

2123

92 I/3E

GEOPHYSICAL
MAGNETOMETER SURVEY
NICOLA M.D.

51° - 121° S.E.

for

New Cinch Uranium Mines Ltd.
6-6-69; 17-7-69 A.R.Allen, P.Eng.

ALLEN GEOLOGICAL ENGINEERING LTD.
507 - 789 West Pender Street
Vancouver 1, B. C.

August, 1969.

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<p>Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. <u>2123</u> MAP</p>
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THE COPPER CANYON PROPERTY
OF
NEW CINCH URANIUM MINES LTD.
MAGNETOMETER SURVEY

INTRODUCTION

A magnetometer survey was conducted over a grid pattern in the Copper Canyon group of claims from June 6th to July 17th, 1969.

The field party was in charge of Tom Thomas and included John Shaw, Frank Tonne, James Elliott, Robin Denning and Terry Thomas.

The field crew was stationed on the property in two tent camps.

A four-wheel-drive, 3/4 ton pick-up truck was used for camp gear, supplies and personnel, between Merritt, the supply centre, and the property.

The copper deposits at the Craigmont Mine are associated with sufficient magnetite to make the orebody detectable from the surface by the magnetometer. The Copper Canyon property is underlain by the Kingsvale group, as in the Craigmont Mine. It was anticipated, therefore, that should detectable magnetite mineralization be indicated on the Copper Canyon property it may be associated with copper deposits. The purpose of the magnetometer survey, therefore, was to ascertain if there were detectable deposits of magnetic mineralization underlying the Copper Canyon property.

LOCATION AND ACCESSIBILITY

The property is located in south central British Columbia eighteen miles west of Merritt.

Geographical location is $121^{\circ} - 12'$ west longitude and $50^{\circ} - 10'$ north latitude.

Access is via the secondary road up the north side of Neutich Creek, which may be reached by two bridges across the Nicola River from Highway #8, near Canford.

PROPERTY

The property was originally made up of the Eagle 17, Copper Canyon 1-8 located claims. Subsequently the SDS 1-40 located claims were staked on four sides of the original 9 claims. During the survey a large area of open ground, lying on the southeast side of the Copper Canyons 2, 4 and 6, was acquired by staking the TT 1-5 and TT 1 Fr and TT 2 Fr. A map of these claims is included with this report.

TOPOGRAPHY

The property is located on the east side of Minnehah Mountain, elevation 6030 feet above sea level, six miles west of the Nicole River. The claims extend to the main Naultch Creek at elevation 3500 feet above sea level. The numerous small feeder creeks flow within sharp v-shaped winding valleys in general east to southeast directions. The intervening ridges are rounded and lightly wooded. Overburden cover is extensive. Road building is neither difficult nor expensive.

GEOLOGY

The property is located within a wide band of Lower Cretaceous volcanic rocks termed the Kingsvale Group. The geology of the claims area has not been mapped in detail. Spot observations indicate that the prevailing rock type is porphyritic to amygdaloidal andesite, with some intervening sedimentary strata and, particularly in the Copper Canyon area, light grey, fine-grained acid intrusives carry disseminated pyrite, chalcopyrite and other metallic minerals.

The Mount Lytton batholith outcrops six miles westerly and the Guichon Creek batholith lies six miles to the east. The Craigmont mine is located 12 miles easterly at the contact between the Kingsvale volcanic and sedimentary strata and the Guichon Creek batholith.

The Craigmont orebodies contain along with copper mineralization, sufficient hematite and magnetite to account for a 20% iron content. Numerous other small prospects in the Mexritt area have significant magnetite in and around zones of copper mineralization. Before the Craigmont ore zones were intersected by diamond drilling they

had been outlined by magnetometer and soil sampling surveys, although there was little or no surface data to otherwise indicate the locations of same.

MAGNETOMETER SURVEY

The magnetometer survey was conducted on a surveyed grid pattern over the entire claims area. Grid lines were established on 300-foot spacing northeast-southwest, and stations designated by numbers on cedar stakes were placed every 100 feet along each line. The control was a base line along the road in a general east-west direction. All lines were run with chain and Brunton compass. In excess of 68 miles of line was completed. Magnetometer readings were noted at each 100-foot station and recorded in a field notebook. Diurnal corrections were established by check readings at established locations at least twice a day. This work was under the supervision of the writer, and the operator was Mr. Tom Thomas who has for the past ten years carried on similar surveys.

Station readings were corrected for diurnal variations and transferred to a field map. The field was re-drawn

in Vancouver and areas of each 1,000 gamma range designated by colours.

The magnetometer used was a Scintrex MF1 Fluxgate, serial #30856.

Except for three small zones of high magnetic intensity the area exhibits no anomalous conditions which would suggest a large iron deposit. Anomalous areas are as follows:

#1 Anomaly:

This lies just north of the base line between lines 3 and 6. It is 500 feet long and up to 20 feet wide. It strikes northeasterly. It registered over 8,000 gammas along the central core.

#2 Anomaly:

One thousand feet north of anomaly #1 is a similar zone. It measures 400 feet in a northwesterly direction and is up to 250 feet wide. A maximum of 9,400 gammas was recorded on this zone. Four hundred feet to the east there is a narrow band exhibiting less than 3,000 gamma intensity. Polarization is indicated. The original Copper Canyon

showings are located about 1,500 feet southeast of these two anomalies.

#3 Anomaly:

This is located between lines 78 and 81 near the northwest corner of the property. It is 700 feet long and up to 200 feet wide. It lies in a general northeast direction and is near a geochemical high.

Twenty-five hundred feet southwest, between lines 54 and 57 there is an area exhibiting very low intensity.

#4 Anomaly:

Southeast of Anomaly #3, between lines 69 and 87 there are two large irregular areas, trending in general northeast, in which intensity ranges from 6,000 to well over 7,000 gammas. The approximate dimensions of this area are 1,600 feet wide by 3,000 feet long.

#5 Anomaly:

One thousand feet southeast of Anomaly #4, there is a smaller but similar zone, in an area approximately 1,500 feet by 1,000 feet, all recording above the 6,000 and up to 8,200 gammas.

#6 Anomaly:

Twenty-four hundred feet southwest of Anomaly #5 there is an elliptical anomaly, about 550 feet long and 350 feet wide that exhibits a low central area.

#7 Anomaly:

Just north of the base line, between lines 63 and 69, there is an irregularly shaped anomaly. It is Y-shaped with maximum length of 1,000 feet. This area registers 6,000 and higher gammas.

#8 Anomaly:

Very close to the southeast corner of the property there is an anomaly, between lines 81 and 87 which exhibits over the 6,000 gamma intensity. It is 700 feet long, widening to the northeast and open in that direction.

#9 Anomaly:

Along the southeast boundary of the property, between lines 42 and 60 there is a large northwesterly trending anomaly. The central part of this area is about 700 feet long and up to 400 feet wide. It recorded a maximum of 8,000 gammas. It is surrounded by a sizeable area in the 6,000 gamma level. It is open to the southeast.

The geology of the area is not sufficiently known to attempt correlation between the Kingsvale volcanics and sediments, and the anomalous areas of stronger than normal magnetic intensity.

Correlation with anomalous areas of copper content in the soil, as outlined by the geochemical survey conducted simultaneously with the magnetometer investigation, is not too significant. There is evidence, however, of magnetic variables in the general areas of the geochemical anomalies in the northwest corner and the entire easterly portion of the property.

SUMMARY AND CONCLUSIONS

The Copper Canyon property is located in the Merritt area of southwestern British Columbia. The discovery of copper mineralization on the property has pointed up the possibility that, by virtue of favourable geology, the entire claims area, much of which is covered by overburden, should be investigated by geophysical methods.

The orebodies of the Craigmont mine, which lies within the Kingsvale formation, twelve miles to the east, were

discovered partly as a result of a magnetometer survey since magnetic iron occurs along with the copper at that location.

The magnetometer survey has not indicated heavy magnetic iron deposition on the Copper Canyon property. Nine anomalous areas of varying size and intensity have been outlined, and they are shown on the plan map which accompanies this report. Several of these are in the same general area as geochemical anomalies, outlined concurrently with the magnetometer survey. It is concluded that, whereas no major zone of magnetic iron mineralization has been outlined by the survey, there are areas which warrant further checking, and this may possibly be done when investigating geochemical anomalies.

Respectfully submitted,

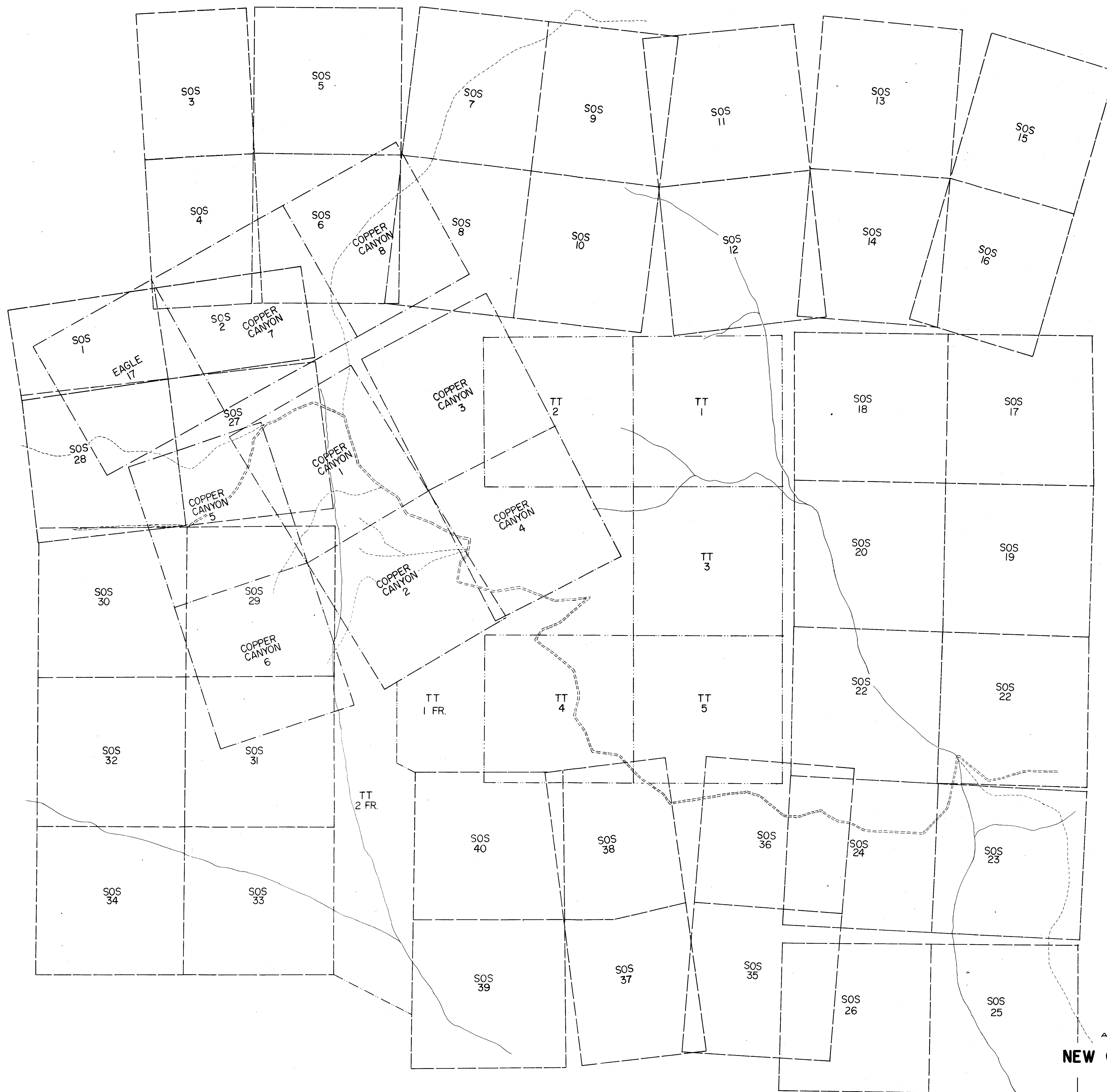
Per: Alfred K. Allen P. Eng.

ALLEN GEOLOGICAL ENGINEERING LTD.

Vancouver, B. C.

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- Cockfield, W. E., G.S.C. Memoir 249
- Duffell, S., and McTaggart, K.C., K.S.C. Memoir 262

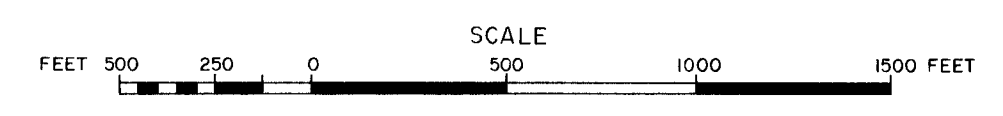


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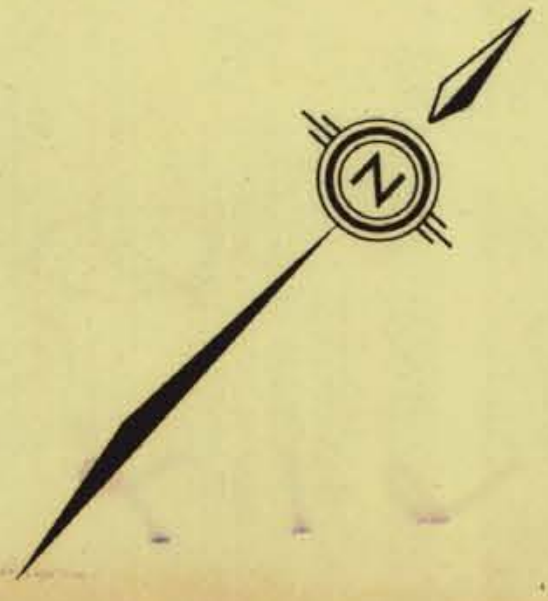
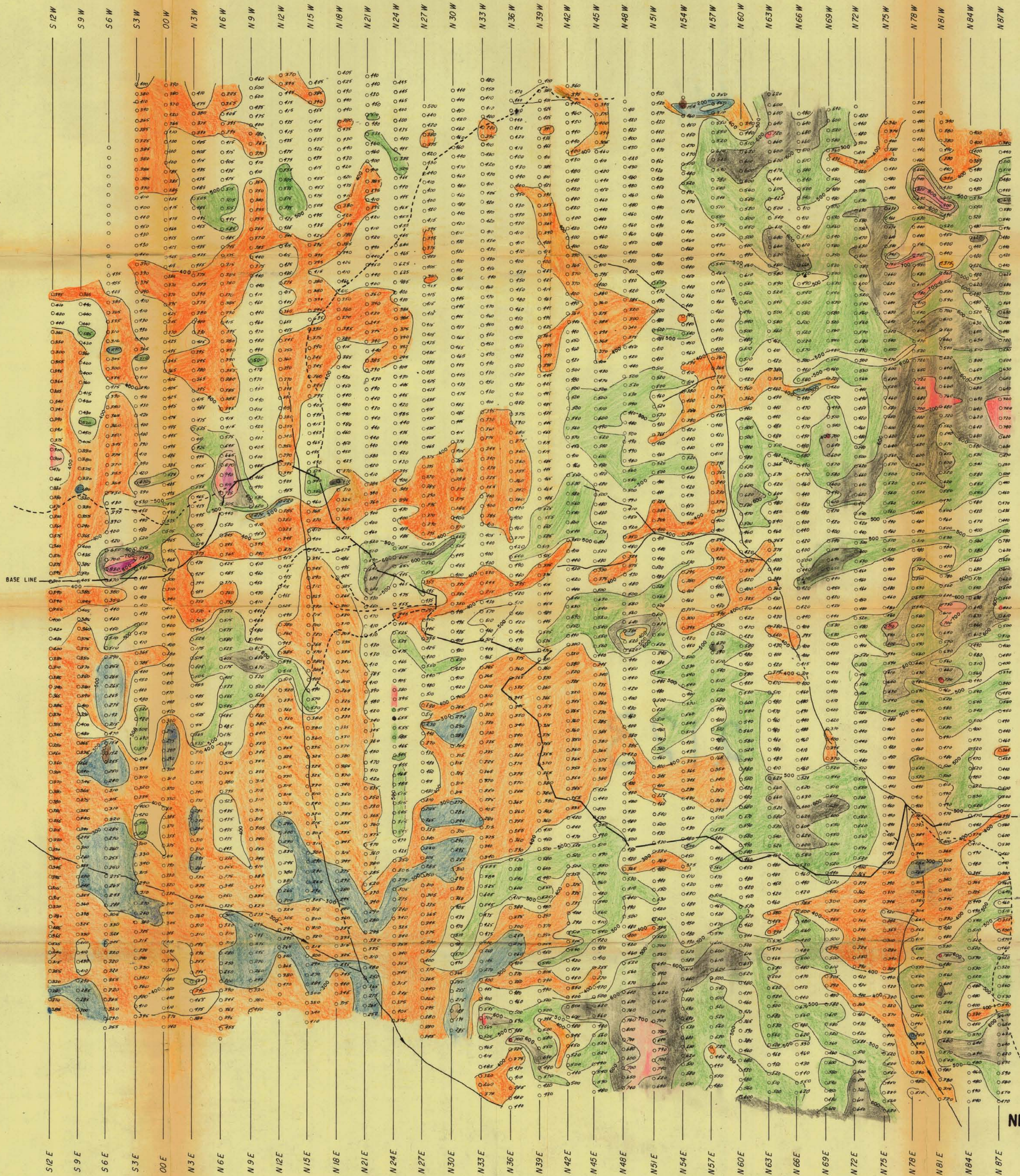
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2123 MAP #1

ALLEN GEOLOGICAL ENGINEERING LTD.
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CLAIM OVERLAY

COPPER CANYON PROPERTY
MERRITT, B.C.



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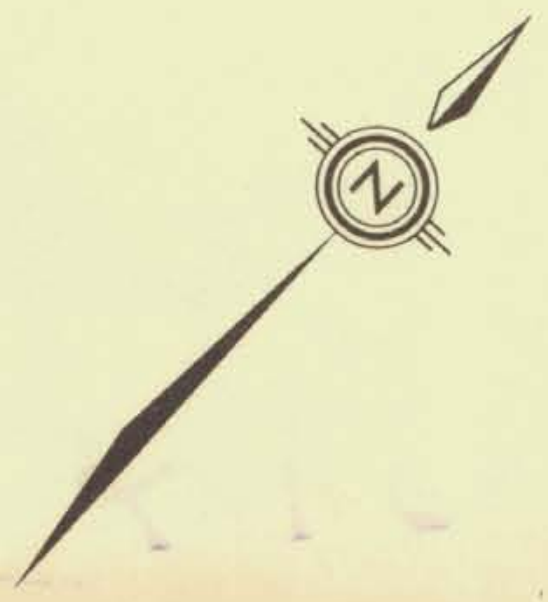
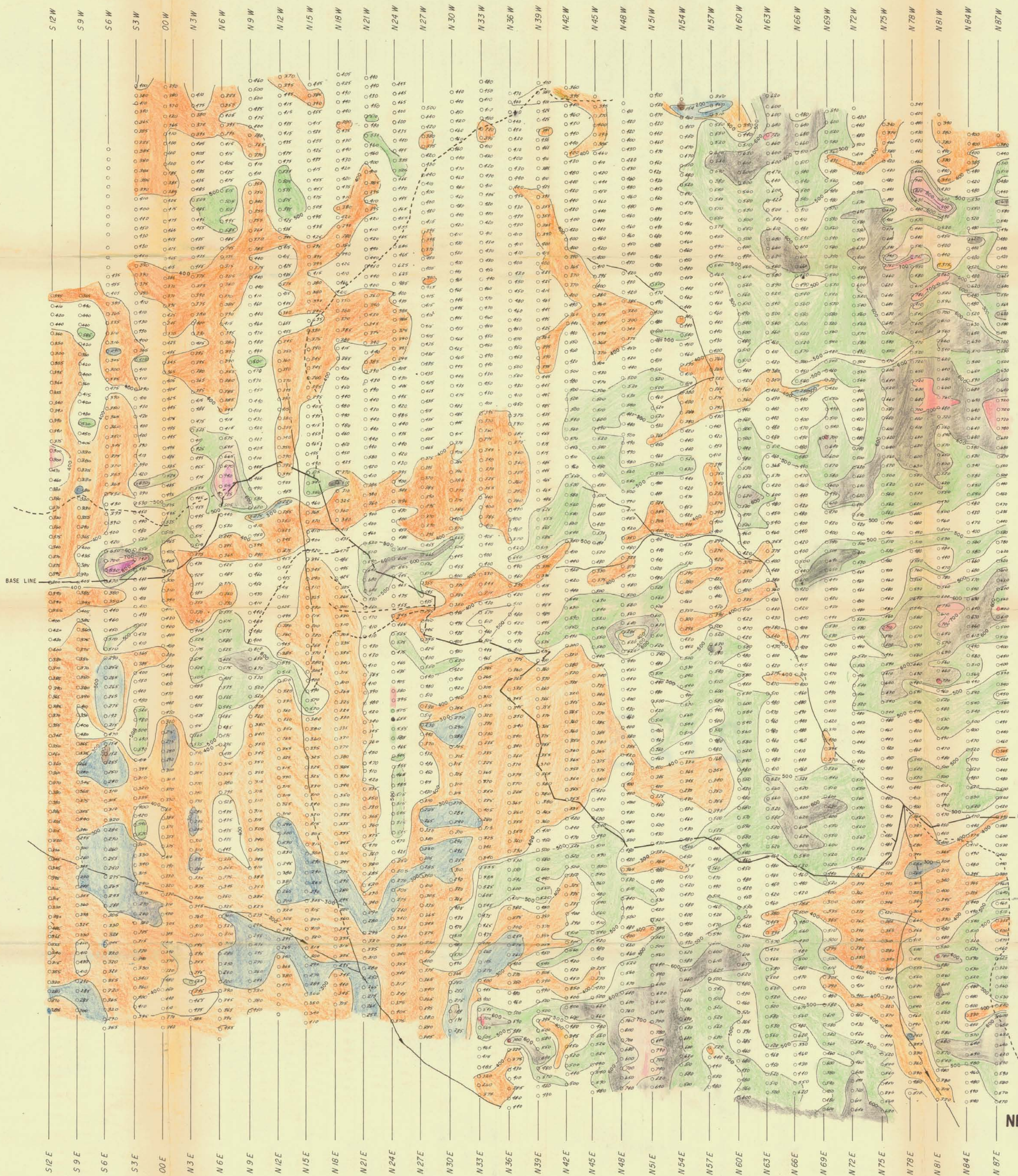
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NO. 2123 MAP #2

- LEGEND
- CREEKS
 - ROADS
 - BASE LINE
 - N87W— GRID LINES
 - 0590 MAGNETOMETER READINGS INDICATING CORRECTED READING IN GAMMAS ON SHARPE MF-1 FLUIGATE INSTRUMENT, REDUCED BY 10 IN 840 IS 1,400
 - ANOMALY

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MAGNETOMETER SURVEY
COPPER CANYON PROPERTY
MERRITT, B.C.



SCALE
500 1000 1500 FEET
Allen



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Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2123 MAP #2

- LEGEND
- CREEKS
 - ROADS
 - BASE LINE
 - N87W GRID LINES
 - 0590 MAGNETOMETER READINGS INDICATING CORRECTED READINGS IN GAMMAS ON SHARPE MF-1 FLUGATE INSTRUMENT, REDUCED BY 10 IN 54025,400 ANOMALY
 - 2.0

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SCALE 1:5000
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