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Area 'J'

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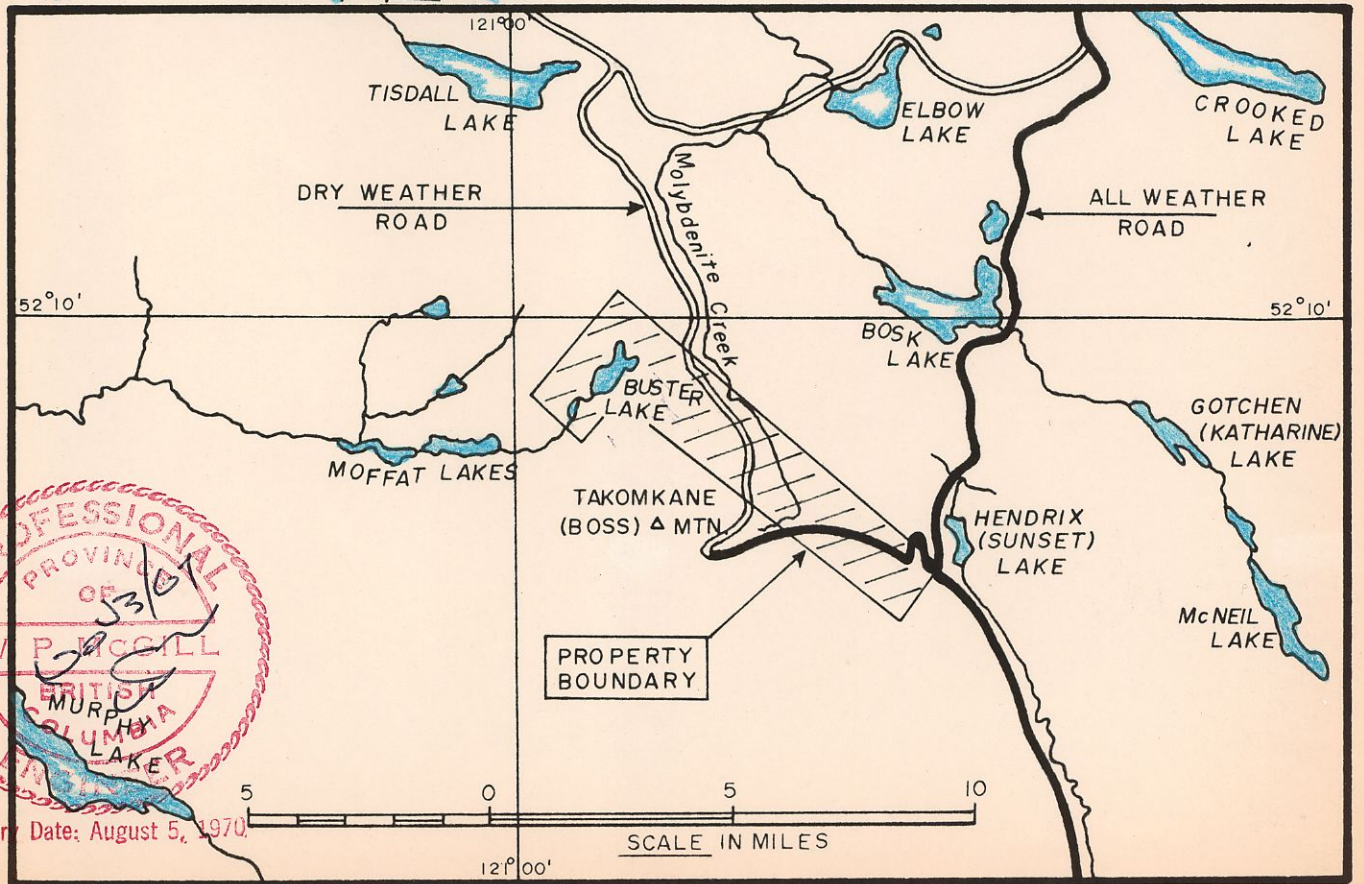
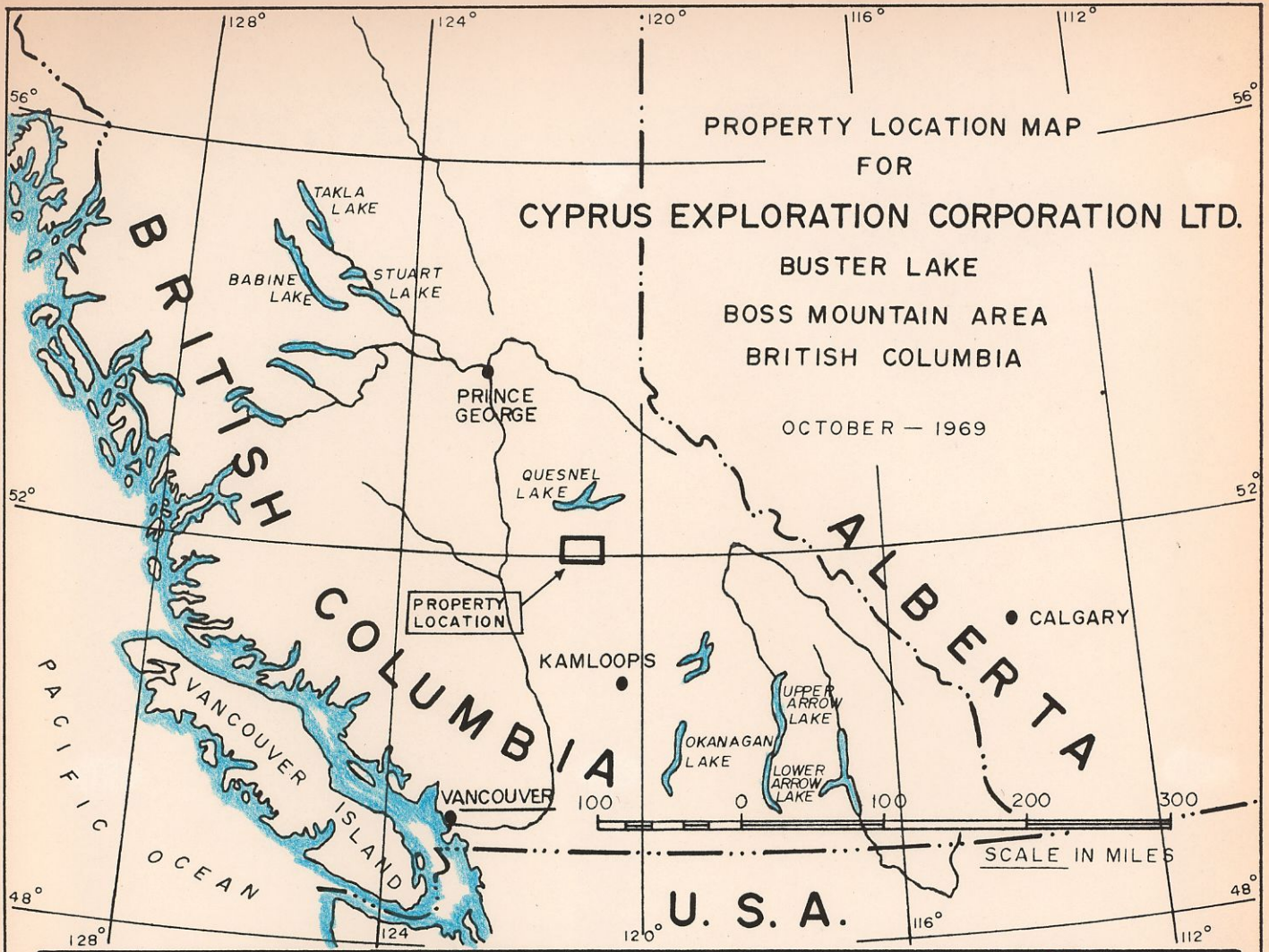
GEOLOGICAL REPORT
ON PROPERTY OF
CYPRUS EXPLORATION CORPORATION LTD.

AREA J
BUSTER LAKE
BOSS MOUNTAIN AREA
BRITISH COLUMBIA
CANADA

BY
W. P. MCGILL, M.A., P.ENG.

WILLIAM P. MCGILL & ASSOCIATES LTD.

OCTOBER 1969



PROFESSIONAL
 PROVINCE OF
 5310
 W. P. MCGILL
 MURP.
 BRITISH COLUMBIA
 LAND SURVEYOR

Expiry Date: August 5, 1970

INTRODUCTION

This report embraces geological studies of a specific group of claims known as "Area J", which was located along a northwest trending airborne magnetic anomaly. The geological studies were carried out with the ultimate aim of assessing the potential of the ground for concentrations of economic minerals, mainly molybdenite and copper.

The mapping was of a detailed reconnaissance nature and was carried out in the main to determine whether further exploration should be done.

The work was carried out by a two-man geological party under the direction of geologist R. P. Sinha, M.Sc., working under the direction of the writer.

SUMMARY

During the period from July through to October, 1969, the property, consisting of 205 contiguous mineral claims, was geologically mapped at the scale of 500 feet to 1 inch. A few silt samples were also taken to supplement the geological program.

Four areas within the claim group are considered to be favourable localities for possible economic mineralization and warrant further investigation. Detailed geological

and geophysical surveying is suggested to provide additional knowledge.

PROPERTY

The property comprises 205 contiguous claims known as "Area J". The claims are numbered as follows:

<u>Claim Names</u>	<u>Record Nos.</u>	<u>Tag Nos.</u>	<u>Total No. of Claims</u>
J 1-39	49695 - 49733	1401-M - 1439-M	39
J 40		81853 M	1
J 41	49735	1441-M	1
J 42		81850 M	1
J 43	49737	1443-M	1
J 44		81849 M	1
J 45-50	49739 - 49744	1445-M - 1450-M	6
J 56-95	49745 - 49784	1456-M -1495-M	40
J 96		81852 M	1
J 97	49786	1497-M	1
J 98		81851 M	1
J 99-150	49788 - 49839	1499-M - 1550 M	52
J 201-215	51320 - 51334	7501M - 7517M	15
J 216	51335	841598	1
J 217-218	51336 - 51337	969811 - 969812	2
J 219		81856 M	1
J 220		81854 M	1
J 221		81857 M	1
J 222		81855 M	1
J 223		81859 M	1
J 224		81858 M	1
J 225		81860 M	1
J 226		81861 M	1
J 227-230	51346 - 51349	901633 - 901636	4
J 232-237	51351 - 51356	878432 - 878437	6
J 238-245	51357 - 51364	1551M - 1558M	8
RS 1-4	53078 - 53081	6634M - 6637M	4
J 260-263		6638M - 6641M	4
J 264-271		6643M - 6650M	8

The claims are situated in the Cariboo Mining Division, Province of British Columbia.

LOCATION AND ACCESS

The property is located at an elevation from 4,000 to 6,000 feet between latitude $52^{\circ} 5'$ to $52^{\circ} 12'$ and longitude $120^{\circ} 45'$ to $121^{\circ} 0'$, on the eastern slope of Takomkane Mountain, commonly called Boss Mountain. It is about 35 air miles northeast of 100 Mile House which is a small town situated on Highway 97 about 375 miles northeast of Vancouver, British Columbia, Canada. The eastern half of the property is best reached by 56 miles of gravel road from 100 Mile House via Forest Grove and Canim Lake.

The western half of the property is readily accessible by float aircraft based at Williams Lake. A logging road touches the northwestern boundary of the claim group but needs to be repaired before it can be used for vehicular transport.

"Area J" is situated adjacent to the Boss Mountain property of Noranda Mines Ltd., a producing molybdenum mine. The location of the claim group adjacent

to the Boss Mountain operation and essentially consisting of the same rock type as found in the mine, makes the area interesting. Geologically the two areas are interrelated.

METHOD OF WORK

In May and June 1969 planimetric base maps of the area were made using aerial photographs taken by the British Columbia Department of Mines at an approximate scale of $\frac{1}{2}$ mile to 1 inch. Photographic representations and planimetric maps at scales approximately 500 feet to 1 inch were compiled for use in the field. A Wild A8 stereoplotter was used for the production of the planimetric primary manuscript which was enlarged photographically and hand drafted. The resulting planimetric map, at a scale of approximately 500 feet to 1 inch, was used in the field for locating control points and other landmarks, and for plotting of geological field data. The photographic representations, more familiarly designated "mosaics", were produced from air photos of the property and enlarged by means of a Lanston Monotype Process Camera to a scale of approximately 500 feet to 1 inch. The mosaics were used in the field to locate ground stations with reference to landmarks, to find outcrops, and to record certain field

notations. The geological outcrops located were finally plotted with respect to the topography taken from these mosaics.

Subsequently, from July through to October, 1969, surface traversing was made at intervals of 500 feet. Control points on the ground for geological mapping were provided by four base lines, the initial being cut across the entire length of the property in the direction approximately 305° azimuth. Three subsequent lines were cut near the eastern and western peripheries.

The lines were cut by Alrae Engineering Limited, Vancouver, B. C.

Concurrently and subsequent to the line cutting, the geological survey at 500 foot intervals was carried out employing a two-man party. All outcrops were mapped along the traverses. Detailed investigations within limits commensurate with the scale of the mapping were carried out in areas of possible molybdenite and chalcopyrite mineralization.

TOPOGRAPHY

A large meadow with swamps occurs in the middle of the area traversed by a stream. The eastern and western

parts, however, show considerable relief. Several ridges are within the area and good outcrops are at or near the top of the ridges. The slopes are covered with heavy timber and thick underbrush, foot travel being slow and arduous. The snowfall is heavy in the area and the ground is snow covered from early October to early June.

HISTORY

The general area in which the claim group lies has been mapped at 4 miles to 1 inch by R. B. Campbell of the Geological Survey of Canada. A number of reports have been published by the B. C. Department of Mines on the adjacent Boss Mountain property of Noranda Mines Ltd., a producing molybdenum mine. There is a general similarity in the geology of the "Area J" property and Boss Mountain mine. Identical environments, therefore, may prove to be areas of vital interest.

REGIONAL GEOLOGY

The area has been mapped by the Geological Survey of Canada at the scale of 4 miles to 1 inch (Map 1-1963,

Quesnel Lake, East Half). The map shows two main rock types in the area. The older rocks are described as Triassic and/or Jurassic volcanics and are essentially andesitic along with tuffaceous rocks that commonly contain fragments or whole crystals of black pyroxene. Rarely, the fine grained andesites contain phenocrysts of hornblende in small patches.

The volcanics are intruded by a younger diorite-granodiorite rock occurring as a batholith. In the region, the batholith has been mapped for about thirty miles. Eastwood (1964) concluded that the batholithic rock in the Boss Mountain mine area is quartz diorite. Heim (1964) considers that the rock is essentially granodiorite. Megascopically the rock is light grey, medium grained and is composed of white feldspar, quartz, hornblende with minor amounts of biotite and magnetite. Monzonite and syenodiorite have been reported from about a mile southwest of Boss Mountain. Altered inclusions of the volcanics are found in abundance within quartz diorite at various places.

In the northeastern part of the batholith, mineralization consisting of molybdenite, chalcopyrite and pyrite is found on the eastern slope of Boss (Takomkane) Mountain and adjacent to the "Area J" claims. In the Boss Mountain mine area, south of "Area J", mineralization consisting of molybdenite and chalcopyrite is found to focus

on an irregular body of brecciated rock (Eastwood, 1964). Molybdenite also occurs along a narrow zone of thin quartz veins. The veins have a general northwesterly trend but irregular veins also occur (Brown, 1957). It is interesting to note that the initial molybdenite showings were found to occur in two different ways at two different elevations. The upper showing was along a narrow zone of small quartz veins and the lower one was along a quartz-diorite breccia pipe (James, 1962). In the mine area, the surrounding quartz-diorite is also now found to contain low grade disseminated molybdenite with disseminated pyrite and is mined.

The quartz-diorite, granodiorite batholith has been intruded by a number of irregular dykes and a granite stock. The dyke rocks are lamprophyres of two ages; the older group comprises buff coloured bodies of felsite, quartz-porphyry, quartz-feldspar porphyry and aplite; the younger group consists of dark grey andesitic rocks (Eastwood, 1964).

Intrusive into the quartz-diorite is a coarse grained granite, the youngest rock in the area, which consists essentially of quartz and pink orthoclase. The granite is devoid of dykes and fractures present in the quartz-diorite and hence is considered younger.

GEOLOGY OF THE PROPERTY

The rocks of the area have been described briefly by the Geological Survey of Canada along with Map 1-1963 (Quesnel Lake) and in various reports and publications by the B. C. Department of Mines.

The rocks of the "Area J" claims can be broadly divided into three main units. The oldest rock type is the Triassic and/or Jurassic volcanics bordering the northern boundary of the claim group. These have been intruded by a younger hornblende-biotite-quartz-diorite - the host rock of mineralization in the adjacent area.

At the western boundary of the claim group there appears to be a distinct phase of granodioritic intrusion. The rocks in this area are distinctly richer in quartz and biotite and appear to be a separate phase of batholithic intrusion.

The youngest rock unit in the area is a pink to buff coloured granite intruding the quartz-diorite. These will be discussed further.

Geological Boundary - The geological boundaries of the major rock units drawn on the map are on the basis of field observations made in the area. These include outcrops, possible continuation of the rock of the outcrop

along the slope of the ridges, recognition of local boulders, and estimate of thickness of the overburden. On the basis of these criteria the geological boundaries of the main rock types are drawn. The geological boundary of the volcanics is fairly well established. The boundary of the hornblende diorite, granodiorite probably extends further than indicated on the map under the thick overburden and swamp and is in contact with the volcanics. The boundary of the younger granite stock is based on one small outcrop. Further detail study would be essential to outline the boundary of the granite.

Rock Types

(1) Andesite

The oldest rock in the area is greenish black to greyish black andesitic rock. It is fine grained and occasionally contains small phenocrysts (<.5 cm.) of hornblende. Small xenoliths of volcanics are seen enclosed inside the younger quartz-diorite. These rocks are devoid of molybdenite or copper mineralization in the area.

(2) Hornblende-biotite-quartz-diorite

This rock underlies the major part of the claim area. West of Buster Lake it outcrops extensively along the top of a ridge running northeast-southwest. It also outcrops in the southeast corner of the claim area at the top of

"Telephone Hill". The eastern side of the claim group is mostly covered by till and gravel.

From the study of local boulders, which in many cases can be differentiated from the regional boulders, it appears that most of the area underlying the overburden is quartz-diorite with which the molybdenite mineralization is associated in the adjacent Boss Mountain mine.

The rock consists of coarse to medium grained light grey to pale pink plagioclase and minor quartz with greenish black hornblende and minor biotite. The rock occasionally becomes rich in quartz and biotite locally and it may then be called granodiorite. Magnetite is usually present in minor amounts (approximately 2%) but occasionally occurs as pockets in the rock both in area 1 and area 4 (see geological map). In area 1 the magnetite occurs close to the fracture zone and in area 4 abundant local boulders with pyrite mineralization are seen nearby. This suggests a possible indication of molybdenite mineralization in these areas in that magnetite is found to occur in pockets in the mineralized zone in adjacent Boss Mountain mine.

Fractures and Veins

The quartz-diorite has undergone extensive fracturing. Most of the fractures have a general northerly trend. Among these the north and northwest trending

fractures in the adjacent Boss Mountain area are found to be good channelways for molybdenite, chalcopyrite, pyrite and quartz. Thin quartz veins along with molybdenite follow these northwest trending fractures in the mine area.

In "Area J" the relative ages of the fracture planes were determined by their cross cutting relationships. The earliest fractures developed have a general northwesterly trend and belong to the group of fractures which preceded molybdenite and chalcopyrite mineralization in the adjacent Boss Mountain mine. The fractures which developed at a later date after molybdenite mineralization have an easterly trend. Pyrite mineralization is associated with fractures of both groups.

The pre-mineralization fractures may be further subdivided according to the way they have allowed the emplacement of (i) aplite, felsite, and quartz-feldspar porphyry in a northwesterly direction; (ii) an andesitic dyke trending north, northwesterly and northeasterly; (iii) thin quartz and quartz-feldspar veins in the north and northwesterly trend; (iv) secondary fractures (generally not too well developed) at approximately right angles to the primary fractures. At some places dykes of quartz-feldspar porphyry and dark green andesite tend to follow secondary fractures.

The best post-mineralization fractures were observed in the Boss Mountain mine area, outside "Area J" and are found to be characterized by abundant crushed rock and gangue. Within the J claim area minor pyrite mineralization is seen along the post-mineralization fracture planes having a general northeasterly trend.

Both quartz veins and quartz feldspar veins are found in the area. They are fairly thin - from about a knife's edge to 0.5" thick and are seen in small outcrops for about a foot or so. There appears to be a general north to northwesterly trend in the veins, though other trends are also visible. Pyrite is seen associated with the veins having a different strike.

The occurrence of quartz and quartz-feldspar veins in the area is important since the early upper molybdenite showings in the Boss Mountain region were found to be associated with quartz and quartz-feldspar veins (James, 1962).

(3) Granodiorite

At the western boundary of the claim group a distinctly different rock type is seen forming a ridge running approximately northeast-southwest. A small outcrop of the same rock also occurs on claim #J 26. Compared to quartz-diorite the rock is distinctly richer in quartz, alkali feldspar, biotite and lower in plagioclase

and hornblende. It is more compact, gneissic and poor in foliation with random orientation. No shear planes or pyrite mineralization are seen. Rarely, the rock becomes rich enough in quartz, in small pockets, to call it a granite. This local variation of granodiorite to granite should not be confused with younger granite stock which is distinctly intrusive into the batholith and is much younger. This granodiorite appears to be a younger phase of the batholithic intrusion perhaps separated from the main dioritic intrusion by a small interval of time. No shear planes or pyrite mineralization are seen. The rock lacks the character favourable for mineralization.

Contact Zone

Where the granodiorite is in contact with the older volcanics a series of hybrid rocks occurs which ranges from hornblendites and gabbros to granodiorite to andesite. In several outcrops, north and northeast of Buster Lake, quartz-diorite is seen enclosing xenoliths of the older andesite. The contact zone extends for a distance of about 1½ miles east of Buster Lake.

(4) Dyke Rocks

The quartz diorite has been intruded by irregular lamprophyre dykes of two ages. The older dykes include felsites, quartz-feldspar porphyry, aplite, and the younger

dykes consist of andesitic rocks. In texture the aplite is "sugary" and the felsite is fine grained. The quartz feldspar porphyries are coarse grained and hornblende is usually associated with them. These dykes have a general northwesterly trend and have intruded along the fractures developed in the quartz-diorite.

The younger dykes are dark green to greyish black and have a general northerly trend. Some of these dykes are seen to follow the secondary fracture trends in the north and northeasterly directions.

(5) Granite

The only outcrop of granite observed is on claim #J 70. It is a coarse grained rock and consists essentially of quartz, pink orthoclase and a minor amount of plagioclase. Because it neither contains veins and fractures characteristic of quartz-diorite nor pyrite mineralization so commonly associated with them, the granite is considered younger than the quartz-diorite (Eastwood, 1964). It has been hypothesized that the granitic intrusion was the cause for the intensive brecciation and the development of fractures in the quartz-diorite in the Boss Mountain area, but the absence of dykes, which clearly follow the fracture trends in the diorite, indicates that the fracturing and brecciation are not related to the granite stock. Mineralization in diorite

consisting of molybdenite and pyrite, however, is seen associated with the granite in space, in the Boss Mountain area.

GEOCHEMICAL SOIL SAMPLING

Silt samples were collected from all the creeks flowing in and out of Buster Lake, from the creeks west of Buster Lake, and from those which lie in the southeast corner of the Area. The results of the analysis are given in Fig. 1 and the location of the samples are shown on the geological map.

The silt from the creeks lying to the west of Buster Lake shows relatively high concentrations of copper and molybdenum (Sample #20, 21, 22, 40, and 41). The samples from the creek which lies on claim J 232 are not silt samples in a true sense. The area is rocky and the samples consisted essentially of coarse grained sand. Even then the concentrations shown by these samples indicate that further investigation is warranted, especially since the ground is thought to be geologically favourable.

The samples #301, 302, 306, 307, 308, 309, and 310 are contaminated by the concentrating plant of Noranda Mines Ltd. and their values should be discarded. Samples #303,

304, and 305 were obtained from the creek which drains part of the "Telephone Hill" in the southeast corner of the property. The molybdenite values are comparatively high and further investigation appears warranted.

CONCLUSIONS

Area (1)

The following factors make Area 1 interesting and warranting further investigation.

(1) The strong northwesterly trending pre-mineralization foliation planes in quartz-diorite in the area. The foliation planes in some of the outcrops are dominant and can be easily distinguished from secondary and other post mineralization foliation planes. Their location coincides with the low magnetic profile shown on the claim map provided by the client. These fractures are found to be excellent channelways for the minerals in the adjacent Boss Mountain mine.

(11) Because of thin (0.5" or less) fine quartz and quartz-feldspar veins with their strike directions lying between northwest and northeast, it has been observed that molybdenite mineralization is associated both with quartz and quartz-feldspar veins and it was deposited in two

distinct and separate intervals (Eastwood, 1964): (a) in the first in the banded veins and slips in the rocks, and (b) in the second in the much younger quartz and quartz-feldspar veins.

(iii) The presence of post mineralization pyrite along northeasterly shear planes in the same outcrops in which quartz-feldspar veins are seen. This clearly indicates that the environment during the two mineralization phases did not change significantly.

(iv) The occurrence of magnetite pockets in quartz-diorite close to the fractured zone. Magnetite is found to occur in pockets in the mineralized quartz-diorite in the Boss Mountain mine.

Area (2)

The following factors observed in Area 2 make it interesting and warranting further investigation.

(i) The ridge west of Buster Lake runs approximately NW-SE and both quartz veins and quartz-feldspar veins are found along the eastern slope of the ridge.

(ii) Pyrite mineralization is found to occur extensively in the northwestern part of the ridge.

(iii) Post mineralization fractures are observed in the area.

(iv) Comparatively higher percentage of copper and molybdenum in the soils of the creek in the southern part of the ridge.

Area (3)

A small outcrop of the coarse grained granite occurs on claim No. J 70 and is found to be closely associated with highly fractured quartz-diorite in which pyrite mineralization is seen. Local boulders found nearby contain both chalcopyrite and pyrite. It has been observed that the granite is closely associated with mineralization in the Boss Mountain area. This along with the fact that abundant pyrite mineralization is found in the adjacent quartz-diorite makes the area interesting for further investigation. Since the area is swampy and is covered by fairly thick overburden, an I.P. survey and ground magnetic survey may outline the granite stock and quartz-diorite body and at the same time indicate possible mineralization.

Area (4)

In this area local boulders contain abundant pyrite mineralization along fracture planes. Also in a nearby region there appears to be a large magnetite pocket. Magnetite also occurs in pockets to the north of the area on claims J 30, 31, and 32. The presence of magnetite along with pyrite mineralization in local boulders warrants further investigation of the area.

RECOMMENDATIONS

Area (1)

(i) Detailed geological mapping, preferably at a scale of 200 feet to 1 inch.

(ii) Detailed ground magnetic and I.P. surveys based on a 400 foot grid to outline areas of possible mineralization.

(iii) Detailed geochemical analysis of silt from creeks and washouts both big and small. Since the overburden is thin and at places the bare rock is exposed a detailed geochemical survey can be carried out.

(iv) Some trenching on top of the hill where the veins are exposed and where the fractures are dominant.

Area (2)

(i) Detailed geological mapping, preferably at 200 feet to 1 inch along the whole ridge, to pick up quartz and quartz-feldspar veins, pyrite mineralization and pre- and post-mineralization fracture zones.

(ii) Detailed geochemical sampling from small and large creeks. The overburden here is thin or absent and it is possible to carry out such a survey.

(iii) Detailed ground magnetic and I.P. surveys, preferably on a 400 foot grid system, to outline areas of possible mineralization.

Areas (3) and (4)

Detailed ground magnetic and I.P. surveys, preferably on a 400 foot grid system, to outline the boundaries of granite and quartz-diorite and to delineate areas of possible mineralization.

Recommendations for the Region as a Whole

(i) The batholith in which the mineralization is found in the Boss Mountain region has been mapped for about thirty miles in diameter. To the best of my knowledge no reconnaissance or detail prospecting of any kind has been carried out in this batholith outside the Boss Mountain area. A reconnaissance program which would include aerial and ground magnetics, geochemical sampling of the creeks and a simultaneous rock sampling may reveal areas of vital interest.

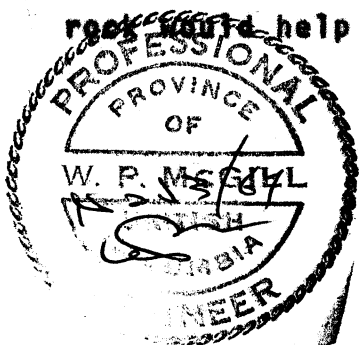
(ii) A petrographic study of the samples collected from the area to outline petrographic characters of the rocks belonging to different phases of batholithic intrusion. Since the mineralization appears to be associated with a particular phase of intrusion a good knowledge of the host rock ~~type~~ would help delineate areas of possible mineralization.

Respectfully submitted,

WILLIAM P. MCGILL & ASSOCIATES LTD.


W. P. McGill, M.A., P.Eng.


R. P. Sinha, M.Sc.



August 5, 1970
Toronto, Ontario
October, 1969

REFERENCES

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FIG. 1

AREA J

BUSTER LAKE - BOSS MOUNTAIN AREA, B. C.

GEOCHEMICAL LABORATORY REPORT

<u>Sample No.</u>	<u>HCl Cu (ppm)</u>	<u>Bis Mo (ppm)</u>
3	15	1
4	21	1
5	19	1
6	25	1
7	29	2
10	12	1
11	67	1
12	58	6
13	37	1
14	22	1
15	90	1
17	58	1
18	18	1
19	16	2
20	7	1
21	63	8
22	132	1
40	75	5

<u>Sample No.</u>	<u>HCl Cu (ppm)</u>	<u>Bis Mo (ppm)</u>
41	80	6
50	11	4
51	58	1
52	54	5
53	34	1
60	11	5
61	11	1
62	14	1
63	36	6
64	63	7
65	37	1
66	90	1
67	37	2
68	54	1
69	39	1
91	48	2
92	50	1
93	42	2
94	40	2
101	100	1
102	75	1
103	63	4
301	45	80
302	11	12

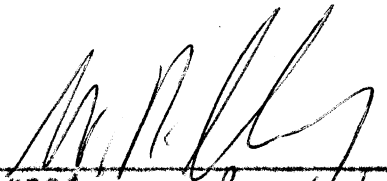
<u>Sample No.</u>	<u>HCl Cu (ppm)</u>	<u>Bis Mo (ppm)</u>
303	36	10
304	22	16
305	29	16
306	185	96
307	26	88
308	85	56
309	23	16
310	27	24

CYPRUS EXPLORATION CORPORATION LTD.
AREA J & J2, BOSS MOUNTAIN AREA, B. C.

STATEMENT OF COST

Preparation of base maps and photo mosaics	\$ 1,253.12
Services of field geologist - 95 days @ \$109	10,355.00
18 days @ \$100	1,800.00
Services of geological assistant - 95 days @ \$81	6,695.00
Services of senior geologist - 10 days @ \$137	1,370.00
Services of draftsman - 74 hours @ \$5	370.00
In field transportation	289.00
Printing charges	<u>20.66</u>
TOTAL COST	\$ <u><u>22,152.78</u></u>

Signed


Vice President

CYPRUS EXPLORATION CORPORATION LTD.
AREA J & J2, BOSS MOUNTAIN AREA, B. C.

PERSONNEL EMPLOYED

R. P. Sinha	Geologist	July 3 - Oct. 5, 7-9, 13-17, 20-24, 27-31, 1969	113 days
T. O. Wong	Geological Assistant	July 3 - Sept. 6, 1969	66 days
P. Archie	Geological Assistant	Sept. 7 - Oct. 5, 1969	29 days
B. L. Alexander	Senior Geologist	July 10-12, 26-28, Sept. 29, 30, Oct. 1, 2, 1969	10 days
D. Grant	Draftsman	Oct. 16, 17, 20-24, 27, 28, 30, 31, 1969 (74 hours)	11 days
M. Mezzarobba	Typist	Oct. 31 & Nov. 3, 1969	2 days

C E R T I F I C A T E

I, RAVINDRA PRASAD SINHA, of Scarborough, Ontario, hereby certify:


(1) That I am a geologist and reside at 130 Bellamy Road North, Scarborough, Ontario.

(2) That I am a graduate of Patna University with a M.Sc. degree in Geology (1961) and have been practicing my profession as a geologist for the past eight years.

(3) That I personally performed the geological and geochemical surveys discussed in this report and that I was on the property almost continuously during the period July 5 to October 5, 1969.

(4) That my work on the property itself, the compilation of data obtained from the geological program, and the preparation of this report were carried out under the supervision of Mr. W. P. McGill, M.A., registered Professional Engineer of the Province of British Columbia.

(5) That I am a member of: (i) Geological Association of America, (ii) Geological Association of Canada, (iii) Canadian Institute of Mining & Metallurgy.

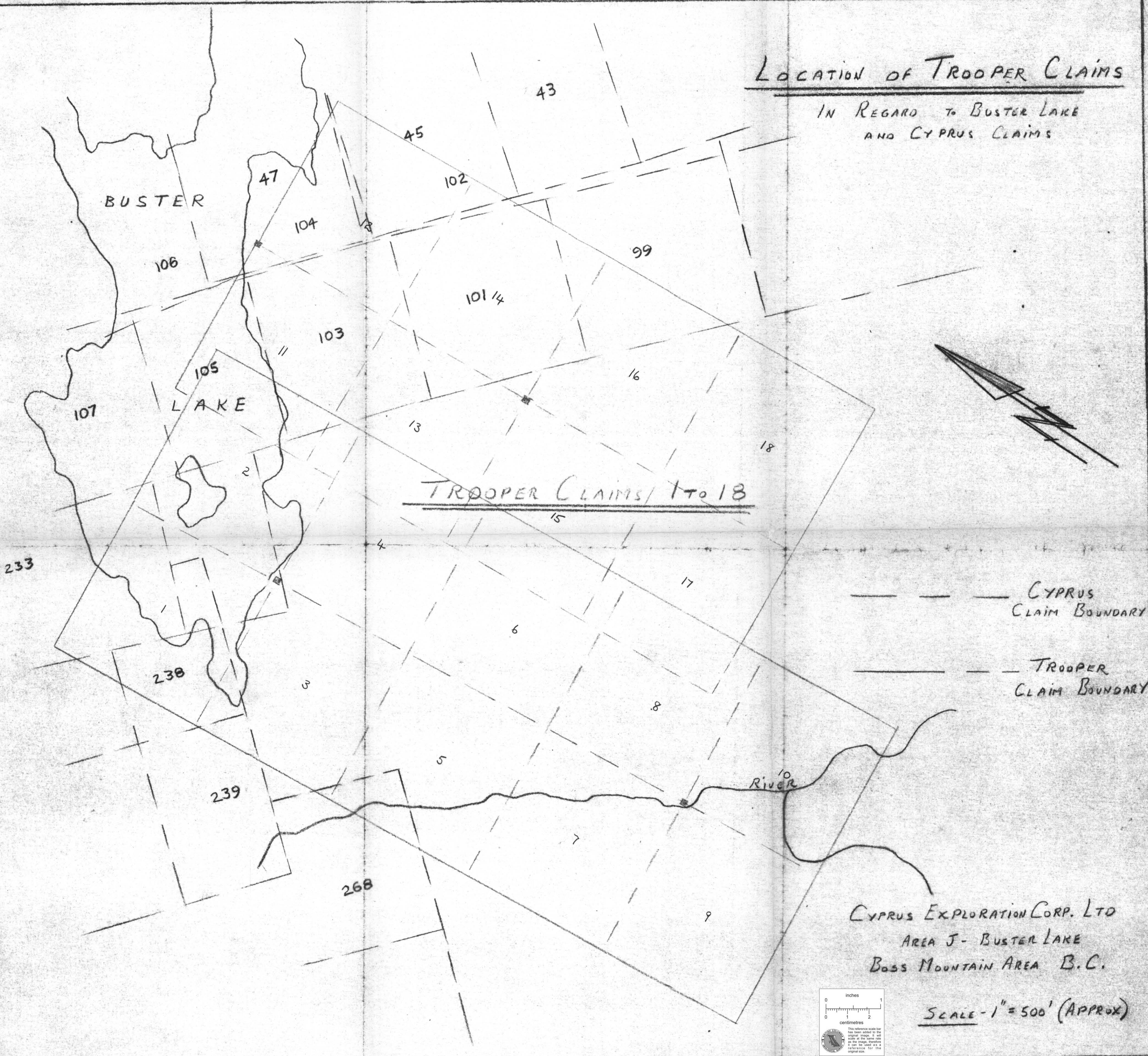

R. P. Sinha,
B.Sc.(Hons.), M.Sc.

Dated at Toronto, Ontario
this 3rd day of November, 1969

LOCATION OF TROOPER CLAIMS

IN REGARD TO BUSTER LAKE
AND CYPRUS CLAIMS

TROOPER CLAIMS 1 TO 18



CYPRUS EXPLORATION CORP. LTD
AREA J - BUSTER LAKE
BOSS MOUNTAIN AREA B.C.

SCALE - 1" = 500' (APPROX)

