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THE GOVERNMENT OF THE PROVINCE OF BRITISH COLUMBIA DEPARTMENT OF MINES AND PETROLEUM RESOURCES

MINERAL ACT FORM B

Affidavit on Application for Certificate of Work

I, Drake L. Cummings Agent for Pacific Rim Mines Ltd. (NPL) 515-475 Howe Street, Vancouver 1, B.C. 507-475 Howe Street, Vancouver 1, B.C. Free Miner's Certificate No. 71196 Date issued May 29th, 1968 Free Miner's Certificate No. 71056 Date issued May 24th, 1968

make oath and say:—

I have done, or caused to be done, work on the Lil #21, Audrey #22, Katy #19, Jozien #3 Heather #1, Astrid #4, Louise, #2, Maria #11, Martha #9 Mineral Claim(s)

Record No. (s) 25972, 25973, 25970, 25954, 25952, 25955, 25953, 25962, 25960 respectively situate at Aristazabal Island

in the Skeena Mining Division, to the value of at least Seventy-two hundred dollars, since the 15th day of June, 1967

The following is a detailed statement of such work:—

(Set out full particulars of the work done in the twelve months in which such work is required to be done.)

Prospecting and exploration work has been carried out on the above 9 mineral claims which adjoin and form part of a group of 36 mineral claims under Grouping Notice No. 922 recorded May 24th, 1966, in the office of the Mining Recorder, Prince Rupert, B.C. The work was done and performed with a crew of 7 men, consisting of bulldozing, trenching and drilling and blasting as follows: Bulldozing with a C6 Euclid Tractor 401 hours, Drilling and Blasting with an Atlas Copco Air-Trac Drilling machine 190 hours. The bulldozing is indicated in orange and the drilling and blasting in green on the annexed claim map. The total yardage bulldozed, blasted and moved amounted to not less than 15,000 yards of material. The wages paid amounted to \$13,270.88. Pacific Rim Mines Ltd. (N.P.L.) is applying for a Certificate of Work for two years by applying \$7,200.00 of the above expenditure for a Certificate for two years on each of the said 36 mineral claims, Group No. 922.

That I have not and will not use the work declared herein in any way for the purposes of obtaining tax exemption on a Crown-granted mineral claim under the terms of the Taxation Act.

SWORN and subscribed to at Vancouver this June 19 68, before me— * A Commissioner for taking Affidavits within British Columbia

* This affidavit may be taken by a person empowered to take affidavits by the Evidence Act of British Columbia.

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36 MINERAL CLAIMS GROUPED UNDER NUMBER 922 - MAY 24, 1968

<u>MINERAL CLAIMS</u>	<u>TAG NUMBER</u>	<u>RECORD NUMBERS</u>
Heather #1	584161	25952
Louise #2	584162	25953
Jozien #3	584163	25954
Astrid #4	584164	25955
Kay #5	584165	25956
Erica #6	584166	25957
Nora #7	584167	25958
Diane #8	584168	25959
Martha #9	584170	25960
Shirley #10	584169	25961
Maria #11	584177	25962
Annie #12	584178	25963
Doris #13	584175	25964
Peggy #14	584176	25965
Betty #15	584173	25966
Dolly #16	584174	25967
Mary #17	584171	25968
Joy #18	584172	25969
Katy #19	584185	25970
Cora #20	584186	25971
Lil #21	584183	25972
Audrey #22	584184	25973
Ruby #23	584187	25974
Rita #24	584188	25975
Roma #25	584190	25976
Ruth #26	584189	25977
Lisa #27	584191	25978
Mona #28	584192	25979
Gale # 29	584193	25980
Sophia #30	584194	25981
Maude #31	584195	25982
Laura #32	584196	25983
Iris #33	584197	25984
Mabel #34	584198	25985
Nola #35	584199	25986
Dona #36	584200	25987

ALLAN P. FAWLEY, P.E.D., P.ENG.
CONSULTING MINING AND GEOLOGICAL ENGINEER

1947 WEST KING EDWARD AVENUE
VANCOUVER 9, BRITISH COLUMBIA

**ARSTAZABAL ISLAND MINERAL CLAIMS,
BRITISH COLUMBIA**

of

PACIFIC RIM MINES LTD. (N.P.L.)

by

Allan P. Fawley

Property Examination May 18-20, 1968

Report Written June 1968

ARISTAZABAL ISLAND MINERAL CLAIMS,
BRITISH COLUMBIA

of

PACIFIC RIM MINES LTD. (N.P.L.)

INTRODUCTION

The coastal and some inland mineral claims held by Pacific Rim Mines Ltd. were examined in company with Mr. N.N. MacKenzie on May 18-20, 1968. The objective of the examination was to determine both the economic possibilities of the Aristazabal limestone deposit (covered in a separate report) and the possibilities of finding deposits of copper, iron, gold, etc.

LOCATION AND ACCESS

The property of Pacific Rim Mines Ltd. is on Aristazabal Island which is 350 miles northwest of Vancouver and 110 miles southeast of Prince Rupert. The property is on the east side of the island, facing Laredo Channel. Access is by boat or plane.

PROPERTY

Pacific Rim Mines Ltd. are the recorded owner of a group of 36 mineral claims on Aristazabal Island (see enclosed map).

CLIMATE AND TOPOGRAPHY

The climate is typical of the westcentral coast of British Columbia, a moderate temperature and high rainfall. Generally low cliffs occur along or within 200 feet of the shore line, the ground then rises irregularly but fairly rapidly to a height of about 100 feet and then continues to rise gradually with a few hills and mountains, the highest of which (Mt. Johnston) has an elevation of 1085 feet.

GEOLOGY

The general geology of Aristazabal Island is Late Paleozoic and/or Early Mesozoic sedimentary and volcanic rocks that are intruded by granitic rocks of Jurassic or Cretaceous age (Geological Survey of Canada, Map 932A, 1962).

The geology of the eastcentral part of the claims group is a series of limestone beds that have been metamorphosed to marble, dip to the southwest or southeast, are intruded in places by diorite or andesite dykes and sills, and are cut by numerous faults which generally trend either northwest or northeast. Limestone occurs along the coast, where shown on the enclosed map, and from air photographs appears to have an average length of more than 7,000 feet and a width of more than 6,000 feet, and may extend for as much as 8,000 feet from the shoreline.

The limestone mass is bounded on the north by diorite and gneiss and on the south by gneiss. The boundaries of the limestone are mainly faults, but diorite is in direct intrusive contact on the north

side of Quarry Bay. The sills and dykes of diorite intruded the limestone prior to folding and prior to at least some of the faulting.

The structure of the limestone mass, except for the faulting, is not clear and its interpretation will probably change on detailed mapping or on deep drilling, however, on present evidence the main part of the limestone mass appears to be a syncline pitching to the southeast and with the beds on the southern limb overturned. Additional tight folding, isoclinal in part, may have taken place within the syncline.

ORE POSSIBILITIES

Only a minor amount of sulphides, mainly pyrite, were noted during my examination of the coastal section and the possibility of finding an economic base metal or precious metal deposit in this coastal section is slight. However, the area as a whole is favourable as the Surf Inlet mine (a former gold, silver, copper producer) is nearby and as a large limestone body occurs on the claims group that has been intruded by diorite and probably by granitic rocks, and the contact of limestone and intrusive rocks is a favourable location for the formation of contact metamorphic mineral deposits which, along the west coast of British Columbia, are especially noted for deposits of copper and iron.

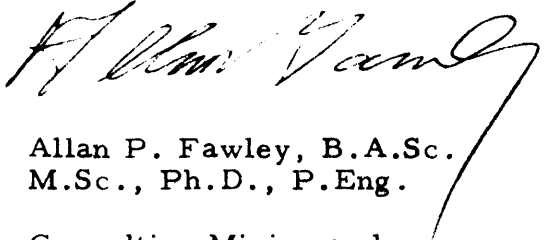
CONCLUSIONS AND RECOMMENDATIONS

Only a minor amount of sulphides were seen in the coastal section of the claims group and the possibility of finding an economic ore body in this section is slight. However, ore bodies, especially copper,

gold or iron, may occur as contact metamorphic deposits along the contacts between the limestone and the intrusive diorite and granite rocks. The most favourable area for exploration is in the western part of the claims group and to the west of the group.

The boundaries of the limestone should be located (see enclosed map for the probable boundaries) and, especially the southwestern boundary, should be carefully prospected. A magnetometer would be of aid as it will locate magnetite (iron) deposits, and it will also indicate copper deposits if they are associated with magnetite. Further staking may be necessary adjoining the western claim boundary.

Respectfully submitted,



Allan P. Fawley, B.A.Sc.
M.Sc., Ph.D., P.Eng.

Consulting Mining and
Geological Engineer

Vancouver, B.C.

June 21, 1968