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NO SECURITIES COMMISSION OR SIMILAR AUTHORITY IN CANADA HAS IN ANY WAY PASSED UPON THE MERITS OF THE SECURITIES OFFERED HEREUNDER, AND ANY REPRESENTATION TO THE CONTRARY IS AN OFFENCE.

PROSPECTUS

BATTLECREEK MINES LTD.

(Non-Personal Liability)

Head Office: 407 - 717 West Pender Street, Vancouver, British Columbia.

Registered Office: 1880 - 1055 West Hastings Street, Vancouver, British Columbia.

FIRST PUBLIC ISSUE 11th January, 1972 250,000 COMMON SHARES

Commission not Proceeds to Price to public Per Unit Company if all not to exceed to exceed the shares are sold 18 3/4¢ 6 1/4¢ 25¢ 1 Common Share \$46,875.00 \$15,625.00 250,000 Shares \$62,500.00

PURCHASE OF THE SHARES OFFERED BY THIS PROSPECTUS MUST BE CONSIDERED A SPECULATION AS THE COMPANY'S MINERAL CLAIMS ARE STILL IN THE EXPLORATION STAGE.

THE MINERAL CLAIMS HAVE NOT BEEN SURVEYED, AND THEREFORE THEIR LOCATION AND AREA MAY BE IN DOUBT.

REFERENCE SHOULD ALSO BE MADE TO THE CAPTION "PRINCIPAL HOLDERS OF SECURITIES" AND THE COMPARISON OF THE PERCENTAGE OF THE SECURITIES ISSUED FOR CASH AND THOSE ALREADY ISSUED BY THE COMPANY TO ACQUIRE PROPERTIES.

Plan of Distribution

By this Prospectus the Company is offering 250,000 of its Common Shares without nominal or par value. The Company proposes to sell these shares through persons or companies registered under the provisions of the Securities Act 1967, and will pay a commission of up to Twenty-five per cent (25%) or Six and one quarter cents (6 1/4¢) per share to such persons or companies for each such share sold. No director will receive any commission on the sale of the securities offered by the Company.

The Company

The full name of the Company is Battlecreek Mines Ltd. (N.P.L.). The Company was duly incorporated under the provisions of the

THIS IS SCHEDULE "B" TO THE STATUTORY DECLARATION OF PHILIP TAMES WALSH
SWORN THIS RT. DAY OF FEBRUARY 1972

BRITISH

COLUMBIA

COMMISSIONER

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CERTIFICATION

- I, CHRISTOPHER MACKENDRICK ARMSTRONG of the City of Vancouver, Province of British Columbia, do hereby certify:
- 1. THAT I am a practicing Geological Engineer residing at 4085 West 29th Avenue, Vancouver 8, British Columbia.
- 2. THAT I am a registered Professional Engineer in the Provinces of British Columbia and Ontario.
- 3. THAT I received the degree of B.Sc. in Geological Engineering from Queen's University, Kingston, Ontario, in 1960, and practiced my profession continuously in the period between leaving university in 1959 and returning to university in 1966.
- 4. THAT I enrolled in the Department of Mineral Engineering at the University of British Columbia in 1966, and in the period to 1969 completed course work and research work requirements for an M.A.Sc. program, specializing in bacterial/acid leaching systems; thesis writing was not completed.
- 5. THAT since leaving university in 1969, I have practiced my profession both as a Geological Engineer and as a Specialist/Advisor in bacterial/acid leaching systems.
- 6. THAT the following is a true record of my employment and experience:
 - 1957 4 mos. Junior Geologist. Noranda Mines Ltd. Quebec.
 - 1958 4 mos. Party Chief. Hollinger North Shore Exploration Co. Ltd. Montreal, Quebec.
 - 1959-1961 27 mos. Assistant Geologist. Pickle Crow Gold Mines Ltd. Pickle Crow, Ontario. Keevil Mining Group.
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 - 1962-1964 28 mos. Chief Geologist. Metal Mines Ltd. Werner Lake, Ontario. Consolidated Canadian Faraday Ltd.
 - 1964-1966 24 mos. Chief Geologist. Tegren Goldfields Ltd. Kirkland Lake, Ontario. Keevil Mining Group.
 - 1967 6 mos. Resident Engineer. McLeese Lake property.
 Geophysical Eng'g & Surveys Ltd. Keevil Mining Group.
 - 1969-1970 13 mos. Laboratory Manager, Chief Geologist, & Consultant. S. M. Industries Ltd., Vancouver.
 - 1970-1971 16 mos. Independent Consulting Engineer.
- 7. THAT I do not have any interest in the securities or properties of BATTLECREEK MINES LIMITED, nor do I expect to receive such interest.

C. M. Armstrong, P.Eng.

REPORT ON THE

RAINBOW MOUNTAIN CLAIM GROUP

NEAR ALTA LAKE, B. C.

50°09.3' North Latitude

122°57.7' West Longitude

For

· BATTLE CREEK MINES LIMITED

c/o 1880-1055 West Hastings Street Vancouver 1, B. C.

Ву

C. M. Armstrong, P. Eng.

4085 West 29th Avenue Vancouver 8, B. C.

October 5, 1970

Reviewed June 9, 1971

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INTRODUCTION

On August 28th, 1970, a representative of Mrs. V. Kidd, president of Battlecreek Mines Limited, requested that the writer evaluate the 48-claim RM group on Nineteen Mile Creek, and, if warranted, outline an exploration program for the property.

This report is based on 2 days of reconnaissance work by the writer in the vicinity of the claim group, including substantial helicopter reconnaissance, and 3 days on the claim group proper. Owing to the dearth of data pertinent to the property, the writer also placed a prospector and helper on the property for 9 days to attempt to locate additional copper showings.

CONCLUSIONS

- 1. Only very limited prospecting has been carried out on the welllocated 48-claim RM group to date, disclosing significant copper values, and expanded exploration of the property is required.
- 2. Chalcopyrite mineralization, as disclosed to date, occurs in two principal modes on the property: very widely scattered "porphyry-type" disseminations in dioritic rock, and narrow, heavy, "lode-type" disseminations in variably sheared and altered dioritic and andesitic rocks. Continuity of the porphyry-type mineralization is substantial, but grade is estimated visually to be considerably below economic requirements. Continuity of lode-type mineralization exposed in one rock cut, and grading 1.51% Cu over 2 feet, has not been established, and further testing is essential.
- 3. It is the writer's opinion that exploration efforts should be directed primarily to the discovery of economic lode-type copper mineralization, and, to this end, there are numerous wide, strong, generally deeply weathered, pyritic shear and schist zones which merit detailed examination for copper throughout their strike extents.
- 4. Exploration of the claim group should involve prospecting, reconnaissance and detailed geological mapping from air photo enlargements, geochemical soil sampling where applicable, and Turam electromagnetic surveying of selected areas, including the chalcopyrite-bearing zone mentioned above. Trenching, diamond drilling and/or percussion drilling of significantly anomalous areas logically should follow.
- 5. Prospecting should be extended on strike of the favourable host rocks in a northerly direction for several miles.

RECOMMENDATIONS

Summarizing expenditures detailed in the discussion of exploration techniques applicable to the RM group, I recommend that the following expenditures be made in a 4-month, Phase I exploration program:

Prospecting Geological mapping Soil sampling Linecutting, Turam, & magnetome Base camp, supplies, & transpor Supervision & consulting Administration		\$ 8,700 5,800 5,300 7,500 5,200 3,000 2,000
Contingency	Sub-total	37,500 3,800
	TOTAL	\$41,300

Follow-up, Phase II exploration will be contingent on the results of Phase I. Specifically, the presence or abscence of significant geological, geochemical, or geophysical anomalies will dictate whether further expenditures, estimated to be a minimum of \$25,000 for trenching and diamond drilling, will be warranted.

Oct. 5, 1970

C. M. Armstrong, P.Eng.

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LOCATION, ACCESS, TOPOGRAPHY, CLIMATE

The RM claim group traverses Highway 99 and the PGE Railway between Squamish and Pemberton approximately 5 miles north northeast of the community of Alta Lake. Nineteen Mile Creek, so named for its distance from Pemberton, and Green Lake also are covered partially by the claims. Road distance north of Vancouver is approximately 80 miles.

Geographical location is 50°09.3' north latitude and 122°57.7' west longitude.

Elevation varies from 2100 feet at the base of Rainbow Mountain to a maximum of 5000 feet at the northernmost extremity of the claims. The mountain itself rises to a maximum elevation of 7500 feet, and is capped by glaciers above the 6000-foot elevation. Although portions of the mountain slope claims are impassable, for all practical purposes, by far the majority of the claims, though steep, are readily traversable: 20° to 25° slopes are common. The lower portion of Nineteen Mile Creek is a ravine, to 300 feet in depth, with very steep timbered slopes.

Approximately 12 of the 24 claims on the mountain slope have been logged thoroughly, and much of the slash has been burned. Heavy timber characterizes much of the other 12 claims. Relatively flat land typifies the southernmost 24 claims: rock exposure is very limited, and overburden depth unknown.

A cottage development, Alpine Meadows, is in the primary stage of construction at the base of the mountain, and, while it is essential to avoid disfiguring such property, and liability must be accepted, it is the writer's opinion that the development will not interfere significantly with exploration, or vice versa.

Climate is typical of southern coastal areas in B. C., though possibly somewhat colder in the winter months. Exploration generally may be conducted from May to September or October with no difficulty.

OWNERSHIP AND STATUS

Transfer of the 48 RM claims situate in the Vancouver Mining Division, being RM 9 to 56, inclusive, bearing Tag Nos. 178009 to 178056, respectively, to Mrs. Verna Kidd, F.M.C. No. 105116, c/o 1880-1055 West Hastings Street, Vancouver 1, B. C., was effected on June 8/71.

Date of record was August 27/70 for claims RM 9 to 48, inclusive, and August 28/70 for claims RM 49 to 56, inclusive. The claims are in good standing for one (1) year from the respective dates of record.

HISTORY

Aside from a "prospect" on Nineteen Mile Creek marked on C. Camsell's geological map of 1917, the writer was unable to find record of further exploration on the property.

In recent years, 1963 to 1969, inclusive, Noranda Exploration Co. Ltd. and New Jersey Zinc Exploration Co. (Canada) Ltd. carried out extensive exploration programs on their contiguous Azure and London claims, respectively, the former of which adjoin the RM group on the south. The writer estimates that both companies spent in excess of \$150,000 on mapping, geophysical and geochemical surveys, diamond and percussion drilling, and underground development.

REFERENCES

Minister of Mines Reports: 1911 - p.147 & 149; 1918 - p.293; 1930 - p.312; 1963 - p.94; 1964 - p.146; 1965 - p.221; 1966 - p.57; 1967 - p.60; 1968 - p.74; 1969 - p.191.

- Camsel, C. "Diagram showing the geology along the route traversed by the PGE Railway between Squamish and Lillooet, B.C." Publication No. 1711, G. S. C., 1917.
- Roddick, J. A. "Vancouver North, Coquitlam, and Pitt Lake Map Areas, B.C." G.S.C. Memoir 335, 1965.
- Topographic Maps: 1:40,000 Advance Prints 92 J 2 W and 3 E. 1:250,000 Pemberton 92 J.

Aerial Photographs: BC 4078 (60-63); 2431 (19-25, 68-77); 2437 • 1"=1/4 mi. (27-36); 2429 (17-28); 2428 (56-66).

REGIONAL GEOLOGY

The claim area covers a portion of a large, variably metamorphosed, geologically complex pendant of volcanic, sedimentary, and possibly intrusive rocks of pre-Jurassic age, encompassed by variable plutonic granitoid rocks dominating the Coast Crystalline Belt, and apparently mainly of upper Jurassic age.

Published geological mapping in the area is limited to the regional reconnaissance mapping (scale 1"=4 mi) of C. Camsell in 1917 for the G.S.C., following the route of the newly completed P.G.E. Railway from Squamish to Lillooet. Beyond defining the approximate boundaries of the Alta Lake pendant and the location of a prospect on Nineteen Mile Creek, within the claim group, the map has limited value.

The Pitt Lake map sheet, 1151A, included in G.S.C. Memoir 335 by J. A. Roddick, also at a scale of l"=4 mi., covers lithologically similar rock types up to 12 miles south of the claim area. Although the writer did not attempt to establish the continuity of the Cheakamus Lake or Mount Sir Richard pendants, it is highly probable that the former is continuous over the RM claims.

In a preliminary orientation survey of the Alta Lake pendant the writer examined many typical rock-cut exposures bordering Highway 99 which traverses the pendant, noting, in particular, numerous wide, pyritic shear and schist zones with conspicuous iron staining striking in a northwesterly direction in conformity with the regional trend.

Additionally, a helicopter reconnaissance examination was made of Fitzsimmons Creek where extensive surface and underground exploration has been conducted by New Jersey Zinc on their London copper deposit, and where Noranda Exploration carried out extensive surface exploration on their 80-claim Azure group. The 48 RM claims adjoin the latter group on strike to the northwest.

Traverses also were made in the partially logged valleys of Nineteen Mile Creek, Twentyone Mile Creek, and Sixteen Mile Creek, and along the Soo River valley. Extensive gossans in bedded rocks contacting the massive "granite" of Rainbow Mountain were noted, and because of their proximity to the RM group were examined in detail on a subsequent trip. Siltstones, slates, and phyllites containing light disseminations of very fine pyrite and narrow stratiform seams of essentially massive pyrite accounted for the gossans. No copper mineralization was observed, as testified by a sample of typical mineralization which graded Tr Cu, 0.01% Zn, 0.01 oz.Au/T, and 0.6 oz.Ag/T.

Local heavy sulphide mineralization in the granite in the contact area likewise was exclusively pyrite. Total thickness of the locally pyrite-rich, metamorphosed sediments striking north northwest and dipping from 50° east to vertical is approximately 2500 feet, including a 50-foot section of basal conglomerate and a 100-foot wide north-south "granite" dyke near the east contact.

Rocks to the east of the sedimentary series are very poorly exposed on the "saddle" dividing the Green and Soo River valleys. Exposures include: fine to medium grained diorite; a very fine grained rock of intermediate composition that could be either intrusive or extrusive in origin; and pyritic (10 to 15%), bleached and altered, sheared and/or schisted derivatives of the former types. Although no copper mineralization was observed in the few small exposures of the latter, extensive alteration and anhedral pyrite mineralization are considered by the writer to be generally favourable indicators. Extension of the existing RM claim group on strike over this area did not appear to be justified at the time.

Quaternary and possibly late Tertiary basalt flows of the Garibaldi Group, often displaying well developed columnar jointing in rock cuts, unconformably overlie pre-existing rocks several miles southwest of the claims.

LOCAL GEOLOGY AND MINERALIZATION

A prospector and helper were employed for a 9-day period by the writer, and established in an on-site camp, both to examine as many of the rock exposures as possible for copper mineralization and to attempt to extend known areas with visibly anomalous copper values.

Nineteen Mile Creek coincides approximately with the previouslymentioned contact between a complex sedimentary/intrusive assemblage on the west, frequently displaying sharp, crosscutting contacts, and a generally dioritic textured intrusive/volcanic assemblage on the east characterised by gradational contacts and numerous broad, pyritic shear and contorted schist zones. The latter assemblage appears to be either part of the pendant itself, or an older phase of the composite Coast pluton. claims RM 50, 52, 54, 56, and 35, the creek parallels the north northwesterly trend of the bordering rocks, after which it swings to the northwest, fed by melt water from the glaciers on Rainbow Mountain. The former portion which continues on strike as a fairly well defined topographic depression, appears to represent fault control. Extension of this linear to the south indicates that it passes several thousand feet west of the London deposit. Fracturing and/or faulting in a northsouth direction, contrasting to the north northwest direction of shearing and schistosity, is particularly evident from the Relationship to copper mineralization, if any, is not air. known.

Attitude of the sediments west of the creek varies from 70° southwest to vertical, while attitudes of shear and schist zones east of the creek vary from 25° northeast to vertical, with steep dips prevailing.

The Nineteen Mile Creek prospect marked on Camsell's map, though not pinpointed definitely, appears to have been heavy pyrite mineralization in slate y sediments near the contact with a granitic dyke. No chalcopyrite was observed in a logging road rock cut or in outcrops along the banks of the creek. Further to the south, on the west bank of the creek ravine, evidence of trenching in similar pyritic sediments was found. Further work is required to establish whether silver values in the order of 1/2 oz./T represent maximum concentrations in the highly pyritic sections, often associated with granitic intrusions, or whether higher concentrations can be found. These sediments appear to have no possibilities for economic copper mineralization, while the contact with schists of igneous derivation well may be copper bearing.

Chalcopyrite mineralization occurs in two environments in the volcanic/intrusive assemblage of intermediate composition east of Nineteen Mile Creek. In terms of economic potential, by

far the most important, in the writer's opinion, are lode-type deposits consisting of patchy chalcopyrite in variably sheared, bleached, and altered diorite coincident with heavy pyrite mineralization. Euhedral pyrite crystals, ubiquitously distributed in disseminations varying from very light to heavy, bear no apparent relationship to copper values, but subhedral to anhedral pyrite is locallized in the same environment as the copper, and, in all probability, has a common genesis. One such occurrence exposed in a rock cut at the northwest corner of claim RM 14 yielded 1.51% Cu over 2 feet of highly altered and pyritized diorite. Moderately pyritic wallrock with very lightly disseminated chalcopyrite averaged 0.14% Cu over 6.5 feet on either side of the heavier mineralization dipping easterly at 80°. Total sulphide content varied from 5 to 50%, and visually averaged about 15%. Potash feldspar characterized the altered dioritic or syenitic host rock in this showing. Lack of exposures did not permit extension of the mineralization along strike.

Cursory examination of numerous strong shear and quartz-muscovite schist zones exposed in logging road cuts provided little or no evidence of copper mineralization, although in some instances weathering and leaching of pyrite in the permeable schists was sufficiently advanced to preclude the verification of primary copper sulphides in residual limonite boxworks.

The second mode of occurrence of chalcopyrite, inevitably accompanied by several times as much pyrite, is that of widely spaced silicification stringers with light to medium sulphide disseminations; erratically distributed fracture-controlled fillings, disseminations, and seams; and local narrow shears with coarse patches of pyrite and light disseminations of chalcopyrite (minor malachite often coats these shear planes). In general, such mineralization is of the "porphyry" type, albeit that copper grades over substantial widths visibly are much below economic requirements. An area several hundred feet in width and two, to three thousand feet in length, approximately centered on the west location line between claims RM 51 and 55, contains visibly anomalous concentrations of chalcopyrite as described. While overall copper content is very low, certainly less than 0.1%, "popping" and sampling of mineralized exposures are required to establish continuity and grade of mineralization. Importantly, within this lightly mineralized environment there is ample opportunity for the occurrence of better grade lode-type deposits, and it is for such mineralization that exploration efforts should be directed.

While much of the rock has a faintly dioritic texture, and some sections clearly must be classified as diorite, only light to moderate shearing and alteration are required to mask the primary texture, making it extremely difficult in many instances to distinguish, megascopically, between intrusive and volcanic rock types of intermediate composition. Geological mapping at a scale no smaller than l"=400' is required.

EXPLORATION

GENERAL

Preliminary exploration of the property should involve combined prospecting, geological mapping, geochemistry, and geophysics to pinpoint potentially significant targets, phase I; followed by trenching and/or diamond drilling to evaluate significantly anomalous areas, phase II. Where outcrop exposure permits, plugger popping and sampling in conjunction with prospecting and mapping is desireable. Cost of a small base camp, transportation, and miscellaneous supplies for the field season is estimated to be \$5,200. Discussion of the exploration techniques applicable to the RM claim group, including estimation of expectable expenditures, follows:

PROSPECTING

Only very preliminary prospecting of the claim group has been conducted to date, and much additional prospecting is warranted to endeavour to locate mineralized areas worthy of more concentrated efforts. Such work should not be confined to the immediate claims, but should be extended on strike to the northwest into and beyond the Soo River valley. An allottment of \$8,700 should be made for 4 months of prospecting in the area during the next field season, including contract, incentive bonus, supplies, helicopter support, communication, sampling, etc.

GEOLOGICAL MAPPING

At the request of the writer, Lockwood Survey flew a single line aerial traverse from the London deposit of New Jersey Zinc, up Nineteen Mile Creek, over the saddle of Rainbow Mountain, and into and beyond the valley of the Soo River. This traverse covers the RM claim group and the generally favourable rocks of the Alta Lake pendant which host the known copper deposits.

Stereo-pair prints of this traverse at a scale of l"=2000', not available at the time of writing, may be used for air photo interpretation and reconnaissance mapping, and, after enlargement to l"=400', for more detailed mapping of the claim group. Since approximately 50% of the claim area has been extensively logged, the photos will provide an excellent, low cost control for the recommended exploration program. Existing air photo coverage not only preceded the majority of logging in the area, but some photography was carried out under conditions of substantial snow cover. The photos also may be used for preparation of a topographic map at suitable scale, preferably after establishment of a surveyed ground control.

Rock exposure varies widely on the property: the southernmost 20 claims contain only very widely scattered outcrops (less than 1% exposure), while the northernmost 28 claims have in the order of 25% exposure. Since soil-covered, inter-outcrop areas may coincide with favourable shear and schist zones, delineation of these areas by mapping is essential to the exploration campaign.

The requirement for mapping on a larger scale, say 1"=100', will depend principally on the success of locating economically significant lode-type mineralization.

Allowance should be made for an expenditure of \$5,800 both for reconnaissance and detailed geological mapping, including air photo enlargement, pertinent supplies, plugger popping, sampling etc.

GEOCHEMISTRY

In consideration of the moderately rugged topography over 28 claims, and deep alluvial deposits over 20 claims, it is apparent that soil sampling has limited application on the property. Logging roads and slash burned areas which disrupt and modify the drainage pattern also inevitably complicate interpretation of geochemical results.

In spite of these obvious limitations, it is the writer's opinion that selective soil sampling may be effective in defining favourable areas for follow-up by more definitive exploration techniques. The unlogged, heavily forested areas on claims RM 37 to 40, inclusive, is one such area. Additionally, overburden-covered, convex slopes may be soil sampled validly, although topographic expression obviously must be considered carefully when attempting to pinpoint anomalous sources.

In general, soil development has progressed sufficiently to make geochemistry a viable exploration technique. For all practical purposes, a 1-foot thick, heavily rooted mat of black humus and organic debris overlies an enriched orange-brown B horizon. Both claim location lines and one tie line were soil sampled at 400-foot intervals to provide an indication of the expectable spread of copper values in the B horizon. Analytical results for the 84 samples taken were not available at the time of writing. A soil auger probably may be used to advantage in future soil sampling, since digging through the heavily rooted organic layer with a grub hoe proved to be more time consuming than desireable.

Expectable expenditure for soil sampling using a flagged, pace and compass grid tied into claim location lines, with 100-foot samples and 400-foot line spacing is approximately \$5,300. This is equivalent to coverage of 26 of the 48 claims, or approximately 54% of the group. If evaluation of the trial soil sampling data and outcrop mapping indicate that geochemistry is unlikely to be sufficiently definitive over this large an area, for reasons previously mentioned, it would be adviseable to allot "surplus" funds to extended geophysical coverage.

GEOPHYSICS

Bearing in mind that heavily mineralized, lode-type deposits are the prime exploration targets, Turam appears to be the best geophysical technique to employ on the property. While horizontal loop EM and induced polarization have advantages insofar as survey cost and definition of heavily disseminated but discontinuous sulphides, respectively, are concerned, consideration of moderately rugged topography, narrow conductor widths (5 to 20 feet), lightly disseminated "background" pyrite of no economic significance, and heavy overburden coverage in some areas support selection of the Turam technique.

Dependent on the size of the area(s) selected by prospecting, geological mapping, and soil sampling for geophysical coverage, a maximum 800-foot line spacing, with 200-foot coil spacing and 100-foot readings should be employed. Detailed fill-in would be dictated by the presence of a significant conductor as determined from "normalized" responses.

The apparent absence of a significant magnetic contrast between mineralized and "background" rocks suggests that little information useful as a direct guide to copper mineralization would be obtained in a magnetometer survey. One or two detailed traverses across known mineralization should be run, however, to substantiate this suggestion, and could yield useful structural and/or lithological information. Chloritized hornblende in some of the dioritic rocks, for example, contains readily detectable magnetite, and it is not unreasonable to expect that continuity of such alteration zones may be substantial.

Linecutting and Turam and magnetometer surveys, as described, with provision for detailing in the former and expansion in the latter, require an allottment of \$1,500, \$5,000, and \$1,000, respectively, for a total of \$7,500. Again, estimated equivalent coverage is 16 claims, with 12 line-miles of survey.

TRENCHING

Deep weathering in quartz-muscovite schist zones, and moderately deep overburden in inter-outcrop areas on rugged side slopes, suggests that trenching will have limited application in exposing over-burden-obscured anomalous areas adequately for representative sampling. Back-hoe trenching for water lines in the cottage development at the base of the mountain, however, has been successful in exposing only lightly weathered bedrock under shallow overburden close to outcrops, so that bulldozer trenching may be applicable in some areas. An allottment of \$5,000 should be made for trenching, sampling, assaying, etc. in the second phase of the exploration program.

DIAMOND DRILLING

It is impossible to predict with any certainty the number of anomalies worthy of drill testing, however, a minimum contract for 2000 feet of BQ wireline drilling involving an all inclusive cost of \$20,000 should be anticipated.

Testing of widespread porphyry-type mineralization probably would be carried out best with a percussion machine, but it is premature at this time to attempt to place a value on such work.

MAR

CERTIFICATION

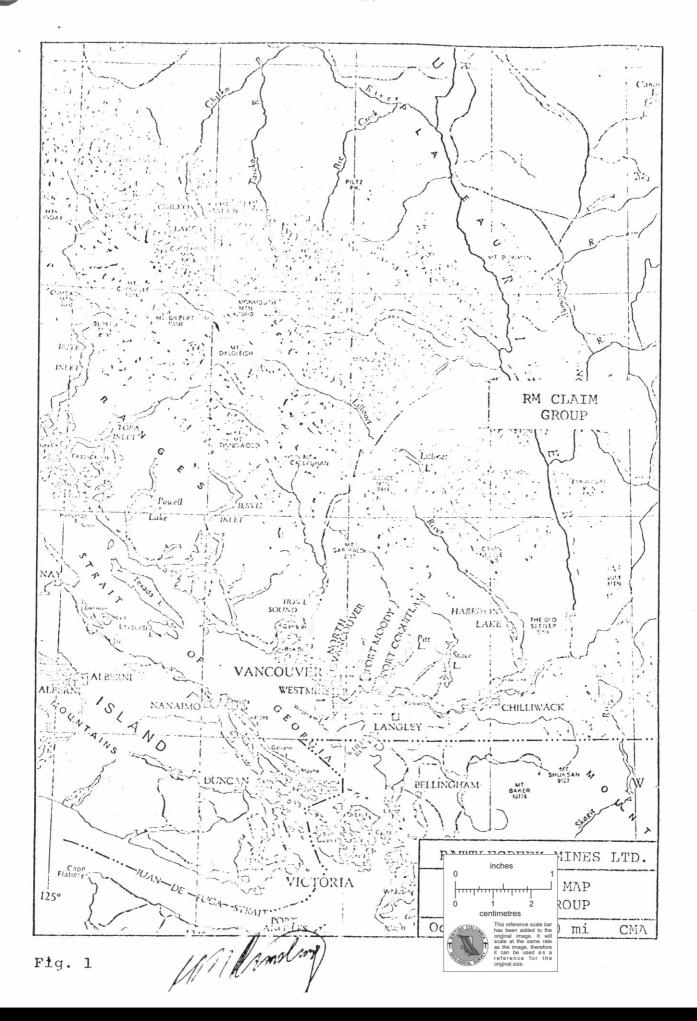
- I, CHRISTOPHER MACKENDRICK ARMSTRONG of the City of Vancouver, Province of British Columbia, do hereby certify:
- 1. THAT I am a practicing Geological Engineer residing at 4085 West 29th Avenue, Vancouver 8, British Columbia.
- 2. THAT I am a registered Professional Engineer in the Provinces of British Columbia and Ontario.
- 3. THAT I received the degree of B.Sc. in Geological Engineering from Queen's University, Kingston, Ontario, in 1960, and practiced my profession continuously in the period between leaving university in 1959 and returning to university in 1966.
- 4. THAT I enrolled in the Department of Mineral Engineering at the University of British Columbia in 1966, and in the period to 1969 completed course work and research work requirements for an M.A.Sc. program, specializing in bacterial/acid leaching systems; hesis writing was not completed.
- 5. THAT since leaving university in 1969, I have practiced my profession both as a Geological Engineer and as a Specialist/Advisor in bacterial/acid leaching systems.
- 6. THAT the following is a true record of my employment and experience:
 - 1957 4 mos. Junior Geologist. Noranda Mines Ltd. Quebec.
 - 1958 4 mos. Party Chief. Hollinger North Shore Exploration Co. Ltd. Montreal, Quebec.
 - 1959-1961 27 mos. Assistant Geologist. Pickle Crow Gold Mines Ltd. Pickle Crow, Ontario. Keevil Mining Group.
 - 1961-1962 9 mos. Assistant Geologist. Willroy Mines Ltd. Manitouwadge, Ontario.
 - 1962-1964 28 mos. Chief Geologist. Metal Mines Ltd. Werner Lake, Ontario. Consolidated Canadian Faraday Ltd.
 - 1964-1966 24 mos. Chief Geologist. Tegren Goldfields Ltd. Kirkland Lake, Ontario. Keevil Mining Group.
 - 1967 6 mos. Resident Engineer. McLeese Lake property.
 Geophysical Eng'g & Surveys Ltd. Keevil Mining Group.
 - 1969-1970 13 mos. Laboratory Manager, Chief Geologist, & Consultant. S. M. Industries Ltd., Vancouver.
 - 1970- mos. Independent Consulting Engineer.
- 7. THAT I do not have any interest in the securities or properties of Battlecreek Mines Limited, or associated companies, nor do I expect to receive such interest.

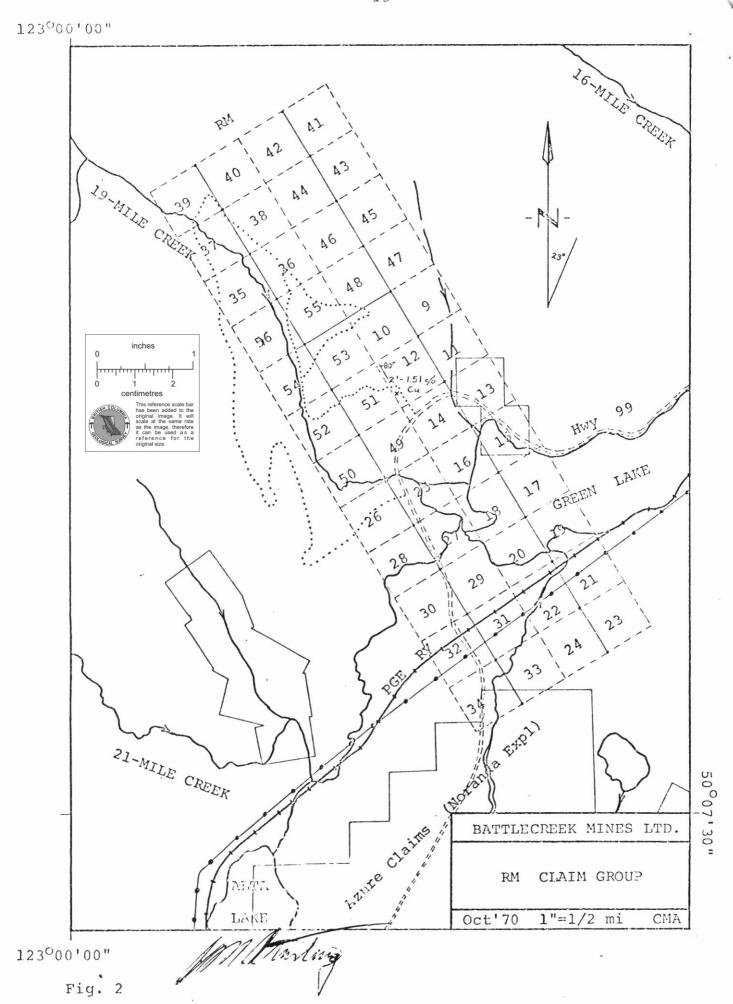
DATED AT VANCOUVER THIS 5th day of October, 1970

REVIEWED June 9th, 1971

Montre

C. M. Armstrong, P.Eng.





CREST LABORATORIES (B.C.) LTD.

1068 HOMER STREET
VANCOUVER 3, B.C.
PHONE 688-8586

CREST LABORATORIES LTONG
7911 ARGYLL ROAD
EDMONTON 82; ALBERTA
PHONE 469-2391

CERTIFICATE OF ASSAY

TO Mr. C.M. Armstrong, P. Eng.	July 28, 197	0'
4085 - West 29 Avenue	Lab No. 1209)

I hereby reriffy that the following are the results of assays made by us upon the herein described samples.

VANCOUVER, B.C.

MARKED	GC	DLD	SILVER	COPPER	,						TOTAL VALUE
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	PER TON (2000 LES.)
RM 1	trace			1.51					Andrews of the Andrews of the Control of the Contro		
Mil 2.0'											
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NOTE:

Rejects retained one month. Pulps retained three months unless otherwise arranged.

Gold calculated at \$..... per ounce

Registered Assayer, Province of British Columbia

CREST LABORATORIES (B.C.) LTD.

1068 HOMER STREET VANCOUVER 3, B.C. PHONE 688-8586

CREST LABORATORIES LT". 7911 ARGYLL ROAD EDMONTON 32, ALBERTA PHONE 469-2391

CERTIFICATE OF ASSAY

то	Mr. C. M. Armstrong, P. Eng.
	4085 - West 29thAvenue
	Vancouver, B.C.

August 12, 1970.

Lab. no. 1338.

I hereby triffy that the following are the results of assays made by us upon the herein described samples.

MARKED	GC	OLD	SILVER	COPPER	ZINC						TOTAL VALUE
MARKED	Ounces per Ton	Value - per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	PER TON (2000 LBS.)
RM2	0.01	\$0.35	0.6	Trace	0.01						
RM3	0.01	0.35	0.3	Trace							
RM4	0.01	0.35	0.4	Trace							
RM5 0-5				0.01							
RM5 5-10				0.12			7.1.		α		1.1.1
RM5 10-15				0.24		Exclus	ing hi	gh grad	my le,	3,0	0.2+ of o (
RM5 15-20				0.10					129	2.0	+ 1.51 % 5 6
RM5 20-25				0.01			•			5.01	
RM5 25-30				0.01							
	-										-
• .				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \							
											<u> </u>

NOTE:

Rejects retained one month. Pulps retained three months unless otherwise arranged.

Gold calculated at \$ 35.00 per ounce

Registered Assayer, Province of British Columbia