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104-N

February 21st, 1969

INTERPROVINCIAL

PROGRESS REPORT
TO SHAREHOLDER

A final feasibility
from Consultants
sidered two apprc
thereon.

Armour Mines Ltd (formerly
Atkin Ruffner Mines) and
Inter. Provincial Silver Mines
Atkin B.C.

as been received
ltants have con-
ommendations

March 29 1969

- (1) It is considered feasible that the mine can be put into production at an operating rate of 100 Tons per day and operated at a profit; however, pay back of the capital expenditure will be marginal until additional ore reserves have been established. A coordinated exploration, development, mine preparation and mill construction program has been defined by the Consultants as a basis of their feasibility. This program is designed to be completed in a 9 month period. The program will develop the mine to provide available ore to sustain a 100 Ton per day milling operation and will convert sufficient possible ore reserves into available mill feed in order to disperse the capital cost.
- (2) It is also considered feasible that the mine can be put into production at an initial rate of approximately 200 Tons per day. Prior to such an accomplishment the Consultants specify that development will be necessary to provide additional underground access, stope blocks and working places. A new exploration program should also be completed prior to mill construction. The many unexplored areas of known mineralization should be developed and possible reserves should be converted to proven and probable ore in order to justify capital costs of mill construction.

The second course of action is favoured by the Consultants, and also by a majority of the Directors. A decision was reached, based primarily by comparison of net earnings potential and capital cost of a 100 Ton per day versus a 200 Ton per day operation.

It is calculated that yearly net earnings of a 100 Ton per day operation will be \$332,180.00, compared to an estimated yearly net earnings of a 200 Ton per day operation of \$1,000,000.00. It is proposed that the entire capital cost of the 200 Ton per day mine will only slightly exceed that of the 100 Ton per day mine.

The final feasibility is based on a production rate of 100 Ton per day, and includes programming and costing of (1) development, (2) mining, (3) milling, as well as a breakdown of capital costs and revenue.

Included with the feasibility are results of Britton Research Limited project B-206 "Metallurgical Tests on a sample of silver-lead-zinc ore submitted by Interprovincial Silver Mines Ltd. (N. P. L.) Progress Report No. 1" and "Mineralogical Examination of Ore and Concentrate from Interprovincial Silver Mines Ltd." by J.A. Chamberlain, P. Eng., Ph.D., of Dolmage, Campbell and Associates.

W.S.R.
K.C.G.
J.H.S.
E.F.
R.D.S.
B.C.B.
P.M.K. ✓
G.W.M. ✓
R.O.M.
C.K.W.
J.P.S.
G.P.R.
K.F.L.
J.H.B.
E.C.J.

INTERPROVINCIAL



SILVER MINES LTD. (N.P.L.)

SILVER MINES LTD.

104-N

PROGRESS REPORT NO. 13
TO SHAREHOLDERS

February 21st, 1969

A final feasibility report on the Company's Atlin Silver Properties has been received from Consultants, Dolmage, Campbell and Associates. The Consultants have considered two approaches for attaining production and have made recommendations thereon.

- (1) It is considered feasible that the mine can be put into production at an operating rate of 100 Tons per day and operated at a profit; however, pay back of the capital expenditure will be marginal until additional ore reserves have been established. A coordinated exploration, development, mine preparation and mill construction program has been defined by the Consultants as a basis of their feasibility. This program is designed to be completed in a 9 month period. The program will develop the mine to provide available ore to sustain a 100 Ton per day milling operation and will convert sufficient possible ore reserves into available mill feed in order to disperse the capital cost.
- (2) It is also considered feasible that the mine can be put into production at an initial rate of approximately 200 Tons per day. Prior to such an accomplishment the Consultants specify that development will be necessary to provide additional underground access, stope blocks and working places. A new exploration program should also be completed prior to mill construction. The many unexplored areas of known mineralization should be developed and possible reserves should be converted to proven and probable ore in order to justify capital costs of mill construction.

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J.B.S.
G.P.R.
K.F.L.
J.H.B.
E.C.J.

The second course of action is favoured by the Consultants, and also by a majority of the Directors. A decision was reached, based primarily by comparison of net earnings potential and capital cost of a 100 Ton per day versus a 200 Ton per day operation.

It is calculated that yearly net earnings of a 100 Ton per day operation will be \$332,180.00, compared to an estimated yearly net earnings of a 200 Ton per day operation of \$1,000,000.00. It is proposed that the entire capital cost of the 200 Ton per day mine will only slightly exceed that of the 100 Ton per day mine.

The final feasibility is based on a production rate of 100 Ton per day, and includes programming and costing of (1) development, (2) mining, (3) milling, as well as a breakdown of capital costs and revenue.

Included with the feasibility are results of Britton Research Limited project B-206 "Metallurgical Tests on a sample of silver-lead-zinc ore submitted by Interprovincial Silver Mines Ltd. (N.P.L.) Progress Report No. 1" and "Mineralogical Examination of Ore and Concentrate from Interprovincial Silver Mines Ltd." by J.A. Chamberlain, P.Eng., Ph.D., of Dolmage, Campbell and Associates.

REFERENCE MEMORANDUM

DATE

April 1

19*69*

THE ATTACHED PAPERS ARE REFERRED

TO

Dr. P.M. Kavanagh ✓

BY

G.M. Hogg

PLEASE REPLY DIRECT

PLEASE HANDLE

PLEASE SEE ME RE THIS

YOUR COMMENTS

FOR YOUR INFORMATION

FOR APPROVAL

PLEASE RETAIN

PLEASE RETURN

*Additional information
on Mr. Stovel's request for
data on Armovore Mines Ltd.*

*The Campbell of Dolmage,
Campbell et al did liberal
ore estimates on Puro Silver
and Arctic Gold.*

Details on cost can be summarized as follows:

Capital Cost - 100 T.P.D.	\$2,327,480.00	
Operating Cost - 100 T.P.D.	\$38.55 per ton	\$3,855.00 per day
Gross Revenue, 100 T.P.D.		\$4,832.00 per day

The gross revenue figure is derived from an ore value of \$71.10 (Canadian); calculated by averaging metallurgical samples, minus shipping and smelter charges.

It is anticipated that the ore dollar value requirement of \$71.10 for a 100 Ton mining operation will be lowered considerably for a 200 T.P.D. operation and as such greater reserves of lower grade material will be more readily available.

The cost of developing 1 ton of \$71.00 ore is calculated at \$11.47 per ton of ore mined. The Company's Directors have considered this exploration cost in view of required long-range profitability and have decided that this cost will necessarily have to be reduced by at least 50%.

It is anticipated that the exploration cost can be reduced effectively by increasing the size of the exploration target by at least 50%. To accomplish this the necessary ore grade requirement must be reduced by as much as 50%, and the resulting rate of production will have to be at least doubled. At the expanded rate of production very low grade material will also become available for blending purposes to provide a profitable mill feed.

The Company will now proceed to raise sufficient funds to initiate a new exploration and development program which is scheduled to commence approximately May 1st and will include work at the following locations, all of which are considered excellent exploration targets.

1. 2D access 175 feet below the 2X level will be rehabilitated for main haulage purposes and for development of the 2X ore body at depth, stope preparations will also be completed on this ore body to include raise work and sublevel development.

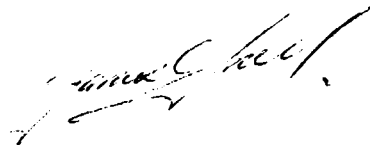
Diamond drilling will probe the eastern extension of this 2X ore body and will define the depth limit.

2. Complete underground development of the Big Canyon No. 1 ore body and preparation of this ore body for mining purposes. Preliminary surface drilling of this zone indicates an ore shoot in excess of 300 feet in length, 5.2 feet in average width and grading 21.6 oz. silver per ton. The Directors believe that this area should be defined as to size and grade prior to production and that the ore body should be prepared for mining. Both underground preparation and surface accessibility are under consideration.
3. The undeveloped 4A ore body will be explored from the 4E adit approximately 150 feet below the 4A adit and surface outcropping.

4. The 2A mineral zone will be explored via the 2A adit 550 feet vertically above the 2X ore body on the No. 2 vein Ruffner Mine. Approximately 400 feet of drifting and 1000 feet of drilling is contemplated.
5. The Big Canyon No. 2B mineral zone will be tapped by adit development at depth below the surface diamond drill intersection.
6. The 4100 level will be rehabilitated on the Ruffner No. 2 vein. Mineralization has been exposed in this area 2000 feet vertically below the 2B ore body.

The Company's Directors believe that the program as outlined, if carried through to completion, will provide sufficient source of ore to justify quite a substantial production rate, and the Company will benefit from this higher production rate by way of long term profitability.

It is therefore the Company's intent to raise sufficient funds and proceed with the new exploration and development programs as soon as possible. A delay in production of one year can be expected during which time the exploration work will be conducted and the property re-evaluated. However, during the next few months final metallurgical reports will be completed and concentrator design and engineering studies will be started for a plant with a capacity of 200 Ton per day to 300 Ton per day. It is intended that the final mill design will incorporate flexible production rate capabilities which will allow production rate adjustments during operation according to such variables as quality and quantity of ore, and metallurgical variations. Production can then be scaled continuously to maximum profitability.



James C. Snell, B.Sc.
President.

KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

To Mr. J. H. Stovel From G. M. Hogg

Subject Armore Mines Ltd. 104-N Date March 28, 1969

Armore Mines Ltd. (previously Atlin-Ruffner Mines Ltd.) is a Toronto-based company under presidency of A. B. Matlow. It is capitalized at 6 million shares, with 3.2 million issued to June, 1968.

Of particular interest is a deal made with Interprovincial Silver Mines Ltd. of Vancouver regarding 58 claims owned by Armore in the Atlin area of B.C. close to the Yukon border. Interprovincial Silver has a total of 180 claims ~~total~~ in the area, and reports 110,880 tons of material grading 25 oz. Ag/ton and 5% Pb-Zn. The potential to at least double reserves is considered good.

Feasibility studies for a 100 ton per day operation with provision for expansion to a 200 ton per day rate are "encouraging." An operating cost of \$25 to \$30 per ton and a capital expenditure of 2 million dollars are estimated. This would of course produce a profit of \$20.00 per ton.

Armore Mines Ltd., under the option arrangement has received total payments to the end of August, 1968, of approximately \$35,000.00 from Interprovincial, and will receive another \$30,000.00 before purchase of claims is complete. In addition, Armore will receive 7½% of net smelter returns for the 1st three years of production, and 5% for the next 17 years.

To May 1968, Interprovincial Silver Mines Ltd. had spent \$300,000.00 on exploration and evaluation of the Armore property. The report on the feasibility study was released in November 1968, and I have not been able to find any new developments since that time.

Interprovincial Silver Mines incidentally changed its name in January 1968 from Interprovincial Metals Ltd. (share for share basis). It is capitalized at 3 million shares, 2.3 being issued. J. C. Shell of Vancouver is President.

Armore Mines Ltd. also has a group of claims north of Elliot Lake on which drilling is planned; an iron deposit in Mongolfier Township in Quebec which is being tested by bulk sampling; claims in the Coppermine area N.W.T.; and a claim group in the Uchi Lake area south of the Selco prospect.

W.S.R.
K.C.G.
J.H.S.
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KERR ADDISON MINES LIMITED


(FOR INTER-OFFICE USE ONLY)

To Mr. J. H. Stovel From G. M. Hogg

Subject Armour Mines Ltd. - 2 - Date March 28, 1969

Concerning the Armour-Interprovincial matter, I will advise you if I hear anything further. You may also note that included in this property area in B.C. are a few claims belonging to Adanac Mining and Exploration Ltd. A small tonnage on this ground has been included in the reserves quoted by Interprovincial. This company is mentioned in the Northern Miner (November 1968) but I have not been able to find any listing on it.

GMH:lfr


G. M. Hogg