

2379

REPORT COVERING
MAGNETOMETER & GEOCHEMICAL SURVEYS
ON THE
CV & PLUS CLAIM GROUPS,
ADAM RIVER AREA,
(50 degrees - 126 degrees S.E.)
NANAIMO MINING DIVISION

BY
A. D. WILMOT, P. ENG.

FOR
ARMEDA COPPER MINES LIMITED

TABLE OF CONTENTS

PART A	Summary of general information on the CV and Plus claim groups	
	Property	Page 1
	Location and access	1
	Topography	1
	Geology	1
	Mineralization	2
	Assessment work	2
PART B	Magnetometer Survey	
	Introduction, personnel employed, method and equipment	Page 3
	Results	Page 4
PART C	Geochemical Survey	
	Method and Equipment	Page 5
	Results	5
	Appendix I	
	Statement of costs	Page 6 & 7
	Appendix II	
	Qualifications	Page 8
#1	PLATE No. I - Reconnaissance magnetometer and geochemical survey - CV and Plus Claim groups. Scale 1" equals 800 ft. (<i>Rear Pocket</i>)	
#2	PLATE No. II - Detailed magnetometer and geochemical survey. Mineral Claims Plus 34 to 39. Scale 1" equals 200 ft. (<i>Rear Pocket</i>)	

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. **2379** MAP.....

Summary of General Information on the CV and
Plus Claim Groups.

I. PROPERTY:

The property consists of one hundred claims held by right of location, which are more particularly described as follows:

<u>Claim name</u>	<u>Record No.</u>	<u>Record Date</u>
CV 1 - 40	28619 - 28658	May 26, 1969
CV 41 - 60	28851 - 28870	June 17, 1969
Plus 1 - 40	28811 - 28850	June 17, 1969

II. LOCATION & ACCESS:

The claims are located on the south west side of the Adam River, some 12 miles ^{west} east of Kelsey Bay, from which point a pass may be obtained from McMillan and Bloedel Limited to travel over the 16 miles of logging road to the property.

III. TOPOGRAPHY:

The ground covered by the claims lies between the converging Adam and Eve Rivers, and ranges from 600 to 2,400 feet in elevation. It is all heavily forested, and at the lower elevations logging operations are presently in progress. In the area covered by this work, all claim lines and location posts have been removed.

IV. GEOLOGY:

The property is entirely underlain by the Kar-mutsen Formation, which locally consists of fine grained massive basalt and amygdaloidal basalt. Olivine and epidote are common constituents of these rocks and fine grained pyrite is also of frequent occurrence. A regional north west trending fault which forms the valley of the Adam River, lies between these rocks and the granitic rocks of the Island intrusives on the North East side of the Adam River.

V. MINERALIZATION:

Copper mineralization, consisting of chalcopryrite and bornite together with the oxidization products, malachite and azurite, has been discovered at points in the Karmutsen basalts over a distance of several miles along the south east side of the Adam River Valley. To date there has been no exploration of these showings, beyond a few surface trenches, however one property is now under option to Bethlehem Copper Corporation, and a comprehensive programme of exploration is planned for this summer. On the CV and Plus claims a little chalcopryrite was noted in road cuts on claims CV 59 and Plus 40.

VI. ASSESSMENT WORK:

As the two known showings on the property do not appear important, it was felt that a geochemical together with a magnetic survey of the property would be more rewarding than a programme of stripping and trenching in the vicinity of the showings. This latter course of work would also present problems because of the logging operations in the area.

MAGNETOMETER SURVEY
OF THE
CV AND PLUS MINERAL CLAIMS
NANAIMO MINING DIVISION

I. INTRODUCTION:

The following report covers a magnetometer survey conducted on the CV and Plus Mineral Claims, between February 7th and March 20th, 1970, for Armeda Copper Mines Limited, of 407-475 Howe Street, Vancouver, B. C.

The survey was supervised by the writer, who was assisted by the following personnel:

W. Boyes - prospector - Sayward, B.C.

D. Boyes - line cutter - Sayward, B. C.

R. Woolsey - prospector - Revelstoke, B. C.

Some of the line cutting on the CV claims was done between June 1st and June 15th, 1969 by W. Lewis of Vancouver and Bruce Thompson of Harlot Bay, Quadra Island, also under the supervision of the writer.

II. METHOD AND EQUIPMENT:

The reconnaissance survey, which covered some 90% of the property area was run on a 1,500 foot grid with readings taken at 500 foot intervals on the grid lines. In a selected area for a detailed survey, covering Mineral Claims Plus 34 to 39, readings were taken at 100 foot intervals on a 200 foot line spacing.

The equipment used was a Sharpe fluxgate magnetometer, Model MF - 1, with a range of 300,000 gammas.

III. RESULTS:

Magnetometer readings taken in the vicinity of the known mineralization, which is admittedly sparse, were not found to be anomalous, so it is probable that anomalous readings are more indicative of the rock type and structure than of mineralization.

A north west trending magnetic high and associated low, centred in the vicinity of Mineral Claims CV 7 and 8, could be a significant structure, and further soil testing in the area is recommended.

a. d. wilmot

A. D. WILMOT, P. Eng.

March 31, 1970.

GEOCHEMICAL SURVEY

This survey was run in conjunction with the magnetometer survey and by the same personnel.

I. METHOD AND EQUIPMENT:

Soil samples were taken at the same frequency and from the same points as the magnetometer readings on both the reconnaissance and detailed surveys.

Samples were taken with a soil auger at a depth of approximately 18 inches, which in the majority of cases penetrated the "B" horizon.

Samples were first tested by the Rubeanic method and those showing any indication of a positive reaction, which was found to occur at about 30 p.p.m. Cu, were sent to Coast Eldridge for assay. The background count was found to range between 10 and 20 p.p.m. Cu. Significant assays, those above 50 p.p.m. have been recorded on the accompanying maps.

II. RESULTS:

The anomalous readings occurring on the northern or upper boundary of M.C. Plus 37, should be checked by additional sampling on the up-hill side. As the area is precipitious it is possible that the anomalies are caused by ground water seepage and are thus considerably removed from the source of mineralization. Further close sampling should also be done in the vicinity of the anomaly in M.C. CV 8, which is superimposed on the magnetic anomaly, described in the report of that survey.

A. D. Wilmot

A. D. WILMOT, P. Eng.

March 31, 1970.

APPENDIX I

The following is a record of salaries, wages and expenses in connection with the Magnetometer and Geochemical survey on the CV and Plus Mineral Claims.

I. Line Cutting

Work performed by W. Lewis of St. Regis Hotel, Vancouver, B.C., and Bruce Thompson of Harriot Bay, Quadra Island, from June 1st to June 15th, 1969

W. Lewis - ½ month @ \$800.00 per month - \$	400.00
B. Thompson - ½ month @\$400.00 " "	200.00

Work performed by W. Boyes and D. Boyes, of Sayward, B.C., between Feb. 7 and Feb. 10, 1970

15,000 ft. of line @ \$14.00 per 1,000 ft	210.00
---	--------

II. Geochemical & Magnetometer Surveys

Supervised by A.D. Wilmot, P. Eng., and assisted by W. Boyes (prospector), R. Woolsey (prospector) and D. Boyes (labour)

W. Boyes - 14 days @ \$40.00 per day	560.00
D. Boyes - 12 days @ \$25.00 per day	300.00
D. Boyes - 5 days @ \$30.00 per day	150.00
R. Woolsey - 14 days @ \$35.00 per day	490.00

III. A. D. Wilmot, P. Eng. - Consulting fees, supervision and preparation of report 3,000.00

IV. Equipment Rental - Supplies & Assaying

i. Jeep Wagoneer from Spa Mines Ltd.	
39 days @ \$15.00 per day	585.00
(mileage from 39125 to 42614 = 3489 miles)	
ii. Magnetometer rental from Carl Stephenson,	
2052 Paulus Crescent, North Burnaby, B.C.	350.00
iii. Geochemical supplies	55.00
iv. Assaying 36 samples @ \$2.00	72.00
Total	<u>\$6,372.00</u>

APPENDIX I - (CONT'D)

V. Distribution

\$100.00 to be applied to each of the
63 claims listed on the enclosed applications to
group.

AFFIDAVIT

I declare the above statement to be true
and correct.

A. D. Wilmot

A. D. WILMOT, P. Eng.

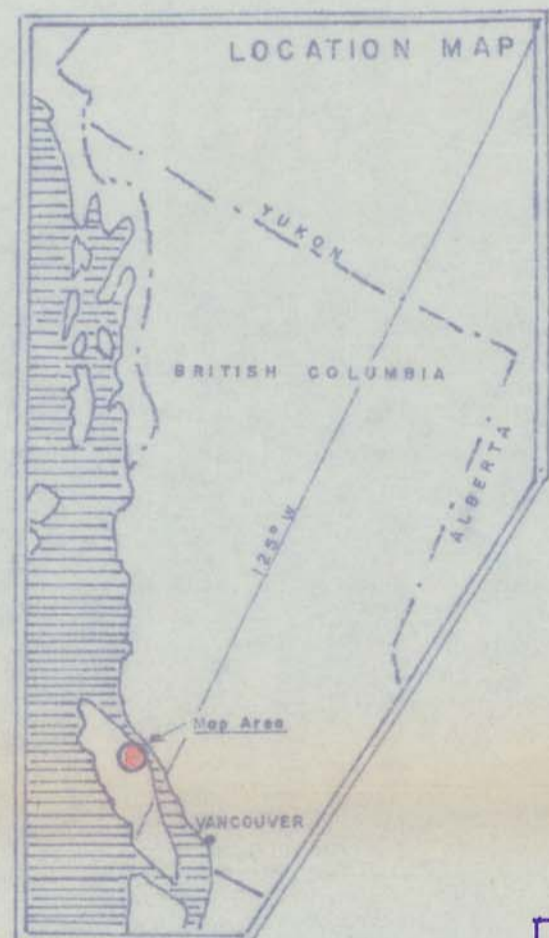
APPENDIX II

Statement of Qualifications

The following is an outline of qualifications as required by Order-in-Council #1491

- A. D. Wilmot - Member B.C. Professional Engineers (Mining);
Member C.I.M.M.
- W. Lewis - prospector
- R. Woolsey - prospector
- W. Boyes - prospector
- D. Boyes - Labour
- B. Thompson - labour

W. Lewis, R. Woolsey and W. Boyes have all been previously employed on magnetometer and geochemical surveys.



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. **2379** MAP #1

LEGEND

- Elevation Contours - interval 200 Ft.
- Road
- Copper Mineralization
- Fault
- Geochemical Sample Site (Background - Less Than 50 p.p.m. Cu.)
- Geochemical Sample Site (Anomalous - p.p.m. Indicated)
- Relative Value of Magnetic Field in Gammas
- Magnetic Contour Interval 500 Gammas
- Over 3000 Gammas
- 2501 to 3000 Gammas
- 2001 to 2500 Gammas
- 1501 to 2000 Gammas
- 1001 to 1500 Gammas
- 501 to 1000 Gammas
- 1 to 500 Gammas
- 500 to 0 Gammas

PLATE No. 1

ARMEDA COPPER MINES LIMITED
407-475 HOWE ST. VANCOUVER
RECONNAISSANCE
MAGNETOMETER & GEOCHEMICAL SURVEY
PLUS & CV CLAIM GROUPS - ADAM RIVER, V.I.

Scale: 1" = 800 Ft

To accompany geophysical & geochemical report by A. D. Wilmut P. Eng on the CV & PLUS groups, Adam River Area, Nahaimo, M.D. dated March 31, 1970

A. D. Wilmut
A. D. Wilmut P. Eng

March 1970

Located By - SAYWARD EXPLORATION LTD.

PLATE No. 2

2379

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. **2379** MAP **#2**

LEGEND

- Road
- Swamp
- Rock Bluff (Basalt)
- Elevation Contours — Interval 100 Ft.
- Geochemical Sample Site (Background — Less Than 50 p.p.m. Cu.)
- Geochemical Sample Site (Anomalous — p.p.m. Indicated)
- Relative Value of Magnetic Field in Gammas
- Contour Interval 300 Gammas
- Over 1600 Gammas
- 1301 to 1600 Gammas
- 1001 to 1300 Gammas
- 701 to 1000 Gammas
- 401 to 700 Gammas
- 101 to 400 Gammas
- 200 to 100 Gammas

2379

PLATE No. 2

ARMEDA COPPER MINES LIMITED
407-475 HOWE ST., VANCOUVER
DETAILED
MAGNETOMETER & GEOCHEMICAL SURVEY
MINERAL CLAIMS PLUS 34 TO 39 ADAM RIVER, V.I.
Scale: 1" = 200 Ft.
March 1970

To accompany geophysical & geochemical report by A.D. Wilmet P.Eng.
on the CV & PLUS groups, Adam River Area, Nanaimo, B.C. dated
March 31, 1970

A.D. Wilmet
A.D. Wilmet P.Eng.

March 1970