3458

Report On

1971 Geochemical Survey
Dominic Lake Group

Kamloops M.D.
50° 120° N.W.

By

F.J.L. Guardia, P. Eng.

Date of Report: December 30, 1971
Date of Fieldwork: Oct. 25 - Nov. 4, 1971

ALRAE ENGINEERING LTD.
VANCOUVER, B.C.
ENGINEERS & GEOLOGISTS

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INTRODUCTION

This report sets out the results of a small experimental soil sampling program conducted on the Dominic Lake Group of mineral claims, which is located some 16 miles west - southwest of Kamloops, B.C. The claims are owned by Tro-Buttle Exploration Ltd. and its associated company Dominic Lake Mining Ltd.

The sampling work was carried out by D.K. Reinke and A. Wall of Alrae Engineering Ltd. in the period of October 25 to November 4, 1971. Messrs. Reinke and Wall are experienced prospectors, well versed in geochemical sampling techniques. The analyses of soil samples for copper and molybdenum were conducted by Fraser Laboratories Ltd. of North Vancouver. The work was supervised by Mr. R.G. Jury, P. Eng.

Disseminated molybdenite mineralization on the Roper Lake Group adjoining the Dominic Lake Group immediately to the south, has been known for some years and has been explored by trenching and diamond drilling. Little attention has previously been paid to the Dominic Lake Group. The present survey was intended to extend knowledge of possible molybdenite mineralization northwards under the thin cover of glacial overburden and to gain orientation data on distribution of copper in soils. The results indicate that more extensive coverage is possibly warranted in this northern part of the entire claim group and that previous samples taken within the drilled area should be reanalysed for copper to assess the significance of locally high copper content in soils taken during the present survey. However before any further work is undertaken the present survey must be assessed after examination of known, but hitherto undescribed copper mineralization in the vicinity of the survey area.

This report with costs incurred is being submitted as assessment work on some of the claims of the Dominic Lake Group.

LOCATION, ACCESS AND TOPOGRAPHY

The Dominic Lake Group is located at latitude 50° 35' N and longitude 120° 40' W, some 2 miles southwest of Greenstone Mountain. The claims

mostly lie to the north and northeast of Dominic Lake and the lake resort access road that extends from Cherry Creek on the Cache Creek - Kamloops Highway.

The topography in the area of the claims is rolling, heavily wooded plateau country, with elevations between 5,000 feet and 5,400 feet above sea level. Drainage is partially governed by south-, southeasterly trending ridges of glacial drift. Numerous small lakes occupy hollows in the drift of the area. Natural rock outcrops are rare in the immediate claim area.

PROPERTY

The Dominic Lake Claim Group is comprised of the following mineral claims:

Claim Name	Record No.	Record Date	Registered Owner
Bruce 59	53727	Feb. 16, 1966	Dominic Lake Mining Ltd.
Bruce 60	53728	"	"
Bruce 61	53729	"	"
Bruce 62	53730	"	"
Bruce 63	53731	"	"
Bruce 64	53732	"	"
Bruce 65	62196	Dec. 28, 1966	"
Bruce 66	62197	"	"
Bruce 67 Fract	62198	"	"
Bruce 68 Fract	62199	"	"
Bruce 69 Fract	62200	"	"
Bruce 70 Fract	62201	"	"
Spur 1	49542	Apr. 20, 1965	"
Spur 2	49543	Apr. 20, 1965	"
Spur 9	49550	Apr. 20, 1965	"
"E" Fraction	62541	Jan. 10, 1967	Tro-Buttle Exploration Ltd.
"G" Fraction	62542	"	"

Recently located claims, also included in the Dominic Lake Group, for which record number are not yet available, are as follows:

Claim Name	Tag No.	Location Date	Registered Owner
LA 1	163179 M	Oct. 27, 1971	Dominic Lake Mining Ltd.
LA 2	163180 M	"	"
LA 3	163181 M	"	"
LA 4	163182 M	"	"

GENERAL GEOLOGY

The general geology of the claims area has been described by Hugh Naylor in a report to Tro-Buttle Explorations dated November 8, 1966. The report gives some detail on lithologies and contact relationships but copper and molybdenum mineralization is shown on the accompanying map while only briefly referred to in the report. Modes of occurrence, widths and grades are not mentioned.

The principal rock types present are the Nicola Group Volcanics and stock-like granite to dioritic intrusions. The oldest rocks in the area are the Nicola Volcanics which consist of andesitic and basaltic rocks that have undergone local recrystallization and brecciation, epidotization and bleaching. Intruded into the volcanics is the Dairy Lakes Stock, a quartz diorite body with minor zones showing introduction of pink felspar phenocrysts and locally high hornblende content. Another stock, known as the Roper Lake Stock is essentually granitic in composition, but has locally undergone bleaching and pyritization, usually accompanied by extensive quartz-veining.

Nicola Volcanics occupy much of the easterly and southeasterly portion of claim group. The Dairy Lakes Stock underlies the central and western part of the claims, north of Dominic Lake, while the Roper Lake Stock occurs mainly south of the claim group but extends into much of the Spur 6 mineral claim.

Molybdenite mineralization in the Roper Lake Stock has been investigated by geochemical surveys, bulldozer trenching and some diamond drilling. Minor molybdenite is found in Nicola volcanic rocks close to the contact. Chalcopyrite mineralization, rather than molybdenite is found in the quartz-diorite of the Dairy Lakes Stock and several instances in the volcanics close to its contact. A number of showings are shown on Naylor's map to occur on the Bruce

and LA claims of the Dominic Lake Group but previous reports do not indicate their extent or significance.

GEOCHEMICAL SURVEY

271 soil samples were collected from an east-west aligned grid of lines cut from a central base line. The lines were spaced 400 feet apart and sample interval was 100 feet. Total length of cut line was 5 miles.

All samples were analysed for copper and molybdenum content by Fraser Laboratories Ltd. of North Vancouver, using the Techtron AA-S photo- spectrometer. Wherever possible, samples were taken from the B horizon of the soil profile, below the zone of surface contamination by humic matter. However, swampy conditions made some sampling of organic matter inevitable and this factor has been noted by the analyst whenever it has occurred. Samples with an appreciable organic content are marked on the accompanying map.

The map shows sample locations in relation to topography and claim boundaries of the Dominic Lake Group. Results of analyses for copper and molybdenum are also shown. Due to insufficient data to clearly establish trends, no attempt has been made to contour the results of the survey. However, as with previous geochemical work done on the Roper Lake Group, immediately to the south, it is clear that some trending of geochemical values is directly related to the north-northwesterly alignment of ridges of glacial drift that control much of the drainage.

Due to a number of erratic highs and some 19 samples that showed high organic content, a factor tending to lead to abnormally high concentrations of copper and molybdenum, a full statistical treatment of the available data is considered to be inappropriate. However histograms to show value frequencies for copper and molybdenum are presented and from these arbitary threshold values of 160 ppm copper and 15 ppm molybdenum are assumed. Non-organic samples in excess of 220 ppm copper and 20 ppm molybdenum are considered to be anomolous. Results of sampling may be summarized thus:

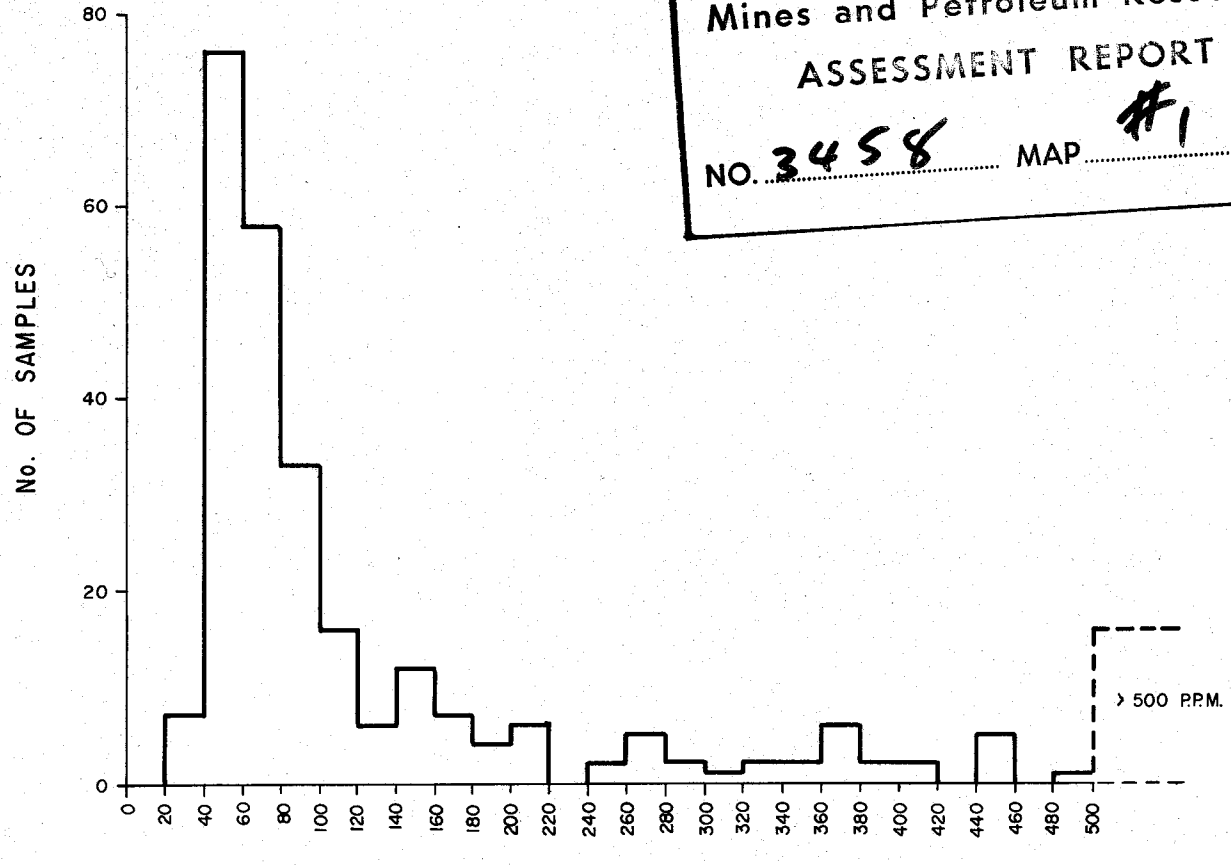
Total number of samples	271
Number of organic samples	19

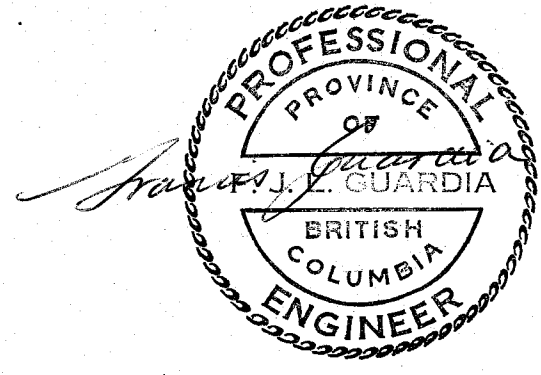
TRO-BUTTLE EXPLORATION LTD.

DOMINIC LAKE GROUP

DISTRIBUTION OF COPPER IN SOILS

DECEMBER, 1971





F.L.G. 1971

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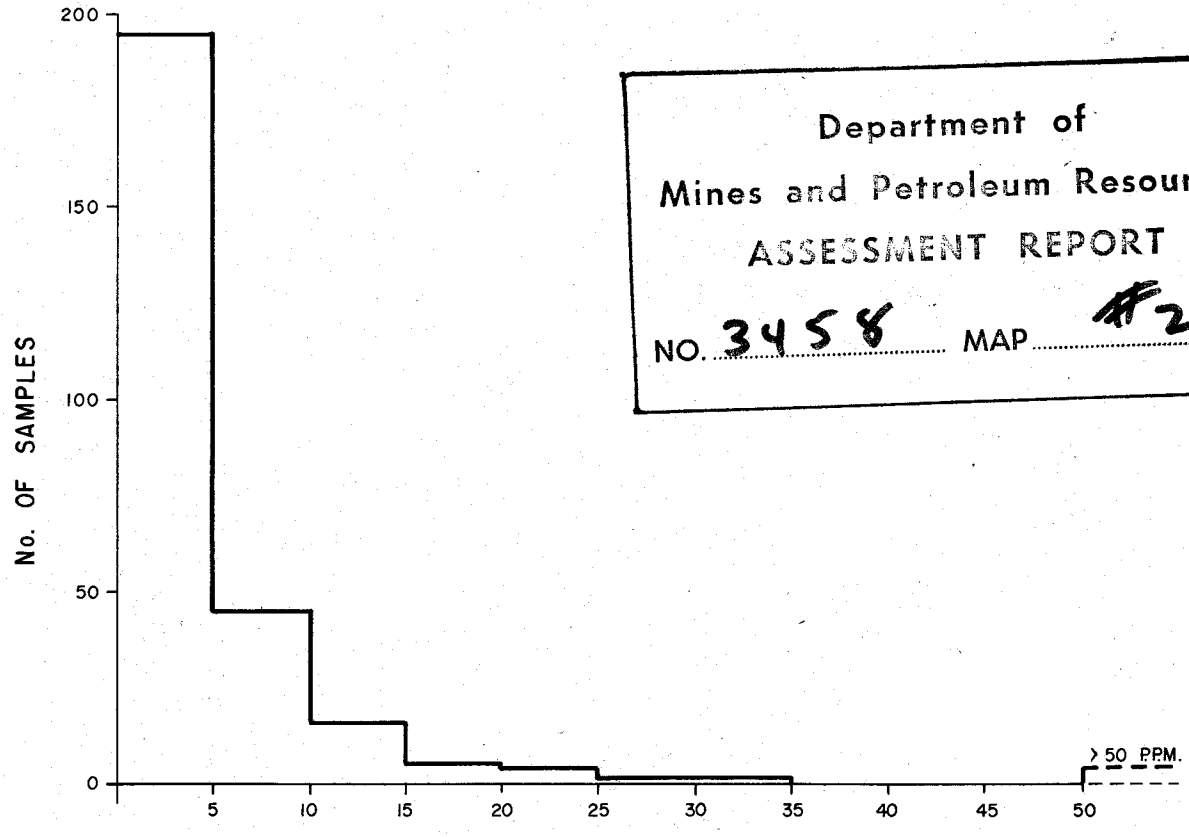
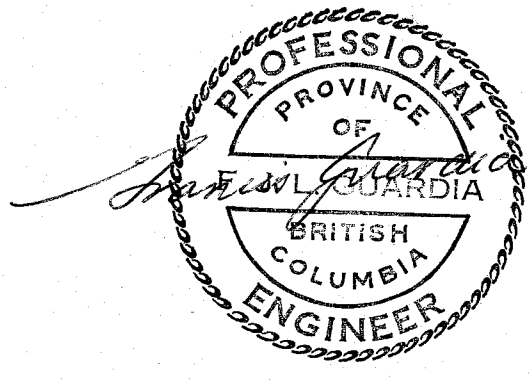
DOMINIC LAKE GROUP

DISTRIBUTION OF MOLYBDENUM IN SOILS

DECEMBER, 1971





F.L.G. 1971

Copper	- arbitary threshold	160 ppm
	- samples above threshold	63
	- anomalous samples (non-organic)	29
	- range of anomalous values (non-organic)	240-990 ppm
Molybdenum	- arbitary threshold	15 ppm
	- samples above threshold	15
	- anomalous samples (non-organic)	6
	- range of anomalous values (non-organic)	22-1010 ppm

Clearly a number of apparently isolated and minor anomalous zones exist for both copper and molybdenum. These would appear consistent with scattered and local zones of minor mineralization as noted by H. Naylor in his geological mapping in 1966.

COSTS

Costs of the soil sampling program described above are as follows:

Salaries:		
A. Wall - Oct. 25 - Nov. 4, 1971	658.90	
D. Reinke - Oct. 24 - Nov. 4, 1971	658.90	
R.G. Jury - Mobilization and supervision	355.00	
F. Guardia - Report and Map preparation	350.00	
		$ 2,022.80
Supplies and Rental:		$ 37.84
Assays:		$ 469.20
	TOTAL:	$ 2,529.84

CONCLUSIONS

271 soil samples were collected from 5 miles of cut line on the Dominic Lake Group of claims. The survey was intended to assess the effectiveness of the method in overburden covered portions of an area known to have several showings of disseminated copper and molybdenum minerals, associated with small granitic to dioritic stocks intruded into Nicola Group Volcanic rocks.

Samples were analysed for copper and molybdenum and a number of small

isolated anomalous zones were detected. These zones are apparently consistent with scattered mineralization previously detected in outcrop and bulldozer trenches, although no detailed descriptions of copper occurrences appear in earlier reports of the area.

No further work can be recommended on the Dominic Lake Group until the results of the present survey are assessed in the light of reexamination of the known mineralization on the ground. Such an examination should pay close attention to drainage and distribution of glacial material to evaluate the possibility of the anomalous zones being wholly derived from known disseminated mineralization.

Respectfully submitted,

F. J. L. GUARDIA

F.J.L. Guardia, P. Eng.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA

BRUCE 70 FR.

BRUCE 69 FR.

BRUCE 68 FR.

BRUCE 66

BRUCE 59

BRUCE 61

BRUCE 63

LA 1

LA 3

BRUCE 67 FR.

BRUCE 65

BRUCE 60

BRUCE 62

BRUCE 64

LA 2

LA 4

"E" FR.

"G" FR.

SPUR 1

SPUR 3

SPUR 5

SPUR 7

SPUR 9

SPUR 2

SPUR 4

SPUR 6

SPUR 8

SPUR 10

Dominic Lake

Resort

Baseline

30 W.

20 N

16 N

12 N

8 N

5100

5200

5300

5400

5500

5600

N

3458 M3

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3458 MAP #3

LEGEND

214 COPPER IN PPM.
32 MOLYBDENUM IN PPM.

ORGANIC SAMPLE

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
F. J. L. GUARDIA

NOTE: Map to accompany report on 1971 Geochemical Survey, Dominic Lake Group, Kamloops M.D., by F. Guardia, P.Eng., dated December 30, 1971.

ALRAE ENGINEERING LTD.
CONSULTING ENGINEERS & GEOLOGISTS. VANCOUVER, CANADA

TRO-BUTTLE EXPLORATION LTD.

DOMINIC LAKE
1971 GEOCHEMICAL SURVEY

SCALE : 1" = 400'	DESIGNED : F.G.
DATE : Dec. 1971	DRAWN : ALTAIR
REVISED :	CHECKED : R.G.J.
	MAP No