

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3563 MAP _____

GEOPHYSICAL REPORT
BAT 1 - 20 MINERAL CLAIMS
49° 01.5' N. 118° 39' W.
Approximately 5 air miles SSE of
Greenwood, B.C. 82E/2E
for
Alwin Mining Company Ltd. (N. P. L.)
by
W.S. Read, B.Sc., P. Eng.
Between October 2 and February 16, 1972

3563

WAYLAND S. READ, B.SC., P.ENG.

AREA CODE 604—TELEPHONE 922-1347

Consulting Geologist

880 YOUNETTE DRIVE, WEST VANCOUVER, B.C., CANADA

February 16, 1972

The Board of Directors,
Alwin Mining Company Ltd. (N. P. L.),
Ste. 807 - 409 Granville Street,
Vancouver 2, B.C.

Gentlemen:

At your request I have started preliminary work in locating the claims to existing lines, topographical features and mine workings.

Existing baselines and crosslines on the claim group were covered with a magnetometer survey at a scale of 1 inch = 300 feet. The map has been laid out to receive a buildup of data as more work is done on the claims.

The report with the map and conclusions is herewith attached.

Yours very truly,



Wayland S. Read, P. Eng.

wsr/e
att.

REPORT ON
MAGNETOMETER SURVEY

ON

BAT CLAIMS GROUP
49° 01.5' N 118° 39' W
Approximately 5 air miles SSE of
Greenwood, B. C.

BAT 1 - 20 MINERAL CLAIMS

of

ALWIN MINING COMPANY LTD. (N. P. L.)

in the

GREENWOOD MINING DIVISION

province of

British Columbia

Canada

by

W. S. Read, B.Sc., P. Eng.
860 Younette Drive,
West Vancouver, B. C.

February 16, 1972

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MAP 1 - Magnetometer Survey (with Index Map)

Scale 1 inch = 300 feet.

LOCATION AND ACCESSIBILITY

The Bat claims group of Alwin Mining Company Ltd. (N. P. L.) is situated at $49^{\circ} 01.5'$ north latitude and $118^{\circ} 39'$ west longitude about 5 airmiles south southeast from Greenwood, B. C. The claims are in quite hilly, forest covered country varying in elevation from 3,700 feet to 5,200 feet above sea level and is crossed by Gidon Creek and the Gidon Creek road.

The property is reached from Greenwood by B. C. Highway 3 south to Boundary Falls, then southeastward 2.8 miles to junction of Gidon Creek road. It is an additional 1.6 miles southeastward to where the No. 2 baseline crosses the road near the western edge of the claims group.

During the period of the survey, accommedation was found in Greenwood with daily commuting to the property.

The lines in some cases were difficult to follow due to deteriorated flagging and fallen pickets. These were in places reflagged and pickets reset. Extra care had to be exercised during the magnetometer survey due to the large number of iron I. P. rods in the ground at many stations.

CLAIMS HELD BY COMPANY

The Company reports that they hold the following 20 mineral claims:

<u>Claim Name and Number</u>	<u>Record Number</u>	<u>Anniversary Date</u>
BAT 1, 2	22195 - 6	November 4
BAT 3 - 14	23770- 81	May 16
BAT 15 - 20	23938- 43	June 1

These claims are in an area of Crown Granted mineral claims and other claims held by location. Additional work is necessary to fully determine claim boundaries.

GEOLOGY

The geology of the area of the claims and surrounding country is described on G. S. C. map No. 828 "Boundary Creek Mining District" by R. W. Brock, 1905. This district has been an active mining area since about 1890. Many copper occurrences are known, some of which have been mined.

The G. S. C. map shows the predominant rocks underlying the property and adjoining ground as argillite, altered argillite, granodiorite, porphyrite (not differentiated) and serpentine. Some production has been recorded from the adjoining Mabel workings. (Minister of Mines 1937 D 22, 23).

The writer observed outcroppings of several of the rock types mentioned above during the course of the magnetometer survey.

MAGNETOMETER SURVEY

Type of Magnetometer

A Sharpe fluxgate magnetometer Model MF-1, serial number 803331, was used for this survey. This is a hand-held instrument requiring only coarse levelling and is not significantly affected by orientation.

The magnetometer measures the vertical component of the earth's magnetic field to 5 gammas on the lowest scale range.

The full scale ranges vary progressively from a minimum of plus or minus 1,000 gammas to a maximum of plus or minus 100,000 gammas. The values can be read directly from the scale.

Temperature compensations have been built into the instrument and the only necessary correction to the readings is for the diurnal variation. The variation in each survey loop is assumed to be linear and is determined by subtracting the initial and final readings at any control point. The correction added to each reading in the loop is the product of the total diurnal variation of the loop and the ratio of time elapsed up to the time of reading, over the total time elapsed for the loop.

Field Procedure:

The instrument was set or zeroed for the area, and station 143 + 00 N on number 2 baseline was given a value of 1200 gammas.

The two baselines were surveyed and a loop was made to correlate the number 1 baseline with number 2 baseline. Corrections in the readings were made for diurnal variation, and the stations at the junction of the crosslines with the baselines were used as control points for each survey loop.

Readings were taken every 100 feet on 2.69 miles of number 1 baseline and .44 miles on number 2 base, a total of 3.13 baseline miles, and 19,000 feet or 3.60 miles of crosslines at 50 foot intervals, with some sections detailed at 25 foot centers. Pacing was used to locate chainage points, fallen or with deteriorated markings, and the intermediate points between the pickets. Diurnal variation was low and corrections were treated linearly in respect to elapsed time. Iron I. P. rods remained in the ground, at or near many stations and extra care was required to offset the point of the magnetometer reading to be out of the area of influence of these rods.

Results

The corrected readings were plotted on a base map to a scale of 1 inch = 300 feet to tie in with an I. P. assessment survey on an adjoining property, and Crown Grant survey plots. Readings were plotted as gammas relative to 143 + 00 N on number 2 baseline. The readings varied from a high of 12,095 to a low of -1985 gammas. The corrected readings were hand contoured at intervals of -1000, 0, 500,

1000, 2000, 3000, 4000, 6000, 8000 and 10,000 gammas.

The magnetic intensity was quite low on the southwest side of the survey area but there was a strong, somewhat erratic northwest trending anomaly outlined to the northeast, on the Bat 15, 17 and 19 claims. This anomaly strikes towards the Mabel mine workings and may be associated with magnetic mineralization related to that deposit or to the serpentine belt.

There is considerable variation within the anomaly which may be caused by a banding of the magnetic minerals associated with the serpentine belt shown on the G. S. C. map to be in this area and with a similar strike. Geological mapping is necessary to correlate the magnetic variation with rock types and mineralization.

The Minister of Mines Report 1937 D 22, 23 in part describes the adjoining Mabel property mineralization as follows. "Sulphides include chiefly pyrrhotite and less chalcopyrite and sphalerite. Pyrrhotite occurs as impregnations in schist and chert, as fracture fillings in the rock, and strikingly in semi-crystalline vein-quartz; chalcopyrite is finely and intimately associated with the pyrrhotite, and sphalerite occurs as less common patches and aggregates of grains."

Assessment report number 1775 dated June 7, 1968 shows a strong I. P. anomaly striking northwest from the southwest of the Cornucopia Crown Grant mineral claim lot 608 into ground which appears to be covered by the Bat 3, 14 and 16 mineral claims.

CONCLUSIONS

This preliminary work has located part of the claims group in relation to two baselines, crosslines, mine workings, road and drainage features as well as two claim posts from the adjoining property. Controls have been established and a magnetometer survey started on the northwesternmost claims in the group.

A northwest-southeast trending anomaly striking towards the adjoining Mabel mine workings has been located.

The plan at a scale of 1 inch = 300 feet has been laid out so that it can be built up as additional data becomes available.

Additional work required is the southeast extension of number 2 baseline, crosslines, location of key Crown Grant corners and property boundaries, a continuation of the magnetometer survey to the southeast, soil sampling and geological mapping.

The data derived from the additional work may outline areas for a limited I. P. survey as required.

This extended work would cover the northwest strike extension of the I. P. anomaly from the adjoining Cornucopia Crown Grant, lot 608.

CERTIFICATE OF QUALIFICATIONS

I, Wayland Stuart Read of 860 Younette Drive, West Vancouver,

B.C., do hereby certify that:

1. I am a practising mining geologist and my address is 860 Younette Drive, West Vancouver, B. C.
2. I am a graduate in geology from Acadia University, Wolfville, Nova Scotia, and have been granted the degree of Bachelor of Science in Geology and have engaged in practising my profession for the past twelve years.
3. I am a member of the Association of Professional Engineers of British Columbia and the Yukon Territory, a Fellow of the Geological Association of Canada and a Member of the Canadian Institute of Mining and Metallurgy.
4. This report is based on my personal work on the property between October 2 - 6, 1971. The research, compilation of data, and preparation of report was done by the writer between October 7, 1971 and February 16, 1972.

Respectfully submitted,



Wayland S. Read, B.Sc., P. Eng.
Consulting Geologist

860 Younette Drive,
West Vancouver, B. C.

February 16, 1972

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.

In the Matter of

Geophysical Survey

To Wit:

SUB-MINING RECORDER
RECEIVED
MAR 20 1972
M.R.# 62967E \$90.00
VANCOUVER, B. C.

I, W. S. Read, P. Eng.,

of Wayland S. Read Limited, Geological Consultant,
860 Younette Drive, West Vancouver, B.C.

in the Province of British Columbia, do solemnly declare that The following supervision
and work was done:

Magnetometer Survey re: Report dated February 16, 1972.

Costs:

Vehicle rental	\$172.48	
Meals & expenses	67.78	
Hotel	42.00	
Magnetometer rental	105.00	
Engineering supplies	12.00	
Draughting, report, printing	<u>127.05</u>	\$526.31

Personnel:

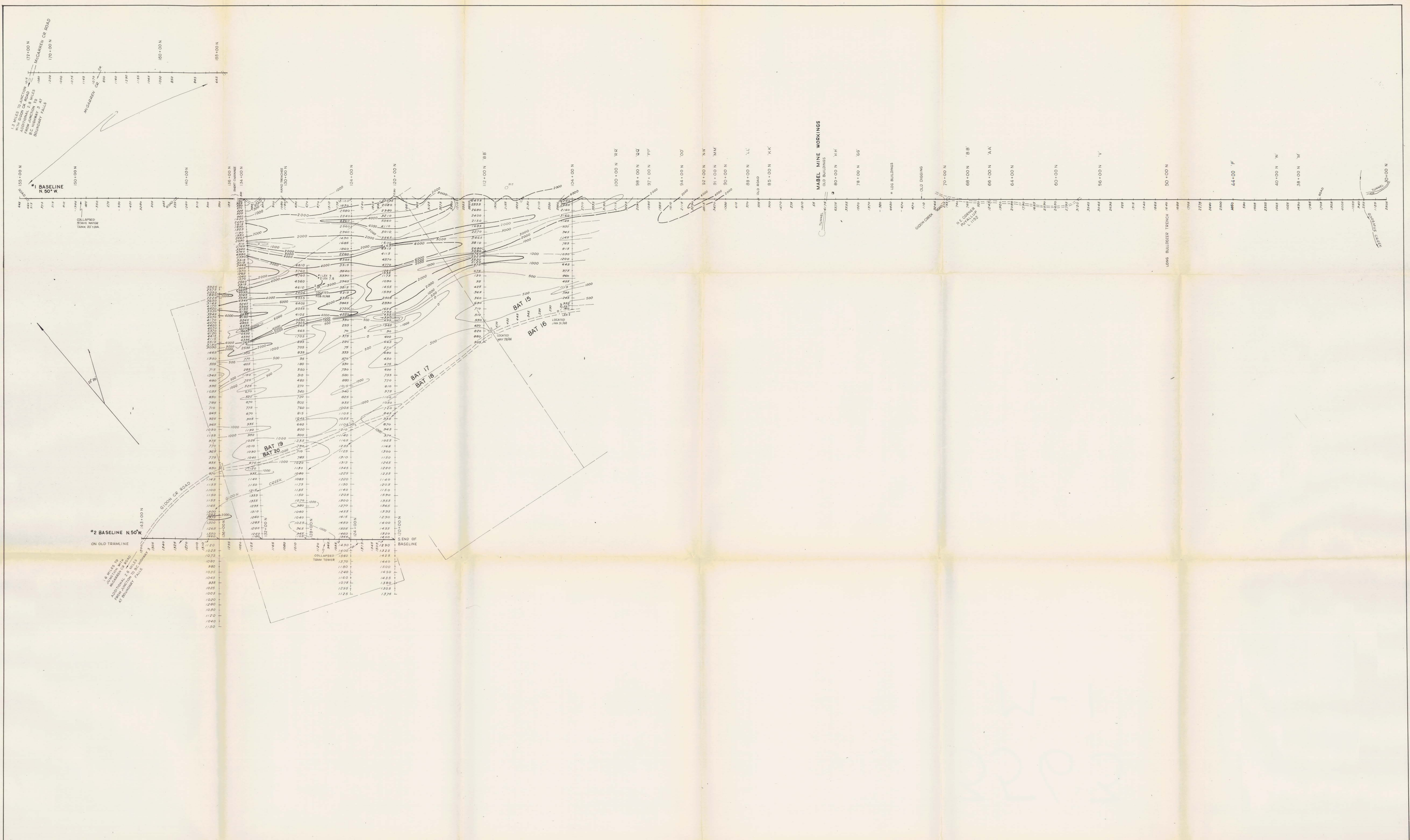
W.S. Read, P. Eng., Oct. 2-6, 1971		
7 days equivalent @ \$100	700.00	
Office, Oct. 7 - Feb. 16, 1972		
Research, interpretation, report data preparation.	<u>600.00</u>	<u>1,300.00</u>
		<u>\$1,826.31</u>

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."

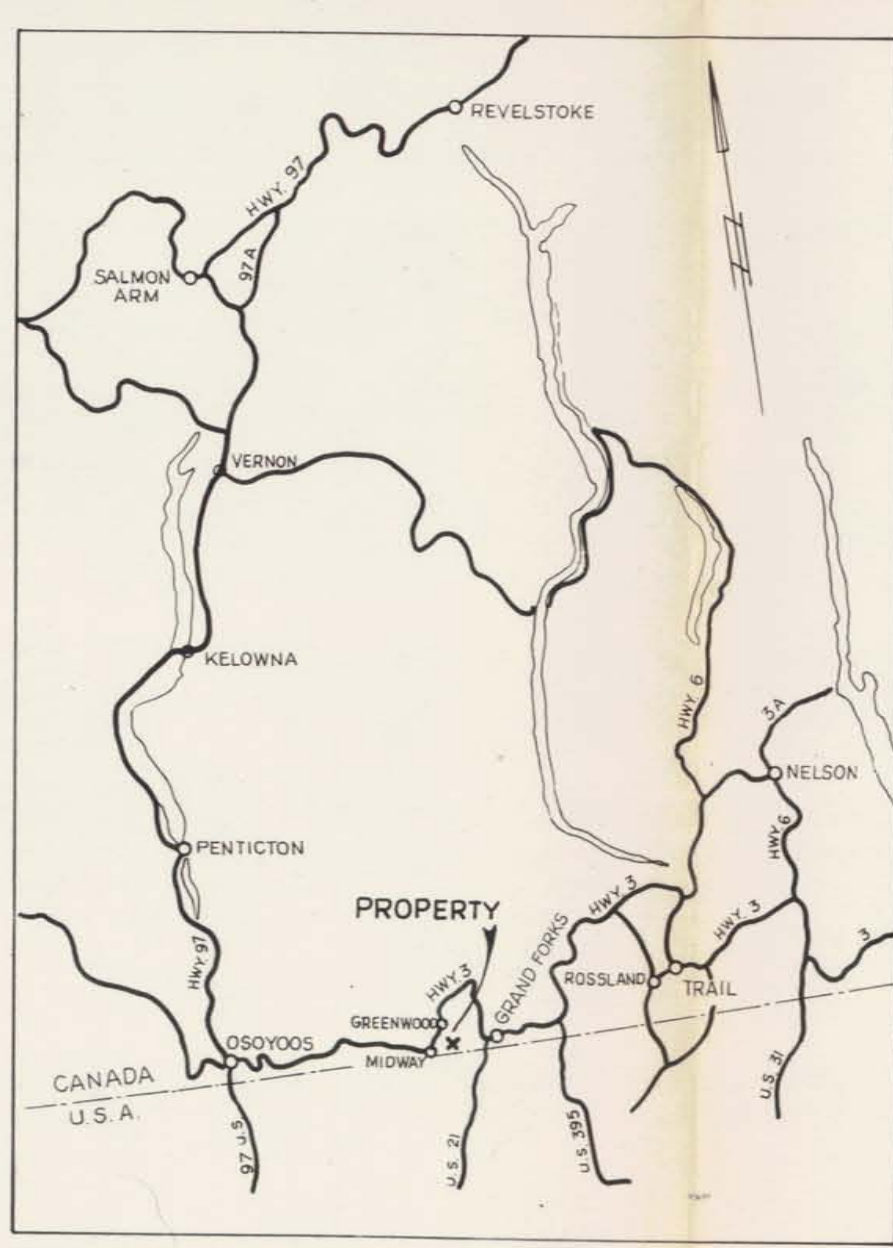
Declared before me at the City
of Vancouver, in the
Province of British Columbia, this 15 day
of Feb. 1972, A.D.

W. S. Read

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



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M-1



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
No. 3563 MAP 41

ALWIN MINING COMPANY LTD. (N.P.L.)
49° 01' 5" N 118° 39' W
BAT CLAIM GROUP

MAGNETOMETER SURVEY
(PRELIMINARY)

Legend:
Magnetometer Readings in Gamma
Instrument - Sharp MFI # B03351
Contours in Gamma

SCALE IN FEET
0 100 200 300 400 500

DATE: FEB 16, 1972
DRAWN: J.W. REVISOR: [Signature]
No. 1

To accompany Geophysical Report by W.S. Read
Dated February 16, 1972

WAYLAND S. READ P.Eng. Consulting Geologist, West Vancouver, B.C.