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Box 448,
Merritt, B. C.
Dec. 16th, 1958.


The Mining Recorder,
Merritt, B. C.

Dear Sir:

The magnetometer survey of the
Domino No. 1 Group of claims, described
in the report by J. C. Foweraker, was
carried out under the general supervision
of the undersigned.

I am satisfied that the survey was
properly performed and that the map and
report were carefully prepared.

Yours truly,


C.C. Rennie, F. Eng.
Geologist.

GEOPHYSICAL REPORT

MAGNETOMETER SURVEY ON DOMINO NO. 1 GROUP

Claims: Domino Nos. 7 - 14.

Location: 10 miles northwest of Merritt, B.C. (50° 120° SW)

Date of Survey: July 29th - August 20th, 1958.

Map and Report by: J. C. Foweraker.

Supervision by: C. C. Rennie, P. Eng.

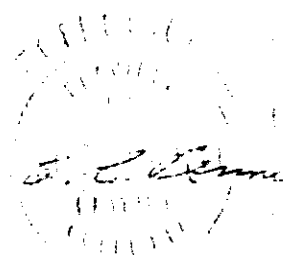
December 16th, 1958.

GEOPHYSICAL REPORT

MAGNETOMETER SURVEY ON DOMINO NO. 1 GROUP

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GEOPHYSICAL REPORT

MAGNETOMETER SURVEY ON DOMINO NO. 1 GROUP

1. EXPENSES INCURRED FOR ASSESSMENT

<u>Item</u>		
1.	Labour, line cutting and chaining. 2 men, 19 days @ \$15.00 /man/day.....	\$ 570.00
2.	Labour, magnetometer readings. 2 men, 10 days @ \$15.00 /man/day.....	300.00
3.	Geology and geophysics general supervision. of the programme in the field. 1 man for 7 days @ \$15.00 /man/day.....	105.00
4.	Calculations of results, and plotting of results of magnetometer readings and map drawing. 1 man for 2½ days @ \$15.00 /man/day.....	37.50
5.	General supervision and preparation of reports and maps. 1 man for 5 days @ \$15.00 /man/day.....	75.00
	Total	<u>\$1,087.50</u>

The above expenses do not include such items as transportation of personnel, rental of equipment, etc.

E. L. Dennis

GEOPHYSICAL REPORT
MAGNETOMETER SURVEY ON DOMINO NO. 1 GROUP

2. INTRODUCTION

An option was negotiated for the property consisting of the PCM, CAP and DOMINO mineral claims for the period March 17th to May 17th, from Isaac Shulman of Vancouver. On the 17th of May, it was decided to continue the option and assessment work on the claims was guaranteed. This report is concerned with the eight claims known as the Domino #1 Group consisting of Domino #7,8,9,10,11,12,13 and 14 mineral claims. The remaining five Domino claims (#2 Group) are almost entirely covered by other claims or the Indian Reserve. Those areas of Domino #5 and 6 claims not covered by prior stakings, have been surveyed by the magnetometer (see map). Road construction and access has also been carried out on the #2 Group, totalling \$580.00.

3. LOCATION AND ACCESS

The Domino Groups lie about ten miles by direct route to the north-west of Merritt, B. C., on the south-west upper slopes of Promontory Hill, less than a mile south-west of the Forestry Look-Out, and adjacent to the eastern boundary of the Indian Reserve #9.

From Merritt the main road to Spences Bridge is followed

to the Forestry Look-Out gravel road junction, some $1\frac{1}{2}$ miles west of Lower Nicola. The Look-Out road is then followed for a further 6 miles to the junction with the $1\frac{1}{2}$ mile access road leading to the claims.

4. EQUIPMENT

The vertical force variometer (hereafter referred to as the Magnetometer) made by Hilger and Watts, was used throughout in this survey. This instrument has a scale value for division of 30 gammas and uses short, medium and long auxiliary magnets for high readings.

5. GENERAL DESCRIPTION OF THE METHODS OF SURVEY

An east-west picket-base-line 4000 feet long was established from the south-east corner peg of the Indian Reserve #9, cross lines were turned off, by a right angle 'turning board' every 400 feet along this line. These cross lines were extended north and south of the base line, to give a 400 feet grid spacing over the entire group. While the main purpose of the cross lines was to control the magnetometer survey, claim posts, geology, and topographic features were also tied into the lines. Along the cross lines, pickets were driven in every 100 feet to mark the magnetometer stations. The crosslines were extended north of the group to cover those parts of Domino #5 and 6 mineral claims not

covered by the Betty Lou Group.

Before the commencement of the magnetometer survey, a base control station was established. This provided a datum to which the survey and subsequent control stations could be related. R. Harvey carried out the magnetometer readings and subsequent calculations assisted by C. Beaulieu and J. Bannen, under the supervision of J.C. Foweraker.

6. CALCULATIONS AND PLOTTING METHODS

Diurnal corrections were applied, auxiliary magnets were used where necessary on the survey and the corrective formula $\frac{2 K 10^5}{d^2}$ applied. Results of the readings converted to gamma values are shown on the map accompanying this report.

7. FACTORS WHICH PRODUCE VARIATIONS IN VERTICAL MAGNETIC INTENSITY.

(See C.C. Rennie's Geophysical Report on Magnetometer Survey HEC Group - South, June 17th, 1958)

- 1) A concentration of magnetic mineral, possibly with associated valuable minerals.
- 2) A variation in the amount of accessory magnetite in granite or volcanic bedrock.
- 3) A variation in the amount of magnetite distributed through or connected with, the overburden.
- 4) A variation in depth of non-magnetic overburden or caprock over bedrock, having a constant vertical magnetic intensity.
- 5) Variations in amounts of magnetic minerals in adjacent

bands of volcanic and sedimentary rock, such as may be expected in the Nicola formations which would produce elongated magnetic highs and lows parallel to the form strike. These variations are not expected to be great.

6) Any combination between variations in magnetic minerals in the rock and variations in the thickness of the overlying magnetic or non magnetic overburden or cap rock.

From the above factors it will be seen that the evidence for mineralization is not necessarily conclusive from a magnetometer survey one way or the other.

8. RESULTS OF THE GEOPHYSICAL SURVEY

(1) General

The results of the survey (see map accompanying this report) show a marked negative condition existing over a large part of the property, and a positive anomaly of 4087 γ existing in the south-east corner of the property.

The highest negative reading of 1242 γ was found on Domino #5 M.C. adjacent to the east boundary of the Indian Reserve. A negative condition was found on either side of the Domino #5 and 6 claim-location line, and on Domino #7,8,9,10 and 12, and #1 and 2 fractional mineral claims. In Domino #14 mineral claim, the highest positive reading recorded was 4087 gammas. Higher readings have been recorded in this immediate area, but outside the property boundary.

(11) DETAILS OF THE RESULTS WITH NOTES ON GEOLOGY AND
GENERAL TOPOGRAPHY

There are five main areas in which negative readings have been recorded, areas A, B, C, D and E. The areas recording a negative condition show a very general east north east trend across the property, and the results show a concentration of negative readings on the west side of the Domino Group adjacent to the Indian Reserve, and north of the east-west base line. A geological traverse along line 4E from north to south showed a noticeable lack of outcrop where negative readings had been recorded. At the northern end of 4E a negative condition exists adjacent to a prominent draw. Immediately south of an area of outcrops (showing broken and shattered agglomerate, and some minor pyrites) there is another area of negative readings, area A, which continues south for 900 feet as far as a series of north east trending ridges. Outcropping on these ridges, are volcanic agglomerates and porphyritic andesites. The strike appears to be running along the ridges, with a steep dip (80°) to the north-west. South of the outcrop area, the negative condition prevails again, in area C, until just north of the east-west base line. Prominent depressions and draws exist where the negative readings have been recorded at the northern end of 4E/N and in areas C and E.

In the south east corner of Domino #14 M.C, a positive anomaly of 4087 gammas was recorded. At the northern end

of the anomaly are outcrops of red brown agglomerate and epidotized andisite with vertical and near vertical jointing planes striking to the north east and to the north west. Further to the north again, on the east-west base line are large outcrops of red brown agglomerate with prominent north-south jointing. There is a draw 200 feet to the south of the 4087 gamma reading, and south of the draw on line 36E/S, but outside of the Domino boundary, there is a continuation of the anomaly trend, with still higher positive readings. Scattered outcrops of andesite porphyry sometimes epidotized, and also red brown volcanic agglomerate, have been observed in the general area.

9. GENERAL CONCLUSIONS AND RECOMMENDATIONS ON THE RESULTS OF THE SURVEY

The results of the magnetometer survey on the Domino #1 Group and Domino #5 and 6 mineral claims are discouraging. The highest negative reading recorded was 1242 gammas on line 4E/N in area "A". The highest positive reading of 4087 gammas was recorded in the south east corner of the property, and the anomaly here appears to be similar to others found elsewhere on the PCM, CAP and Hank mineral claims. Outcrops of red brown agglomerate and epidotized andisite (found admittedly several hundred feet to the north of the anomaly) are somewhat similar to outcrops associated with a large anomaly found on an adjoining property to the north-west. While geological investigations of the Domino Claims are only of a

reconnaissance nature, investigations to date have shown only very minor copper mineralization existing in localized pockets, shear zones and on joint faces. As nothing of commercial interest was found from the detailed surface and subsurface investigations on the much larger magnetic anomaly to the north-west, on the adjoining property; it cannot be recommended that further subsurface exploration be carried out on the positive magnetic anomaly on the Domino mineral claims. However while further exploration work may appear to be warranted on the claims, the results of the exploration work to date, has shown no definite copper mineralization of commercial significance to exist on the Domino claims. The present results, as well as the discouraging results obtained from drilling the large neighbouring anomaly, do not justify the additional expense of continuing the present exploration programme.

J. C. Foweraker

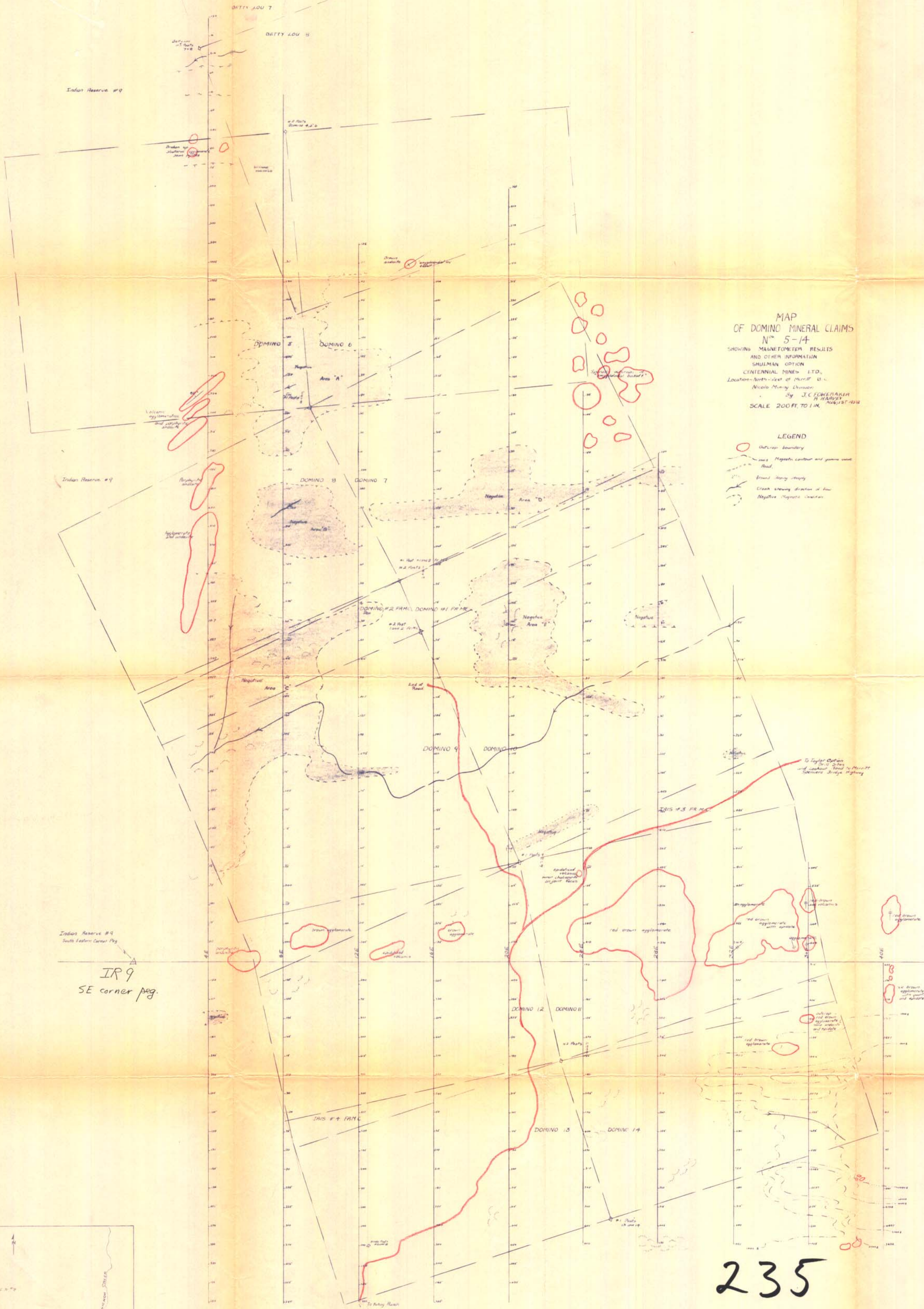
J. C. Foweraker
Geologist.

1" = 200'
Reduced to 1" = 1000'



MAP
OF DOMINO MINERAL CLAIMS
N^o 5-14
SHOWING MAGNETOMETER RESULTS
AND OTHER INFORMATION
SHUELMAN OPTION
CENTENNIAL MINES LTD.
Location-North-West of Merritt, B.C.
Nicola Mining Division
By J.C. FOWLER & A. HANCOCK
SCALE 200 FEET TO 1 IN.

LEGEND
- - - - - Claim boundary
--- Magnetic contour and gamma curve
--- Road
--- Stream
--- Creek showing direction of flow
--- Negative magnetic contour



IR 9
SE corner peg.

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Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 235 MAP #1



1" = 200'
Reduced to 1" = 1000'

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