

1582



GEOCHEMICAL SURVEY REPORT
ON THE
AERO-BETA GROUP, PORT HARDY AREA
NANAIMO MINING DIVISION
LAT 50°40', N, LONG 127°40' W
NTS 92 L/12 E

REPORT BY
I. R. CHISHOLM,
EXPLORATION GEOLOGIST,
COMINCO LTD.

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

GEOCHEMICAL SURVEY REPORT
ON THE
AERO-BETA GROUP, PORT HARDY AREA
NANAIHO MINING DIVISION
LAT 50°40' N, LONG 127°40' W
NTS 92 L/12 E

The Aero-Beta claim group is located two miles south of Kains Lake about eight miles southwest of Port Hardy, B.C. The following is a list of the claims comprising the group and indicates the amount of assessment credit requested on each claim:-

<u>Claim</u>	<u>Record No.</u>	<u>Anniversary Date</u>	<u>Credit Requested Per Claim</u>	<u>Total</u>
Beta 1, 2	17462, 63	August 26	1 year	2 yrs.
Beta 3Fr., 4Fr.	17464, 65	August 26	1 year	2 yrs.
Aero 1-6 inclusive	16562-67	July 8	1 year	6 yrs.
Aero X	19630	July 17	1 year	<u>1 yr.</u>
				11 yrs.

Work was carried out on the above claims during the period June 15 to July 6, 1968.

REPORT BY

I. R. CHISHOLM,

EXPLORATION GEOLOGIST,

COMINCO LTD.

UNDER THE SUPERVISION OF

J. RICHARDSON,

PROFESSIONAL ENGINEER

July 19, 1968
Vancouver, B.C.

C O M I N C O L T D.

EXPLORATION

WESTERN DISTRICT

GEOCHEMICAL SURVEY REPORT
ON THE
AERO-BETA GROUP, PORT HARDY AREA
NANAIMO MINING DIVISION
LAT 50°40' N, LONG 127°40' W
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July 19, 1968
Vancouver, B.C.

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

GEOCHEMICAL SURVEY REPORT
ON THE
AERO-BETA GROUP, PORT HARDY AREA
NANAIMO MINING DIVISION
LAT 50°40' N, LONG 127°40' W
MPS 92 L/12 E

SUMMARY

A total of \$1,355 was expended on a geochemical survey and geological evaluation of the Aero-Beta claim group. It is requested that \$1,100 of this amount be applied as assessment credits. An application for Certificate of Work is being filed with the Mining Recorder at Nanaimo, B.C.

The following is a list of claims in the Aero-Beta group and indicates the amount of assessment work requested for credit to each claim:-

<u>Claim</u>	<u>Record No.</u>	<u>Requested Assessment Credit</u>	<u>Total</u>
Beta 1, 2	17462, 63	1 year per claim	2 years
Beta 3, Fr., 4 Fr.	17464, 65	1 year per claim	2 years
Aero 1-6 inclusive	16562-67	1 year per claim	6 years
Aero X	19630	1 year per claim	<u>1 year</u>
			11 years

INTRODUCTION

During 1968 Cominco undertook the assessment of base metal potential on the Aero-Beta claims staked and held by Western Canada Steel.

A joint geological-geochemical survey was completed during the period June 15 to July 6, 1968 under the supervision of I. R. Chisholm, Cominco Exploration Geologist. Sample collection was carried out by G. G. Booth, Cominco Exploration Assistant, aided by Student Assistant F. P. O'Grady. Samples were analyzed at the Cominco geochemical laboratory in Vancouver.

Location and Access

The group, consisting of two full claims and nine fractions, is located in the Port Hardy Area of Vancouver Island, two miles south of Kains Lake on the headwaters of Wanokana Creek. The property adjoins Asbestos Corporation claims on the west and Utah Mining and Construction claims to the east.

Access to the group is by a 1½-mile flagged trail south from a logging road on a branch of Dickbooth Creek. This road joins the B.C. Forest access road from Port Hardy to Holberg at Kains Lake.

History

The ground was originally acquired by Western Canada Steel in 1963 and 1964. Subsequent work consisted of a Sharpe magnetometer survey carried out partly in 1964 and partly in 1965 by Dr. J.M. Black, consultant geologist for Western Canada Steel, and a reconnaissance ABEM minigun electromagnetic survey in 1967 also by Dr. Black.

GEOLOGY

Outcrop on the Aero-Beta group is scarce as the claims overlie a predominantly flat, swampy, muskeg-covered valley at the headwaters of Wanokana Creek. The only exposures occur along the bed of Wanokana Creek just north of the Aero fractions, and at 1400' north on line 0+00 east of the Beta grid. Poor outcrop exposure is also present along ridges to the north and along the branch of Dickbooth Creek flowing northerly towards Kains Lake.

Geology continued....

Generally, the claims appear to be underlain by a series of massive and amygdaloidal andesites. These are dark green to black, fine grained to aphanitic rocks with occasional amygdaloidal bands containing epidote, quartz and possibly some zeolite minerals in the amygdules. Easterly along Wanokana Creek outcrops consist of a medium to coarse grained diorite to gabbroic intrusive which locally demonstrates a slightly trachytic alignment of the feldspar lathes. Appreciable magnetite is present within this rock type, the contact of which is not exposed against the andesites to the west. Considerable pyrite is disseminated throughout these rocks in proximity to the gabbro. The general trend of the volcanics is west-northwesterly dipping 15 to 40° towards the southwest.

GEOCHEMISTRY

Control and Sampling Procedure

Location of the samples was controlled by a chain and compass survey along lines at 400' intervals extending from control base lines (claim location lines). Samples were collected at 100' intervals along these lines.

Soil development is variable due to the presence of deep layers of humic material around widely scattered swampy zones. The "B" horizon could be reached in most cases (85%) beneath the "A" horizon at depths varying from 4" to 2'. Samples were collected with a mattock from the Upper "B" horizon where possible, and humic soil samples were collected around the swamps.

The collected samples were analyzed for copper at the Cominco geochemical laboratory in Vancouver using atomic absorption techniques.

Based on the limited area covered by the survey, samples yielding 40 ppm or less copper were considered within the background range and values of better than 40 ppm were considered anomalous.

Readings, expressed in parts per million, are plotted on the accompanying 1"=400' plan but are not contoured since only minor, erratic anomalous values were obtained.

RESULTS

The few erratic, anomalous geochemical samples appear to correlate only with the interface between the well developed "B" soil horizon and the humic soils of the swampy areas.

The aeromagnetic anomaly originally leading to acquisition of the ground can reasonably be explained by the presence of the magnetite-bearing intrusive underlying part of the claim group.

ATTACHMENTS

1. Plan - Geochemical Survey - Aero-Beta Claim Group Scale 1"=400'.
2. Statement of Expenditures.
3. Statutory Declaration Relating to Expenditures.

Ian R. Chisholm

IRC:mk
 July 19, 1968
 Attachments (3)
Distribution:
 Mining Recorder (2)
 West. District (1)
 IRC - Writer (1)

Report By I. R. Chisholm

Endorsed By J. Richardson
J. Richardson, P.Eng.

EXHIBIT "A"

C O M I N C O L T D.

EXPLORATION

WESTERN DISTRICT

1968 EXPENDITURES
AERO-BETA CLAIM GROUP, PORT HARDY AREA
NANAIMO MINING DIVISION

SALARIES

- | | | | | |
|----|---|-------------------|--------------|--------|
| 1. | Exploration Geologist (I.R. Chisholm) | | | |
| | Geological examination and supervision | | | |
| | | 4 days @ \$50/day | \$ 200.00 | \$ |
| | Report preparation | 1 day @ \$50/day | <u>50.00</u> | 250.00 |
| | (During period June 15 to July 6, 1968) | | | |
| 2. | Exploration Assistant (G.G. Booth) and | | | |
| | Student Assistant (F.P. O'Grady) | | | |
| | for 7 days total @ \$40 and \$30/ man day | | | 490.00 |
| | (during period June 15 to July 6, 1968) | | | |

SAMPLES

419 geochemical copper analyses @ \$1.30/sample	545.00
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TRANSPORTATION

JEEP rental 7 days @ \$300/mo.	<u>70.00</u>
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TOTAL	\$ 1,355.00
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Signed

J. Richardson.
J. Richardson, P.Eng.

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.
To Wit:

In the Matter of

STATUTORY DECLARATION RELATING
TO EXPENDITURES ON A GEOCHEMICAL
SURVEY OF THE AERO-BETA GROUP OF
MINERAL CLAIMS, NANAIMO M.D.

I, JAMES RICHARDSON, Professional Engineer

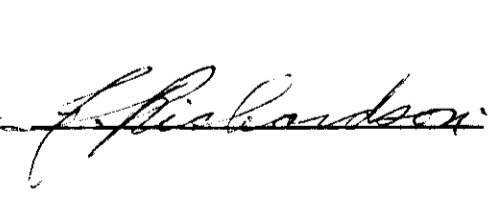
of the City of Vancouver

in the Province of British Columbia, do solemnly declare that

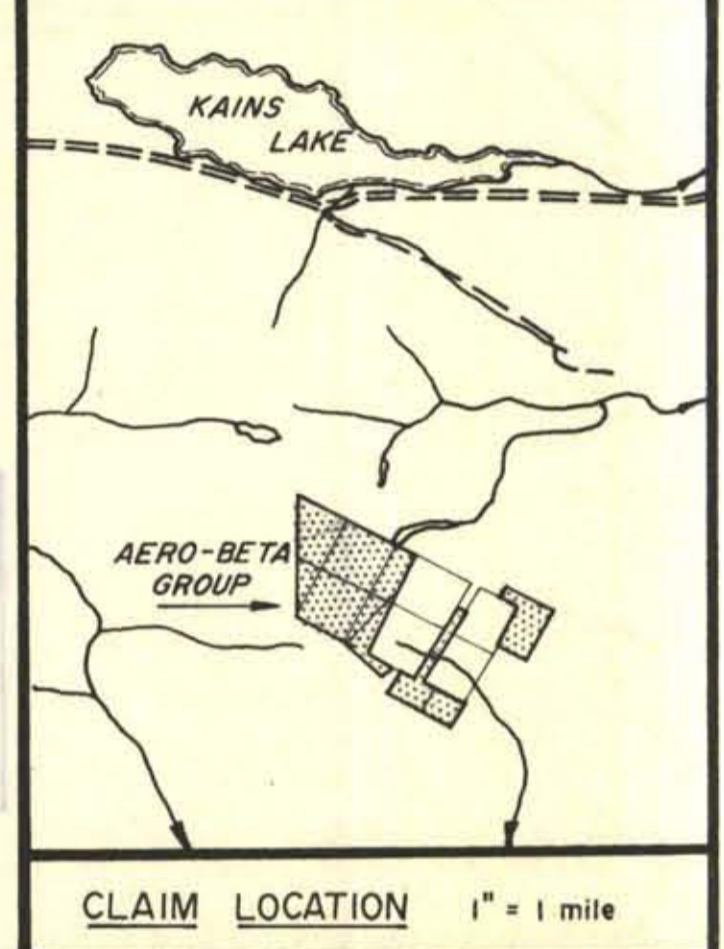
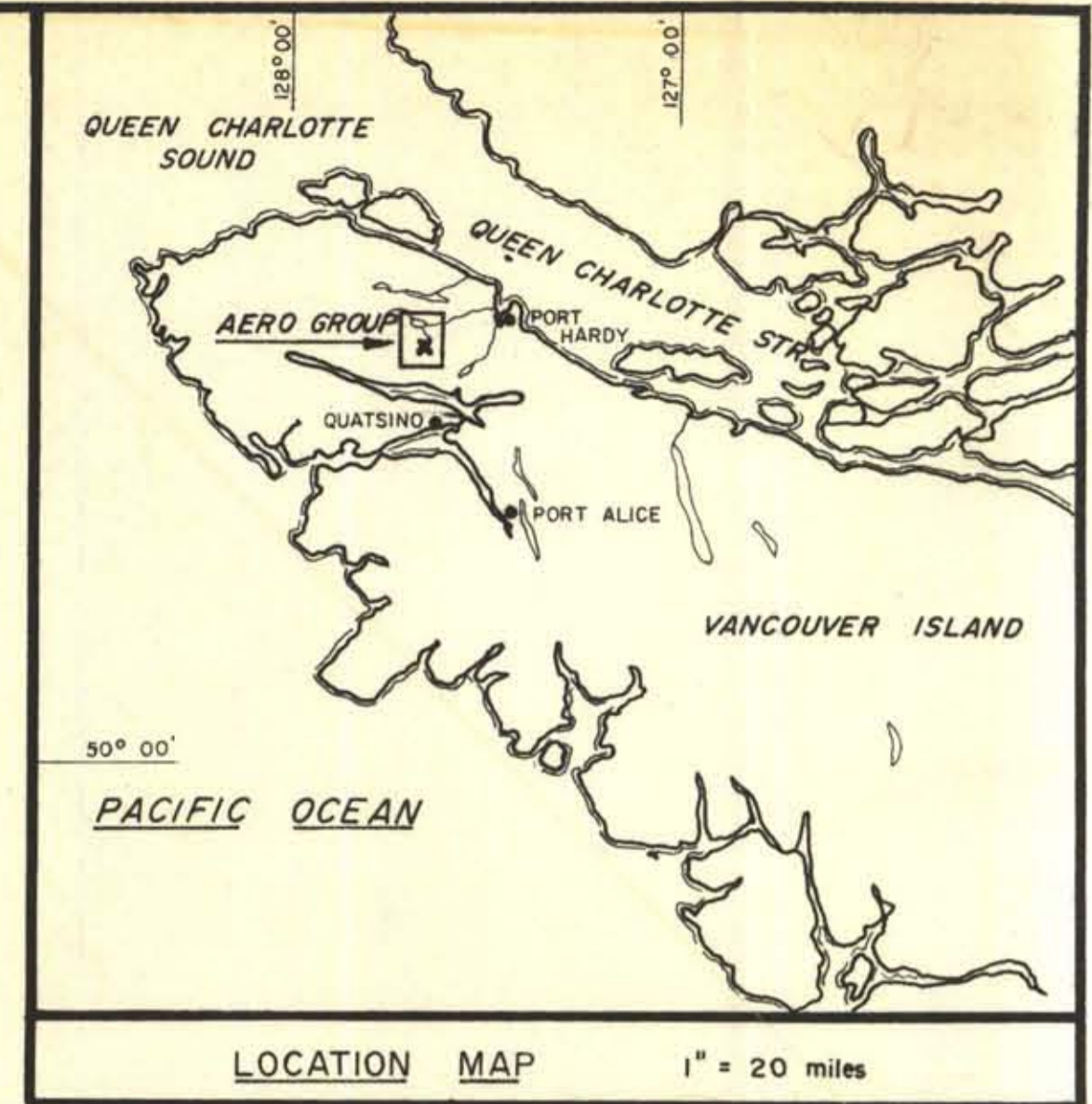
1. I do personally know I.R. Chisholm who prepared the accompanying geo-chemical report as a result of a survey carried out under my supervision on certain mineral claims owned by Western Canada Steel.
2. Copies of the said report are being filed with the Mining Recorder in Nanaimo.
3. Attached hereto and marked with the letter "A" upon which I have signed my name at the time of declaring hereof, is a statement of expenditures incurred in connection with the geochemical survey of the said claims showing in addition the dates during which those making the said survey performed their work.

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

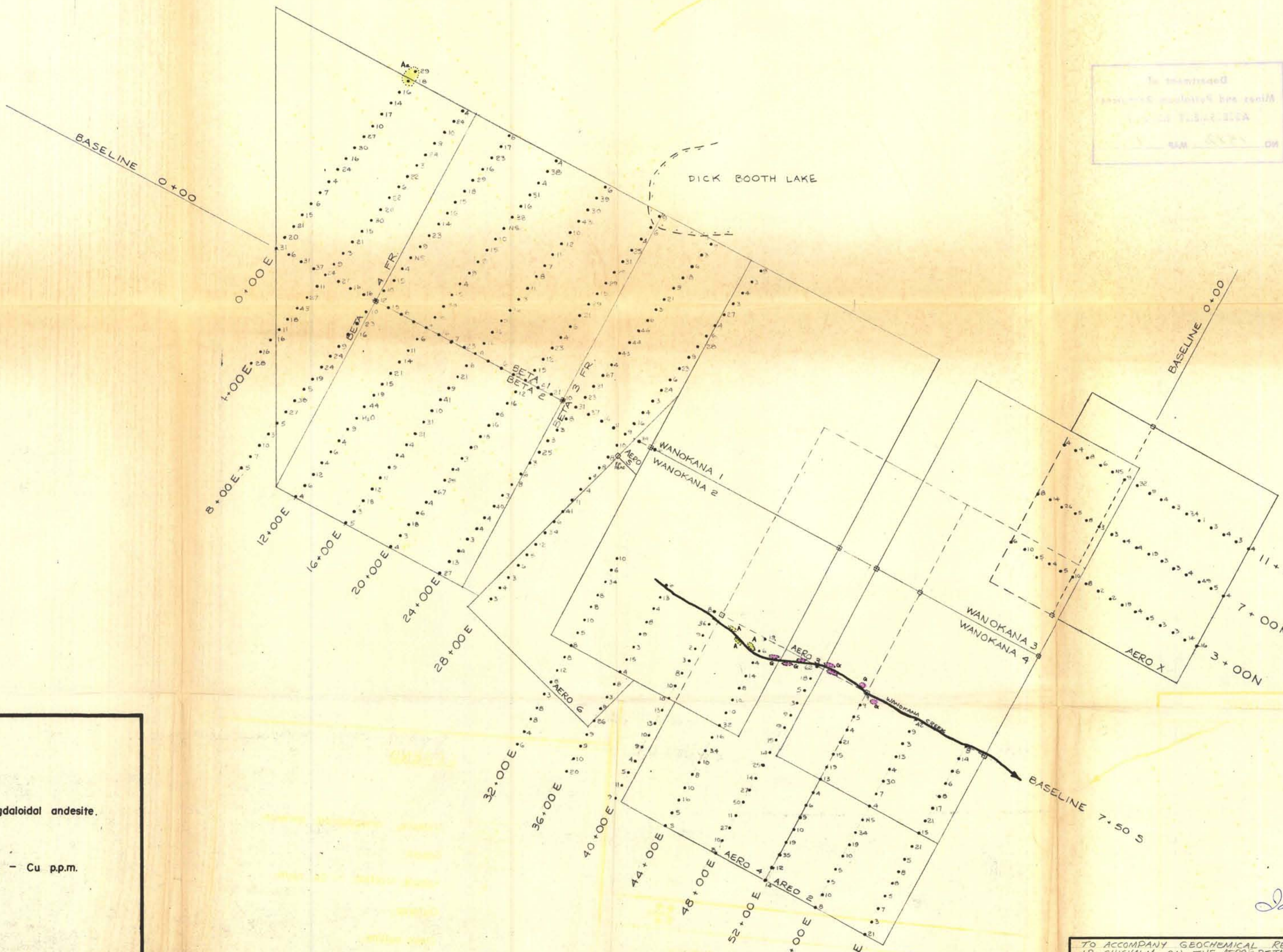
Declared before me at the City
of Vancouver, in the
Province of British Columbia, this 13th
day of July 1968, A.D.



L. L. Trickle
A Commissioner for taking Affidavits for British Columbia or
A Notary Public in and for the Province of British Columbia.
Sub-mining Recorder



To be returned
to the Department of
Mines and Technical Surveys
at the following address:
M.A.M. 5555 010



LEGEND

- A, Aa Andesite, amygdaloidal andesite.
- G Gabbro
- 1 Sample location - Cu p.p.m.
- Outcrop
- Claim outline

Jan R. Chisholm

1582

TO ACCOMPANY GEOCHEMICAL REPORT BY
J.R. CHISHOLM ON THE AERO-BETA CLAIM GROUP,
NANAIMO, B.C., DATED JULY 10, 1968.

Drawn by:		Traced by: G.K.T.	
Revised by:	Date:	Revised by:	Date:

GEOCHEMICAL SURVEY
AERO-BETA CLAIM GROUP

NTS 92 L 12

Scale: 1" = 400' Date: JULY 14, 1968 Plate: