PRELIMINARY REPORT ON

B. C. B. MICA PROPERTY

SITUATED ON

SITKLAN ISLAND & ADJACENT MAINLAND

TERRITORY OF ALASKA

OWNED OR CONTROLLED BY

B. C. MICA MINES LTD.

January 6th, 1954
416 Bank of Nova Scotia Bldg.,
Vancouver, B. C.

B. W. W. McDougall, P. Eng.,
Consulting Mining Engineer

B.C.B. MICA PROPERTY

SITKLAN ISLAND & ADJACENT MAINLAND, TERRITORY OF ALASKA

INTRODUCTION

This report is based on information obtained during an examination made on December 8th to 10th, inclusive, 1953. The writer was accompanied on this examination by Messrs. O. Cote of Vancouver and F.W. Blasher of Seattle. Mr. Blasher is one of the stakers of the mineral claims which comprize the property and he has conducted prospecting operations in the areas over some considerable period of time.

The area has been known to contain mica-bearing formations for a number of years but no determined effort appears to have been made to effect sufficient prospecting and preliminary exploration work to delimit and map the extent of these formations or, except at very few places, to expose by trenching and opencutting, the mica contained in such formations.

There are no cabins on or in the vicinity of the mineral claims. A sturdy fishing vessel was chartered for the occasion of this examination; this boat, besides being our means of conveyance to and from the property, provided living quarters while we were conducting the examination. The weather was continuously stormy and the heavy gales, rains, dull mist-rimmed skies, etc. limited visability and very considerably shortened the length of the working days and otherwise impaired conditions for conducting this sort of work. It was desirable, too, that a geological reconnaissance of the rock formations along the coastlines with the aid of a skiff equipped with an outboard motor be made. However, though the skiff and motor were available, the heavy seas prevented such reconnaissance. There was no snow of consequence below the 300-foot contour but above this altitude a light covering of wet snow made it impossible to trace formations or structures. The fact is, however, that there is an abundance of mica-bearing formations below the 300-foot horizon and the extents of these above and beyond this altitude is not considered to be of great importance at this time.

From the foregoing descriptions of circumstances attending this examination it will be understood that this report must of necessity be preliminary in character.

PROPERTY

MINERAL CLAIMS & SITUATIONS:

The mineral claims comprizing this property, as at present constituted, are approximately as follows:

On Sitklan Island, vicintiy of Point Mansfield:
Hyder Mica No. 1, Hyder Mica No. 2, Bennett Mica, Morris Mica No. 1, Morris Mica No. 2 and Ater Mica.

On Kanagunut Island, southern end;
Garnet.

On Alaskan Mainland, vicinity of north shore of Sitklan Passage opposite or north from Sitklan Island:

Hyder Mica No. 9 (Mill Site), Hyder Mica No. 10, Pearson No. 1, Pearson No. 2, Pearson No. 3, Last Chance, Har No. 1, Feldspar and two others the names of which are not presently available to the writer.

The names of the claims as here set forth are as supplied to me. I am advised that there are in the Group, as at present constituted, some 17 mineral claims which are owned or controlled by the Company. All are unsurveyed locations which have been staked and recorded in accordance with the mining regulations of the Territory of Alaska. The approximate locations of these 17 mineral claims with reference to each other and to the geography of the region are indicated on a small-scale sketch accompanying this report.

The above-enumerated mineral claims are situated at the extreme south easterly tip of the Territory of Alaska. More particularly they are situated on Sitklan and Kanagunut Islands and on the mainland of Alaska directly across or northerly from Sitklan Island and Sitklan Passage or channel; also - they are at the entrance to Pearse Canal which waterway, together with the Portland Canal, form the boundary between Alaska and British Columbia inland for a distance of about 90 miles from the Pacific Ocean at Dixon Entrance.

Assuming that the operations center of this mineral claim Group to be on the northerly coast of Sitklan Island near Point Mansfield some air-line distances to the nearest population centers are as follows:

From Ketchikan, Alaska, to property south easterly 56 miles,
From Hyder, Alaska, to property, south westerly 88 miles,
From Port Simpson, B.C., to property, N.W. 17 miles,
From Prince Rupert, B.C., to property, N.W. 33 miles.

The approximate geographic position is 54° 56' N. Latitude and 130° 40' W. Longitude.

The geography of the area is more readily understood from reference to charts accompanying this report than from detailed written descriptions. The property is in the Ketchikan region of Alaska and it is but a few miles distant from the boundary line with British Columbia.

TOPOGRAPHY AND ACCESS:

The general topography of Sitklan Island and of the adjacent mainland is shown on the U.S.C.&G.S. Chart No. 8141, a copy of which accompanies this report. From this it will be observed that Sitklan Island is about 2½ miles in length, that it is partly divided by a westerly-fronting fiord and that the terrain in the northerly section attains an altitude of between 600 and 700 feet. The shoreline fronting Sitklan Passage on the north is, for the most part, steep and rugged and the terrain rises steeply. Those parts of the area which were inspected disclose few rock outcrops though it is suspected that, for the most part, the soil overburden is comparatively shallow over much of the area. The terrain is somewhat rugged in places and, particularly, immediately above the shoreline. On the mainland the topography, particularly that immediately above the shoreline is similar to that of the island. The highest point on the mainland peninsula is shown, on the chart, to be 1,029 feet - and, in the vicinity of the higher mineral claims, about 700 feet.

GENERAL SUMMARY AND CONCLUSION

On Sitklan Island and on the adjacent Alaskan Mainland there are extensive occurrences of acid pegmatites in which limited prospecting work and inspections have revealed concentrations of mica of probable substantial economic importance. Though the region is, at present, largely uninhabited it is readily accessible being, in fact, situated near the established steamer routes in the vicinity. All external circumstances affecting the carrying forward of mining operations, so far as these are recognized or foreseen, are reasonably favorable. The possibilities for establishing a profitable production operation depend on the quality and quantity of mica which can be developed in the pegmatitic formations.

It is my opinion that the property as described and discussed in foregoing pages fully warrants the expenditure of capital as indicated in exploration work. Further - it is anticipated that the mineral disclosures resulting from such initial exploration work will warrant additional expenditure of capital leading, eventually, to profitable production.

Respectfully submitted

Signed "B.W.W. McDougall" P. Eng.

Consulting Mining Engineer

January 6th, 1954
416 Bank of Nova Scotia Bldg.,
Vancouver, B.C.

B. W. W. McDOUGALL, B.A., B.Sc.
CONSULTING MINING ENGINEER

REGISTERED PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA

TELEPHONES:
OFFICE, PACIFIC 1631
RESIDENCE, NORTH 2830-Y

MINE
EXAMINATIONS
REPORTS
APPRAISALS
CONSULTATIONS
MANAGEMENT

416 BANK OF NOVA SCOTIA BUILDING
VANCOUVER 2, B. C.

July 7th, 1954.

The Directors,
B. C. Mica Mines Limited,
307 Williams Building,
Vancouver, B.C.;

Dear Sirs:

This report is for the purpose of presenting a description of the work which has been done on your mica-bearing properties, situated in the Territory of Alaska, from the commencement of operations by your Company in the latter part of April, 1954 down to June 30th, 1954. As instructed, I have made a thorough inspection of the work which has been, and is being, done under the direct supervision of Mr. Ovela Cote. This inspection was made during the seven-day period, June 24th to 30th, inclusive. In addition to descriptions of work details this report will include some discussion of matters affecting the more complete exploration and development of these properties.

Mr. Cote, accompanied by Mr. Frank Blasher, having travelled from Vancouver in the Company's sea-going launch, the Quest 1, arrived in Sitklan Passage on April 28th. By the end of the month a temporary camp had been established on the Alaskan mainland at Mr. Blasher's former camp site . It will be understood that this section of the Alaskan coast is almost completely without permanent habitations or inhabitants and that the nearest settlement or town of consequence, in Alaskan territory is Ketchikan, some 56 miles distant.

It was apparent, at the outset, that there was no immediate certainty as to the most desirable place for a permanent camp. If important production operations were to be eventually forthcoming on Sitklan Island a permanent camp site near by and on that Island would be highly desirable. Similarly in regard to possible important operations on the mainland, permanent camps reasonably close to operations would be desirable there. In view of these uncertainties Mr. Cote decided to provide a temporary tent camp on a float. Such a camp is, of course, portable,- that is, it can be towed from one site to another if deemed advisable and until such time that accumulative knowledge of the somewhat complicated geographic and topographic features of the area has quite definately indicated the proper place for a permanent camp to serve the entire area.

During the month of May logs were assembled from far and near to the small cove fronting Mr. Blashers old camp site and with these, together with lumber, cables and other hardware items a two-section float about 90 feet in length and 20 feet in width was constructed and well anchored to the shore rocks. On this float a comfortable tent camp was erected,- there being a bunk tent, a cook and mess tent and a warehouse or supply tent. The Quest 1 provides living and office quarters for Mr. Cote. It also houses ship-to-shore radio

B.W.W.McD

apparatus. Following the arrival of equipment and supplies from Seattle this camp was equipped and furnished for comfortable living. Running water is piped in from the near-by creek,- the bunk tent is provided with new beds and bedding and a large oil-burning heater,- the cook and mess tent is provided with a large oil-burning range and all the dishes and utensils required for a crew of probably up to 20 men. A small gasoline-driven motor-generator supplies electric current for camp lights and for a refrigerator which appliance is necessary for food storage; it is also very desirable, indeed necessary, to keep the radio batteries charged and conditioned for radio communications with Prince Rupert.

Early in May equipment and supplies purchased in Seattle at a cost of about $ 12,000, were landed at the site from the motor ship Eureka which is owned and operated by the McKay Transport Company of Ketchikan.

Actual field work was commenced about the second week of June and was continued throughout the remainder of the month. The equipment provided included a comprehensive assortment of hand tools such as shovels, picks, mattocks, axes, carpenter's tools and a portable gasolive-driven rock drill. This machine weighs about 90 pounds and, used as a jackhammer, is an effective device for opencut work and vastly more economical than the old-fashioned hand-drilling methods. This drill was provided with an adequate supply of drill rods and tungsten-carbide drill bits. Blasting sundries, including dynamite, fuse and detonators were acquired from Ketchikan after a good deal of nuisance and trouble. Mr. Cote had to transport it in the Quest 1 after first acquiring a permit to transport it.

Exploratory work conducted consisted of trail making and repairing and opencutting by drilling and blasting. The old trails were cleared and, in places, rebuilt and new ones were made to more remote sections of the claims. Opencutting work was conducted with the intent to enlarge the known areas of the mica occurrences rather than merely to enlarge the old cuts. It was considered, at this stage in the operations, much more important to increase the known size of the good mica-bearing sections than to keep on digging in the same old cuts.

This initial exploratory work has, of necessity, been directed in such manner as to constitute proper assessment work on the Company's mineral claim holdings - besides increasing the known dimensions of the mica-bearing structures; it has also been, to some extent conducted in such manner as to render accessible for more complete examination areas underlain by pegmatite which have not been hitherto prospected.

In respect to additional positive information concerning the economic features of the property to that given in my initial report, it can, I believe, be stated that the known areas underlain by heavy mica concentrations have been considerably increased and we have now fairly well worked out the width extents and the attitudes of the pegmatite occurrences. It is premature to attempt any estimate as to the ultimate mica resources but these are already substantial in respect to the probable and possible classes of "ore" and could be very great depending on the frequency with which the heavy concentrations of mica

B. W. McC

are found to occur. It will be understood that mica is found most everywhere in these pegmatite masses but commercial concentrations of the mineral occur erratically - and both quality and quantity are highly variant from place to place.

Throughout the month of May and the first week or so of June, during which time the float and camp were provided, messrs. Cote and Blasher were alone on the job and the work accomplished under the prevailing adverse conditions is not only creditable but decidedly amazing when one becomes familiar with such things as extra high tides, storms and other vagaries of nature. From the second week of June when two additional men, as well as an excellent cook, were engaged, a total of three men, not including Mr. Blasher, were engaged in exploratory work. Thus during the latter part of June expenditures in direct exploratory work on the Company's mineral claim holdings, in labor, expendable supplies and the very necessary culinary department, have been at the approximate rate of $100.00 per day.

I have mapped out certain additional work for the month of July and it is anticipated that this, when completed, will permit reasonably definate and precise planning for the next phase of the operations which should include opening up a part of the deposit with the aid of compressed-air-driven equipment. In concluding this brief account of B. C. Mica Mines Ltd. operations to the end of June, I wish to state that I am highly appreciative of the work as effected and supervised by Mr. Cote who, literally, and particularly in the earlier stages, has personally done the work of two or more men in order to provide a base of operations from which preliminary exploratory operations could be efficiently conducted.

Respectfully submitted,

B. W. McDougall P. Eng.,
Consulting Mining Engineer.

B. C. MICA MINES LIMITED

NOTES RE GEOLOGY & DEVELOPMENT PROPOSALS:

Sitklan Island and the adjacent mainland are underlain by gneisses and schists,- the general strike is NW-SE and the dips, for the most part, are steeply to the NE.

On Sitklan Island three major pegmatite occurrences are recognized: the No. 1 zone occurs exactly at Pt Mansfield,- it follows, more or less the Island coast line SE. This zone is probably about 500 feet in width. About 200 feet distant from the SW wall of this dike, the intervening distance being underlain by gneiss, there occurs the NE contact or wall of the No. 2 zone. This is about 700 feet wide. Some 550 feet, more or less, SW from the SW contact of the No. 2 pegmatite zone there occurs the NE wall of the No. 3 zone. This is at least 1,000 feet in width. The distances, as given, are as estimated from pacing etc. The lengths of these zones or dikes have not yet been fully traced out but they are probably to be measured in the thousands of feet.

On of the dikes or pegmatite zones - probably the No. 3 - appears to cross Sitklan Passage and to reoccur on the mainland shore. It strikes inland northwesterly and the Pearson claims are staked on it. Where it can been seen in its reasonable entirety it is about 150 feet in width. Mica can be seen almost everywhere that exposures of the pegmatite occur,- many such mica appearances, of course, are sparse.

The pegmatites persist - either continuouslt or intermittently - to the NW into the Nakat Inlet and Harbor area. There are extensive occurrences in this section which have been seen only at a few spots in detail by this writer. Mica occurs at such spots or landings as were visited but such occurrences are sparse.

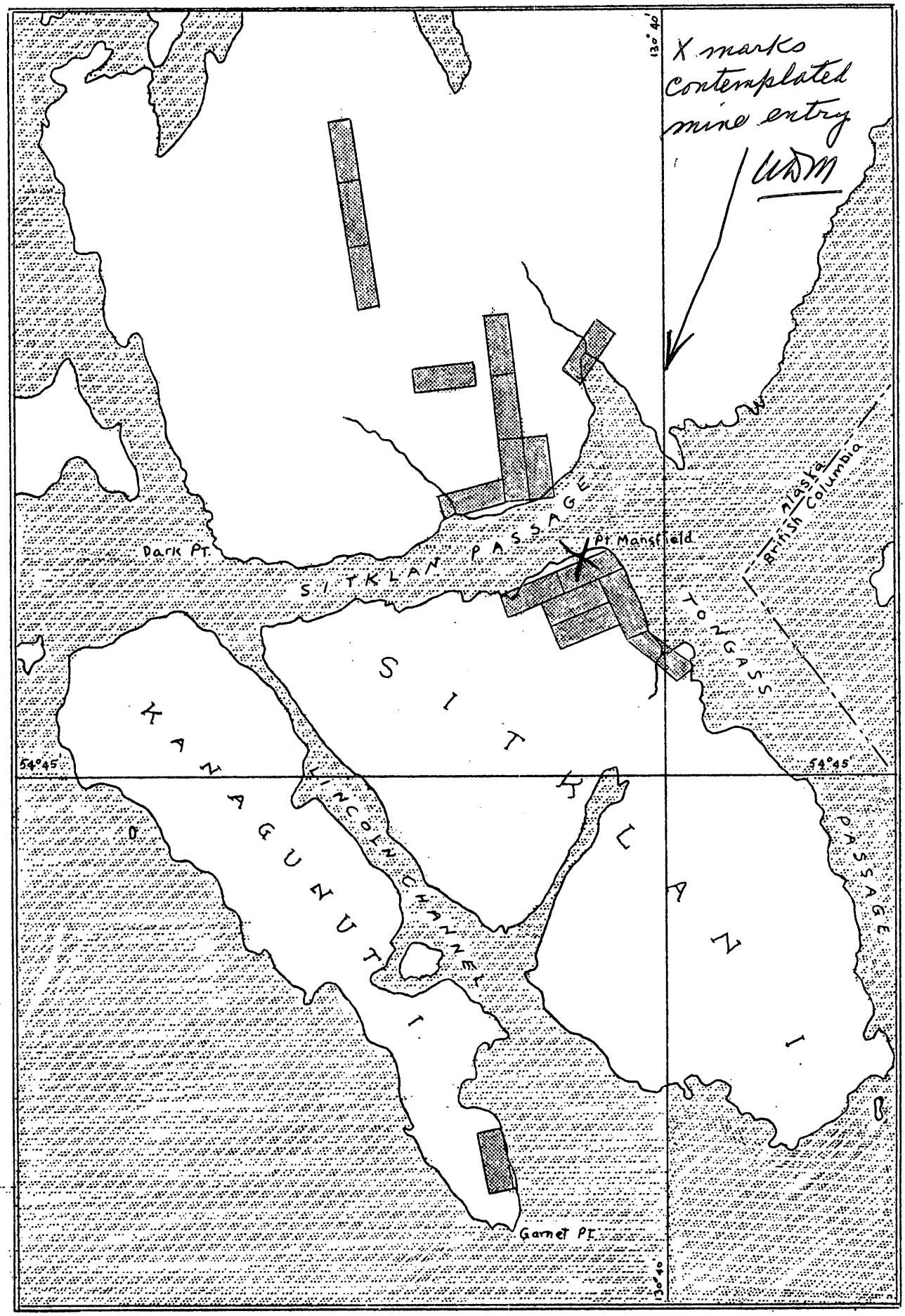
The pegmatites appear to conform in strike and dip to the enclosing gneisses and schists.

The most important concentration of mica presently known on these claims is on Sitklan Island, near point Mansfield at the NE corner of the Island and about 300 feet from the shoreline. This is on the Hyder Mica No. 1 claim. The altitude here is about 150 - 175 feet and the angle of inclination upwards from the proposed boat landing place is from 30 to 35 degrees. The place is suitable for a ground-surface tramway operated by a hoist from either the top or bottom. To make any substantial progress jack hammers operated by compressed air are essential. It is proposed to carry a 'floor' or a series of such inwards against the rise of the slope which lies at an angle of 15 to 20 degrees. The topography is suitable for this bench-type of opencutting. The compressor may be stationed either at the shoreline or near the opencut. In the interests of economy it should be operated close to the cut.

At the landing, near the foot of the proposed ground-surface tramway, there is deep water close to the shore. The shore is rocky and some temporary sort of landing is proposed for fishing-type craft, small outboard boats and barges.

It will be appreciated that this Company entered the area before there were camps or any shelter other than that of the launch. It required a month or more to provide comfortable temporary camp conveniences. As a result work on the claims has been under way for only a little more than two months. Most of this work has been purely exploratory - involving tracing out the pegmatites and conducting light opencut work to expose occurrences.

The Company recognizes only two courses, in regard to the required follow-up development,- that is diamond drilling or exposing one of the best-appearing mica concentrations by and expensive benched-type cut. Diamond drilling cannot give us information about the size and quality of muscovite crystals and we have elected to conduct extensive opencutting accompanied by careful testing of the muscovite by competent authority.



SKETCH PLAN BASED ON CHART NO. 8141
Showing Approximate Position of
Mineral Claims of B.C.B. Mica Group,
Sitklan Island & Vicinity
Southeastern Alaska

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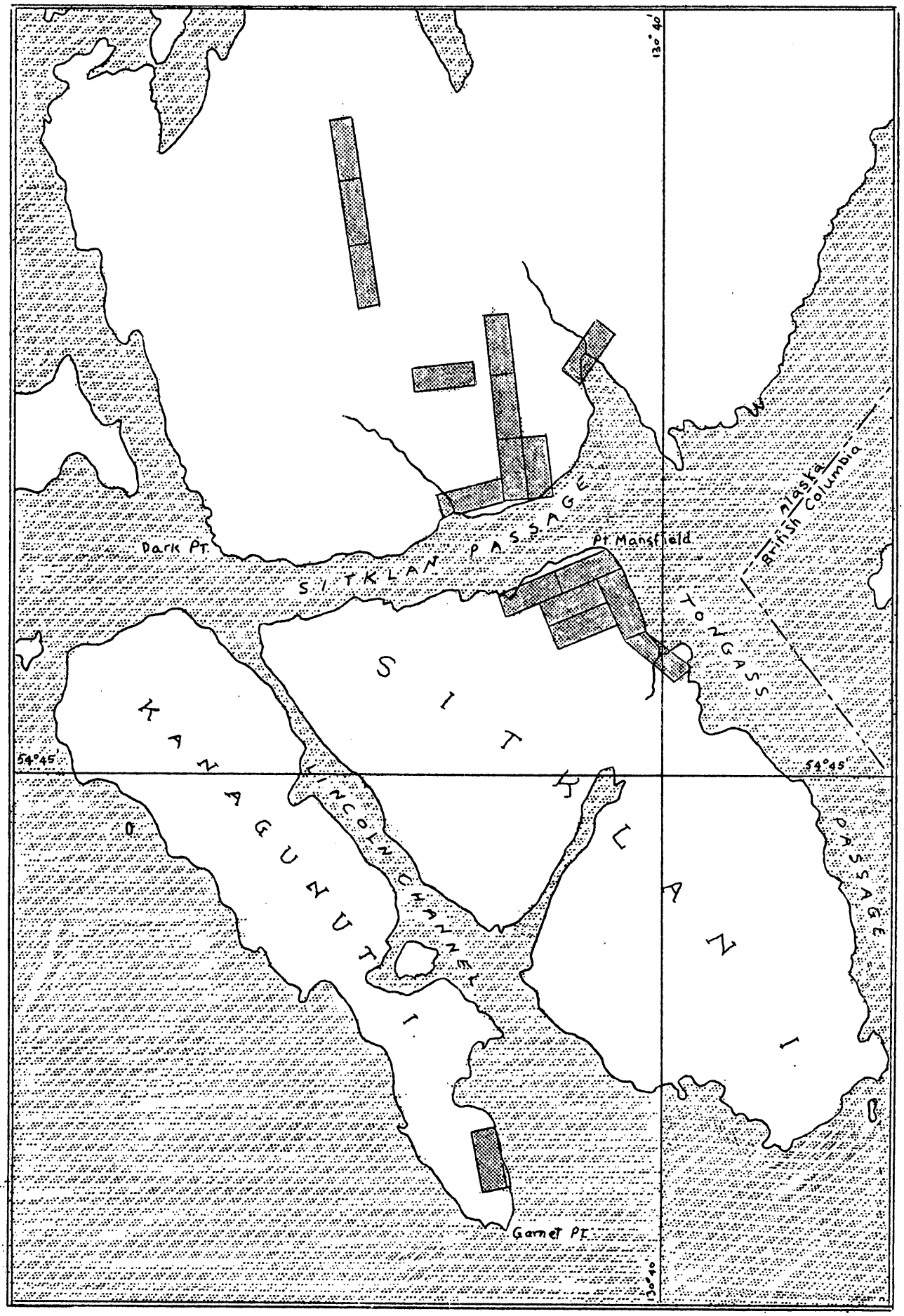
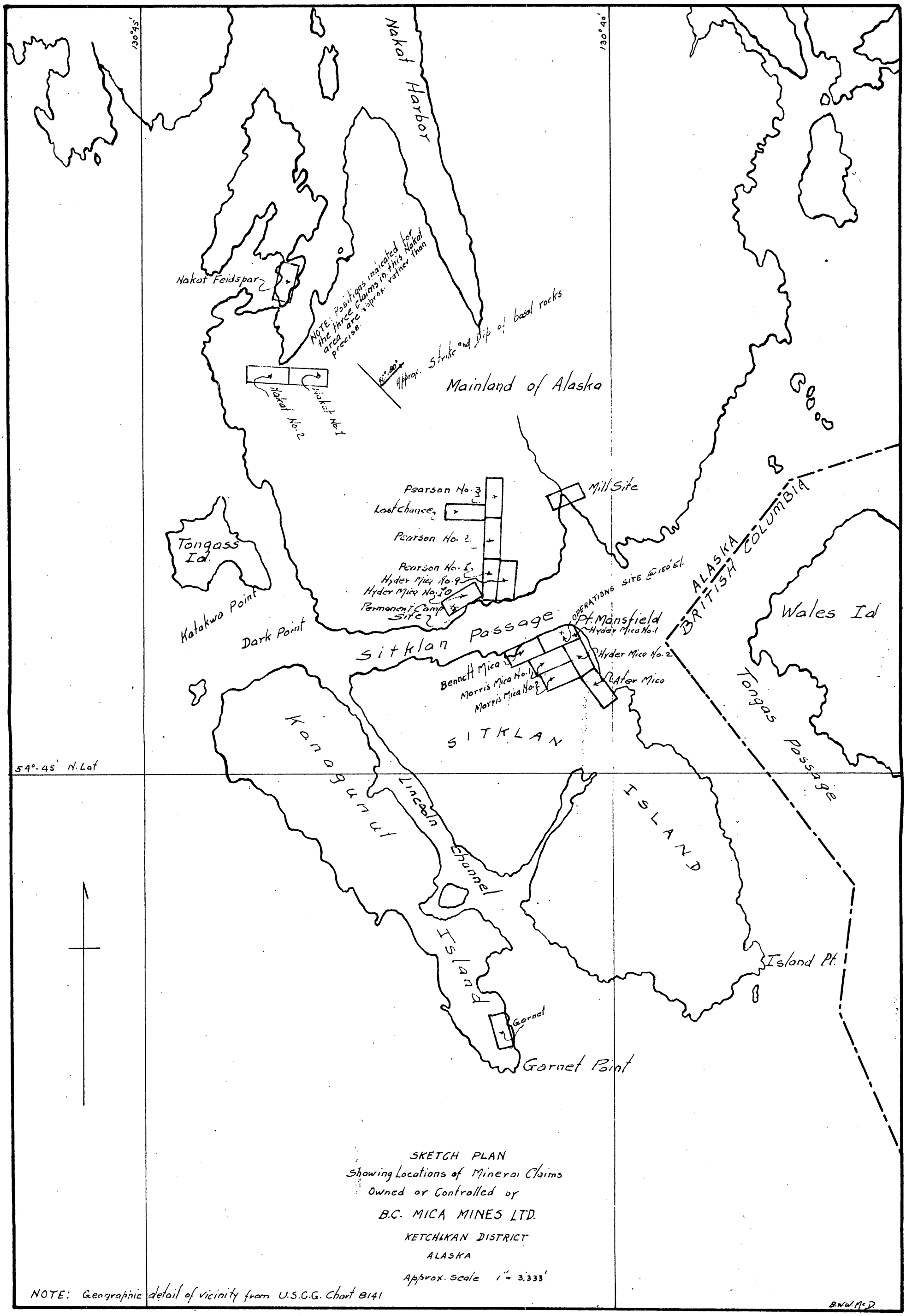


SKETCH PLAN BASED ON CHART NO. 8141
Showing Approximate Position of
Mineral Claims of B.C.B. Mica Group,
Sitklan Island & Vicinity
Southeastern Alaska



SKETCH PLAN
Showing Locations of Mineral Claims
Owned or Controlled by
B.C. MICA MINES LTD.
KETCHIKAN DISTRICT
ALASKA
Approx. Scale 1" = 3,333'

NOTE: Geographic detail of vicinity from U.S.C.G. Chart 8141

B.W.W. McD.

JAN 20 1958

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region 1
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-3437-Misc
B. C. Miss Mines Ltd.
B. C. Miss Mines Prospects
Ketchikan County, Sitklan
Island, Alaska

Docket No. DMEA-4918-Misc
Mainland and Sitklan Island
Groups of Claims
Ketchikan County, Alaska

Dear Mr. Weissenborn:

Reference is made to the letter of March 4, 1955, to Mr. George C. Selfridge from Mr. S. E. Lagain on the subject application, stating, "Mr. Velikanje has been withholding preparation of his report of the survey examination until the operators indicate their serious intentions by submitting a revised application."

Recent application, DMEA-4918, is on the same property and is most inadequate for evaluation purposes. We would, therefore, be pleased to receive Mr. Velikanje's report.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

Frank D. Lamb

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

LHHouk:rsi 1/17/58
Copy to: Admr. R. File
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

P.S. If his report is not available, we would like to have any other information on the property that you have available.

600

APR 20 1955

B. C. Mica Mines Ltd.
515 Vancouver Block
736 Granville Street
Vancouver, British Columbia
Canada

Re: Docket No. DMRA-3437 - Mica
B. C. Mica Mines Ltd.
B. C. Mica Mines Prospects
Ketchikan County, Sitkian
Island, Alaska

Gentlemen:

Reference is made to your application for exploration assistance and the Field Team's letter dated August 6, 1954, requesting additional information needed to process the application.

As the requested information has not been received, we assume that you are no longer interested in obtaining Government assistance for an exploration program. The subject docket, therefore, is considered closed and is being transferred to the inactive file.

Sincerely yours,

C. O. Mittendorf

Administrator

JHopkins:ad 4/18/55
Copy to: Admr. R. File
Docket
Operating Committee
Field Team, Alaska District
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Hauk

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~

P. O. Box 560
Juneau, Alaska

March 4, 1955

Mr. George C. Selfridge, Chairman,
Operating Committee,
Defense Minerals Exploration Admin.,
Department of the Interior,
Washington 25, D. C.

Re: Docket No. DMEA-3437 (mica)
B. C. Mica Mines Ltd.

Dear Mr. Selfridge:

Your letter of February 23 regarding an examination of the referenced project was received the other day.

The property was examined last season (in August I believe) by a party from the Geological Survey. I think that Mr. Velikanje and Mr. Sainsbury both were in the party and, if I remember correctly, George Gates and at least 1 other Survey man were present. Mr. Sainsbury told me that, since his previous examination, the company had done some work on the property and that he was more favorably impressed.

The operators agreed to revise the very unsatisfactory application which they had first submitted but, to date, no word has been received from them. Mr. Velikanje has been withholding preparation of his report of the Survey ~~report~~ exam until the operators indicate their serious intentions by submitting a revised application.

Yours sincerely,

S. H. Lorain,
Executive Officer,
Alaska District, Region I.

cc: Velikanje

600

FEB 23 1955

Mr. E. H. Lovelin
Executive Officer, DMEA
Field Team, Alaska District
Bureau of Mines
P. O. Box 960
Juneau, Alaska

Subject: Docket No. DMEA-3637 - Mian
B. C. Mian Mines Ltd.
B. C. Mian Mines Prospects
Ketchikan County, Sitkian
Island, Alaska

Dear Mr. Lovelin:

Reference is made to your memorandum dated August 6, 1954, together with a copy of your letter of the same date to the B. C. Mian Mines Ltd., regarding the subject application.

In each of these communications it was stated that Messrs. R. S. Williamson, Acting Executive Officer, and C. L. Sainsbury planned to be in the vicinity of the property in August, 1954, and would make a field examination at that time.

Kindly advise if a field examination of the property has been made.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

J. H. Hedges

Director, Bureau of Mines

Thor H. Kiilsgaard

Director, Geological Survey

JHopkins:ad 2/18/55

Copy to: Admr. R. Fils
Docket
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

August 20, 1954

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Chief, Ceramic and Fertilizer Materials Branch

Subject: DMEA-3437 (mica)

Applicant: B. C. Mica Mines, Ltd.

Name and Location of Property: B. C. M. M. Prospects
Ketchikan County, Alaska

Date of Application Rec'd. by Ceramic & Fertilizer Mtls. Br.: August 10, 1954

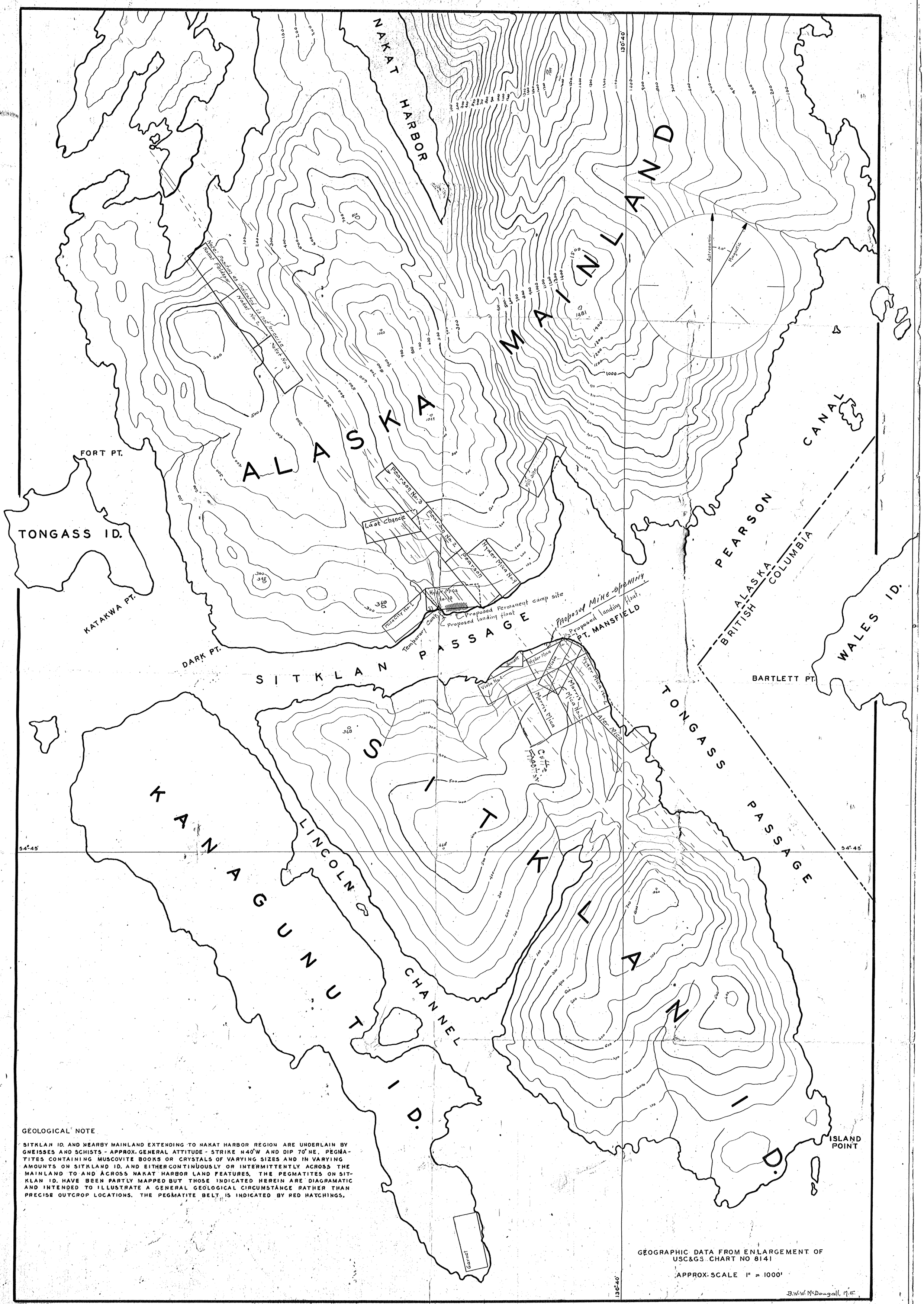
Comments:

1. No data are available in this office on subject property.
2. In light of the limited information on this area regarding mica and the size of the proposed costs ($60,000), the most logical solution would be for field examiners to visit this property.

Recommendation:

It is recommended that the field team visit this mine to ascertain if an exploration project is justified. If so, the field team and applicant should agree on a definite plan of exploration on a unit-cost basis.

W. F. Dietrich



GEOLOGICAL NOTE

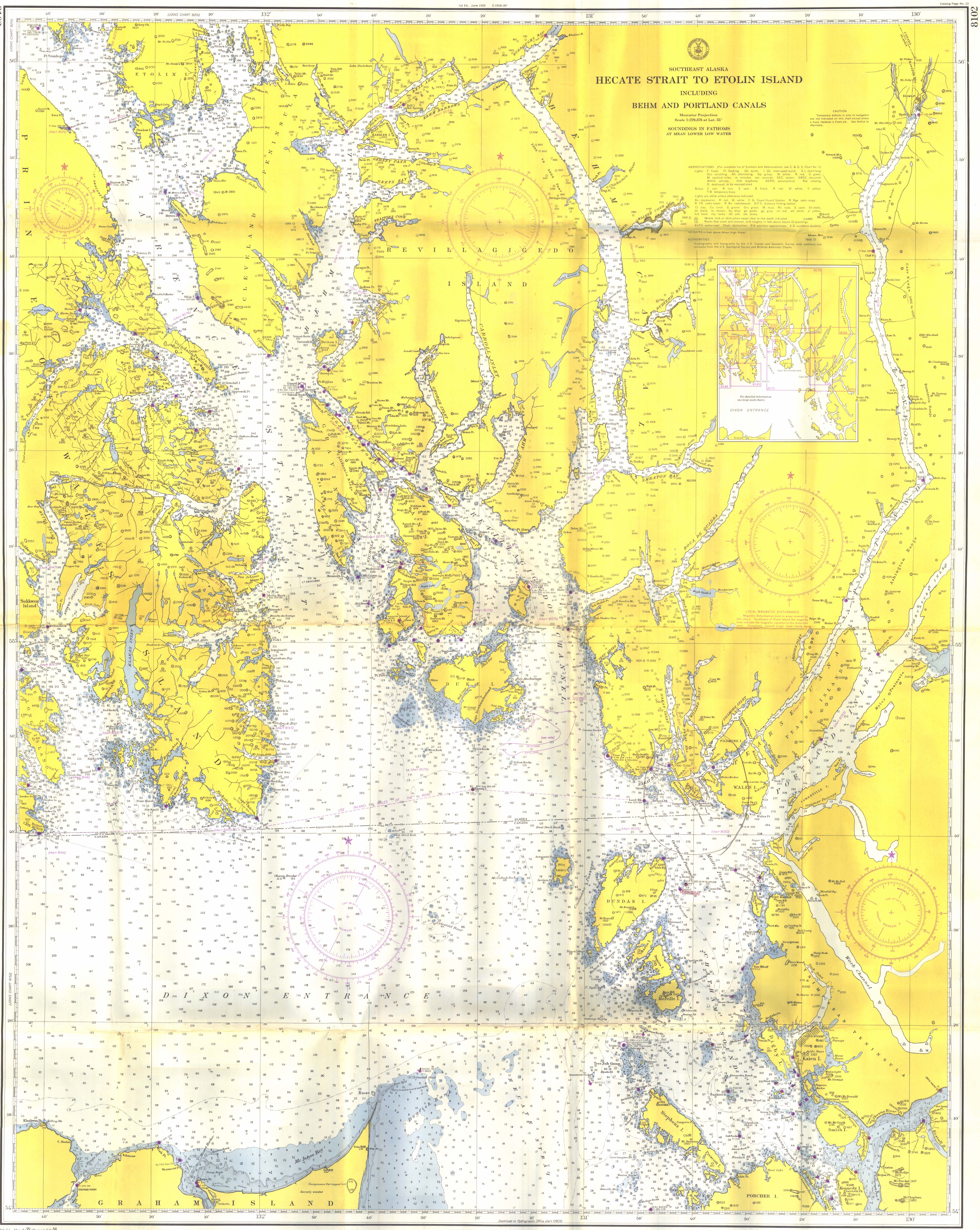
SITKLAN ID. AND NEARBY MAINLAND EXTENDING TO NAKAT HARBOR REGION ARE UNDERLAIN BY GNEISSES AND SCHISTS - APPROX. GENERAL ATTITUDE - STRIKE N40°W AND DIP 70° NE. PEGMATITES CONTAINING MUSCOVITE BOOKS OR CRYSTALS OF VARYING SIZES AND IN VARYING AMOUNTS ON SITKLAND ID. AND EITHER CONTINUOUSLY OR INTERMITTENTLY ACROSS THE MAINLAND TO AND ACROSS NAKAT HARBOR LAND FEATURES. THE PEGMATITES ON SITKLAN ID. HAVE BEEN PARTLY MAPPED BUT THOSE INDICATED HEREIN ARE DIAGRAMATIC AND INTENDED TO ILLUSTRATE A GENERAL GEOLOGICAL CIRCUMSTANCE RATHER THAN PRECISE OUTCROP LOCATIONS. THE PEGMATITE BELT IS INDICATED BY RED HATCHINGS.

B.C. MICA MINES LTD.

GENERAL PLAN – SHOWING GEOGRAPHIC DETAILS, APPROX. LOCATIONS OF COMPANY'S LODE MINING CLAIMS, GEOLOGIC FEATURES & OTHER DATA.

1st Ed., June 1920 C-1918-187

Catalog Page No. 22



6th Ed., Mar. 8/35; Revised 8/6/56

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H. Arnold Karo, Director

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