REPORT COVERING

MAGNETOMETER AND GEOCHEMICAL SURVEYS

ON THE

FRM (26-45) MINERAL CLAIMS

COQUIHALLA, B.C.

SIMILKAMEEN MINING DIVISION

49 Degrees - 120 Degrees N.W.

 $\mathbf{B}\mathbf{Y}$ 

A. D. WILMOT, P. ENG. (DRAFTING BY E.W. JOHNSON, B.Sc.)

FOR

FORT RELIANCE MINERALS LIMITED

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Map			
	Magnetic contour plan and Geochem	ical	
•	data combined.		
	Scale 1" equals 200'.		

Department of

Mines and Petroleum Resources

ASSESSMENT REPORT

NO. 575 MAP

#### MAGNETOMETER SURVEY

#### OF THE

# FRM (26-45) MINERAL CLAIMS SIMILKAMEEN MINING DIVISION

#### I. Introduction:

The following report covers a magnetometer survey which was carried out between October 1st and October 15th inclusive on the FRM (26-45) Mineral Claims, Coquihalla, B.C.

The survey was conducted under the supervision of A.D. Wilmot, P. Eng., by E.W. Johnson, B.Sc., W.D. Munro, prospector, Ivan Staussgaard, prospector, and G.W. Stewart, assistant.

### II. Method and Equipment:

The grid was run from a previously prepared base line (bearing 136 degrees True) and consisted of East-West cross lines run with compass and chain. Readings were taken every 100 feet on the cross lines, with soil samples being taken every 300 feet. Two magnetometers were used, the one over FRM (26-41) claims, being the Sharpes fluxgate type, Model PMF-3 with a range of 300,000 gammas. The other was the Arvella, which has a range of 60,000 gammas, and which was used on the claims FRM (42-45).

Magnetic ties were made twice daily on a base station with both instruments as a check on diurnal variation.

#### III. Results:

On the 16 claims covered with the PMF-3 magnetometer, four areas of strong readings were located. These
lie in the north corner of FRM 28, in the east corner of
FRM 30, in the south corner of FRM 32 and in the north corner of FRM 39 respectively. Several smaller zones of strong
readings were also located, the most important being the one
in the south corner of FRM 41 and the north corner of FRM 36.

All the zones are very irregular in shape but do tend to line up along a north trending line. It is interesting to note that three of the zones are located along a NW - SE line which would join the main workings with another shaft and adit located in the vicinity at line 7,200S - 800W.

The survey done with the Arvella magnetometer upon the four claims FRM 42, 43, 44 and 45 showed no zones of highly anomalous readings. The highest readings were in a small zone in the centre of FRM 45 and approximately 700 feet SE of a group of small high zones located on FRM 41 with the PMF-3 magnetometer.

A fairly large zone of slightly above average readings was located on FRM 44 adjoining and SE of a similar zone on FRM 40. The afore mentioned shaft is situated on the NW edge of this zone. Minor copper mineralization was noted in the dump from this shaft.

IV. Conclusions and Recommendations:

The geophysical work done during this summer has brought to light a number of areas in which more work could well be done. Certainly there seems to be some connection between rock types favourable to mineralization (as shown by the rock type in the main workings) and magnetometer results. More information is needed however before any conclusions can be drawn.

a.w.w.ilmot

A.D. WILMOT

P. Eng.

Kelowna, B. C. October 26, 1964.

GEOCHEMICAL REPORT
ON THE
FRM (26-45) MINERAL CLAIMS

SIMILKAMEEN MINING DIVISION

49 DEGREES - 120 DEGREES N.W.

BY
A. D. WILMOT, P. ENG.
(DRAFTING BY E. W. JOHNSON, B.Sc.)

FOR

FORT RELIANCE MINERALS LIMITED

#### GEOCHEMICAL SURVEY

#### I. General:

Between October 1st and October 15th in conjunction with a magnetometer survey, soil sampling was done on the FRM (26-45) mineral claims. This survey was also done under the supervision of A.D. Wilmot, P.Eng., by E.W. Johnson, B.Sc., W.D. Munro, prospector, Iwan Staussgaard, prospector, and G.W. Stewart, assistant.

### II. Method and Equipment:

Samples were taken every 300 feet along the East-West lines of the magnetometer grid. The samples were obtained by means of augurs which helped to ensure that each sample was taken at the same silt horizon.

The samples were tested by using the Rubeanic Acid method and the results plotted on the accompanying map.

#### III. Results:

Weakly anomalous results were obtained on lines 2800S, 6600S and 7200S at the stations shown on the map.

It was found that the stronger results on lines 6600S (to the west) and 7200S (to the east and west) coincide approximately with areas of higher than average magnetometer readings. Also present on line 7200S is an old shaft, samples from the dump of which show minor chalcopyrite. The soil testing done thus far, while not conclusive, could prove more valuable as further work adds more information to that known about the property.

a.w. Wilms

Kelowna, B. C. P. Eng October 26, 1964.

#### APPENDIX I

The following is a record of salaries, wages and expenses in connection with the Geochemical and Magnetometer surveys on the FRM (26-45) mineral claims.

### 1. Base Line Cutting.

Work performed by I. Staussgaard of 1160 21st Ave., Haney, B.C., and by G.W. Stewart of P.O. Box 694, Merritt, B.G., from September 30th to October 6th, 1964.

I.Staussgaard - 13 days @ \$15.00 per day \$ 195.00 G.W. Stewart - 13 days @ \$15.00 per day 195.00

### 2. Geochemical and Geophysical Surveys.

Conducted by E.W. Johnson, R.R.#3, Kelowna, B.C., W.D. Munro, Box 630, Salmon Arm, B.C., I. Staussgaard, Haney, B.C., G.W. Stewart, Merritt, B.C., Between October 1st and October 15th, 1964.

E.W. Johnson - 15 days @ \$35.00 per day \$ 525.00 W.D. Munro - 15 days @ \$15.00 per day 225.00 I. Staussgaard - 3 days @ \$15.00 per day 45.00 G.W. Stewart - 3 days @ \$15.00 per day 45.00

# 3. General Supervision

By A.D. Wilmot, Hobson Road, R.R.#4, Kelowna, B.C., during September 22, 23, 24, 28, 29 and October 2nd to October 15th, 1964.

A.D. Wilmot - 35 19 days @ \$35.00 per day \$ 665.00

# 4. <u>Drafting</u>

By E.W. Johnson, R.R.#3, Kelowna, B.C.

11 days @ \$25.00 per day

275.00

# 5. Consulting

J.A. Harquail, 3100-25 King St. West,

Toronto, Ontario

2 days @ \$100.00 per day

200.00

Total Costs applicable for assessment work

\$2,370.00

## 6. <u>Distribution</u>

\$100.00 to be applied on each of the following twenty claims - FRM 26 - 45 Mineral claims, with Record Numbers 493853 - 493872, dated October 29th, 1963.

### AFFIDAVIT

I declare the above statement to be true and correct.

A. D. WILMOT.

a.w. Wiland

### APPENDIX II

### Statement of Qualifications

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

E.W. Johnson - B.Sc. - General Science (Major in Geology).

W.D. Munro - Prospector.

I. Staussgaard - Prospector

G.W.Stewart - Assistant

E.W. Johnson, W.D. Munro, and I. Staussgaard have all been previously employed on both geophysical and geochemical surveys.

