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PROSPECTUS

HOLBERG MINES LTD.

~~92L G. J. H. H. 05~~
92L 267
PROPERTY FILE 79X

PRIMARY ISSUE

The Company by this Prospectus of shares at the price of 60¢ per share, subject to a commission not to exceed 15¢ per share.

	Price to public	Discounts or Commissions	Proceeds to Company
Per Unit	\$0.60	Maximum Commission of \$0.15	\$0.45
Total	\$180,000.00	\$45,000.00, if all the shares are sold	\$135,000.00 if all the shares are sold

THERE IS NO MARKET FOR THE SHARES OF THE COMPANY.

THIS ISSUE IS SUBJECT TO A MINIMUM SUBSCRIPTION. FOR DETAILS, SEE PAGE 11 UNDER THE HEADING, "USE OF PROCEEDS AND FINANCIAL".

THE SECURITIES OFFERED BY THIS PROSPECTUS MUST BE CONSIDERED A SPECULATION AND REFERENCE IS MADE TO THE HEADING "SPECULATIVE FACTORS".

NO SURVEY OF ANY PROPERTY OR PROPERTY INTEREST HELD BY THE COMPANY HAS BEEN MADE AND THEREFORE IN ACCORDANCE WITH THE MINING LAWS OF THE APPROPRIATE JURISDICTION IN WHICH THE PROPERTY IS SITUATE THEIR POSITION, SIZE AND EXISTENCE ON THE GROUND MUST BE REGARDED AS SUBJECT TO ADJUSTMENT ON SURVEY.

THIS PROSPECTUS IS NOT, AND UNDER NO CIRCUMSTANCES IS TO BE CONSTRUED AS, A PUBLIC OFFERING OF SHARES FOR SALE IN THE UNITED STATES OF AMERICA OR IN ANY OF THE TERRITORIES OR POSSESSIONS THEREOF, OR IN ANY PROVINCE OF CANADA OTHER THAN THE PROVINCE OF BRITISH COLUMBIA.

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.

NO PERSON IS AUTHORIZED BY THE COMPANY TO GIVE ANY INFORMATION OR TO MAKE ANY REPRESENTATIONS OTHER THAN THOSE CONTAINED HEREIN IN CONNECTION WITH THE ISSUE AND SALE OF THE SHARES OFFERED HEREUNDER. IF GIVEN OR MADE, ANY SUCH INFORMATION OR REPRESENTATION CANNOT BE RELIED UPON AS HAVING BEEN AUTHORIZED BY THE COMPANY.

REFERENCE SHOULD BE MADE TO THE PARAGRAPHS "PROMOTERS" AND "PRINCIPAL HOLDERS OF SECURITIES" HEREIN FOR A COMPARISON OF THE NUMBER OF SHARES HELD BY THE PROMOTERS AND DIRECTORS OF THE COMPANY FOR CASH AND PROPERTIES WITH THE NUMBER OF SHARES OFFERED BY THIS PROSPECTUS.

DATED: June 30th, 1976.

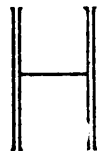
Holberg Mines Ltd. (N.P.L.)

Vancouver, B.C.

DEVELOPMENTS - 1976

PART ONE - SUMMARY OF REPORT
By The S.N.C. Group
(Pages 1 to 13) -

PART TWO - RECOMMENDATIONS FOR
FURTHER DEVELOPMENT
(Pages 14 to 17)



H. S. Haslam and Associates Limited
Consulting Mining Engineers
West Vancouver, B.C.

PART ONE - SUMMARY OF REPORT

entitled

"Holberg Mines Ltd. Developments - 1976"

By The S. N. C. Group.

INDEX

	<u>Page</u>
A. Foreword 1
B. Introduction and Summarized Conclusion - taken from The S. N. C. Group Report	.. 2
C. Market Study 3
D. Technical Considerations .	.. 7
E. The Economical Study10
F. Summary and Conclusion12
G. Report Preparation and Approval13

A. FOREWORD.

A.1 The Report entitled:

"Holberg Mines Ltd. Developments - 1976"
written by Surveyer, Nenniger and Chenevert Inc.,
Consulting Engineers, of Montreal, and dated
January 1976, was commissioned by Holberg Mines Ltd.
(N.P.L.) of Vancouver, as a pre-feasibility study
for the development of large limestone deposits
found on Holberg's minerals claims at Holberg,
North West Vancouver Island, British Columbia.

A.2 The Report considers various alternatives which could
lead to the construction of processing plants based on
limestone as a feedstock, and it arrives at a prelim-
inary evaluation of profitability for these plants
which justifies more detailed and specific studies.

A.3 This "Summary of Report" is an abstract of the Report
by Surveyer, Nenniger and Chenevert Inc. for the
purpose of quick reference.

(B).

INTRODUCTION AND SUMMARIZED CONCLUSION

HOLBERG MINES LTD. OF VANCOUVER, BRITISH COLUMBIA, IS THE HOLDER OF MINERAL CLAIMS WHICH CONTAIN LARGE LIMESTONE DEPOSITS LOCATED IN HOLBERG INLET AREA, NORTH-WEST OF VANCOUVER ISLAND.

ON ACCOUNT OF THE VAST QUANTITY OF QUALITY LIMESTONE AND EASY ACCESS TO WATER TRANSPORTATION, THE HOLBERG DEPOSIT WILL BECOME THE SOURCE OF LIMESTONE TO MANY INDUSTRIES OF THE WEST COAST DURING A LONG SPAN OF FUTURE INDUSTRIAL LIFE.

THE INTRODUCTION OF A THIRD CEMENT PRODUCER IN BRITISH COLUMBIA IS ECONOMICALLY FEASIBLE. VANCOUVER IS AN IDEAL LOCATION FOR BUILDING A CEMENT PLANT BECAUSE OF ACCESS TO EXPORT AND LOCAL MARKETS, AVAILABLE ENERGY AND LABOR.

AS FURTHER DEVELOPMENT, HOLBERG COULD PROCESS AND SUPPLY LIMESTONE TO CONSUMERS OTHER THAN THE THIRD BC CEMENT PRODUCER.

A DETAILED CEMENT MARKET SURVEY AND AN ASSOCIATION WITH AGGRESSIVE PROMOTERS ARE STRONGLY RECOMMENDED.

Abstracter's Note

This Page is a photostat
from the SNC Group Report.

C. MARKET STUDY.

Four products are considered:

- C.1 - Cement) considered
- C.2 - Clinker) together.
- C.3 - Lime
- C.4 - Limestone

C.1 - Cement
C.2 - Clinker

The United States Market

In 1974, Canada exported 2.25 million tons of cement and clinker to the United States, which represented 39.4% of total U.S. cement and clinker imports, and this is an increase of 220% since 1970.

Distribution patterns by U.S. regions require more detailed study. (Pages 8 and 9).

The most probable U.S. region for importing Western Canadian cement and clinker are the four Western States of Washington, Oregon, California and Alaska. (Page 1).

Capacity utilization of U.S. plants is around 93%, and while some plant expansion is planned, many of the new plants will serve as replacements for older facilities now in use, thus it is felt that there will be some room for external suppliers. Imports of cement and clinker are forecast to rise 2.3 million short tons between 1974 and 1980. (Page 7).

We quote from Page 26 :

"A reliable way to penetrate the United States market will be a joint venture with a U.S. producer or user which has an effective distribution network. The agreement could be a financial participation from the U.S. participant or a long term contract with specific conditions concerning quantities and duration of the contract."

"The strategy of implementation will be based on first developing the export market (United States Market) and secondly to envisage a growing part of the British Columbia cement market."

The Canadian Market

The total capacity of the industry is 15.9 million tons, and its plant capacity utilization in 1974 was 71.2%. Cement production rose from 8.0 million tons in 1970 to 11.3 million tons in 1974. (Page 14).

The British Columbia Market

The total capacity of the industry is 1.5 million tons, and its plant capacity utilization in 1974 was 63.4%. Cement production rose from an average per annum in the years prior to 1970 of some 700,000 tons, to a figure of 965,000 tons in 1974. (Page 14.)

There are two cement producers in B.C., namely

Canada Cement Lafarge Ltd.,
and Ocean Cement Limited.

The latter company has announced expansion plans.

We quote:

"Nevertheless, it is to be expected that a third producer will be welcome in a foreseeable future in order to reinforce local competition. This third producer could combine local sales to exportation." (Page 1).

Price Structure

The prices of bulk cement per short ton in August 1975 are quoted for various cities on Page 17, and these ranged from \$39.50 to \$44.20 on the American West coast. The average of twenty cities in North America was \$37.19.

The price per short ton for bagged cement was some 25% higher than the bulk price, at around \$46.50. (Page 15).

Other Possible Export Markets.

A marginal opportunity for exports of cement is anticipated on the Pacific Coast of Latin America, also on the Atlantic Coasts of South America and Africa, subject to further studies. (Page 1).

C.3 Lime

Over the ten years commencing 1964, the annual use of lime in Canada has averaged around 1.47 million tons, of which 87.4% (in 1972) was used in the chemical and metallurgical industries. Exports in 1973 amounted to 373,000 tons, mostly to the United States.

The market for lime is small and is growing relatively slowly, both in Canada and in British Columbia. Future needs are apparently able to be met, and exports are limited. (Pages 18 to 21).

A 200-tons per day plant is in operation at Langley, B.C.

C.4 Limestone

Shipments from Canadian quarries in 1972 amounted to 70.8 million tons.

Shipments from B.C. quarries in 1972 amounted to 3.9 million tons, and to 4.5 million tons in 1973. The value of the stone in 1974 was \$1.68 per short ton.

The entire output of limestone in B.C. is obtained from Texada Island, and as this becomes depleted, quarries further away from the Vancouver-Seattle area, such as Holberg, will be required to supply this market.

However, market possibilities may be available if a price increase is caused by a shortage of the product, or by a need to supply local or foreign captive markets. These prospects will be examined in greater detail for future implementation. (Pages 23 to 26).

D. TECHNICAL CONSIDERATIONS

D.1 Production Program

Cement

The designed production of the cement clinker plant is 1,000 tons per day, or 340,000 tons of cement per annum. This will be mainly sold in bulk, but also some tonnage in bags. (Page 27).

The site of the cement plant could be either at Holberg or at Vancouver, as determined by further studies. The chosen site will require access to shipping vessels of 30,000 tons capacity or more. (Page 28).

Raw materials, in addition to limestone (71.24%), are shale (23.25%), sand (5.51%) and gypsum (4% to 6%), are required for the manufacture of cement.

Fuel accounts for 15% or more of the cement production cost. Natural gas ("interruptable"), Bunker 'C' oil, and coal have been considered. (Pages 34 and 35).

Electric power for the quarrying operation will be supplied by diesel generators unless the cement plant is located there, when a transmission line will be needed between Port Hardy and Holberg. (Page 36).

Regarding labour requirements, 90 workers are envisaged for quarrying and cement manufacture, with 31 supervisors. An additional 8 workers are needed if an aggregate plant is installed at Vancouver. (Page 37).

The cores from five recently-drilled boreholes were analysed every 15 feet of their length. Four of the holes were 150 feet deep, and one was 94 feet. Magnesium oxide (MgO) was found in a quantity greater than desirable in one of the boreholes between 120 ft. and 150 ft., and

after eliminating this 30 ft. section from the total of 544 ft. of drilling, the following average chemical composition of the limestone was found:

<u>Constituent</u>	<u>Percentage by Weight.</u>
SiO ₂	0.41
Al ₂ O ₃	0.156
MgO	1.706
CaO	50.926
Na ₂ O	0.002
K ₂ O	0.005
TiO ₂	0.036
S (total)	0.033
Fe (total) as Fe ₂ O ₃	0.144
Loss on Ignition	<u>43.893</u>
	97.311

(Page 38).

The degree of lime saturation was checked for the mixture of raw materials shown above and found to be satisfactory for several types of cement. (Page 39).

The cement manufacturing process recommended is of the 'dry' type, and with sufficient automation to allow operation from one central control panel. (Page 40). The plant will consist of primary crushers, secondary crushers, screens, additives handling plant, raw material grinders, blenders, preheater, clinker calciner, storage buildings for raw materials, finished cement grinders and cement shipping facilities. (Pages 41 to 44). Material flow sheets and design outline drawings are included. (Appendices 2 to 5).

E. THE ECONOMICAL STUDY.

Depreciable Assets.

The Capital Cost Estimate arrived at for the quarry operation and the cement plant, marine dock facilities, installation costs and project management, etc., is \$55,485,200. (Page 48)

Land

Forty acres of land are needed, excluding that for the quarry operation. This land must be accessible to water transportation using ships of 30,000 tons capacity or larger. A minimum length of shoreline of 1,000 feet is required.

There is no great difficulty to find such a parcel of land at Holberg. Efforts have been made, with some success, to find such land in the Vancouver area, and the price is expected to be in the order of \$35,000 to \$45,000 per acre for unserviced land. (Page 53).

Pre-operating and Start-up Expenses

Prior to the start-up of operations, there will be an expenditure of some \$230,000 for roughly 50 man-months, and start-up expenses are estimated at \$500,000. (Page 54).

Working Capital

Electrical and mechanical equipment is valued at \$15.8 million, and 5% of this would represent the value of spare parts in stock, approximately \$800,000.

Accounts Receivable must be taken into consideration, and the total Working Capital is estimated at \$1,400,000.

(Page 55).

Aggregate

In addition to the quarrying of limestone to supply the cement manufacturing plant, provision has been made in the plans to produce limestone aggregate at the annual rate of 300,000 tons. Further testing of the stone is planned to ensure that it will satisfy market requirements. (Page 27).

Production Cost

- (a). The cost per ton of limestone quarried at Holberg and delivered by barge to Vancouver site is estimated at \$5.67, or \$2,211,300 per annum. (Page 57).
- (b). To manufacture 340,000 tons of cement per annum is estimated to cost \$7,945,000, or \$23.36 per ton. (Page 58).

Selling Price Structure

The prevailing price for bulk cement in Vancouver, (December 1975) was \$37.50 per ton. The two cement producers at that time announced a price increase effective January 1st. 1976 to \$48.50 per ton. The Report takes a figure of \$45.00, after allowing for recent Federal Government rulings on Price Increases, and in the analysis of profitability, three prices are simulated, namely \$40.00, \$45.00 and \$50.00 per short ton. (Page 67).

Plant Capacity Utilization.

This is assumed at 50% for the first year, 70% for the second year and 85% for the third and subsequent years. (Pages 62 and 67).

Other Items taken into account

These include transportation charges, sales expense, customs duties, income taxes and depreciation. (Pages 62/64).

Methods of Analysis of Profitability

Various alternatives of selected variables are examined for their effect upon cash flow and rate of return on the invested capital, over a period of twenty years.

(Pages 64 to 71.)

F. SUMMARY AND CONCLUSION

(Pages 72 and 73).

1. The Holberg Limestone deposit can become the centre of a supply of limestone to consumers located within an economical distance.
2. Production of cement appears to be the first priority development at this time.
3. The United States import large quantities of cement from Canada and this is likely to remain attractive to Canadian producers. However, one must look beyond exports and examine possibilities of combining export with domestic sales.
4. The Vancouver area appears to be more attractive for a cement plant location than the Holberg area.
5. As a third producer, a cement plant producing 340,000 tons per annum can be profitable.
6. If the cement plant is designed to produce 680,000 tons annually, an internal rate of return of 13% before taxes can be achieved, based on a selling price of \$45.00 per ton.
7. Expertise in the financial, commercial and technical fields as related to the cement industry is a necessary asset for a successful development Company.
8. The project is of sufficient interest to justify more detailed studies such as:
 - cement market survey on West coast of Canada and U.S.A.,
 - determination of most economical plant size,
 - full analysis of raw materials, and
 - survey of fuels potentially cheaper than natural gas.

G. REPORT PREPARATION AND APPROVAL

The Report was prepared by a team consisting of three leaders of Surveyer, Nenniger and Chenevert Inc., and was approved by three other officials, which included the Manager for the Project, Mr. Simon C. Leclipteux. All these officers signed the Report. (Page 74).

THIS SUMMARY OF REPORT has been abstracted from
the original by



H. S. Haslam, P.Eng.

Dated at West Vancouver, B.C.,
this 12th. day of May, 1976.

PART TWO - RECOMMENDATIONS FOR
FURTHER DEVELOPMENTS

1. The Report by H. S. Haslam and Associates Limited entitled

"Preliminary Report on the Limestone
Deposits at Holberg Inlet,
Vancouver Island, - November 1974"

recommended expenditure of funds in the development of this property in two phases - Phase I and Phase II, totalling \$71,500.00.

The work represented by this sum of money has been carried out and the results of the work have been incorporated in the Report of the S. N. C. Group, ("Holberg Mines Ltd. Developments - 1976"), which Report has been summarized in PART ONE hereof.

We concur with the recommendations arrived at.

2. WE NOW RECOMMEND the following steps should be taken as the next approach towards implementation of a third cement producer in British Columbia, the work to be carried out in two stages.

PHASE 1 - 76 - CEMENT MARKET SURVEY

- (i). A detailed survey of the cement market in British Columbia and the four western States of the United States to determine quantities of cement and potential aggregate markets within each market area.
- (ii). Personal contacts should be made with potential and present users of cement and/or clinker for purposes of negotiating long term sales contracts for cement, also for aggregate sales within a convenient transportation area.
- (iii). Minimum time period for work preparation, field survey, analysis of data and finalization of report is approximately sixteen (16) man-weeks.

PHASE 1 - 76 : continued

ESTIMATE OF EXPENDITURE required to carry out this work:

Minimum Cost - \$36,000.00

PHASE 2 - 76 - TECHNICAL DEVELOPMENT

On completion of Phase 1 - 76, and providing sufficient potential markets are established, Phase 2 - 76 should be implemented.

(a). Cement Plant Capacity

Determination of the most economical capacity for the proposed cement manufacturing plant to satisfy market conditions.

(b). Location of Cement Plant

Studies to confirm the Vancouver area as the best site for the plant.

(c). Cement Additives

A search to obtain suitable additives for cement manufacture from locations as near to the plant as possible.

(d). Raw Materials Analyses

Further analysis of the raw materials for cement manufacture to ensure the success of the process to be adopted.

It should be noted that the analyses so far available indicate that cement of Types I, II, III and IV can readily be manufactured.

(e). Fuel for Cement Plant

A detailed survey of all potential fuels and their cost delivered at the plant.

(f). Aggregate

To carry out testing of physical properties of the limestone to ensure its market acceptance.

(g). Engineering

Engineering, preparation of reports, and Management.

(h). Minimum contingency fund of \$9,000.00 to be set aside in the event a more conventional comprehensive market survey is required using information obtained in Phase 1 - 76 of the Cement Market Survey.

ESTIMATE OF EXPENDITURE required to carry out this work:

Minimum Cost - \$53,000.00

3. SUMMARY OF ESTIMATED EXPENDITURES

For PHASE 1 - 76	-	\$36,000.
For PHASE 2 - 76	-	53,000.
Drilling - 1976	-	<u>7,500.</u>
TOTAL COST	-	<u>\$96,500.</u>

RESULTS OF THE 1975 DRILLING PROGRAM

1. Our previous Report, dated March 27th.1975, assumed an approximate area of limestone available of 190.3 hectares (470 acres).
2. The "75" Series of drill holes have revealed 45.72 metres (150 feet), at least, of clean limestone without overburden. Assuming the limestone weighs 2,722kg. per cubic metre (170 lbs.per cubic foot) there are some 260 million short tons of limestone "in place" down to this depth.
3. In other words, more than sufficient reserves of limestone are thus indicated to be present for the purposes intended by Holberg Mines Ltd. for many years to come, and in any event far in excess of that tonnage required to satisfy any feasibility consideration for processing plants or external direct sales of limestone from this site.

DRILLING - 1976

Further core drilling on the property to the extent of 152 metres (500 ft.) for the purpose of additional chemical analytical data concerning the limestone deposit, and for assessment filing:

Minimum Cost - \$7,500.00

CERTIFICATION

This is to certify that

HUBERT S. HASLAM,

Consulting Mining Engineer and President of H. S. Haslam and Associates Limited, has abstracted the Summary of Report to be found in PART ONE hereof, and that he has compiled and written PART TWO hereof.

I HEREBY CERTIFY THAT:

- (a) I hold the Degree of Bachelor of Engineering in Mining, First Class, also the Degree of Master of Engineering in the University of Sheffield.
- (b) I hold, through examination, Fellowships in
The Institution of Mining Engineers
The Institution of Mechanical Engineers
The Institution of Civil Engineers.
- (c) I am a Registered Member of the Association of Professional Engineers of British Columbia, also similar registration in the Provinces of Ontario, Alberta and Quebec.
- (d) I am a Member of
The Canadian Institute of Mining and Metallurgy
The Engineering Institute of Canada
The American Institute of Mining and Metallurgical Engineers.
- (e) I am a practising Consulting Mining Engineer and reside at 2144, Nelson Avenue, West Vancouver, British Columbia.
- (f) I have no direct or indirect interest whatsoever in Holberg Mines Ltd. (N.P.L.) nor in the mineral claims mentioned in the foregoing Reports, nor do I expect to receive any interest, direct or indirect, in the properties of Holberg Mines Ltd. (N.P.L.) or any affiliate or any security of the Company or affiliate.

Dated at West Vancouver, B.C. this 12th. day of May, 1976.



H. S. Haslam

H. S. Haslam, P.Eng.


President,
H. S. Haslam and Associates Limited.

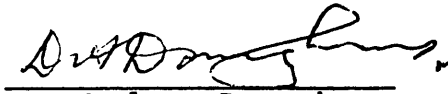
H. S. HASLAM AND ASSOCIATES LIMITED


CERTIFICATE

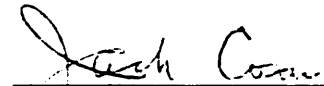
The foregoing constitutes full, true and plain disclosure of all material facts relating to the securities offered by this Prospectus as required by Part VII of the Securities Act of British Columbia and the regulations thereunder.

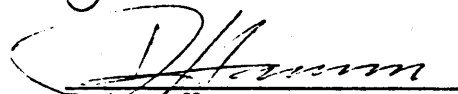
DATED at Vancouver, British Columbia this 30th day of June, 1976.

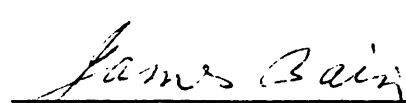

Peter Floyd Wishart
(Director and Promoter)


Don Andrew Donaghan
(Director and Promoter)


Monying (Monty) Lee
(Director and Promoter)


Jack Cosar
(Director and Promoter)


Peter Hamm
(Director and Promoter)


James Bain
(Director and Promoter)

This is Exhibit "A" In the Affidavit of
Peter Lloyd Wishart Sworn before me at
North Vancouver, B. C. this *6th*
day of *August* 19 *76*

[Signature] C.N. MUNRO
A Commissioner for taking Affidavits
within British Columbia.