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GEOCHEMICAL REPORT
DOMINIC LAKE CLAIMS
GROUPS A, B, C & E

GREENSTONE MOUNTAIN,
KAMLOOPS MINING DIVISION,
BRITISH COLUMBIA
50° 120° N.W.

by

Gavin A. Dirom, P.Eng.,

for

DOMINIC LAKE MINING CO. LTD.

Date of Report May 3rd, 1967
Period of Field Work Oct. 12 - Dec. 1, 1966.

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ATTACHMENTS

	<u>Scale</u>
1 Sketch of Claims	1" : 3,000'
2 Claim Map - Showing Geochem Soil Grid	1" : 1,600'
4 GAD Map #6 - South Sheet - Geochemical Survey	1" : 500'
3 GAD Map #7 - North Sheet - Geochemical Survey	1" : 500'

INTRODUCTION

Following report summarizes a geochemical soil survey completed during the fall of 1966 on portions of the Dominic Lake claims. The report has been written to substantiate certain Applications for Certificates of Work which have been filed by Mr. George A. Burdett for Dominic Lake Mining Co. Ltd.

The writer is Consulting Engineer for Dominic Lake Mining Co. Ltd. and has been closely associated with these claims since September 2nd, 1966. The present report is based on personal knowledge and information; and utilizes maps prepared by the writer for a private report of this same date.

GENERAL SUMMARY

The soil survey indicates a wide, complex northwest-trending molybdenum belt in the Roper Lake area; and provides incomplete results on portion of a somewhat parallel copper belt lying adjacent to the north. The molybdenum mineralization seems to have some relationship to the Roper Lake granitic stock; and the copper mineralization to the Dairy Lake quartz-diorite stock, as well as to the Nicola volcanics which are intruded by both stocks. Geochemically, there seems to be only minor overlapping of the copper and molybdenum.

A preliminary program of diamond drilling, completed in the Roper Lake area in February and March, 1967, confirms the presence of widespread, very low grade molybdenite mineralization in the Roper Lake belt.

Further investigations of the molybdenum and copper belts have been recommended, including additional soil sampling.

PROPERTY AND OWNERSHIP

The Dominic Lake property consists of at least 192 claims, viz.:

TC 1 - 130
 Spur 1 - 16; 27 & 28
 Bruce 59 - 66; 67 - 70 Fractions
 A, B, C & D Fractions; also E & G
 MO 31 - 56.

All are owned by Dominic Lake Mining Co. Ltd., 815 West Hastings Street, Vancouver 1, B.C. For assessment purposes, they have been grouped by George A. Burdett, as per records at Mining Recorder's Office, Kamloops.

The property is partly a relocation of the DRG group, which was held by Kennco Explorations (Western) Ltd. in 1960 and subsequently allowed to lapse.

LOCATION AND ACCESS

Property lies on Greenstone Mountain about 15 miles airline west-southwest of Kamloops. It covers the summit and west and south slopes of the mountain; and includes Dominic and Roper Lakes. It forms a north-south block of claims extending about 1 mile north to 4 miles south of the summit, and up to 1 mile east to 2 1/2 miles west.

Access is by a dirt road leaving the TransCanada Highway at Cherry Creek about 12 miles west of Kamloops. Distance from Highway to Roper Lake is about 16 miles.

Elevations on property range from about 4,500 feet to 5,500 feet, but the main areas of interest are around 5,000 feet where the topography is gently undulating. Most of the property is covered with open, upland forest.

GEOLOGY

Property is underlain by Upper Triassic Nicola volcanics intruded by at least three bodies of granitic rocks. A stock in the vicinity of Roper Lake varies from "granite" to granodiorite; one in the Dairy Lakes, etc. area is a quartz diorite; and a third near Gilbert Lake is reported to be a "granite". Some Tertiary volcanics occur locally. Consist of basaltic flows and some felsitic tuffs. There are also some felsite, feldspar porphyry and hornblende lamprophyre dykes cutting the Nicola volcanics and the various intrusive bodies.

The intrusives and volcanics are variably altered and fractured. These features are more intense in proximity to the main contacts and where there is evidence of shearing and faulting. Jointing and minor slips are abundant. Fractures are mostly hairline to 1/4", quartz-filled and of at least two ages. Fracture attitudes seem to be somewhat random. Disseminated pyrite is widespread in the Nicola volcanics and also the intrusives, but occurs particularly along joints and fractures.

Chalcopyrite mineralization occurs in the North Copper area around 75 N. as sparse disseminations in quartz diorite. It was seen in unimportant breccia-type fractures in Nicola volcanics around the Microwave Station on the summit of the mountain. It was observed at only one location (38S. 23E.) in the Roper Lake molybdenum area. It is believed that small amounts of copper must occur in the pyrite fabric to explain some of the geochemical results in areas where no copper minerals have been recognized.

Molybdenite mineralization occurs sparsely within the portion of the Roper Lake area drilled this winter. It occurs in thin hairline seams and minor quartz fractures in both the intrusives and volcanics in this area. It was seen in all the diamond drill holes. Except for two holes it probably occurs in visible amounts in every 10 ft. section of the holes drilled. No molybdenite mineralization, however, was recognized in the North Copper area, where limited check analyses indicate ^{Ni}molybdenum content in the soil.

It is believed that significant copper mineralization is confined to proximity to the quartz diorite intrusives and the intruded Nicola volcanics; and that molybdenum mineralization is related to the Roper Lake "granite" intrusive.

GEOCHEMICAL SURVEY

Organization, etc.:

The field part of the soil survey was completed during period October 12th - December 1st, 1966. It was under the supervision of George A. Burdett, Exploration Manager. His field crew consisted of Peter Bland, Merton Holmes, Norm McCullough and Bob Wardrope.

The main Roper Lake grid area, 4N.-56S., 23W.-31E. (South Sheet), was contracted to Amex Mining Exploration Services, Kamloops. This outfit cut out lines at 400 ft. spacing and chained and picketed stations at 100 ft. interval, all controlled by Brunton survey and chain and compass base and tie lines. Expansion of this grid to east, west and south are taped and flagged (or picketed) but not cut out lines.

The North Sheet area is controlled by a North/South base line extended northerly from the South Sheet area. The preliminary grid is a taped and flagged expansion with line spacing 400 feet and sample interval 200 feet.

Coverage can be summarized as follows:

Main Roper Lake grid	104,800 feet	19.8 miles
Extension of above	166,500 "	31.5 "
North Sheet area	48,000 "	9.1 "
Total	<u>319,300 feet</u>	<u>60.4 miles</u>

Samples in the main Roper Lake grid area were taken at 100 ft. interval, and in the extension at 100 ft. or 200 ft. interval; in the North Sheet area, at 200 ft. interval.

A total of 1,911 soil samples were taken in the Roper Lake area, and these were run only for Molybdenum. In addition, ten stream silt samples were taken and assayed for both copper and molybdenum. Total of 245 samples were taken in the North Sheet area, of which all were run for Copper and only 25 for Molybdenum. Total determinations add up to 2,201.

Soil samples were taken using a shovel and consisted of the underlying "B" layer. The samples in the main Roper Lake grid area were taken with particular care. The balance were taken sometimes under rather rough snow conditions, and, therefore, must be considered more reconnaissance in character.

All samples were analyzed in the Vancouver geochemical laboratory of Noranda Exploration Co. Ltd. during the period December 1st, 1966, and April 10th, 1967. The samples were run by reliable colourmetric laboratory procedures for determining the acid soluble molybdenum and copper contents. Noranda has developed its own laboratory procedures which are confidential and classified and, therefore, are not obtainable for inclusion herewith.

Costs:

Following summary has been prepared by George A. Burdett:

Preparation of Roper Lake grid	\$1,625.00
Field Wages - 6 week period	3,657.00
Laboratory costs	2,888.75
Camp, transportation, travel & sundry	1,739.00
	<hr/>
Total	\$9,909.75
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Cost/sample works out to \$4.56; and cost/determination, \$4.50. These are all inclusive figures.

Results:

Accompanying Maps 6 & 7 record the locations and analytical results of the samples and also show contoured values. Map 6, South Sheet, covers the Roper Lake Molybdenum Belt; Map 7, North Sheet, the North Copper Area. The South Sheet area is largely covered with glacial drift; the North Sheet area contains more outcrops.

Roper Lake Molybdenum Area: Except for 10 silts in this area, the samples were not run for copper, as no important copper content is indicated. The 10 silt samples range from 16 to 64 p.p.m. Cu, i.e. well below the copper threshold indicated on the North Sheet. These samples were taken from the small creek draining the southeast corner of Roper Lake.

Graphic tabulation of 1,850 non-organic soil samples on Map 6 indicates a threshold of 22 p.p.m. Mo. For contouring purposes, values have been grouped from 15-25 p.p.m., 25-45 p.p.m. and 45 and over p.p.m. Mo. It is felt that Mo values down to 15 p.p.m. have some geological significance; values of 25 p.p.m. and over warrant some consideration; and values of over 45 p.p.m. should receive particular attention. However, one must not overlook several unknown factors, viz. depth of overburden, the fact that the overburden is largely transported glacial drift and also the effects of dispersion in general and the possible local concentrations of values in more humus material.

The soil survey in general indicates a northwest-trending belt of interest about 8,000 feet long and 4,500 feet wide which has its long dimension parallel to regional ice movements, viz. northwest to southeast. This belt in gross, and in some local detail, bears a relationship to the Roper Lake intrusive stock; and also in rough fashion to the magnetics of the area. The centre part of the belt conforms closely with the centre of the granitic stock, and the flanks represent the contact areas, or at least areas of volcanics cut by granitic dykes.

The evidence to date is that the soil results, in a general way at least, reflect underlying bedrock molybdenum mineralization. It seems most certain that they are not due to material transported into this area from the northwest, as to date there are no known sources in this direction. However, the predominant northwest trends indicated by the contouring may partly reflect parallel glacial ridges and bordering troughs, i.e. depth of drift cover. Also, some of the local trends, both northwest and northerly, may represent a certain amount of concentration in organic content in samples along drainage courses.

The scattered, above-threshold values to the southwest of the main belt, and also those on the southeast extension of the latter, suggest areas of relatively lower molybdenum content in underlying bedrock, but possibly may be due partly to greater depth of overburden, or to both factors.

Location of 15 BQ wireline diamond drill holes drilled during February and March, 1967, are shown on this map. These totalled 2,447 feet, of which 2,200 feet was in bedrock to a maximum depth of 207 feet. Depth of overburden varies from 4 feet to 16 feet in these holes, and averages less than 12 feet. Individual holes average from 0.018 to 0.048% MoS_2 , and highest value is 0.22% MoS_2 over 10 feet. Average of all the holes is 0.031% MoS_2 .

Purpose of the drilling program was to preliminarily check bedrock mineralization underlying what appeared to be the more attractive portions of the main "anomalous" belt.

North Copper Area: Map 7 is the north extension of Map 6 and joins on the common map margin as indicated by grid lines. The map shows the preliminary area covered, viz. 64-84 N., 50W.-30E. Sample values shown are for copper only. However, every tenth sample was run for Molybdenum. No results were Nil in all these cases.

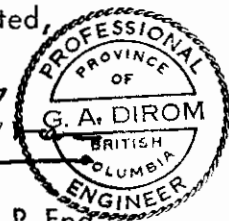
Graphic tabulation of 240 non-organic Cu values indicates a threshold of 150 p.p.m. Cu. Contouring has been rated arbitrarily on basis of 200, 400 and 800 and over p.p.m.

Results of the limited soil survey indicate that the area to the east of the Base Line warrants further investigation and additional soil sampling on north and south extensions. Based on incomplete geology, this eastern section lies close to the eastern margin of the Dairy Lakes quartz diorite stock, but is probably largely underlain by Nicola volcanics.

PREVIOUS DATE ON FILE

Attention is called to a report filed for assessment work by Kennco Explorations (Western) Ltd. dated November 17th, 1960, covering field work on the DRG Nos. 1-76 claims. The report covers Geological, Geochemical and Geophysical Surveys and includes seven maps. The area surveyed by Kennco extends northerly from the south end of Roper Lake. Its north limit diagonally crosses the common margin between GAD Maps 6 & 7. The most northerly Kennco crossline, K60N., and also the Kennco Base Line, are shown approximately on both the latter maps. It should be noted that the scales of the two sets of maps are different.

Respectfully submitted,



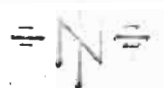
Gavin A. Dirom, P.Eng.



Dominic Lake Mining Ltd. NPL.
 Claims Map 921/10E

Scale 1" = 3,000 ft.

March 1967 G. Burdett



GILBERT L.



DAIRY LAKES



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
2 Map 1009

1009

DOMINIC LAKE MINING LTD.
DOMINIC LAKE CLAIMS
KAMLOOPS M.D., B.C.
CLAIM MAP
SHOWING
GEOCHEM SOIL GRID



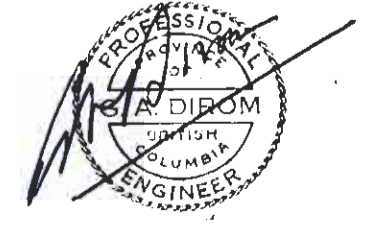
Department of
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ASSESSMENT REPORT
NO. 3 MAP 1009

COPPER - PPM
 200 < 400
 400 < 800
 800 & OVER

SAMPLES TAKEN BY P. BLAND - NOV. 1966
 ANALYSES BY NOKANDA EMPLOYEES - MARCH 67
 SAMPLES RUN FOR MO - ALL MIN.

GRID BASIS: TAPED & FLAGGED COMPASS LINES

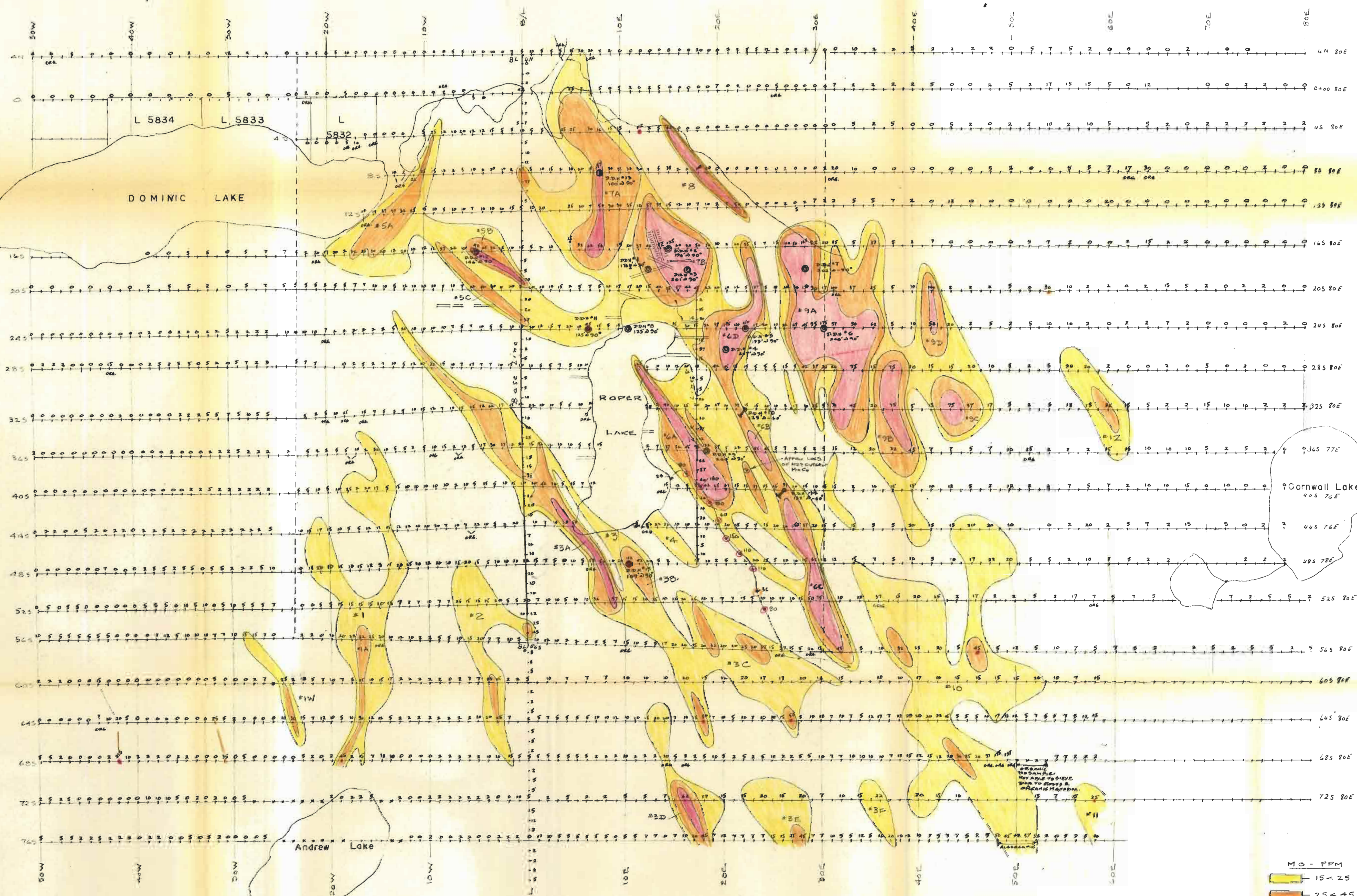
BASE MAP: PREPARED BY GEO. AUBRETT
SUBJECT TO CORRECTION



DOMINIC LAKE MINING CO. LTD
 DOMINIC LAKE CLAIMS
 KAMLOOPS M.D., B.C.
 NORTH SHEET
 GEOCHEMICAL SOIL SURVEY

1009

TO ACCOMPANY REPORT BY G. ADIR, MAY 1967
 SCALE: 1:5000
 SHEET: 6
 MAP: 1009



Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 9 MAP 109

M.O. - PPM
 15-25
 25-45
 45 & OVER

SAMPLES: TAKEN BY FIELD - NOV. 1966
 ANALYSES: BY HORANDA EXP. CO. LTD. - DEC. 1966
 & MARCH 1967
 * NO SAMPLES TAKEN.

GRID BASIS:
 4N-54S, 23W-31E: LINES CUT OUT, CHAINED & MEASURED
 REMAINDER: TAPED & FLAGGED COMPASS LINES ONLY

⊙ - BQ DIAMOND DRILL HOLES

BASE MAP: PREPARED BY GEA SURVEY
 SUBJECT TO CORRECTIONS



DOMINIC LAKE MINING CO. LTD.
 DOMINIC LAKE CLAIMS
 KAMLOOPS 110, 120, 130
 SOUTH SHEET
 GEOCHEMICAL SOIL SURVEY

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