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VANCOUVER 1, B.C.

748

REPORT

on the

MAGNETOMETER SURVEY

of the

RUTH-ESTHER CLAIMS

RAMADA MINES LTD.

MERRITT, B.C.

March 23, 1966.

F.J. Hemsworth, P.Eng.,  
Consulting Mining Engineer

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

In the Matter of

Magnetometer Survey of the  
 Ruth 1-5 and Esther 1-30  
 Mineral Claims

I, **Fred J. Hensworth**  
 of **616-850 West Hastings St., VANCOUVER 1, B.C.**

in the Province of British Columbia, do solemnly declare that the following is a true statement of expenditures on the above magnetometer survey

Ronald P. McBean-Exploration Superintendent-Feb. 1-Mar.21/66	☉\$175.00/Week-----	\$1,225.00
Thomas Fenton-Operator-Feb. 20-Mar. 20/66	☉\$575.00/Month-----	575.00
Dale Duncan-Operator-Feb. 20-Mar. 20/66	☉\$475.00/Month-----	475.00
Burt Welsh-Assistant-Feb. 27-Mar. 20/66	☉\$150.00/Week-----	450.00
F.J. Hensworth-P.Eng.-Field Work-4 days	☉\$75.00/day-----	300.00
-Office Work-3 days	☉\$50.00/day-----	150.00
D.R. Foster-M.Sc.-Assistant-2 days	☉\$30.00/day-----	60.00
Rental paid to Redhawk Rentals Ltd. for 4-wheel drive vehicle necessary on property during breakup-2 weeks	-----	160.00
Rental on Magnetometer - Feb. 11-Mar. 21/66	☉\$110.00/Month---	170.00
Expendable items purchased for this job:		
1,000 cedar pickets-----	-----	\$42.00
Flagging tape, markers, chaining cord, first aid material-----	-----	72.00
		<u>114.00</u>
	<b>Total</b>	<b><u>\$3,679.00</u></b>

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 *24th*  
 day of *March*, 1966, A.D.

*F.J. Hensworth*

*[Signature]*  
 A Commissioner for taking Affidavits within British Columbia or  
 A Notary Public in and for the Province of British Columbia.  
Sub-mining Recorder

SUB-MINING RECORDER  
 RECEIVED  
 MAR 24 1966  
 M.R. #888910 \$175.00  
 VANCOUVER, B. C.

FRED J. HEMSWORTH  
MINING ENGINEER

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REPORT  
on the  
MAGNETOMETER SURVEY  
of the  
RUTH-ESTHER CLAIMS  
RAMADA MINES LTD.  
MERRITT, B.C.

INTRODUCTION

This report describes the field procedure and the results of a magnetometer survey completed on the Ruth-Esther group of 35 mineral claims near Merritt, B.C. The work was done in February and March, 1966, for Ramada Mines Ltd., 925 Georgia Street, Vancouver, B.C.

The following report and attached magnetometer map are submitted in compliance with the Mineral Act claiming geophysical work for assessment credit on the mineral claims outlined in the text.

The magnetometer survey is the first part of a planned exploration program of geophysical and geochemical surveys, aimed at finding bodies of copper mineralization.

LOCATION AND TOPOGRAPHY

The claims lie south of Nicola Lake and west of Quilchena Creek. The general geographic location is latitude 50°10' north, and longitude 120°30' west.

Access from Merritt is by the Merritt-Kamloops highway northeast for 12 miles, then by a gravel road southwest for 4 miles.

The claims are situated in the Interior Plateau of British Columbia. Elevations range from 2400 feet to 4500 feet above sea level. The southern and eastern sections of lower elevation are characterized by gentle upland areas of grazing land, changing to wooded, more rugged, mountain terrain at the higher elevations.

A mantle of glacial till covers most of the claims and rock outcrops are few and very limited in extent.

PROPERTY

A list of the claims which this survey covers is as follows:

<u>NAME</u>	<u>RECORD NOS.</u>
Ruth 1-5	23872-23876
Esther 1-30	23881-23910

The claims are bounded on the north by property of Quilchena Mining and Development Co. Ltd., on the west by the Rick group owned by Ramada Mines, and on the south by Indian Reserve No. 7. The claims are in the Nicola Mining Division; the record date is March 24th.

GEOLOGY

The Geological Survey of Canada Map 886A shows the claims to be underlain by Upper Triassic Nicola Series of greenstones and sediments. Adjacent to the west boundary is a granitic stock of Jurassic intrusions. The map depicts the stock to be of circular outline, about two miles in diameter. It is pie-shaped, with the northern quadrant cut out.

Limestones and limy tuffs of the Nicola Series, near the contact of granitic intrusives are considered favorable host rocks for copper deposits. These conditions are similar to the geology of the Craigmont Mine which is located about 15 miles to the northwest. The Craigmont orebody consisted of chalcopyrite-magnetite mineralization, and although completely covered by overburden, was indicated by a large magnetic anomaly, during a magnetometer survey in 1956.

#### MAGNETOMETER SURVEY

##### Survey of claims and geophysical grid

Three baselines, A, B, and C, were surveyed with Brunton compass and tape along true north bearings conforming closely with the claim location lines. All claim posts were tied in to the baselines. Some claims were found to be too long and fractions were staked to cover the open ground. East and west sidelines were run out at 400-foot intervals from the baselines to the claim boundaries. Stations were set at 200-foot intervals with lathe pickets on which red marker tape was tied.

##### Instrument and Readings

The Sharpe model A3 magnetometer is simple to operate and observations can be made without specialized training. It has a sensitivity of 100 gammas per degree and an accuracy to about 30 gammas.

On the upper levels of the claims, the snow was about three feet deep and snowshoes were required. This eliminated the possibility of using the more sensitive A2 instrument equipped with tripod.

With the A3 instrument held vertical, the operator turns until he is facing magnetic south toward the instrument, (with the dipping circle pointing magnetic north toward the operator). Then the vernier at the bottom of the handle is rotated until the dip needle reading indicated by the white index pointer is zeroed. The vernier setting is read and recorded in the notebook. If desired these vernier readings may be converted to vertical intensity in gammas by using the chart supplied with the instrument. The readings shown on the accompanying map are in degrees and hundredths and were not converted to gammas.

A reading was taken at the base station each day before leaving for the field and each day after field work was completed. The variation between the base reading on any particular day and the original base reading was the day to day correction. The day to day corrections were added to each field reading to arrive at the corrected magnetometer reading. No corrections were made for possible diurnal variations as these were not considered significant.

### Mapping

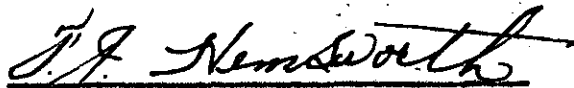
A map on a scale of 400 feet to one inch is contained in the pocket at the back of the report. It shows the position of the located claims and all the magnetometer readings. It was not possible to contour the readings and so they were circled in colour in order to emphasize the distribution and assist in a visual interpretation.

### Interpretation

A study of the map shows that more or less normal readings were obtained, and no anomalous conditions exist. The readings vary from a high of 23.36 to a low of 20.93 representing a difference of only a few hundred gammas. However, there is a concentration of higher readings on the northwest section of the claims, on Esther 6, 8, 14 and adjoining ground. Due to the snow cover it was not possible to examine the geology of this area. The writer believes that a small stock of granitic rock will be found to underlie this section at a shallow depth. This small intrusive is probably an offshoot of the larger granitic mass which lies to the west on the Rick claims. If this hypothesis proves correct, a preliminary program of stripping and trenching is recommended. The contact zones between the Nicola sediments and the granitic intrusives are generally highly altered and fractured and represent likely areas for deposition of copper minerals.

Respectfully submitted,

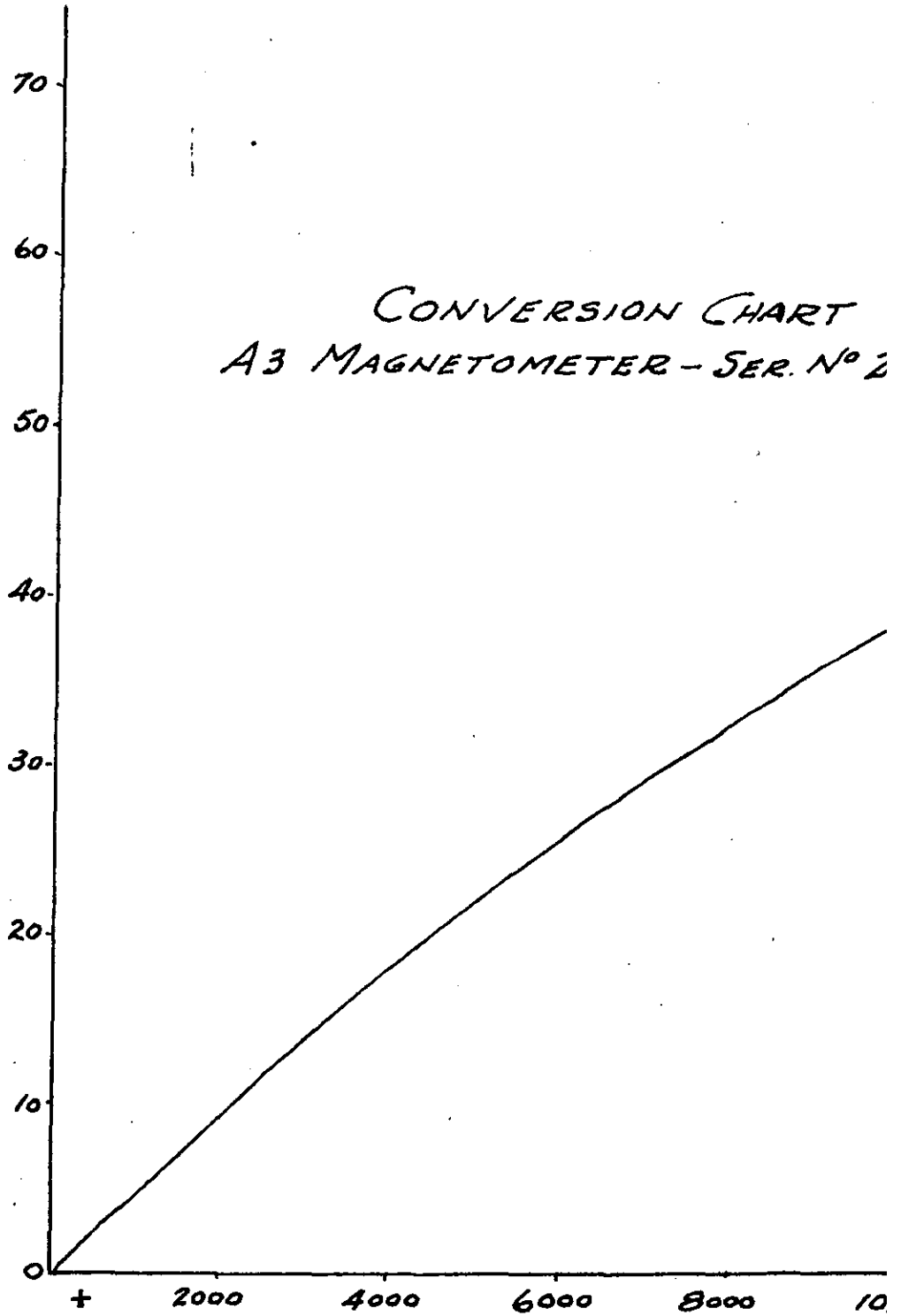
March 23, 1966.

  
F.J. Hensworth, P.Eng.,  
Consulting Mining Engineer.

Appendix

A3 INSTRUMENT DRUM SCALE

CONVERSION CHART  
A3 MAGNETOMETER - SER. N° 2



MAGNETIC READING IN GAMMAS



Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 748 MAP #1

COLOUR LEGEND  
LESS THAN 21.50  
21.50 - 22.00  
MORE THAN 22.00

TO ACCOMPANY REPORT  
BY E.J. HEMSWORTH, P.E.G.  
J.F. Hemsworth

INDIAN RESERVE No 7

MAGNETOMETER SURVEY

RUTH 1-5 & ESTHER 1-30 CLAIMS.  
MERRITT, B.C.

Scale 1 in = 400 ft. March, 1966

RAMADA MINES LTD.

POND  
748

