

357

REPORT ON A
MAGNETOMETER SURVEY
OF THE
MINT 1-6 MINERAL CLAIMS
NICOLA M.D.

By
M.K. Lorimer, P.Eng.

14 June, 1961.

SUMMARY

In May and June, 1961, a magnetometer survey was made of the Mint 1-6 Mineral Claims near Merritt, B.C.

The survey revealed two anomalous areas of moderate size and intensity. The larger and stronger of the anomalies is located in an area which is known to contain small deposits of iron and copper.

It is recommended that a geochemical survey of the anomalous areas be carried out. If this survey reveals the presence of copper, the anomalies, particularly the larger one, should be checked by a self potential survey. If the results are favourable, the anomalies should then be diamond drilled.

CONTENTS

Object	Page 1
Location	1
Title	2
Transportation	2
Topography	3
Climate	3
Geology	3
History	4
Survey Methods	5
Results	6
Conclusions	7
Recommendations	8

Maps

In Pocket

- 1 Magnetometer Survey
- 2 Anomaly No. 1
- 3 Anomaly No. 2

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 357 MAP

REPORT ON A
MAGNETOMETER SURVEY
OF THE
MINT 1-6 MINERAL CLAIMS
NICOLA M.D.

OBJECT

This report is submitted for the purpose of recording the results of a magnetometer survey carried out on the Mint 1-6 Mineral Claims in the Nicola Mining Division in May and June, 1961, and for the purpose of presenting the conclusions to be drawn from these results.

LOCATION

The Mint 1-6 Mineral Claims are part of a group of 13 claims located about two miles west of Merritt, B.C., and south of the Nicola River. In general, the Nicola River forms the northern boundary of the property.

The claims cover part or all of Lots 126, 176, 393, 534, 535, 536, and 537 of Township 91, Kamloops Land District.

TITLE

The claims under consideration in this report are held as follows:

<u>Claim</u>	<u>Tag Number</u>	<u>Date Recorded</u>	<u>Title</u>
Mint No. 1	390454	15 June, 1960	W.D. Barr
Mint No. 2	390455	15 June, 1960	W.D. Barr
Mint No. 3	390456	15 June, 1960	W.D. Barr
Mint No. 4	390457	15 June, 1960	W.D. Barr
Mint No. 5	390458	15 June, 1960	W.D. Barr
Mint No. 6	390459	15 June, 1960	W.D. Barr

TRANSPORTATION

A gravel road, which runs from Merritt to the Indian village of Shulus, traverses the eastern half of the group and an old logging road gives access to the western part of the property.

Merritt is well provided with transportation facilities. It has highway connections with Kamloops, Spences Bridge and Princeton, and it is on the Canadian Pacific Railway line from Spences Bridge to Princeton. Daily passenger and freight services are available by highway and railway.

Merritt is 240 miles from Vancouver by road and rail.

TOPOGRAPHY

The northeastern quarter of the group lies on the flat agricultural land of the Nicola Valley. It is irrigated land, at present under hay. There is one group of old buildings in this area.

The southern half of the group is hilly, rising from an elevation of about 2000 feet to over 3000 feet. This area is mostly grass covered. There are a few belts of thick brush and trees, and a few rock outcrops.

The northwestern quarter is generally hilly and precipitous with thick stands of lodgepole pine. Rock outcrops cover about thirty percent of this area.

Four dry watercourses cross the property. There are no ponds or lakes on the group although there are a few ponds about a mile to the south. The Nicola River appears to be the only year-round source of water.

CLIMATE

The climate is generally dry with hot summers and fairly cold winters. The snowfall is light.

GEOLOGY

The Mint Group lies in an area of Nicola volcanic rocks, chiefly greenstones with minor amounts of calcite.

An intrusive body of red granitic rock lies immediately to the west of the group.

Specular hematite is common in the area, both as float and in place. In the northern part of the group, where an adit was driven by former owners, chalcopyrite is found associated with hematite in a deposit which strikes S80°E and dips 35° south. This body, as observed in a 15-foot shaft 400 feet west of the adit, has a thickness of 12 inches at the surface and 24 inches at the bottom of the shaft. No chalcopyrite was observed in the shaft. Although the deposit is weakly magnetic in places, no magnetite was seen.

HISTORY

The Mint Group covers an area which has been staked and prospected many times in the past.

Former owners drove two adits and sank a shallow shaft on the deposit described under "Geology". Both adits are caved. One is on the strike and the other at right angles to it. Judging from the size of the dump, the former adit is about 50 feet long. The shaft is about 180 feet above and about 400 feet west of the adit. It is about 15 feet deep.

Anacosta

The claim area abounds in test pits and trenches.

SURVEY METHODS

A straight base line was run with transit and stadia rod. This line passed through the junction of the location lines of the Mint 1, 2, 3, and 4 Claims (I-10 on the map). The east-west direction of the line was established by compass. It is a true direction. This line was designated No. 10.

Magnetometer stations were established every 200 feet along the base line. From these stations lines were run north and south by compass and 200-foot chain. These lines are designated by letters. At every 200-foot mark, corrected for slope, a lath stake was placed and marked with the letter and number which identifies its location. Magnetometer readings were taken at each of these stations and the time noted. When anomalous areas were located, intermediate readings were taken on a grid of 100 feet in order to locate the cores and provide better outlines of the anomalies.

Station I-10 was taken as the base for the survey and assigned a value of 2000 gammas. Auxiliary base stations were established along line 10. Readings were taken at I-10 at the start and finish of the day's work and at other 10-line base stations through the day. Diurnal corrections were applied to all readings, the readings were converted to gammas plus or minus the base reading of 2000, and the resulting values plotted on the map.

The instrument used was a Radar Magnetometer with a range of approximately 38000 gammas.

The field party was under the direction of the writer who did the transit work and much of the magnetometer work. W. Weatherly and D. Roline were the other members of the party. The former was trained to use the magnetometer and did so in the absence of the writer. Any anomalies found by him were checked by the writer.

Work commenced on May 19 and was completed on June 12, 1961.

RESULTS

The results of the survey are plotted on the accompanying map to a scale of 400 feet to the inch. Two smaller maps, to a scale of 100 feet to the inch, are also provided. They are enlargements of the anomalous areas and show the intermediate readings. Readings of over 3000 gammas are regarded as anomalous.

Two anomalous areas were located, one at the northwest corner of the Mint No. 2 Claim and the other near the southwest corner of the Mint No. 5 Claim. Both anomalies extend beyond the boundaries of the claims under consideration.

Anomaly No. 1:

Location: Northwest corner of Mint No. 2. Half of this anomaly lies outside the boundaries of the claim.

Size: 400 feet long by 250 feet wide.

Strike: Anomaly strikes east but main core strikes north.

Core: Has two cores, one outside the claim boundary and one inside.

Maximum intensity: 5430 gammas.

General description: Located on a high bluff with a shear drop of nearly 100 feet on the northeast side. The rock is greenstone. No mineralization was observed.

Anomaly No. 2:

Location: Southwest corner of Mint No. 5. A small part of this anomaly lies outside the claim.

Size: 400 feet long by an average of 100 feet wide.

Strike: North 60° East.

Maximum intensity: 4560 gammas.

General description: This anomaly lies in an outcrop area of minor relief. The rock is greenstone.

CONCLUSIONS

The Mint 1-6 Claims contain two anomalous areas, one at the north and the other at the south of the group.

The northern anomaly is both larger and stronger.

than the other. It therefore conforms to what might be expected since it lies between the old workings, with known iron and copper minerals, and the Copper Belle Mine from which some copper ore is reported to have been shipped in 1908 and 1913. This anomaly is therefore located in an area which is favourable for the deposition of iron and copper.

RECOMMENDATIONS

In accordance with the results obtained from the magnetometer survey, the following recommendations are made:

1. Check the anomalous areas for the presence of copper by a geochemical survey.
2. If the presence of copper in the soil is confirmed geochemically, run a self potential survey over Anomaly No. 1.
3. If the results are favourable for Anomaly No. 1, repeat for Anomaly No. 2.
4. Drill on any confirmed anomalies.

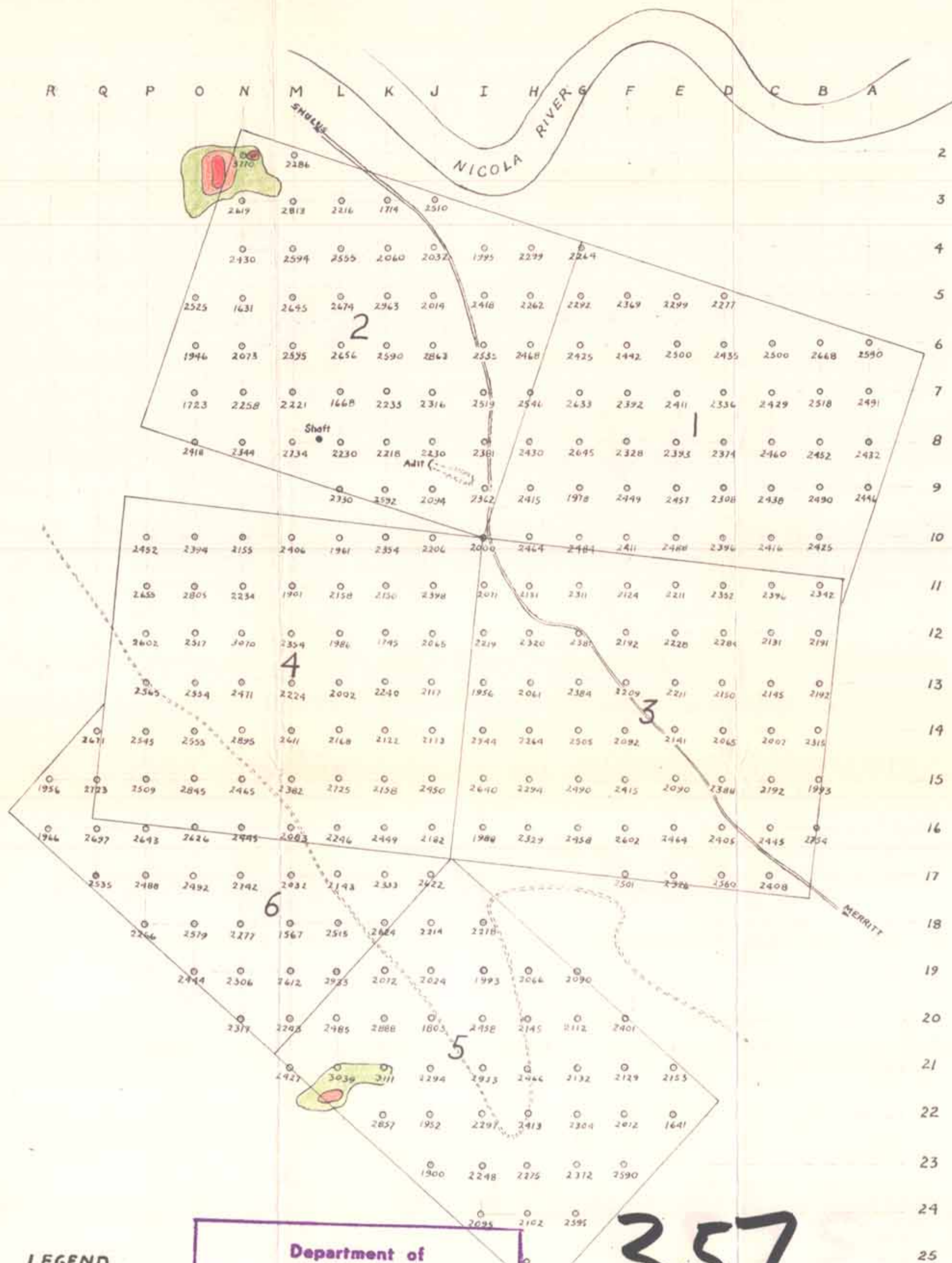
Respectfully submitted,



M.K. Lorimer, F.Eng.

BIBLIOGRAPHY

Cockfield, W.E.: "Geology and Mineral Deposits of Nicola
Map-Area, British Columbia." Geological Survey,
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LEGEND

- Claim Boundary
- 3** Claim Number
- Magnetometer Station
- 2590 Magnetometer Reading in Gammas
- Public Road
- Logging Road
- D, 5** Magnetometer Grid
- Anomalous Area (above 3000 gammas)

**Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT**
 NO. 357 MAP 1

357

(M)



**MINT 1-6 MINERAL CLAIMS
 MAGNETOMETER SURVEY**

Scale: 1" = 400'	<i>M. K. Lorimer</i>
Drawn: M. K. Lorimer	
Date: 13 June, 1961	

110

P O N M

357

P-2
1792

O-2
3279

5320

N-2
3770

5430

2826

M-2
2286

MINT 13

5280

3148

3320




P-3
1537

O-3
3172

N-3
2619

MINT 2

M-3
2813

-  Above 3000 gammas
-  " 4000 "
-  " 5000 "

M. L. ...

MINT GROUP
ANOMALY No. 1

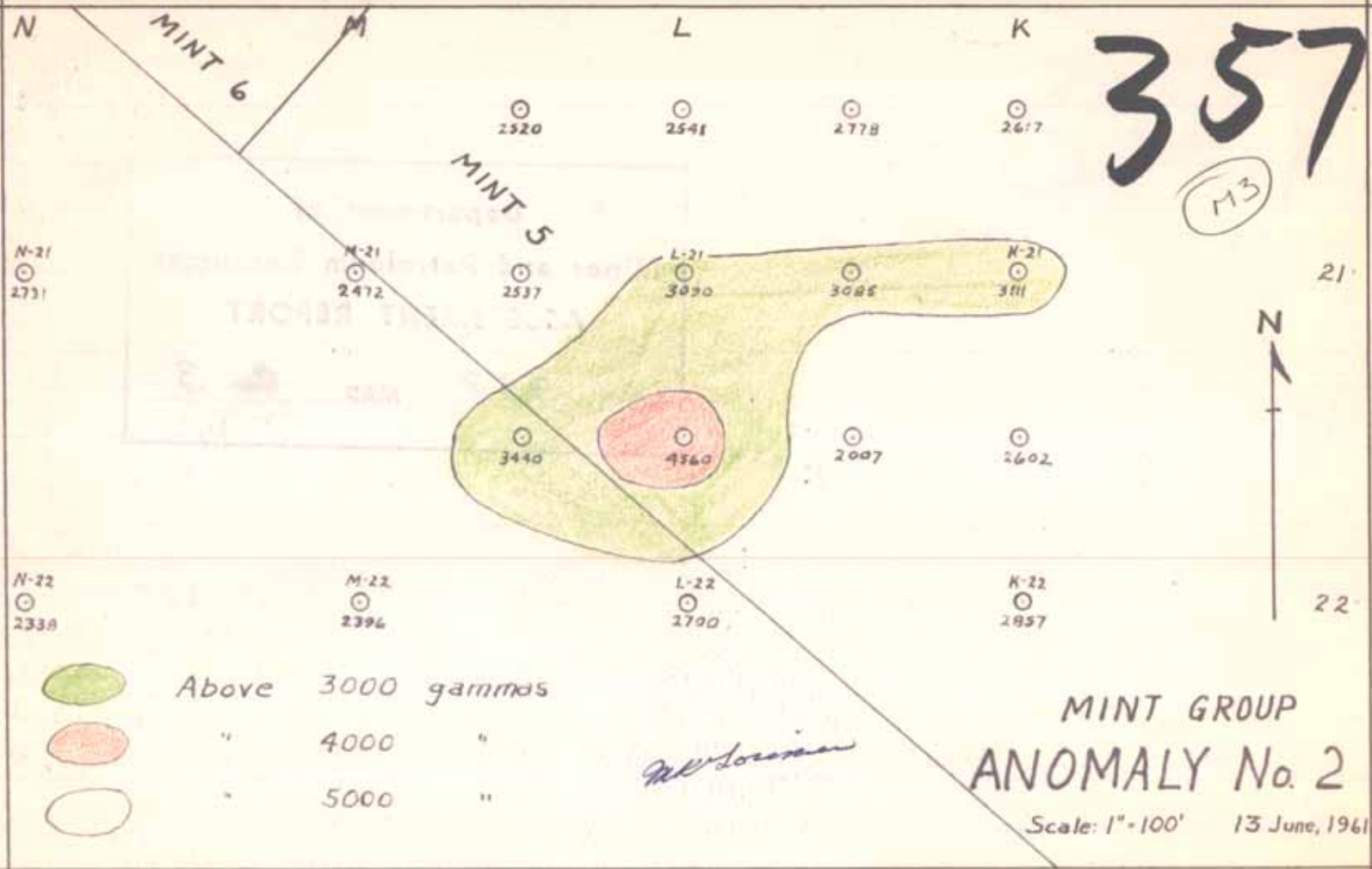
Scale: 1" = 100'

13 June, 1961



2

3



357
(M3)

N-21
2731

M-21
2472

2537

L-21
3090

3085

M-21
3111

N-22
2338

M-22
2396

L-22
2790

M-22
2957

3440

4360

2007

2602

- Above 3000 gammas
- " 4000 "
- " 5000 "

M. L. Loomis

MINT GROUP
ANOMALY No. 2

Scale: 1"=100' 13 June, 1961