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BIRKETT CREEK MINE OPERATORS LIMITED

MAGNETOMETER SURVEY OF PEC GROUP

EXPENSES INCURRED

LABOUR: Line cutting and magnetometer readings 92 man days @ \$15.00/man/day	\$1,380.00
MAP PREPARATION: 5 man days @ \$15.00/man/day	75.00
SUPERVISION OF SURVEY, CALCULATIONS AND REPORT COMPILATION BY PROFESSIONAL ENGINEER 4 days @ \$35.00/day	140.00
	<hr/>
	\$1,595.00
	<hr/>

CCR:
September 30th, 1958.

C. C. Rennie
C.C. Rennie, P. Eng.
Geological Engineer.

BIRKETT CREEK MINE OPERATORS LIMITED

GEOPHYSICAL REPORT ON

MAGNETOMETER SURVEY OF PEC GROUP

OF

CRAIGMONT MINES LIMITED PROPERTY

CLAIMS: Paystin 5 and 6, Edith 1 and 2,
Craig 1 and 2, AL 7 Fract.
and TB 5.

LOCATION: approximately 14 miles northwest of Merritt, B. C.
(50°, 120°SW)

DATE OF SURVEY: August 11th to Sept. 26th, 1958.

SUPERVISION AND REPORT BY: C.C. Rennie, P. Eng.

September 29-30, 1958.

REPORT ON
MAGNETOMETER SURVEY OF PEC GROUP

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BIRKETT CREEK MINE OPERATORS LIMITED

REPORT ON

MAGNETOMETER SURVEY OF THE PEC GROUP

PURPOSE OF THE SURVEY

The survey was performed in search of magnetic anomalies resulting from concentrations of magnetite with which copper minerals might be associated.

LOCATION OF THE CLAIMS

The following claims comprise the PEC Group:

<u>Claim</u>	<u>Metal Tag No.</u>	<u>Record No.</u>
Paystin #5	B21305	1145
Paystin #6	B21306	1146
Edith #1	B48923	1775
Edith #2	B48924	1776
Craig #1	287487	4340
Craig #2	287488	4341
AL #7 Frac.	260230	5299
T. B. #5	287485	8707

These claims are roughly centrally located in the Craigmont Mines Limited property twelve miles northwest of Merritt, B. C., in the Nicola Mining Division.

A jeep road on the south and west of the group provides access to the area.

GENERAL GEOLOGY OF THE AREA

REFERENCE: G.S.C. Memoir 249, "Geology and Mineral Deposits of Nicola Map Area, B. C." by W. E. Cockfield, and Geological Map 826A which accompanies the Memoir.

The Craigmont property covers a portion of the contact between the Nicola volcanics and sediments of Upper Triassic age and the Guichon Batholith of Jura-Cretaceous age. Thin scabs of Lower Cretaceous Kingsvale volcanics cover portions of the contact and some areas of the Nicola series, and much of the non-batholithic rocks are covered by varying depth of glacial overburden.

On the PEC group there are outcrops of granodiorite and diorite exposed over an estimated average of 10% of the area, sufficient to indicate that the entire group of claims lie north of the contact and are underlain by rocks of the Guichon batholith. Under these conditions no contact replacement type mineralized zones such as the Craigmont body can be expected.

EQUIPMENT

The magnetometer used for this survey was manufactured by the Radar Exploration Company, Toronto, and bears serial number 37. The scale constant on this torsion type instrument is 22.6 gammas per division of the micrometer scale. This instrument, which is very light and portable, requires no locking of the motion before being moved from one station to the next. With practice, an operator can take readings at 100 foot intervals every two minutes or in excess of 200 readings per day. This instrument has no auxiliary magnets but has a range between 11,000 and 33,000 gammas.

METHOD OF SURVEY

An east-west base line was established by compass survey and north-south picket lines were turned off by compass at 200 foot intervals along the base line. Stations on the picket lines were marked at 100 foot intervals with four-foot cedar laths bearing the line and station numbers.

One man took the magnetometer readings while a second man recorded the readings, station numbers and time. Permanent and daily base stations were established as a constant check on diurnal and instrument variation.

CALCULATION AND PLOTTING

The calculation and plotting of the notes was done by the writer and P. Schutz. The instrument varied enough during the day that a diurnal correction was required. A constant correction was also necessary to correlate the survey with previous detailed surveys, and this constant included the arbitrary constant of 10,000 gammas subtracted from all survey calculations.

The calculated readings were plotted on the appended 1"-200' scale map beside the corresponding station and lines of equal magnetic intensity were drawn.

INTERPRETATION OF THE MAGNETOMETER SURVEY RESULTS

Lines of equal magnetic intensity have been drawn on the map at 1000 gamma intervals only, since closer spacing would confuse the interpretation and add meaningless detail.

No worthwhile areas of anomalous readings were found in the map

area. The greatest portion of the readings are in the 7000 to 8000 gamma range, and over 80% are in the 6500 to 8000 gamma range. A few single-reading or small area-highs above 8000 gammas were detected but most of these were on outcrops and therefore only reflect a proximity to bedrock containing accessory magnetite.

The slightly anomalous small highs and lows do not follow any pattern such as constancy of direction or lineation, nor do the areas of intermediate readings show any gradation or other pattern.

CONCLUSIONS

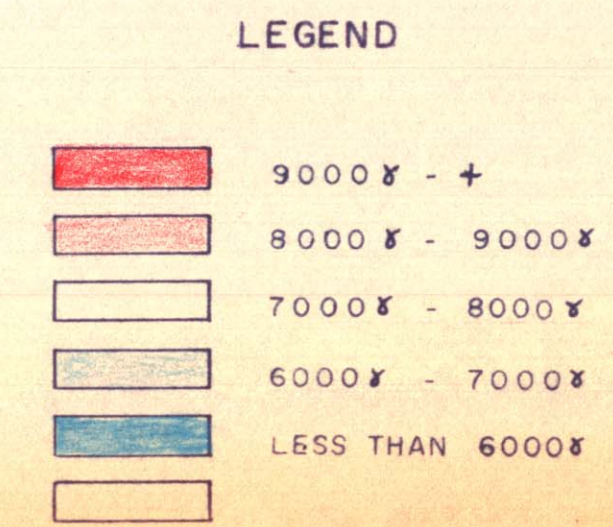
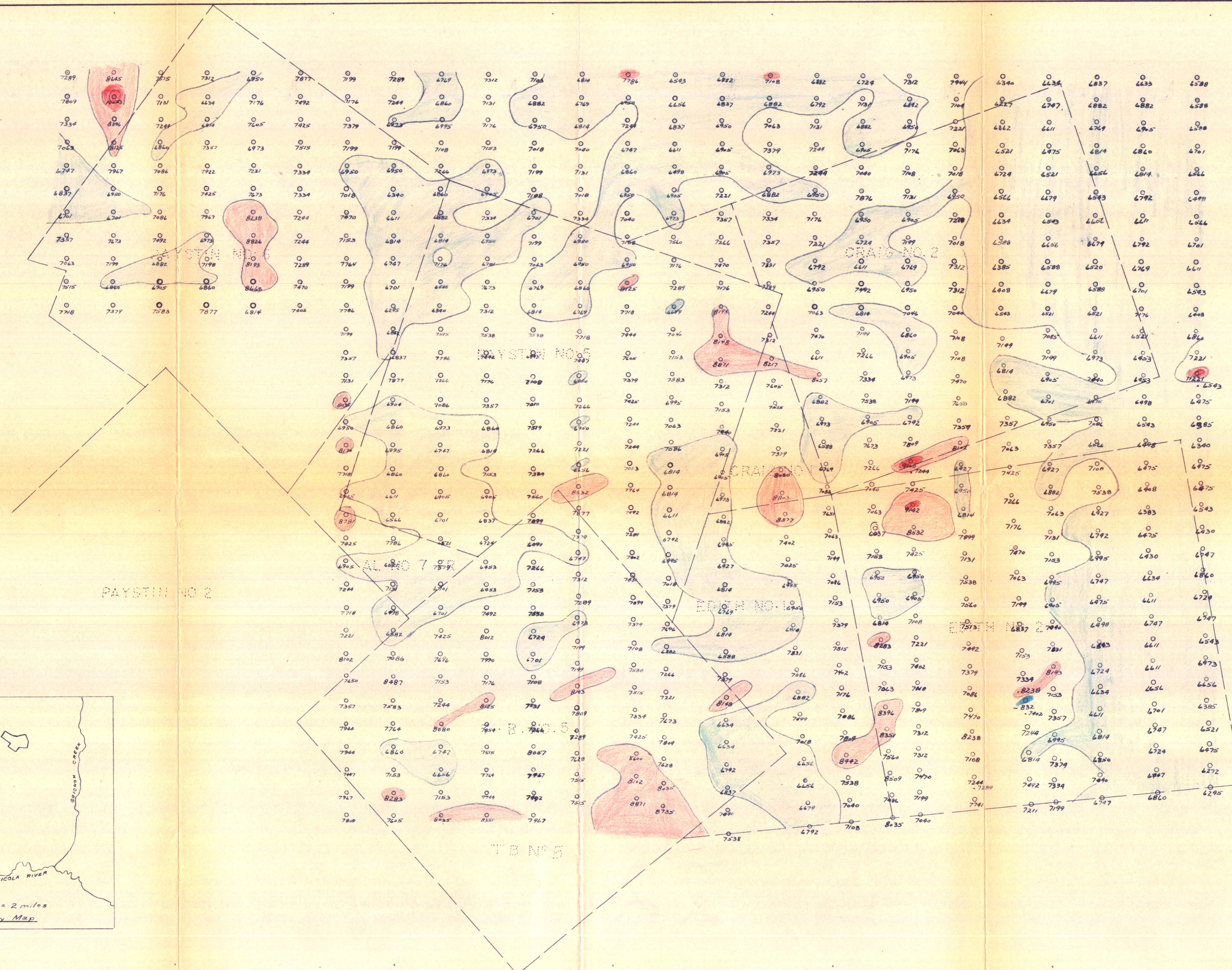
1. There are no magnetic anomalies of interest on the PEC group of claims, nor is there any magnetic trend displayed.
2. As evidenced by frequent outcrops the bedrock is entirely granodiorite and diorite of the Guichen batholith.
3. A geochemical and detailed geological survey over the same grid lines would assist in the final evaluation of the claims.

Respectfully submitted,

CCR

September 30th, 1958.

C. C. Rennie
C.C. Rennie, P. Eng.,
Geological Engineer.



A MAP SHOWING
 THE
 MAGNETIC VALUES AND CONTOURED RESULTS
 ON THE
 PEC GROUP OF MINERAL CLAIMS
 NEAR
 MERRITT, B.C.
 IN THE
 NICOLA MINING DIVISION

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SCALE: 1" = 200'

DRAWN BY: C RENNIE, P. SCHUTZ

SEPT. 26 1958

