

GEOCHEMICAL SURVEY REPORT

on the

MOUSE GROUP V MINERAL CLAIMS

921/2E

for

NICOLA LAKE MINING COMPANY LTD. (N.P.L.)

by

J.A. Mitchell, P. Eng.
Vancouver, British Columbia.

September 12, 1967.

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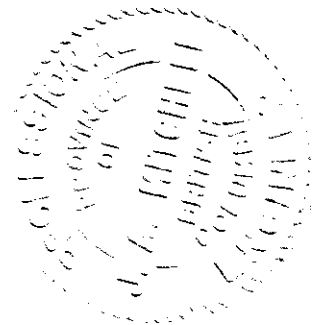
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C E R T I F I C A T I O N

I, JAMES A. MITCHELL, of 2991 Mathers Avenue, West Vancouver, British Columbia, do hereby certify that:

1. I am a graduate of the University of British Columbia, 1932, and hold the Degree of Bachelor of Applied Science in Mining and have practised my profession since that time.
2. I am a registered Professional Engineer of the Province of British Columbia.
3. This report is based on a Geochemical Survey made in June 1967 on the Mouse Group Mineral Claims.
4. I have no interest directly or indirectly in the properties or securities of Nicola Lake Mining Company Ltd., (N.P.L.), nor do I intend to hold any such interest.


J.A. Mitchell, P. Eng.

West Vancouver, British Columbia
September 12, 1967.



GENERAL STATEMENT

The mineral claim group, Mouse V is underlain by volcanic and sedimentary rocks of the Nicola Group which are triassic in age. Medium grained granodiorite dikes intrude the Nicola Group and have a northerly strike. Chalcopyrite is visible in the volcanic rocks in several localities. The geology of the region is shown on Geological Survey of Canada Map 886A, Nicola Sheet.

PROPERTY

The mineral claims which are the subject of this report, lie approximately two and one half miles east of Upper Nicola, British Columbia and are immediately south of Nicola Lake.

The claim records are as follows:

Mouse Group V

<u>Mineral Claim Name</u>	<u>Record Number</u>
Mouse 111 to Mouse 118, inclusive	31006 to 31013 inclusive

TOPOGRAPHY

The topography of Mouse Group V Mineral Claims is steep and mountainous. The elevation difference between the south and north borders of the group averages 2400 feet for a horizontal distance of 3000 feet for an average slope of 38 degrees. Vertical cliff faces were encountered in a number of locations which made soil sampling hazardous and slow.

SURVEY CONTROL

A base line was established and sampling stations were located at intervals of 200 feet using a compass and nylon chain. Lines were run parallel to the base line on a spacing of 250 feet with control maintained by frequent cross tying to adjacent lines and stations. Lines were

run on a bearing 70 degrees east of north. Horizontal distance along lines was maintained by applying calculated slope corrections.

GEOCHEMICAL PROSPECTING

Sampling

A soil profile is generally well developed and soil samples were collected at the top of the "B" soil horizon at each station location. At a small number of stations a soil horizon was not developed, hence no sample was taken.

Analysis

Soil analyses were made by T.S.L. Laboratories Ltd., 325 Howe Street, Vancouver 1, British Columbia.

Copper determinations were made on 181 soil samples gathered from the Mouse Group V mineral claims. The samples were treated as follows at T.S.L. Laboratories:

After receipt, the samples were sorted in numerical order, dried at 200 degrees fahrenheit and screened through a minus 80 mesh nylon screen.

From the minus 80 portion a 1 gram sample was weighed and treated for one hour 212 degrees fahrenheit with Hydrochloric Acid.

After cooling the sample was brought to a certain volume and the copper content of this solution was measured by atomic absorption spectrophotometer (A.A.). The copper value in the soil sample was then calculated and reported in parts per million (P.P.M.).

Results

Copper - No copper anomalies were discovered. Four isolated stations containing copper in the amount of 41-80 parts per million and two stations with 89 and 110 parts per million were found, and these are considered to be slightly anomalous. The general background of copper values was found to be less than 20 parts per million.

CONCLUSIONS

No anomalous areas of copper were found as the result of analyses of 181 soil samples taken at locations described herein.

Detailed geological mapping should precede further physical work in this area. In this way favourable host rocks, alteration zones, geological structures, rock contacts or intrusive rocks may be recognized.

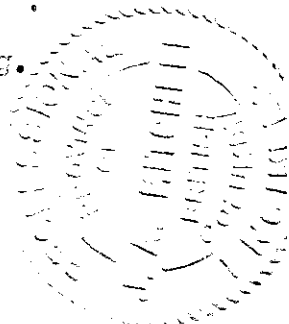
STATEMENT OF EXPENDITURE

Geochemical sampling was supervised by J.M. Ashton as part of a programme recommended by J.A. Mitchell, B.A.Sc., P. Eng., and was conducted by those shown below:

<u>Name</u>	<u>Dates Employed</u>	<u>Expenditure</u>
J.M. Ashton (B.A.Sc)	June 3, 4, 10, 11	\$ 200.00
P. Bessville	June 3, 4, 10, 11	100.00
E.J. Boldt	June 3, 4, 10, 11	100.00
R.D. Deane	June 3, 4, 10, 11	<u>100.00</u>
	<u>Total</u>	500.00
Compensation and benefits @ 15%		75.00
Room and board, 16 man days @ \$10.00/day		160.00
Jeep employed in collecting samples 4 days @ \$25.00/day		100.00
Geochemical analyses 183 samples @ \$1.20/sample		220.00
Reports and Maps		<u>135.00</u>
	<u>TOTAL</u>	<u>\$1,190.00</u>

Vancouver, British Columbia
Sept. 12, 1967.


J.A. Mitchell, P. Eng.



EVIDENCE OF QUALIFICATION

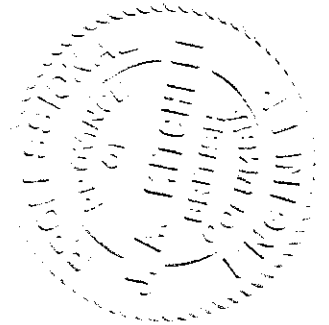
Mr. J.M. Ashton, B.A.Sc., is a graduate of the University of British Columbia, 1965, in Electrical Engineering. He is presently engaged by M.A. Thomas and Associates Ltd., Consulting Electrical Engineers.

In his undergraduate days he spent time in the summer on mineral exploration, and all his spare time is so spent. He shows a keen interest in all aspects of this work and has the necessary and ethical approach to his work.

Respectfully submitted,

J.A. Mitchell

J.A. Mitchell, P. Eng.



T S L

Laboratories Limited

325 HOWE STREET - VANCOUVER 1, B.C.

TELEPHONE 684-1374

ASSAYERS
CHEMISTS
GEOCHEMISTS

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM

NICOLA LAKE MINING CO. LTD.
601-850 W. HASTINGS STREET.
VANCOUVER 1, B.C.

REPORT NO.

V1184-1

SAMPLE(S) OF

SOIL

RESULTS IN PARTS PER MILLION

	SAMPLE No	Cu	Pb	Zn	Ag	Ni	Mo	Co
1	A-7 30	26						
2	32	9						
3	34	17						
4	36	8						
5	38	9						
6	40	14						
7	42	24						
8	44	29						
9	46	7						
10	48	25						
11	50	14						
12	52	13						
13	54	50						
14	56	38						
15	58	53						
16	60	28						
17	62	12						
18	64	28						
19	66	15						
20	A-7 68	24						

Cu by hot HNO₃ acid extraction
determined by A.A.

DATE June 9, 1967

SIGNED *[Signature]*

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GEOCHEMISTS

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM

NICOLA LAKE MINING CO. LTD.

REPORT NO.

V1184-2

SAMPLE(S) OF

SOIL

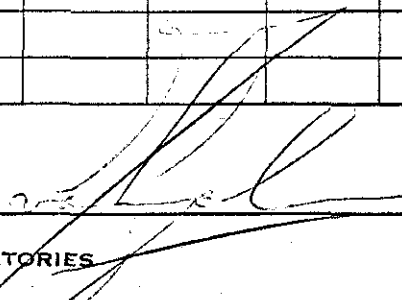
RESULTS IN PARTS PER MILLION

	SAMPLE No	Cu	Pb	Zn	Ag	Ni	Mo	Co
1	A-7 70	25						
2	72	35						
3	74	16						
4	A-8 30	20						
5	32	16						
6	34	18						
7	36	22						
8	38	17						
9	40	13						
10	42	15						
11	44	12						
12	46	25						
13	48	19						
14	50	19						
15	52	26						
16	54	20						
17	56	11						
18	58	11						
19	60	10						
20	A-8 62	20						

DATE

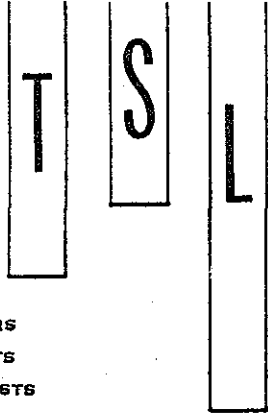
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SAMPLE(S) FROM

NICOLA LAKE MINING CO. LTD.

REPORT NO.

V1184-3

SAMPLE(S) OF

SOIL

RESULTS IN PARTS PER MILLION

	SAMPLE No	Cu	Pb	Zn	Ag	Ni	Mo	Co
1	A 8 64	14						
2	66	14						
3	68	10						
4	70	11						
5	72	38						
6	A-9 30	12						
7	32	10						
8	34	9						
9	36	13						
10	38	15						
11	40	11						
12	42	12						
13	44	15						
14	46	18						
15	48	14						
16	50	7						
17	52	8						
18	54	13						
19	56	11						
20	A-9 58	44						

DATE June 9, 1967

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SAMPLE(S) FROM NICOLA LAKE MINING CO. LTD.

REPORT NO.

V1184-4

SAMPLE(S) OF

SOIL

RESULTS IN PARTS PER MILLION

	SAMPLE No	Cu	Pb	Zn	Ag	Ni	Mo	Co
1	A-9 60	20						
2	62	12						
3	64	89						
4	66	7						
5	68	35						
6	70	14						
7	72	8						
8	74	14						
9	A-10 30	12						
10	32	11						
11	34	13						
12	36	12						
13	38	14						
14	40	15						
15	42	18						
16	44	37						
17	46	16						
18	48	14						
19	50	28						
20	A-10 52	20						

DATE June 9, 1967

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SAMPLE(S) FROM NICOLA LAKE MINING CO. LTD.

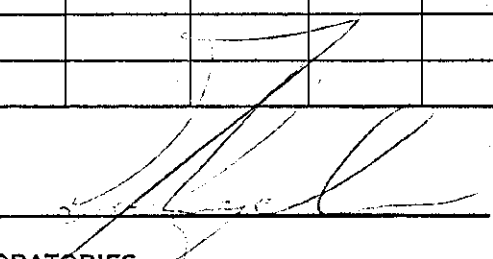
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V1184-5

SAMPLE(S) OF SOIL

RESULTS IN PARTS PER MILLION

	SAMPLE No	Cu	Pb	Zn	Ag	Ni	Mo	Co
1	A-10 54	27						
2	56	6						
3	58	13						
4	60	8						
5	62	25						
6	64	19						
7	66	20						
8	68	12						
9	70	9						
10	72	9						
11	A-10 74	14						
12	A-11 30	8						
13	32	8						
14	34	11						
15	36	10						
16	38	13						
17	40	13						
18	42	9						
19	42	9						
20	A-11 44	28						

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SAMPLE(S) FROM NICOLA LAKE MINING CO. LTD.

REPORT NO.

V1184-6

SAMPLE(S) OF SOIL

RESULTS IN PARTS PER MILLION

	SAMPLE No	Cu	Pb	Zn	Ag	Ni	Mo	Co
1	A-11 46 ^{NO} SAMPLE							
2	48	29						
3	50	14						
4	52	16						
5	54	15						
6	56	13						
7	58	21						
8	60	36						
9	62	24						
10	64	14						
11	66	110						
12	68	8						
13	70	14						
14	72	11						
15	A-11 74	26						
16	A-12 30	30						
17	32	25						
18	34	15						
19	36	16						
20	A-12 38	27						

DATE June 9, 1967

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SAMPLE(S) FROM NICOLA LAKE MINING CO. LTD.

REPORT NO.

V1184-7

SAMPLE(S) OF

SOIL

RESULTS IN PARTS PER MILLION

	SAMPLE No	Cu	Pb	Zn	Ag	Ni	Mo	Co
1	A-12 40	11						
2	42	37						
3	44	25						
4	46	32						
5	48	15						
6	50	16						
7	52	11						
8	54	10						
9	56	5						
10	58	27						
11	60	18						
12	62	27						
13	64	28						
14	66	17						
15	68	16						
16	70	26						
17	72	12						
18	A-12 74	16						
19	A-13 30	5						
20	32	14						

DATE June 9, 1967

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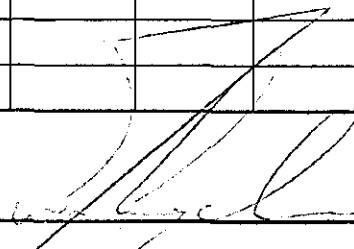
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V1184-8

SAMPLE(S) OF
SOIL

RESULTS IN PARTS PER MILLION

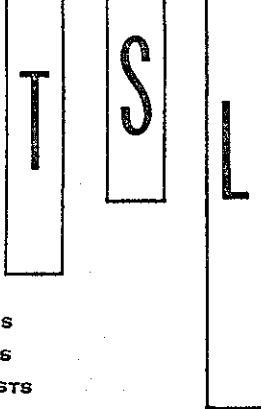
	SAMPLE No	Cu	Pb	Zn	Ag	Ni	Mo	Co
1	A-13 34	20						
2	36	10						
3	40	27						
4	46	45						
5	48	12						
6	50	14						
7	52	14						
8	54	9						
9	56	8						
10	58	35						
11	60	20						
12	62	6						
13	64	16						
14	66	6						
15	68	14						
16	70	13						
17	72	18						
18	A-13 74	41						
19	A-14 30	15						
20	32	13						

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SAMPLE(S) FROM NIOKA LAKE MINING CO. LTD.

REPORT NO.
V1184-9

SAMPLE(S) OF SOIL

RESULTS IN PARTS PER MILLION

	SAMPLE No	Cu	Pb	Zn	Ag	Ni	Mo	Co
1	A-14 34	26						
2	36	13						
3	38	9						
4	40	15						
5	42	4						
6	44	27						
7	46	7						
8	48	9						
9	50	8						
10	52	27						
11	54	15						
12	56	21						
13	58	25						
14	60	25						
15	62	34						
16	64	8						
17	66	8						
18	68	15						
19	70	9						
20	72	24						
	A-14 74	16						

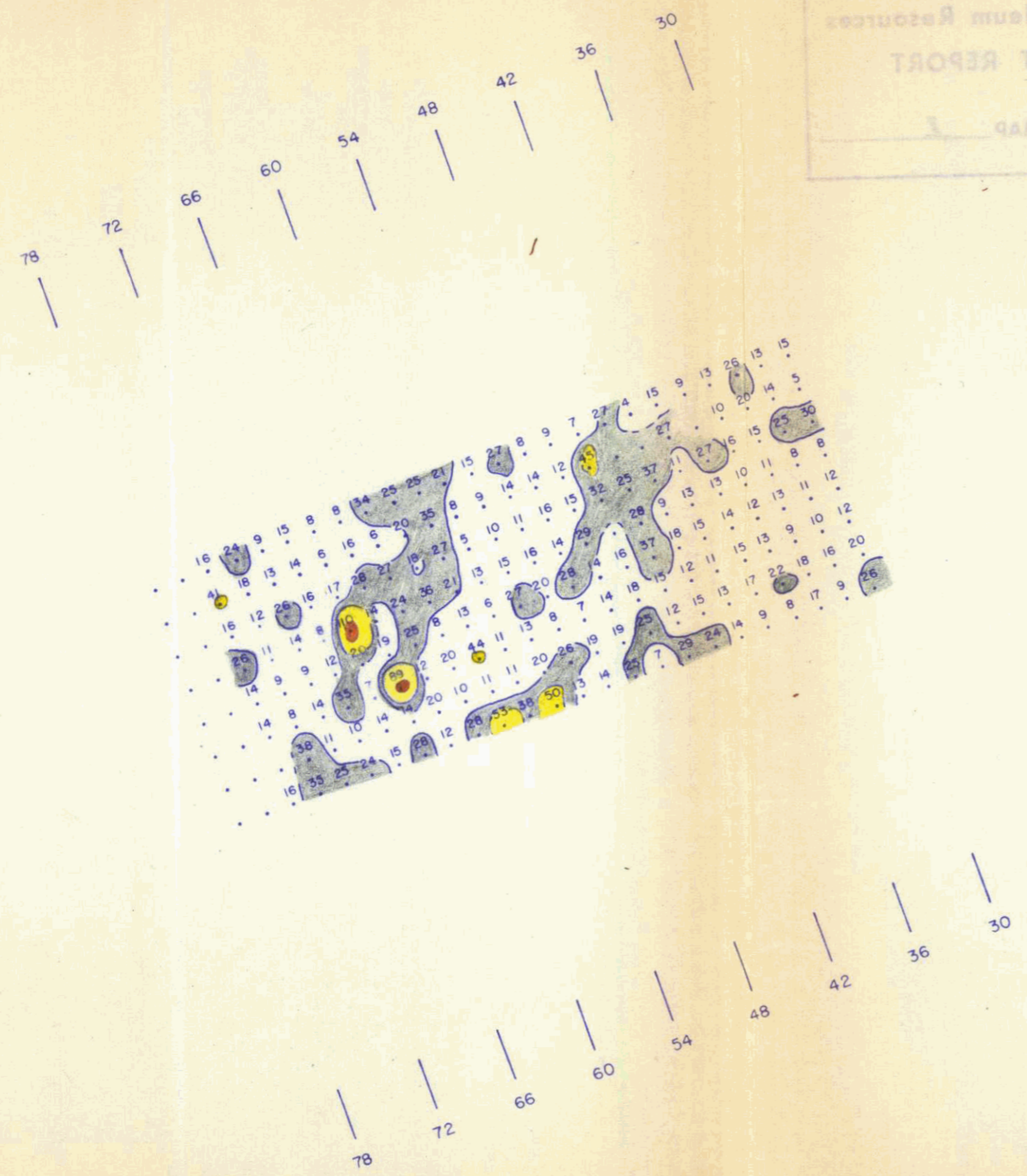
DATE June 9, 1967

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Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 1053 MAP 1



NOTES

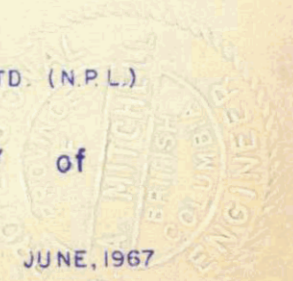
1. COPPER WAS EXTRACTED FROM SOIL SAMPLES WITH HOT HNO₃ ACID, AND DETERMINATION WAS MADE BY ATOMIC ABSORPTION SPECTROPHOTOMETER.
2. COPPER VALUES ARE SHOWN IN PARTS PER MILLION (PPM).

LEGEND

- 41 Copper value in ppm.
- Sample location.
- > 160 ppm copper
- 81 - 160 ppm
- 41 - 80 ppm
- 21 - 40 ppm
- 0 - 20 ppm



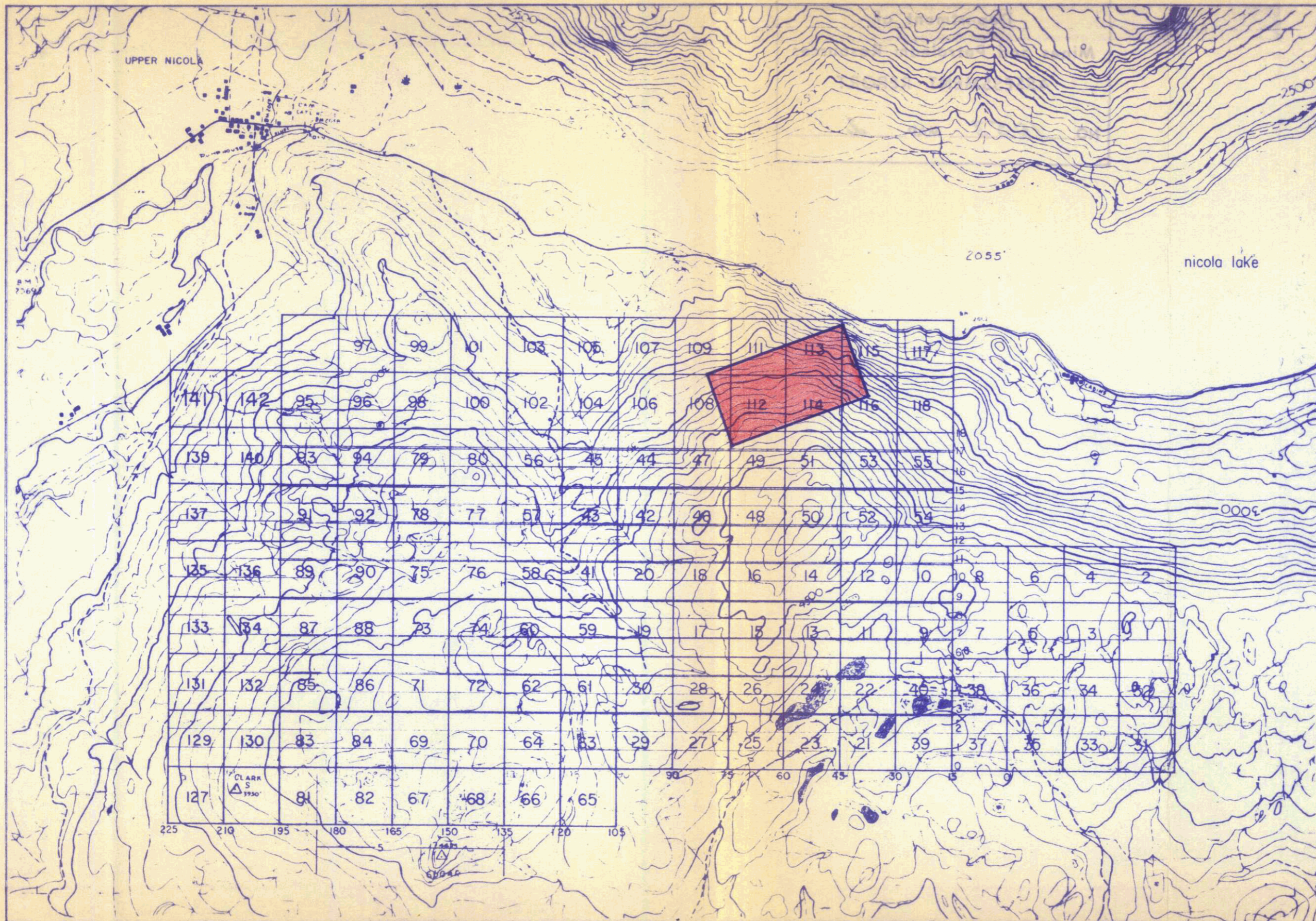
NICOLA LAKE MINING COMPANY LTD. (N.P.L.)
 NICOLA LAKE B.C.
GEOCHEMICAL SOIL SURVEY of
MOUSE MINERAL CLAIMS
 J.M. ASHTON
 DRAWN - C.R. KOEHLER



JUNE, 1967

PLATE I

1053



LEGEND

- AREA COVERED BY GEOCHEMICAL SOIL SURVEY

LOCATION MAP

GEOCHEMICAL SOIL SURVEY of
 MOUSE MINERAL CLAIMS, GROUP V
 J.M. ASHTON SEPT., 1967

PLATE II

1053