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REPORT ON THE
VIKING GROUP MINERAL CLAIMS,
MERRITT, B.C.

TO:
KAMLOOPS COPPER CO. LTD.,
KAMLOOPS, B. C.


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 1" = 400'

INTRODUCTION:

GENERAL

The Viking Group, consisting of 16 mineral claims, is owned by Kamloops Copper Company Limited of Kamloops, B.C. The period September 5 - 12 was spent largely on a dip needle survey and cutting of picket lines on the property. This report is compiled from results of the original reconnaissance prior to this period September 5, but mainly from the later work.

The purpose of the survey was to record any magnetic anomalies on the property which would indicate the presence or absence of magnetic minerals, primarily magnetite in the bedrock of the mineral claims. A magnetic anomaly would indicate an area deserving detailed attention as copper minerals have been found associated with magnetite on other claims adjacent to this property.

LOCATION AND ACCESS

The Viking Group mineral claims lie some 15 miles north-west of Merritt, B.C. The property is situated adjacent to Abbott Lake (see map).

The road to the property leaves the Merritt-Spences Bridge highway at Det, and travels northerly and easterly to the Viking Group and on to Farr Lake and Tyner Lake. The road continues southerly to the Craigmont property and joins the Aberdeen road. The distance by road to Merritt from the Viking is approximately 18 miles, using the Aberdeen road approach.

Merritt is situated on the Nicola River, approximately 130 air miles from Vancouver, B.C. It is arrived by good highway to Kamloops, Princeton and Spences Bridge, and it is on the Canadian Pacific Railway line.

PHYSIOGRAPHY

Drainage of the property is into Abbott Lake, Abbott Creek, and into the Nicola river. The hills are generally rounded and lack the rugged character of the mountain farther west and south.

The main timber growths are pine and fir, most of which could be classed as "non commercial" grade. Very little undergrowth exists at this elevation and natural exposures of rock are few.

GEOLOGY

Reference G.S.C., memoir 349, 1948. Geology and Mineral Deposits of Nicola Map Area, B.C. - by W.E. Cookfield and Geological map 886 A, which accompanies the memoir.

Overburden prevented any detailed geological examination of this area, and rock exposures are confined to the odd rock bluff. Observations revealed rocks of granite composition, diorites and granodiorites in various transitional phases.

RESULTS OF GEOPHYSICAL INVESTIGATIONS

The purpose of the geophysical survey was to determine the existence of any magnetic anomalies on the property and if so, what was their size and intensity. An anomaly would result from the presence or absence of magnetic mineral magnetite in the rocks

investigated. It is known that copper minerals have been found associated with magnetite on other claims in the Merritt area and for this reason a magnetic anomaly would be an area of interest for possible copper-ore bodies and worthy of more detailed attention.

Factors which produce variations in vertical magnetic intensity are:-

1. A concentration of magnetic minerals possibly associated with valuable minerals.
2. A variation in amount of accessory magnetite in granitic or volcanic bedrock.
3. A variation in amount of magnetite distributed through or connected with the overburden.
4. A variation in depth of non-magnetic overburden on 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 Nicola formations which would produce elongated magnetic highs and lows parallel to the formation strike. These variations are not expected to be great.
6. Any combination between variations in magnetic minerals in the rock and variation in the thickness of the overlying magnetic or non-magnetic overburden or caprock.

It will be seen from the above factors that the evidence of mineralization is not necessarily conclusive from a dip needle survey one way or another.

On the Viking mineral claims, areas of interest from results of the dip needle survey are as follows:-

Anomaly A on Viking No. 9 M.C. The highest dip needle reading here was $+17^{\circ}$.

Anomaly B on Viking No. 11 M.C. is situated at a cross-fault with a high reading of $+16'$ at station R + 1800. A small exposure revealed rocks chiefly transition rocks and altered diorites.

Anomaly C on Viking No. 14 M.C. with a high of $+16^{\circ}$. This zone in general is interesting with the adjacent high and low readings, but the physical feature -- such as the marsh to the west of station M + 1650 may place the cause of the readings into classification A (above).

GENERAL

The dip needle map was compiled from the results of the dip needle and reconnaissance survey during the period September 5 - 12. The dip needle used for the original survey was the V.K. Readings were taken on north-south lines at 150 ft. intervals. The lines were run at 500 ft. spacing.

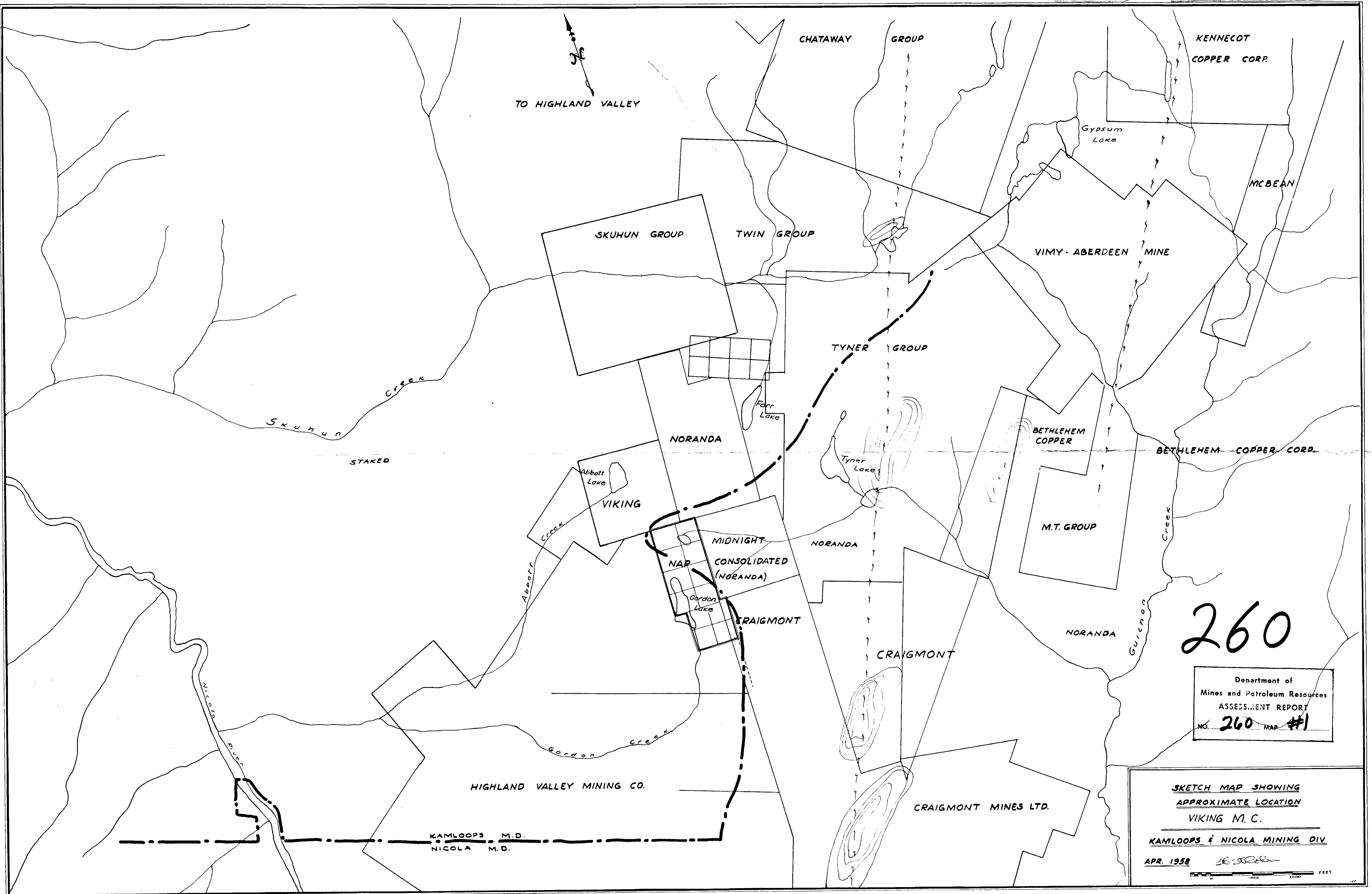
Further reconnaissance was carried out to the east on Viking 1, 3, 5, 7 but the results were not recorded and generally this area showed little interest.

Other areas of higher readings observed on the property are recorded on the map. The dip needle survey hastily eliminates large areas of little interest, leaving areas with indicated anomalies open for further study by supporting methods (other than diamond drilling) such as magnetometer survey, soil sampling or tree sampling.

A magnetometer survey carried out over the indicated anomalies on a grid of 100 ft. by 50 ft. would clearly outline the magnetic "highs" and the cost of this program would be very small. Further examination of the areas of magnetic anomalies by tree sampling is considered advantageous over soil sampling in view of the greater ground penetration of the tree root system. Here, twigs of jackpine are burnt and the ash tested for copper content. The results are plotted on a gridded map and correlated with the results of the magnetic anomalies to determine the presence of copper minerals associated with the magnetic minerals.

ACKNOWLEDGMENTS

The writer wishes to express his gratitude to Mr. R.W. Kennedy and to the directors of Kamloops Copper Co. Ltd. for the opportunity to investigate the Viking Group mineral claims.



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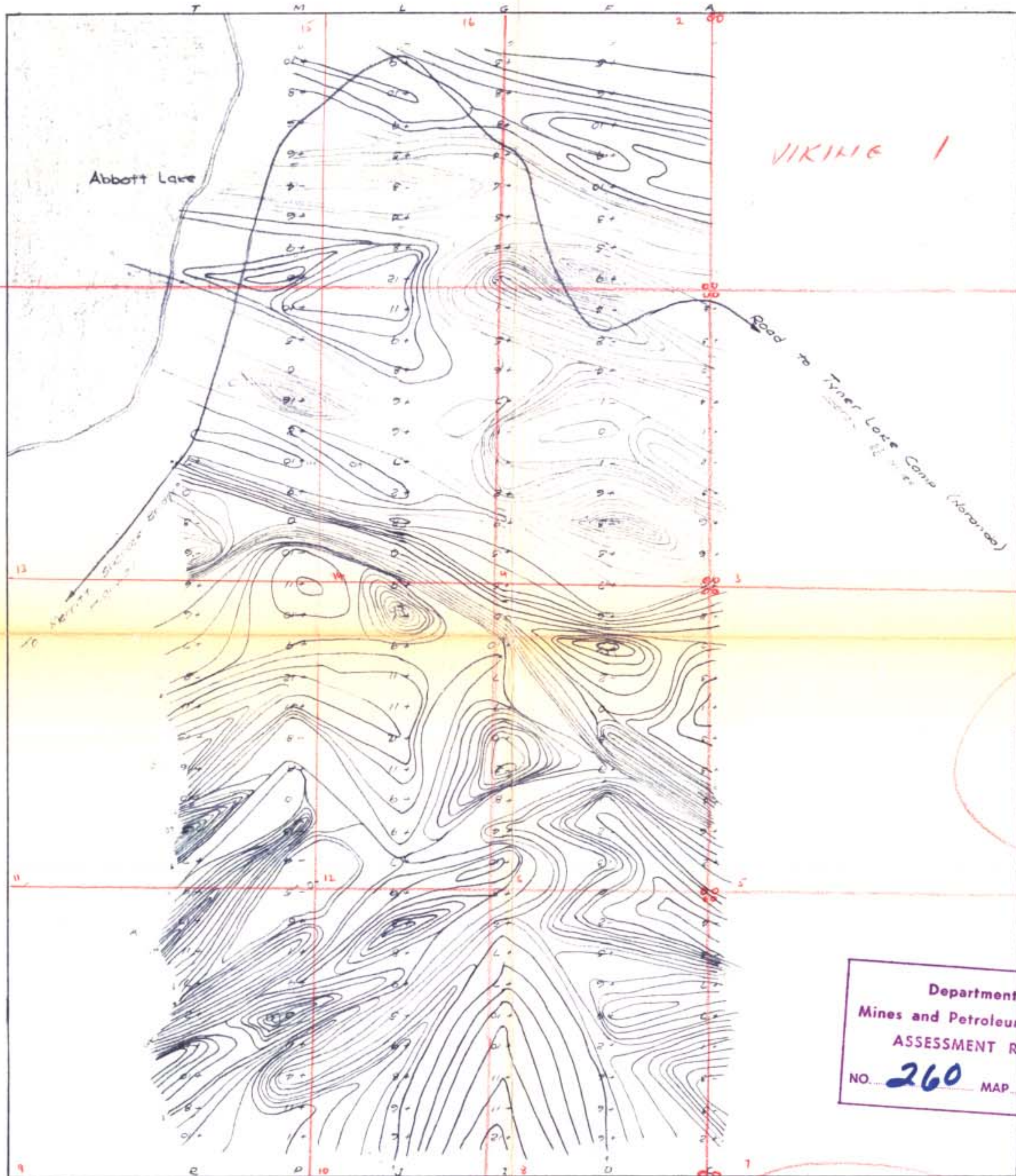
Department of
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ASSESSMENT REPORT
NO. 260 MAP #1

SKETCH MAP SHOWING
APPROXIMATE LOCATION
VIKING M. C.

KAMLOOPS & NICOLA MINING DIV.

APR. 1958 *H. J. [Signature]*





Note:
 THIS BOUNDARY
 CONSTITUTES THE
 LIMITS OF THE
 VIKING GROUP
 (SEE INSET)

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LOCATION LINE

Viking Location Line

LEGEND
 CONTOUR INTERVAL 1' OF NEEDLE
 ALL READINGS TAKEN USE 0°
 AS BASE.

15	16	2	1
13	14	4	3
11	12	6	5
9	10	8	7

VIKING GROUP

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VIKING GROUP
 KAMLOOPS MINING DIVISION
 PLOT OF DIP NEEDLE SURVEY (U.K.)
 Scale: 1" = 400' *J. J. Blain* September 1938