LORNEX MINING CORPORATION LTD.

1. Lornex Mining Corporation Ltd. is preparing to put its Highland Valley copper-molybdenum property into production by late 1971 or early 1972 at a total capital cost of $120,000,000.

   When financing is completed, Rio Algom Mines will hold over 50% of the outstanding common shares. Senior financing is being arranged through three Canadian banks and a consortium of Japanese interests. Pending final negotiations and Japanese government approval, copper concentrates will be sold to the Japanese group.

2. Ore reserves of 293,000,000 tons have been confirmed and grades are conservatively reported at 0.427% copper and 0.014% molybdenum. The official mill rate is 38,000 tons per day although a a higher rate in the order of 42,000 tons per day is anticipated. Recoveries of 92% for copper and 65% for molybdenum are expected.

3. A number of present value calculations have been included in this report assuming various metal grades, metal prices and mill rates. The most realistic estimate, in our opinion, uses a copper price of $0.45 per pound and gives a present value per share of about $12.00. This P.V. increases to over $17.00 with a $0.50 per pound copper price and decreases to about $8.00 if the established floor price of $0.41 per pound is assumed.

   The White Paper on Taxation, now expected in November, may recommend a reduction in the tax free period and in the present depletion allowance available to mining companies. Such changes would obviously reduce the calculated present value of Lornex shares.

4. Lornex shares are now trading at $11.00 which is slightly below what we consider to be a conservative present value of $12.00. As a general rule, shares of a new mine will sell close to their present value 1 to 2 years prior to production. By the time production commences the shares normally will trade at a 50% to 100% premium of this value. Thus, over the next 1 to 2 years the stock can be accumulated in the $10.00 range. Possible weakness due to tax uncertainties or softening copper prices would offer a good buying opportunity.

THE COMPANY Lornex Mining Corporation Ltd. was incorporated under the B.C. Companies Act in 1964 to develop its copper-molybdenum property in the Highland Valley area of B.C. about 30 miles from Ashcroft. Financing of this $120,000,000 project has been arranged through Canadian banks and Japanese interests and a concentrates sales contract with the Japanese interests is being finalized. When completed, this project will result in the largest single base-metal operation in Canada producing about 120 million pounds of copper and 3 million pounds of molybdenite in concentrate forms annually.

Early development work was financed through an underwriting and option agreement with Rio Algom Mines and the Yukon Consolidated Mining Corp. At present Rio Algom has a 36% interest and Yukon has a 24% interest in Lornex. Rio Algom maintains management control of the Company. Subsequent to the completion of financing, Rio's interest will increase to just over 50% of the 6,400,000 shares that will then be outstanding.

Construction and preparation of the mine for production is estimated to require 32 months. A definite start-up date has not yet been announced and will depend on completion of final discussions in Japan.

OREBODY The Lornex orebody falls into the porphyry copper category insofar as it is a large, low grade, economic, copper deposit. It is located near the centre of the Guichon Batholith in the Highland Valley and is contained in a zone of faulting and hydrothermal alteration up to 2,000 feet wide and more than 8,000 feet long. This zone grades into the Skeena granodiorite on the east and the Bethsaida granodiorite grading to quartz monzonite on the west. The Bethlehem Copper deposits are located on the opposite side of the Skeena granodiorite where it contacts the Guichon Quartz Diorite.

The primary copper minerals are bornite, chalcopyrite and chalcocite and the secondary oxide minerals are malachite and tenorite. Molybdenum occurs in economic amounts as the sulfide molybdenite.

ORE RESERVES A feasibility study by Bechtel Corporation has confirmed a tonnage of 293,000,000 tons of 0.427% copper and 0.014% molybdenum based on a cut-off grade of 0.26% copper. The overall waste to ore ratio is 0.862 to 1 including 35,000,000 tons of oxidized material which will be stockpiled. In addition, some 51,000,000 cubic yards of overburden must be removed.

The underground programme, including 5,439 feet of drilling and 13,000 tons of bulk sampling, indicated grades from 8.8% to 9.9% higher for copper and 4.5% to 13.8% higher for molybdenum. While the Company states there is insufficient evidence to raise the total ore reserve grades [illegible] these percentages, it appears that reported grades are conservative due largely to core losses. Moreover, it is estimated that the underground programme has tested about one-third of the tonnage to be m[illegible] in the first five years. Thus we have included an evaluation of the deposit assuming copper and molybdenum grades 8% higher than those officially reported.

DEVELOPMENT AND PRODUCTION PLANS Preproduction development, now in progress, involves stripping of about 29,000,000 cubic yards of overburden and removal of 6,300,000 tons of waste rock. The oxidized ore zone that lies above the sulfide ore will be stockpiled for possible future treatment since pilot testing of this ore was unsuccessful.

The official mill rate is 38,000 tons of ore per day. However, it is felt that a higher rate in the order of 42,000 tons per day may be achieved. At this higher rate present reserves will sustain a 20-year operation. Recovery of copper is expected to average 92% and molybdenum about 65% (as molybdenite). Development of the mine and construction of the plant should be completed within a 32-month period. -

FINANCING The total capital cost of the project is estimated at $120,000,000. Of this amount, Rio Algom and Yukon will provide $23,600,000 through purchase of units comprising a $1,000 Subordinated Income Debenture and 80 Lornex shares. This will increase the Company's outstanding capitalization from 4,521,321 shares presently issued to about 6,400,000 shares. In the event of an overrun on expenses Rio Algom has agreed to purchase additional units to a maximum of $20,000,000. Under letters of intent, senior financing, totalling $86,500,000, has been arranged from two sources; a consortium of Japanese interests ($26.5 million) and three Canadian banks ($60 million). Final details are now being discussed with the Japanese and approval is expected before the year-end.

Of the remaining capital cost, $7.4 million has been spent on the project to date and a $2.5 million mortgage was obtained from N.H.A. for development of a townsite.

MARKETING The Company has arranged a letter of intent for the sale of its entire output of copper concentrate to six Japanese smelters for twelve years. The agreement awaits final negotiations and Japanese government approval. We understand that a floor price of $0.38 U.S. or about $0.41 Canadian has been established.

EVALUATION

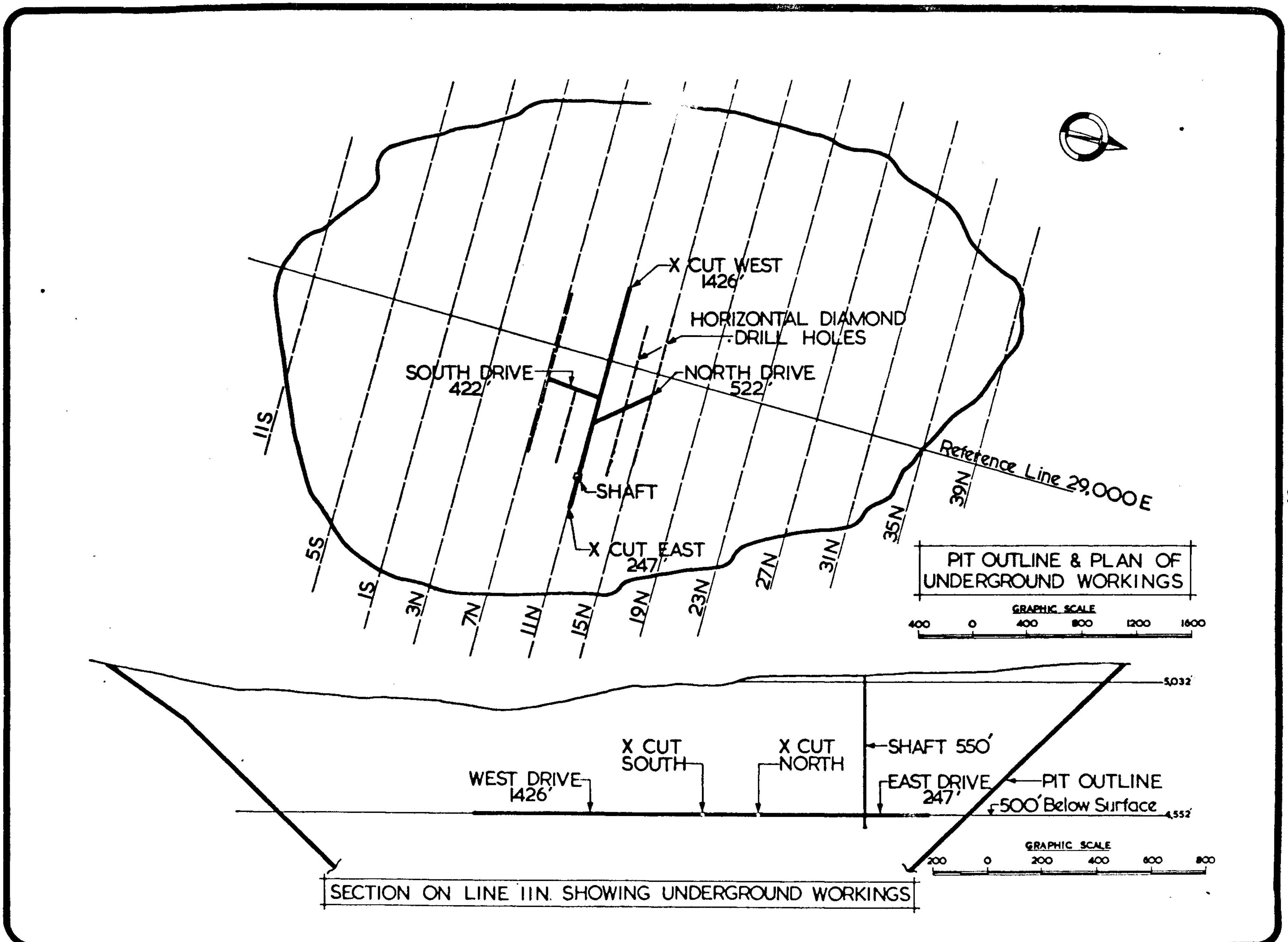
Assumptions

Ore Reserves	293,000,000 tons		
Metal Recoveries	Cu – 92%;	Mo – 65%	(in MoS_2)
Smelting, Refining & Freight Costs	Cu – 8¢/lb;	Mo – 7¢/lb.	
Operating Costs	$1.56 per ton of ore		
Capital Cost	$120,000,000		
Capital Additions	$ 30,000,000		
Interest Rate	8% per annum		
	10% per annum		

Assumptions (Cont'd)

	CASE I			CASE II		
Mill Rate	38,000 tons/day or 13,300,000 tons/year			42,000 tons/day or 14,700,000 tons/year		
Metal Grades Cu	0.427%			0.46%		
Mo	0.014%			0.015%		
	(a)	(b)	(c)	(a)	(b)	(c)
Metal Price Cu	$0.41	$0.45	$0.50	$0.41	$0.45	$0.50
(per lb.) Mo	1.83	1.83	1.83	1.83	1.83	1.83
CALCULATIONS						
N.S.R. per ton	$2.91	$3.23	$3.62	$3.14	$3.47	$3.90
Operating Profit per ton	1.35	1.67	2.06	1.58	1.91	2.34
Annual Operating Profit	$ 17,955,000	$ 22,211,000	$ 27,398,000	$ 23,226,000	$ 28,077,000	$ 34,398,000
Per share	2.81	3.47	4.28	3.63	4.39	5.37
Total net cash flow.	106,000,000	156,600,000	224,000,000	168,500,000	234,300,000	309,700,000
Present value cash flow (discount at 10%)	24,600,000	45,200,000	73,500,000	51,700,000	77,700,000	110,800,000
Present value per share	3.84	7.06	11.49	8.07 7.10(1)	12.15 11.20(1)	17.31 16.40(1)

Note: (1) Present value per share if interest rate of 10% is assumed assumed on debt.



PIT OUTLINE & PLAN OF UNDERGROUND WORKINGS

SECTION ON LINE 11N. SHOWING UNDERGROUND WORKINGS

PRESENT VALUE ESTIMATES Most of the assumptions used in our valuation of Lornex are taken from the Bechtel Corporation feasibility study as published in the Lornex annual report. Each present value is calculated by discounting cash flow at 10% back to the commencement of production. Case I adheres strictly to officially reported metal grades and mill rates, whereas Case II uses more optimistic asumptions which we consider to be realistic. The variation in metal grades obtained from surface drilling and from underground work was discussed under "Ore Reserves". In Case II, copper and molybdenum grades are increased by 8% from 0.427% to 0.45% for copper and from 0.014% to 0.015% for molybdenum. In addition, we feel that there is a good possibility that mill capacity may exceed 38,000 tons per day. Thus, in Case II the mill rate is increased by about 10% to 42,000 tons per day.

At this time, we understand that Lornex is negotiating a floor price for copper of $0.38 U.S. per pound or about $0.41 Canadian with the Japanese smelters. Lornex will be paid the EMJ export price for copper which is currently about $0.67 U.S. per pound. While we do not expect this price level to be maintained over the long-term, over the next year or two we expect prices to stabilize around the $0.45-$0.50 level. The Canadian price at present is $0.57 Canadian per pound. In both Case I and Case II we have calculated the present values using $0.41, $0.45 and $0.50 copper (Canadian funds). The price of molybdenum is already at $1.83 per pound of contained molybdenum in concentrates.

In both Case I and Case II capital cost has been debt financed at 8%. In view of existing high interest rates, Case II has been reworked using a 10% rate per annum and results appear in parentheses.

The present three-year tax free period and 33% depletion allowance have been assumed in these evaluations. It is expected that the Government's White Paper due in mid-November will recommend a reduction in these tax incentives. To obtain some idea of the effect that these changes might have on the present value of Lornex, we have recalculated Case II(b) using a two-year tax free period and a 25% depletion allowance. This gives a present value per share of $10.70 as compared to $12.15.

CONCLUSION The most obvious conclusion to be drawn from the range of values shown in the section on evaluation is the considerable degree of leverage exerted by the price of copper. We feel that $0.45 per pound is a reasonably conservative assumption. Thus it would appear that Case II(b) is the most realistic evaluation giving a present value in the order of $12.00 per share. Continuing high interest rates and the possibility of a less favourable tax climate may reduce this value to the $10.00 to $11.00 range. As a general rule shares of a new mine will sell close to their present value one to two years before the mine goes into production. However, by the time the mine is in production the shares normally sell at a premium of up to 100% over their present value. Lornex will be in production in about 2½ years and thus, for longer term growth potential, Lornex shares can be accumulated in the $10.00-$12.00 range over the next 1 to 2 years.

RESEARCH DEPARTMENT — OCTOBER, 1969

HR - GH/ep

Hank Reimer
Mining Engineer, Toronto.

BALANCE SHEET AS AT SEPTEMBER 30, 1968

Assets:

	1968	1967
CURRENT:		
Cash	$ 121,719	$ 207,194
Short term investments, at cost, and deposits	304,197	2,506,163
Accounts receivable	10,997	38,209
	436,913	2,751,566
FIXED, at cost (notes 1 and 2):		
Plant and equipment	1,382,497	1,319,518
Mining properties	471,000	471,000
	1,853,497	1,790,518
OTHER:		
Deferred exploration, development and administration, at cost (notes 1 and 3)	5,381,113	3,180,761
Incorporation and organization costs	2,601	2,601
	5,383,714	3,183,362
	$7,674,124	$7,725,446

Liabilities and Shareholders' Equity:

	1968	1967
CURRENT:		
Accounts payable and accrued liabilities	$ 225,041	$ 269,262
Due to Rio Algom Mines Limited	47,730	78,387
Due to Rio Tinto Canadian Exploration Limited	29,583	6,027
	302,354	353,676
SHAREHOLDERS' EQUITY:		
Capital stock —		
Authorized:		
5,000,000 shares with a par value of 50¢ each		
Issued:		
900,000 shares for mining properties	450,000	450,000
3,621,321 shares for cash	1,810,660	1,810,660
4,521,321	2,260,660	2,260,660
Premium less discount on shares issued for cash	5,111,110	5,111,110
	7,371,770	7,371,770
	$7,674,124	$7,725,446