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MONTE CRISTO MINES LTD. (N.P.L.)

REPORT ON PROPERTY

LILLOOET RIVER AREA

BRITISH COLUMBIA, CANADA

12th May, 1970

(PML 811)

GERALD L. KIRWAN, B.Sc., F.G.A.C.
Exploration and Mining Geologist
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PROPERTY FILE

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MONTE CRISTO MINES LTD. (N.P.L.)

REPORT ON PROPERTY

LILLOOET RIVER AREA

BRITISH COLUMBIA, CANADA

SUMMARY

Monte Cristo Mines Ltd. (N.P.L.) have acquired an 80 acre lease in the Lillooet River Area, British Columbia, with inferred 25 million tons of alluvial sands to depth 100 feet.

Assays from surface sampling by the writer on the subject property returned a gross metal value at current market prices of \$10.49 per ton with gold and platinum being the chief contributors. Cost per ton to process sands should not exceed \$5.00 per ton.

Through surface sampling and Becker drill holes on the alluvial sands elsewhere in the Lillooet River Valley, substantial tonnages and commercial grade values have been assayed indicated in gold, silver, platinum and allied metals.

Metals occur in submicron size particles and physio-chemical studies currently underway show considerable encouragement with regards to ascertaining the best method possible for maximum recovery.

Stable markets exist for metals noted and should continue for some considerable time.

In view of findings to date, initial expenditures are warranted to conduct a preliminary assessment of the gold, silver

and platinoid metals within the sands on the Monte Cristo alluvium.

It is recommended that a minimum amount of surface sampling be done and assayed for precious metals, especially gold, silver, and the platinum group of metals. The estimated cost of this work should not exceed \$3000.00 all-inclusive.

Contingent upon positive results from the recommended program, further work would be done and would likely be in the form of Becker drilling.



G. L. Kirwan

May 12, 1970

Monte Cristo Mines Ltd. (N.P.L.),
7th Floor,
409 Granville Street,
Vancouver 112, B.C.

Gentlemen:

Monte Cristo Mines Ltd. holds a single lease of about 80 acres located in the Lillooet River Area, British Columbia.

An appraisal is made herein of the economic mineral potential of the property and carries recommendations for programs to test this potential from a mine-making point of view.

PROPERTY, LOCATION, ACCESS:

The Monte Cristo holdings consist of a single lease of about 80 acres size numbered PML 811, Tag No. 37959.

The lease, located along the Lillooet River between Harrison and Lillooet Lakes at mile 21.5 some 58 miles north northwest of the settlement of Harrison Hot Springs, British Columbia, or

some 60 miles due northeast from Vancouver, is located in the New Westminister Mining Division.

Access is by float-equipped aircraft to the northern tip of Harrison Lake thence a 22 mile vehicle ride northward directly onto the property. The property is also accessible from Vancouver by vehicle via Horseshoe Bay, Squamish to Pemberton, thence by four-wheel drive onto the property itself.

GEOLOGY:

A prominent valley running south southeasterly is occupied by Lillooet River within the rugged peaks of the Coast Range Mountain System. It is economically significant that this valley in the area under consideration is a probable fault adding depth potential to delta gravel material underlying the property.

According to G.S.C. Map No. 1151A, Pitt Lake, rock assemblages in the region are represented by complex intrusives (granite to granodiorite to diorite), sediments and volcanics, chiefly of Mesozoic Age. Ultrabasic and basic rock formations occur some 80 miles north of the subject property. These sands have been classified and redistributed in post-Pleistocene time over a period of some 10,000 years.

The Lillooet River between Harrison and Lillooet Lakes, a distance of some 34 miles, generally occupies a broad mountain-flanked valley. The sands containing the precious metals occur along the 34 mile river bed, are laterally one-quarter to one-half mile wide, and are occasionally characterized by paired benches flanking the narrow, fast-flowing, shallow river. In most instances the Lillooet River is entrenched within the sands occupying a bed some 100 feet deep.

Sand material underlying the lease is the product of erosion of some 2,000 square miles of rock which forms the drainage system of the Lillooet Valley. The tributaries and feeder creeks drain an area containing basic and ultrabasic intrusives and are considered as source for the platinoid metals with gold and silver in the Lillooet sands. Since source of the alluvial sands is the same, the average values contained therein should be reasonably consistent throughout the entire area and work to date indicates this to be so.

Platinum and allied metals, gold and silver in the Lillooet sands occur in submicron size and thus cannot be detected by unaided eye.

An estimated 25 million tons of alluvial sands underlie

the subject property to depth 100 feet from surface, and although depth of sands is unknown beyond this point indications are this figure can be increased substantially.

HISTORY AND ECONOMIC CONSIDERATIONS:

The Monte Cristo property forms a portion of an area occupied by alluvial sands to unknown depth extending from the north tip of Harrison Lake to the south tip of Lillooet Lake, a distance of some 34 miles.

The Lillooet River alluvial sands were tested at the turn of the century for coarse gold with crude methods by prospectors en route to the Caribou Area, and as fine gold could not be detected by these procedures, the area fell dormant.

The techniques of sand mining have recently been developed and perfected to a degree to recover gold and precious metals from alluvium material.

Exploration on a portion of the Lillooet sands was undertaken by Zyrox Mining Company, Ltd. on a 14 lease group at mile 2 in the form of surface sampling and Becker drill methods. Results of this work as reported on by competent professional mining

personnel from assays from a number of reliable assay houses indicate 200 million tons of raw sand material to depth 100 feet containing economic proportions and values in silver, gold, and platinum with contributions from associated metals.

Recent research at the laboratory level indicates results are promising in securing recovery of the metals contained in the complex sands. More work will be required to fulfill this aim and Chemalloy Minerals Ltd., which firm optioned the Zyrox holdings, are currently financing research towards this end. Metals occur in sub-micron size particles and chemical and physical methods are now under study to ascertain the best method possible for maximum recovery.

Under the direction of the writer, a 26 mile section of the Lillooet River sands was sampled last summer each one-quarter mile and the arithmetical averages of assay returns from the 61 randomly taken surface samples in troy ounces per ton are: gold 0.036, silver 0.067, platinum 0.046, palladium 0.020 and iridium 0.002 for an average gross metal value of \$8.39 per ton, Engineering and Mining Journal figures. Cost per ton to process would be in the neighbourhood of a maximum \$5.00 per ton. Values are generally consistent throughout the sands.

It is noteworthy that sampling of alluvium from the Monte Cristo property assayed \$10.49 gross metal value per ton with gold and platinum being the chief contributors.

More recently, assay results from sand samples derived from a Becker drill operation on the property of Atlas Rainbow Mines Ltd. at mile 21, in close proximity to the subject property, confirmed that precious metal values as noted above persist to depth 100 feet and, in fact, values increase with increasing depth. Sands underlying the Monte Cristo property are characteristic of the Lillooet River belt under discussion and would thus be similar to those sands on the Chemalloy-Zyrox and Atlas Rainbow holdings.

Indications are that a stable market exists for the precious metals noted herein and will continue for some considerable time.

CONCLUSIONS AND RECOMMENDATIONS

Monte Cristo Mines Ltd. have acquired an 80 acre lease in the Lillooet River Area, British Columbia, with inferred 25 million tons of alluvial sands to depth 100 feet.

Assays from surface sampling by the writer on the subject property returned a gross metal value at current market prices of

Gerald L. Kirwan

EXPLORATION & MINING GEOLOGIST

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Metals occur in submicron size particles and physio-chemical studies currently underway show considerable encouragement with regards to ascertaining the best method possible for maximum recovery.

Stable markets exist for metals noted and should continue for some considerable time.

In view of findings to date, initial expenditures are warranted to conduct a preliminary assessment of the gold, silver and platinoid metals within the sands on the Monte Cristo alluvium.

It is recommended that a minimum amount of surface sampling be done and assayed for precious metals, especially gold, silver, and the platinum group of metals. The estimated cost of this work should not exceed \$3000.00 all-inclusive.

Gerald L. Kirwan

EXPLORATION & MINING GEOLOGIST

Contingent upon positive results from the recommended program, further work would be done and would likely be in the form of Becker drilling.

Respectfully submitted,

A handwritten signature in cursive script that reads "G. L. Kirwan". The signature is written in dark ink and is positioned above the typed name.

G. L. Kirwan, B.Sc.

May 12, 1970

CERTIFICATE

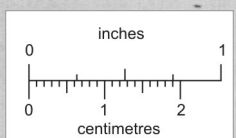
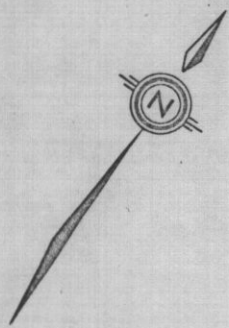
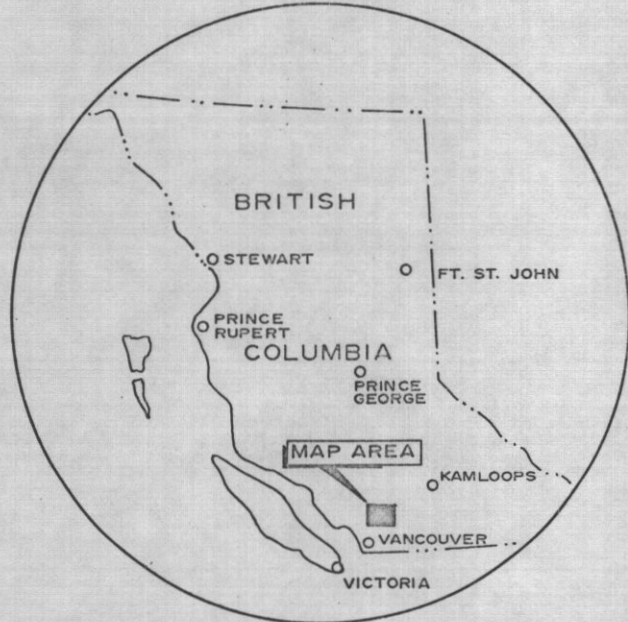
I, Gerald L. Kirwan of the cities of Toronto and Vancouver, certify as follows:

1. THAT I am a Geologist with offices at Ste. 205-160 Bay Street, Toronto, and Ste. 214 - 475 Howe Street, Vancouver, B.C.
2. THAT I have been graduated from Carleton University, B.Sc., 1957, and that I have practised my profession continuously.
3. THAT I am a Fellow of the Geological Association of Canada and a member of the Canadian Institute of Mining and Metallurgy.
4. THAT I have no interest direct or indirect in the property of Monte Cristo Mines Ltd. (N.P.L.), nor do I beneficially own directly or indirectly any security of the Company or affiliate thereof.
5. THAT the accompanying report has been prepared by myself and is based upon a visit to the subject property May 1st, 1970, as well as numerous visits to the region prior to this time, a personal study of the alluvial sand material contained in the Lillooet River Valley, and close contact with personnel and laboratories involved in research of these sands.
6. THIS report herein may be used in the prospectus of this Company and amendments thereto.

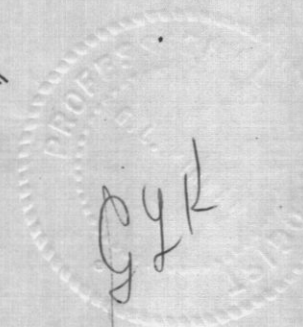
Dated at Vancouver, British Columbia, this 12th day of May 1970.



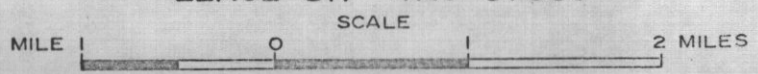
G. L. Kirwan



This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.



MONTE CRISTO MINES LTD. (N.P.L.)
LOCATION MAP
 LEASE 811 TAG 37959



G.L. KIRWAN, B. Sc.