298

REPORT OF A MAGNETIC GROUND SURVEY OF LOTS 757, 758, 759, AND 760, SIMILKAMEEN MINING DIVISION

by Wm.H. White, P.Eng.

February 17th, 1960

TABLE OF CONTENTS

D E C L A R A T I O N

The field work on which this Report and map are based was done in eight days, November 4th to 11th, 1960, by A. Davidson and L. Redivo, under the direction of Wm.H. White, P.Eng., who spent three days in the field supervising the work. Mr. Davidson subsequently spent three days in reduction of data and map compilation.

Mr. Davidson is an Honour Arts graduate in geology from the University of British Columbia and Mr. Redivo is a Fourth Year student in Geological Engineering. Both have had courses in applied geophysics and considerable field experience. Both are considered competent operators of the geophysical method used in this survey.

Wm.H. White is a Geological Engineer registered with the Association of Professional Engineers of the Province of British Columbia, with adequate geophysical experience for the work reported herein.

Feb. 17th, 1960 (Signed)

Wm.H. White, P.Eng.

This is a report of a magnetic ground survey of some 200 acres in the Similkameen Mining Division covering Lots 757, 758, 759, and 760, plus some intervening and adjoining ground. The area some 20 miles westerly from Princeton, B.C., is in the drainage basin of Lawless Creek, tributary of the Tulameen River. The area mapped covers the bottom and gentle lower slopes of the northern side of a broad, easterly-trending valley tributary to the Lawless Creek valley. Most of the area is topographically smooth with a maximum vertical relief of 500 feet, almost devoid of outcrops, and either tree-clad or partly logged. Moderately steep slopes occur well up the valley sides in the northern quarter of the mapped area and in the extreme southwest corner.

General Geology

The area is on and near the eastern contact of the Lytton Creek batholith with moderately metamorphosed sediments that include interbedded limestone, calcareous slate, and argillite of the Upper Triassic Nicola group (?). North of the mapped area this contact trends southerly, but on Lot 757 it appears to make a rather abrupt bend toward the southwest. The contact as approximately known from scattered outcrops is indicated on the map that accompanies this report. On the whole, the strata strike northwesterly and dip steeply to the southwest.

Field Procedure

Starting at the southwest corner of the Crown-granted Liverpool Claim, Lot 1188, a base-line 2600 feet long was cut in a direction south 10 degrees east and stations established at 200-foot intervals using a chain and compass. From these stations lines were run at right angles to the base-line by chain and compass and picketed at 100-foot intervals. This was the grid for the magnetic survey. The survey was made with a Sharpe A3 Magnetometer, making the usual corrections for diurnal variations. The corrected readings converted to gammas were plotted on the map and contoured at intervals of 100 gammas.

Results

The contoured map shows a well-defined magnetic 'grain' that trends in a northwesterly direction over the sedimentary rocks but not over the granitic rocks in the northwest part of the area. This magnetic 'grain' crossing the topographic contours obliquely is thought to reflect the structure of the underlying sedimentary strata. On the whole, the magnetic relief is not great - a maximum of 1000 gammas. It will be noted that the general subdued magnetic surface has the form of a broad 'hill' whose 'crest' trends downward gently from southwest to northeast.

However, superimposed on this gentle magnetic topography is a low ridge of about 300 gammas on Lots 757 and 759 that trends easterly crossing the general magnetic 'grain' obliquely. This ridge which is evidently not due to topographic influence occurs near the bend in the granitic contact. It is believed that this ridge is a weak magnetic anomaly caused by mineralization in the subjacent bedrock. On the other hand, the magnetic 'high' of about the same intensity that appears in the southwest corner of the mapped area occurs where the surface starts to rise steeply on the south side of the valley. This 'anomaly' is most likely merely topographic effect.

Respectfully submitted,

February 17th, 1960

W.H. White, P. Eng.

L 757

L 759

L 760

L 758

Approximate Contact

BASE LINE

N

MAGNETIC MAP
L 757, L 758, L 759 &
L 760

LAWLESS CREEK
SIMILKAMEEN M. D.

SCALE 1" = 100'
CONTOUR INTERVAL 100'

GR = GRANITIC OUTCROP
LS = LIMESTONE OUTCROP

MAPPED BY: A. DAVIDSON
CHECKED BY: W.H. WHITE

18 NOVEMBER 1959

NOTES: GROUND SURVEY WITH SHARPE
A3 MAGNETOMETER