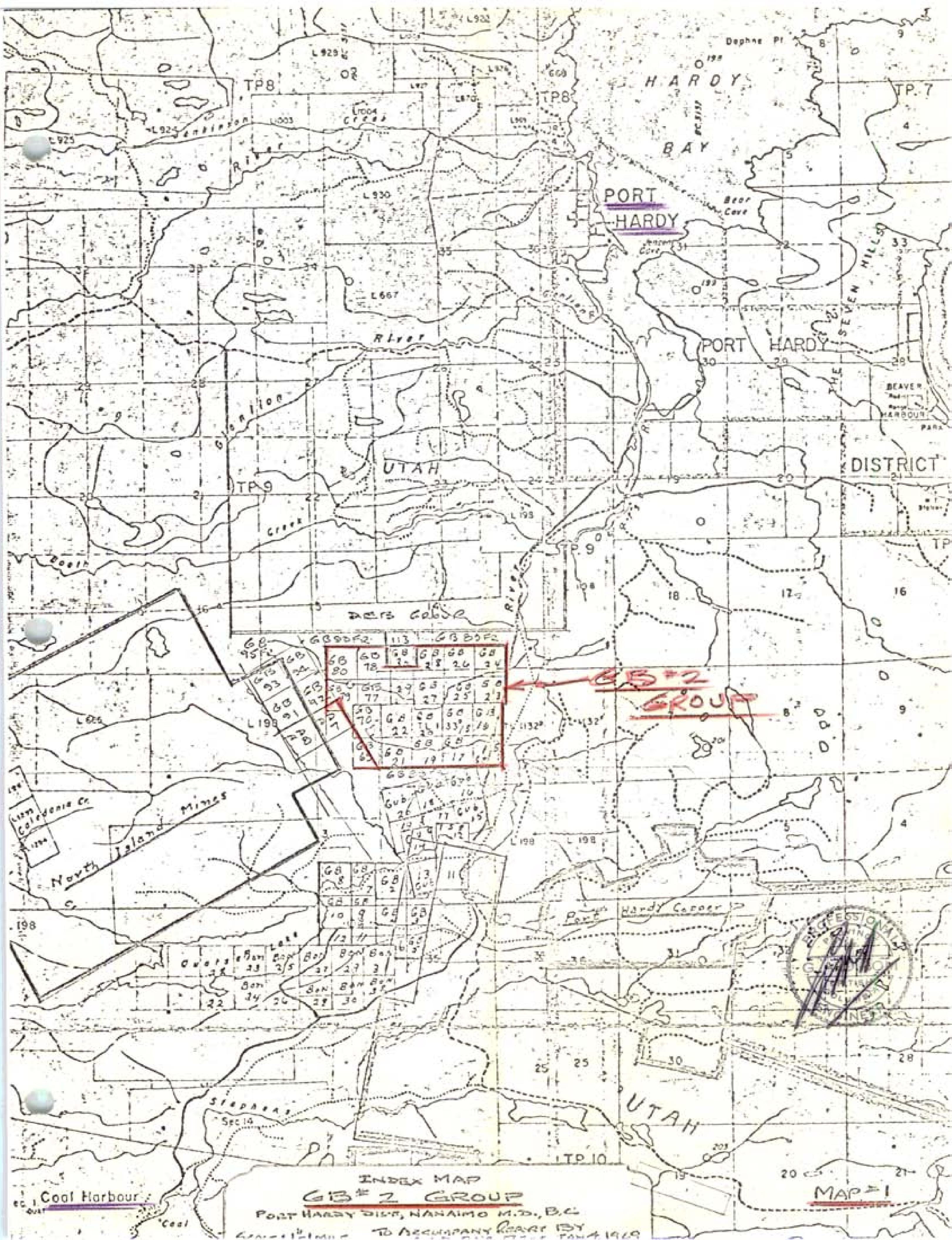
ZINC



PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA

TO ACCOMPANY REPORT BY GADIROM, P.ENG. JANUARY 4, 1969.

FIGURE #2


HARDY
BAY
PORT
HARDY
Bear Cove
TP8
TP.7
PORT HARDY
THE SEVEN HILLS
DISTRICT
UTAH
TP 9
River
Creek
GB#2
GROUP
North Island Mines
Caledonia Cr.
Port Hardy Career
UTAH
TP 10
Sec 14
Coal Harbour
Map #1
INDEX MAP
GB#2 GROUP
PORT HARDY DIST, NANAIMO M.D., B.C.
TO ACCOMPANY REPORT BY

Utah Construction

Deb 113

GB 80 | GB 78 | GB 30 | GB 28 | GB 26 | GB 24

GB 79 | GB 77 | GB 29 | GB 27 | GB 25 | GB 23

GB 70 | GB 22 | GB 20 | GB 18 | GB 16

GB 69 | GB 21 | GB 19 | GB 17 | GB 15

GB 88 Frc

GB 95 Frc

GB 90 Frc

GB 89 Frc

GB 94

GB 93

GB 92

GB 91

DD 7

DD 8

North Island Lumber Ltd

L 28W | L 24W | L 20W | L 16W | L 12W | L 8W | L 4W | L 0+00 | L 4E | L 8E | L 12E | L 16E | L 20E | L 24E

BASE LINE

5 MILES TO COAL HARBOUR

5 MILES TO PORT HARDY

QUATSE RIVER

COPPER :
THRESHOLD - 100 PPM
SAMPLES ABOVE THRESHOLD +

ZINC : (PARTIAL COVERAGE ONLY)
THRESHOLD - 65 PPM
SAMPLES ABOVE THRESHOLD ⊙

FIELD WORK - MAY 1968

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. A. DIROM

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. A. DIROM

1732

BUTTLE LAKE MINING CO LTD. (NPL).
&
TROJAN CONSOLIDATED MINES LTD. (NPL).

GB CLAIMS GROUP 2

PORT HARDY AREA NANAIMO M.D.

MAP No. NAT TOPO SHT 92L/12E SCALE 1" = 800'

LEGEND

- OLD RAILROAD
- CLAIM POST
- 234 CU / 50 ZN GEOCHEM

GEOLOGY
- BONANZA VOLCANICS
- QUATSINO "
- KARMUTSEN "
- INTRUSIVE

GEOCHEMICAL SOIL SURVEY

CU & ZN

CLAIM MAP

MAP #2

To Accompany Report By G.A. Dirom, P.Eng.
January 4, 1969

L 36W L 32W L 24W L 0+00 L 8E L 16E L 24E L 32E

GB 95 Frc

GB 94

GB 93

GB 92

GB 91

DD 7

DD 8

North Island Mines LTd

GB 80

GB 79

GB 78

GB 77

GB 70

GB 69

GB 30

GB 29

GB 28

GB 27

GB 26

GB 25

GB 24

GB 23

GB 22

GB 21

GB 20

GB 19

GB 18

GB 17

GB 15

GB 88 Frc

Utah Construction

Deb 113

1000'

900'

800'

700'

600'

500'

400'

300'

200'

Baseline

5 MILES TO PORT HARDY

5 MILES TO COAL HARBOUR

QUATSE RIVER

COPPER:
THRESHOLD - 100 PPM
SAMPLES ABOVE THRESHOLD +

ZINC: (PARTIAL COVERAGE ONLY)
THRESHOLD - 65 PPM.
SAMPLES ABOVE THRESHOLD ⊙

FIELD WORK - MAY 1968

1732

BUTTLE LAKE MINING CO. LTD. (NPL)
&
TROJAN CONSOLIDATED MINES LTD. (NPL)

G.B. CLAIMS GROUP 2.

PORT HARDY AREA. NANAIMO M.D.

MAP No. NAT. TOPO. SHT. 92 L/12 E SCALE 1" = 400'

LEGEND

+ + OLD RAILROAD
0 CLAIM POST
234 CU
50 ZN GEOCHEM.

GEOLOGY
▪ BONANZA VOLCANICS
▪ QUATSINO "
▪ KARMUTSEN "
INTRUSIVE

GEOCHEMICAL SOIL SURVEY

CU & ZN

MAP #3 GB

TO ACCOMPANY REPORT BY E.A. IRROM, P.ENG
JANUARY 4, 1969