OCT 1 5 1969

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RICHARDSON SECURITIES OF CANADA

ENIOR PARTNER: GEORGE T. RICHARDSON

R E S E A R C H D E P A R T M E N T



LORNEX MINING CORPORATION LTD

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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.

AFFILIATE OF James Richardson & Sons, Similar ESTABLISHED 1857

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 basemetal 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 cutoff 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 by 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 mined 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 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¢/Ib. | |
| Operating Costs | \$1.56 p | per ton of ore | |
| Capital Cost | \$120,0 | 00,000 | |
| Capital Additions | \$ 30,0 | 00,000 | |
| Interest Rate | 8% per | annum | |
| | 10% per | annum | |

Assumptions (Cont'd)

| | (| CASE I | | | CASE I | I |
|--|------------------|--------------------------------|---------------|-----------------|---------------------------------|-------------------|
| Mill Rate | 38,000 tor to | is/day or 13,300,i ins/year | 000 | 42,0 | 100 tons/day or 14 tons/year | 4,700,000 |
| Metal Grades Cu | . (|).427% | | | 0.46% | · |
| Мо | . (|).014% | | | 0.015% | |
| Metal Price Cu | (a) \$0.41 | (b) \$0.45 | (c) \$0.50 | (a) \$0.41 | (b) \$0.45 | (c) \$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.

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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 premlum 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.

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RESEARCH DEPARTMENT HR - GH/ep OCTOBER, 1969

BALANCE SHEET AS AT SEPTEMBER 30, 1968

| | ts: |
|--|--|
| 1967 | JRRENT: 1968 |
| \$207,194 2,506,163 38,209 2,751,566 | Cash \$ 121,719 Short term investments, at cost, and deposits 304,197 Accounts receivable 10,997 436,913 436,913 |
| _,, | XED, at cost (notes 1 and 2): |
| 1,319,518 471,000 1,790,518 | Plant and equipment. 1,382,497 Mining properties 471,000 1,853,497 |
| | THER: |
| 3,180,761 2,601 3,183,362 \$7,725,446 | Deferred exploration, development and administration, at cost (notes 1 and 3) 5,381,113 Incorporation and organization costs 2,601 5,383,714 \$7,674,124 |
| | ilities and Shareholders' Equity: |
| | JRRENT: |
| \$ 269,262 78,387 6,027 353,676 | Accounts payable and accrued liabilities225,041Due to Rio Algom Mines Limited47,730Due to Rio Tinto Canadian Exploration Limited29,583302,354 |
| | AREHOLDERS' EQUITY: |
| | Capital stock — Authorized: 5,000,000 shares with a par value of 50¢ each |
| 450,000 1,810,660 2,260,660 5,111,110 7,371,770 \$7,725,446 | Issued: 900,000 shares for mining properties |

RICHARDSON SECURITIES OF CANADA



EXECUTIVE OFFICES: RICHARDSON BUILDING ONE LOMBARD PLACE WINNIPEG 2, MANITOBA

BRITISH COLUMBIA

| 955 West Hastings Street, P. O. Box 1 | 29, Sta. A 682-175 |
|---------------------------------------|------------------------|
| Bentall Building, 1060 Douglas Street | , P.O. Box 430 385-142 |
| 465 Quebec Street, P. O. Box 1240 | |

ALBERTA

| 10053-"A" Jasper Avenue, P. O. Box 667 | |
|--|----|
| 319 - 8th Avenue South West, P.O. Box 73 | 30 |
| 709 - 4th Avenue South | |
| 562 - 2nd Street South East, P. O. Box 728 | |

SASKATCHEWAN

| 1935 Scarth Street, P. O. Box 288 | | 523-4681 |
|---------------------------------------|---------------------|----------|
| Financial Building, 222 - 22nd Street | East, P.O. Box 1400 | 653-4420 |
| 18 High Street East, P.O. Box 1418 | | 692-2337 |
| 115 Central Avenue | | 773-3161 |

MANITOBA

| Childs Building, 211 Portage Avenue, P.O. Box 747 | 943-9311 |
|---|----------|
| 123 - 10th Street, P.O. Box 878 | 727-0681 |

ONTARIO

| | Richmond-Adelaide Centre, 120 Adelaide St. West | |
|------|---|--|
| | 146 Wellington Street West 352-1510 | |
| | 6 Ainslie Street South, P. O. Box 127 | |
| | 22 King Street East, P.O. Box 2003 528-0477 | |
| | 307 Second Street South | |
| | 90 Brock Street, P.O. Box 180 544-7944 | |
| | 18 Queen Street North 578-1100 | |
| nt.) | 380 Richmond Street | |
| | Victoria Building, 138 Wellington Street | |
| | 144 North Front Street, P. O. Box 2258 | |
| | 61 Robinson Street | |
| | 403 - 96 Larch Street | |
| | 656 Quellette Avenue | |

QUEBEC

| Montreal | 620 St. James Street West | 849-4751 |
|----------|---|----------|
| Quebec | Chauveau Building, 1195 St. Jean Street | 525-7105 |

NEW BRUNSWICK

| 88 York Street, P.O. Box 251 | 475-6661 |
|---|----------|
| 794 Main Street, P.O. Box 337 | 855-1880 |
| 63 Prince William Street, P. O. Box 280 | 657-3551 |

NOVA SCOTIA

| 1649 Hollis Street, P.O. Box 2170 | 423-8383 |
|-----------------------------------|----------|
| 48 Queen Street, P. O. Box 158 | 466-7634 |

PRINCE EDWARD ISLAND

| 146 Richmond Street, P. O. Box 276 | 894-551 |
|------------------------------------|---------|
| 5 Summer Street, P. O. Box 1300 | 436-216 |

UNITED KINGDOM

| 7 Union Court, Old Broad Street, E.C. 2 | 588-2513 |
|---|----------|

WEST GERMANY

Rathenauplatz 1A, 6 Frankfurt/Main 28-32-41

HONG KONG

UNITED STATES AFFILIATE **RICHARDSON SECURITIES, INC.**

14 Wall Street, New York 10005 349-2850 Board of Trade Bidg., 141 West Jackson Bivd. III. 60604 427-6027

New York Chicago

Vancouver Victoria Prince George

Edmonton Calgary Lethbridge Medicine Hat

Regina Saskatoon Moose Jaw Swift Current

Winnipeg Brandon

Toronto Chatham Galt Hamilton Kenora Kingston Kitchener Landon (O Ottawa Sarnia Simcoe Sudbury Windsor

Halifax Dartmouth

London

Frankfurt

Charlottetown Summerside

Fredericton Moncton Saint John

92 I JAN 21 1966

| KERR-ADDISON GOLD N | AINES LIMITED attach to S.R. Previous |
|---|--|
| | Catter |
| ToF.M. KAVANAGH. From | W.M. SIROLA. |
| Subject. LORNEX MINING CORPORATION LTD. | Date January 19th, 1966. C.K.W. J.B.S. |
| | G.P.R. K.F.L. 11B |
| Pursuant to your 'phone ca | 11 of yesterday on the above |

Fursuant to your 'phone call of yesterday on the above subject I telephoned Gus Skerl and he proffered the following information:

(1) He feels that a grade of 0.50% copper is essential for economic operation.

(2) The North Zone is open to the north and, to some extent, to the west.

(3) He does not place too much credence on I.P. response because he thinks that much of it comes from the mineral response.

(4) The MoS₂ found to date is extremely fine-grain, and only half of it appears recoverable.

(5) The upper 100 feet of the mineralized zone is mostly carbonate with the same grade as the primary mineralization.

(6) Most of the drilling completed thus far has been percussion-type, but they are now attempting diamond drilling. The first attempt at diamond drilling produced 70% core recoveries and slightly lower grades than the percussion drilling.

The deposit appears to have dimensions which could exceed 2,000 ft. of strike length and 1,200 ft. of width. A 200-ft. depth of this material would provide 40 million tons. Conceivably, the value of the molybdenite could compensate for tailing loss in the copper circuit, and the gross value of the mineralization would then be: 0.50% Cu @ 35ϕ per pound = \$3.50 per ton. With strip ratios of 2 - 1, it should be possible to keep operating costs in the order of \$2.00 per ton. It seems to me that this situation could survive, even if copper prices were reduced to the 30ϕ level.

From a grade standpoint, the Lornex property appears to have an edge on the Brenda deposit, but this is offset to some degree by higher strip ratios. From an investment standpoint, the Lornex property appears to have good potential.

In Seirla

William M. Sirola.







FIRST ANNUAL REPORT

AS OF SEPTEMBER 30, 1965

LORNEX MINING CORPORATION LTD. (N.P.L.)

AUTHORIZED CAPITAL

5,000,000 common shares par value 50c each

ISSUED

1,883,592

REMAINING IN TREASURY

3,116,048

DIRECTORS

| EGIL H. LORNTZSEN Vancouver |
|---|
| A, DAVID ROSS, B.C.L.S West Vancouver |
| C. W. McK. BURGE, LL.B West Vancouver |
| DR. E. B. GILLANDERS, Ph.D Crescent Beach |
| ISAAC SHULMAN, LL.B Vancouver |
| J. A. SADLER, P.Eng Toronto |
| W. P. ARNOLD, P.Eng Toronto |
| |

OFFICERS

| EGIL H. LORNTZSEN | N - | | - | - | - | - | - | - | - | President |
|-------------------|-----|---|---|---|---|---|-----|-----|-------|-----------|
| A. DAVID ROSS - | - | - | - | - | - | - | - | ١ | Vice | President |
| C. W. McK. BURGE | - | | - | - | - | - | Sec | ret | tary- | Treasurer |

CONSULTING GEOLOGIST

DR. A. C. SKERL, A.R.C.M., Ph.D., P.Eng.

MINE MANAGER

JOHN W. SCOTT, P.Eng.

SOLICITOR

C. W. McK. BURGE, LL.D.

REGISTRAR AND TRANSFER AGENTS

NATIONAL TRUST CO. - Vancouver

AUDITORS

JOHN C. OSWALD & CO., Chartered Accountants Vancouver

BANK

BANK OF NOVA SCOTIA - Vancouver

HEAD OFFICE

558 Howe Street, Vancouver

SHARES OF THE COMPANY LISTED

VANCOUVER STOCK EXCHANGE



Egil H. Lorntzsen President

Egil H. Lorntzsen was born in Norway and at an early age, as was the custom of his birth place, he went to sea. He led an active few years in sealing in the Arctic and later served with the Norwegian Merchant Marine to many parts of the world.

In Norway he obtained his education in Commerce and soon after arriving in Canada in 1932, he became interested in mining, studying geology and surveying, and he received his underground mining experience in the Bridge River area. He had his first producing mine in this area which he worked with a partner for several years, producing high grade tungsten ore. He has been active in the exploration field in all parts of British Columbia, parts of the Yukon, and at one time, very interested in Dutch Guiana. He has been busy in the Highland Valley area since 1956... compass and chain surveying of mining properties and directing prospecting and development.

He is President of Empire Mercury Corporation Ltd. (N.P.L.) and Director of several other mining companies.

Message from the President

It has been a rich reward to me, with over 30 years in the prospecting and mining business to be heading a team of business men and engineers, that are working together to bring into reality, a mine of great potential.

I wish to thank the staff, the men in the field, the consultants, the directors, the chartered accountants, and the men of Rio Algom Mines Limited, and Rio Tinto Canadian Exploration Ltd., who have all united into this team for the development of Lornex Mining Corporation Ltd. (N.P.L.).

It is my pleasure to introduce to you, the following directors and consultants, whose efforts have helped to bring this Company to its present status.

Directors

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C. W. McK. Burge Director

C. William McK. Burge is a Canadian, born in British Columbia, and is a graduate in Chemistry from the University of Alberta and Law from the University of British Columbia. He has maintained his own law practice for ten years and is a member of the Law Society of British Columbia. He is the secretary of Northern Coal Mines Ltd. and is secretary and director of Empire Mercury Corporation Ltd. (N.P.L.) and Iola Mines Ltd. (N.P.L.).



Isaac Shulman Director

Isaac Shulman is a Canadian, born in Manitoba. He is a graduate in Law from the University of British Columbia. He is the senior partner in the Vancouver law firm of Shulman, Tupper, Worrall, Jonsson and Laxton. He is the President of Ace Mining Co. Ltd. (N.P.L.), President of Utica Mining Co. Ltd. (N.P.L.), Director of Copper Ridge Mines Ltd. (N.P.L.) and Director of North Pacific Mines Ltd. (N.P.L.).



W. P. Arnold Director

Walter Paige Arnold was born in Johannesburg, S.A., and is presently the Vice-President and General Manager of Operations, Mining Division Rio Algom Mines Ltd. Mr. Arnold has had an extensive career as Shift Boss, Mine Captain, Underground Manager, Assistant General Manager, and General Manager of mining companies in South Africa. At the time of his appointment as a Mine Manager, he was the youngest Mine Manager ever appointed in that country. He is presently a Director of Canadian Metal Mining Association; Chairman, Rock Burst Committee of Ontario Mining Association; Uranium Committee of Ontario Mining Association; member of the South Africa Institute of Mining and Metallurgy; member the Canadian Institute of Mining and Metallurgy.



J. A. Sadler Director

James Arthur Sadler is a Canadian born in Canada and is a Mining Engineer. His present position is President of Rio Tinto Canadian Exploration Ltd. He previously held the position of General Manager of the Gieta Gold Mining Company Ltd. of East Africa and was also Chief Mining Engineer, Department of Natural Resources, Province of Manitoba. He is a Director of Rio Tinto Canadian Exploration Ltd., Consolidated Zinc Corporation of Canada, Yukon Consolidated Gold Corporation. British Newfoundland Exploration Limited, and Anglo-Rouyn Mines Limited. He is a member of the Professional Engineers of Ontario, Canadian Institute of Mining and Metallurgy, the Institute of Mining and Metallurgy, and A.I.M.E.

A. David Ross Director

A. David Ross is a Canadian, born in British Columbia, and has been an active prospector since before World War II. He served in the Canadian Army during World War II and subsequent to the war was trained as a British Columbia Land Surveyor and practiced in that capacity as well as maintaining his activities as a prospector. Mr. Ross surveyed the mineral claims of the Granduc Mines Limited and also the Hart Highway in British Columbia. He is Managing Director of Rio Plata Silver Mines Limited and is a Director of Northern Coal Mines Ltd., Empire Mercury Corporation Ltd. (N.P.L.) and Iola Mines Ltd., (N.P.L.).



Dr. E. B. Gillanders Director

Earl B. Gillanders, PhD. Dr. Gillanders is a Canadian born in British Columbia who is a Past-President of the Canadian Metal Mining Association, former executive Vice-President of Rio Algom Mines Ltd., and formerly head of operations for the Rio Tinto Group in Canada. During the war Dr. Gillanders was. manager of mining and exploration for the crown corporation Eldorado Mining and Refining Ltd. He was honoured by the Canadian Institute of Mining and Metallurgy for his efforts on behalf of the Canadian Uranium Industry. He is also a director of New Imperial Mines Ltd.

Directors' Report

The Company was incorporated under the laws of British Columbia on the 6th day of July, 1964.

Prior to the 1st of May, 1965, the Company had issued 750,000 shares in exchange for 94 mineral claims, 50,000 shares in exchange for a commitment to pay royalty under an option agreement, and 658,952 shares issued for cash to yield \$137,293.50 for the Company Treasury. No commission has been paid on the sale of any of these shares.

In September 1964 after the incorporation of the Company and the preliminary expenses had been paid and no funds were available, the President of the Company, Egil H. Lorntzsen, requested the release of escrowed shares received in exchange for mineral claims in another company so that he could and did sell these shares to carry on exploration work.

The President then raised further funds on a personal and private company basis without any shares being issued to the public and the Company carried on exploration work until the subsequent agreement with Rio Algom Mines Limited.

The Company was converted to a public company on the 19th day of March, 1965.

On the 1st day of May, 1965, the Company entered into an agreement with Rio Algom Mines Limited, which agreement provided for Rio Algom Mines Limited to have the option to purchase 2,400,000 shares of the capital stock of Lornex.¹ This agreement when finalized will give Rio Algom Mines Limited or its nominees majority control of the Company.

Pursuant to an agreement with Skeena Silver Mines Ltd. (N.P.L.) (now Consolidated Skeena Silver Mines Ltd.) dated the 17th of May, 1965, the Company has issued a further 25,000 shares on an option to purchase four mineral claims from that company, the balance of the purchase price for these mineral claims is a further 50,000 shares of Lornex.

Lornex has assumed an assignment from Rio Algom Mines Ltd. of the option to purchase a further 15 claims from Consolidated Skeena Silver Mines Ltd. (N.P.L.). Option payments under this agreement call for increasing amounts of money to be spent each year for prospecting, exploration, and development work and if the claims are brought into production to pay royalties.²

Lornex has a further agreement with Kennco Explorations (Western) Limited to purchase a further six mineral claims.

At the date of this report, the Company owns or has under option a total of one hundred and fifty-three (153) mineral claims.

The shares of the Company were called for trading on the Vancouver Stock Exchange on Tuesday, the 17th of August, 1965.

¹ See Note 2 to balance sheet.

² See Note 1 to balance sheet, "Skeena Option".



John W. Scott, P.Eng. Mine Manager

Report by Mine Manager

The following is an outline of work completed to date on the Lornex property with some brief comments on the results obtained:

Development work on the Lornex property started September 21st, 1964, and a vigorous, well-directed program has been carried on continuously since that date.

Exploration began with bulldozer stripping near the Lorntzsen discovery and was extended as substantial widths of copper mineralization were uncovered. In early February, 1965, the program was expanded by the addition of a truckmounted Copco percussion drill. Drilling was started in the discovery area and extended on a 100 ft. by 200 ft. grid pattern over the mineralized areas. Dry cuttings from each 10 ft. run were collected as samples. Wet drilling equipment was added in August 1965 enabling the percussion drill to reach depths of 250-300 feet consistently.

In July and August, 1965, a limited program of diamond drilling was carried out to test the discovery zone and check the percussion drilling results. With unsatisfactory core and sludge recovery, the diamond drilling program was suspended to permit further study of applicable techniques and evaluation of sample results.

Practically all of the company's extensive claim holdings were covered dur-ing the 1965 season by an Induced Polarization survey, Magnetometer survey, reconnaissance surface geology and geochemical sampling of the area drainage systems. The I.P. survey confirmed and extended the mineralized zone from the discovery area South and also indicated a very substantial extension to the North.

Drilling and bulldozer trenching were started on the North zone, known as the No. 2 zone, in August, continuing to the present time with most encouraging results.

The work done on the property since September 21, 1964, is briefly summarized as follows:

Percussion Drilling-36,500 feet in 300 holes No. 1 Zone-24,500 feet in 242 holes

No. 2 Zone-12,000 feet in 58 holes

Diamond Drilling—3,123 feet of BX wire line drilling in 7 holes, all on the No. 1 (Discovery) Zone.

Surface Trenching—total of 18,000 feet of bulldozer trenches No. 1 Zone—9,000 feet

No. 2 Zoneand extensions-5,000 feet

No. 3 Zone-3,000 feet

Geophysical line cutting-40 miles

Access roads and drill roads built-25 miles

Results:

Drilling results to date indicate a mineralized zone or zones of very large proportions. The area covered to date by the percussion drilling grid is 5,600 feet long, and varies in width from 900 to 1,600 feet. It appears most probable that a single mineralized structure follows through the full length, but the North section is offset to the West some 200 to 300 feet on a major fault. For convenience therefore, the mineralized area has been divided for reference into the No. 1 (Discovery Zone) extending South from the fault and the No. 2 (North Zone), North of the fault. Details of probable ore widths and average grades are included in Dr. Skerl's report.

Although average values in the No. 1 Zone are quite low, it should be noted that the average depth of the 242 percussion holes drilled on this zone is only 100 feet. Drilling to the 300 foot depth now obtainable with the percussion machine is definitely required over a large part of this zone. A considerable number of holes gave values well above the general average, and somewhat better values at greater depth can be reasonably expected.

On the No. 2 Zone considerably better average copper values have been obtained and it is reasonably certain that this section will, when completely explored, show higher grade than the No. 1 Zone. Drilling on thte No. 2 Zone to date has extended over a length of 1,400 feet, with drilled widths from 800 to 1,400 feet. An eastern limit has been established in the drilled area, but the western limit has nowhere been reached. To the South, a length of 600 feet to the No. 1 Zone has not been drilled and the Northern limit has not been reached.

Recent drilling westerly on a single line has extended 500 feet beyond the previous 800 to 900 ft. width drilled with most encouraging results. Overburden is deepening to the west but all holes which have penetrated bedrock have shown good copper values and the western limit has not yet been reached.

Present drill holes are being carried to 250 to 300 ft. depth, with an overall average for the No. 2 Zone of over 200 feet. Since the I.P. survey results have given strong indication of much greater depth for the mineralization, a program of deeper diamond drilling is about to start. Percussion drilling to the present depth will be extended West and North as rapidly as possible.

John W. Scott, P.Eng., Mine Manager.

December 1, 1965.



Dr. E. C. Skerl Consulting Geologist

Consulting Geologist's Report

The President and Board of Directors, Lornex Mining Corporation, 558 Howe Street, Vancouver 1, B.C.

Dear Sirs,

In the following report you will find an account of the operation and the results achieved during the past twelve months at the company's property in Highland Valley, B.C.

One small outcrop of copper-stained diorite that was found by Mr. Lorntzsen provided the clue that he expanded by bulldozing into a mineralized area at least 4,000 feet long and up to 1,000 feet wide that had been concealed by glacial overburden.

After a favourable demonstration on the property of the operation of a Copco overburden drill for sampling purposes the company purchased one of these machines together with a compressor and bulldozer. Later the drill was mounted on a truck body to facilitate moving.

When the ground has been dry enough this machine has drilled as much as 250 feet vertically. For the wetter conditions encountered during the past two months the machine is operated with water down to 300 feet and a sludge is obtained every 10 feet for sampling and assaying. Full recovery is normally obtained.

This is probably the first time that a potential orebody has been systematically drilled with such a machine.

During the past year the following work has been done on the company's property:

18,000 feet of bulldozed trenches

36,500 feet of drilling with the Copco machine

3,123 feet of diamond drilling

As of the 1st November 1965 the dry drilling has given the following results from lines spaced 200 feet apart with holes at 100 feet intervals:

In the original area there is a zone 1,600 feet long and 300 feet wide that averages 0.40% Cu, 0.050% MoS² down to the average depth drilled of 120 feet. Across a gap of 400 feet that has still to be tested an enlargement of the zone is now being drilled. So far an area/200 feet long and 600 feet wide has been found that averages 0.51% Cu, 0.043% MoS² but the molybdenite assays are not yet complete.

AREA DIMENSIONS CORRECTED TO READ 1200 FT. LONG AND 600 FT. WIDE> Here the average depth reached is 200 feet below bedrock. In some sections the copper is present mostly as carbonate to as deep as 140 feet. There is no diminution in the grade for the depths explored so far in either of the two mineralized areas. An induced polarization survey suggests that there might be another 2,000 feet of strike to the second zone and that the width could be more than 600 feet.

Diamond drill holes Nos. 1 to 3 were drilled at -45° with B wire line to explore the first zone at depth. Core recoveries averaged only 70% and sludge recoveries considerably less. The sludge assays were the same as in the corresponding dry drilling but the recovered core only assayed 65% of the dry drilling values where a comparison could be made. Thus the first 140 feet (average 0.26% Cu) in No. 2 hole apparently corresponds to a length of 200 feet (averaging 0.25% Cu) in the bottom of hole No. 1 at 350 feet below. This corresponds to an indicated width on the surface of 200 feet averaging 0.40% Cu in two dry drill holes on the section line. The dip is then 80°.

The next three diamond drill holes were drilled on a section further south outside the zone where the dry drilling was obtaining interesting but sporadic results. Indifferent values were found.

A seventh hole was drilled at the site of dry drill hole No. 145 in the original zone for 150 feet vertically for direct comparison. The average grade of the core was 0.45% Cu (sludge 0.60) from 10 to 130 feet as compared with 0.53 by dry drilling. The core recovery was poor to 70 feet. The comparative figures from 70 to 130 feet where the core recovery was good is core 0.41% Cu (sludge 0.57) and dry drilling 0.43% Cu.

An attempt will be made shortly to test the promising second zone to depth by diamond drilling with an NX wire line rig which should give better recoveries.

The company's objective is to prove a sufficiently large body average 0.50% Cu that will justify an operation treating 20,000 tons per day. The amount of molybdenite recovered will probably be sufficient to offset the loss of copper in the mill tailing. The net cost of producing the copper could then be 20c per lb.

I wish to commend Mr. J. W. Scott for his efficient management of the field work and to acknowledge the co-operation of the engineers of Rio Tinto Canadian Exploration Company.

Respectfully submitted,

A. C. Skerl.



John C. Oswald Chartered Accountant

Auditors' Report

To the Shareholders of Lornex Mining Corporation Ltd. (N.P.L.)

We have examined the balance sheet of Lornex Mining Corporation Ltd. (N.P.L.) as at September 30, 1965, and the accompanying statement of exploration, development and administration costs from July 6, 1964 (date of incorporation) to that date, and have obtained all the information and explanations we have required. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion, and according to the best of our information and the explanations given to us and as shown by the books of the company, the accompanying balance sheet, read in conjunction with the notes thereto, and the related statement of exploration, development and administration costs present fairly the financial position of the company at September 30, 1965, and the costs incurred during the period then ended, in accordance with generally accepted accounting principles.

> John C. Oswald & Co., Chartered Accountants

November 10, 1965.

| Assets | | |
|---|----------------------------|-----------------------|
| CURRENT: Cash Prepaid equipment finance charges | | \$ 102,278 1,106 |
| | | 103,384 |
| MINING PROPERTIES, at cost: Mineral claims, including \$375,000 value placed on 750,000 shares issued therefor Payments made under options to purchase mineral claims including \$37,500 value place on 75,000 shares issued therefor (Note 1) | \$ 380,000 | 423,500 |
| EQUIPMENT AND BUILDINGS, at cost: Drilling and other equipment Trucks and tractor Camp buildings | 14,233 91,752 11,713 | 117,698 |
| DEFERRED CHARGES: Exploration, development and administration costs, per statement attached Incorporation and organization costs | 220,551 2,601 | 223,152 \$ 867,734 |

LORNEX MINING CORPORATION LTD. (N.P.L.)

Balance Sheet

September 30, 1965

| Liabilities | | |
|---|---|---------------------|
| CURRENT: Payables Equipment purchase contract | | \$ 54,147 26,294 |
| | | 80,441 |
| SHARE CAPITAL (Note 2): Authorized— 5,000,000 shares, par value 50c each 5 Issued— 825,000 shares for mineral claims 858,952 shares for cash | <u>\$ 2,500,000</u> 412,500 429,476 | |
| 1,683,952 Less net discount on issued shares | 841,976 117,183 | |
| Add subscription received, shares to be issued | 724,793 62,500 | 787,293 |
| = | | \$ 867.734 |

The accompany notes are an integral part of this statement. Approved on behalf of the Board:

Egil H. Lorntzsen, Director C. W. McK. Burge,

Director To be read in conjunction with our report to the Shareholders dated November 10, 1965.

John C. Oswald & Co., Chartered Accountants **Notes to balance sheet**, 1. Options to purchase mineral claims:

September 30, 1965

'IRIS'—in order to exercise the option to purchase these claims the Company will be required to pay a further \$19,000 in cash as follows:

- \$ 5,000 on or before February 28, 1966
 - 5,000 on or before August 31, 1966
 - 5,000 on or before February 28, 1967
 - 4,000 on or before August 31, 1967

\$19,000

'SKEENA purchase'--- in order to exercise the option to purchase these claims the Company will be required to issue a further 50,000 shares to the Vendors on May 31, 1966. The terms of this option agreement further provide for payment of 5% net smelter returns up to \$500,000 with minimum annual payments of \$15,000 to commence on May 31, 1971, and work commitments of \$10,000before May 31, 1966, and a further \$25,000 before May 31, 1967, on the exploration and development of these claims.

'SKEENA option'—in order to exercise the option to purchase these claims the Company agrees to spend the following sums on their exploration and development.

15,000 prior to May 31, 1966, and a further \$ 30,000 prior to May 31, 1967, and a further 50,000 prior to May 31, 1968, and a further 100,00 prior to May 31, 1969, and a further 150,000 prior to May 31, 1970

\$ 345,000

The terms of this option agreement further provide for payment of 5% net smelter returns up to \$3,000,000. In the event that the Company does not bring these claims into production prior to May 31, 1972, the Company shall pay to Skeena the sum of \$2,000 per month until the claims are brought into production or until May 31, 1974, whichever shall be the earlier.

'KEN'-under the terms of an agreement, presently being executed, the Company will acquire an option to purchase these claims for the following consideration-

- 25,000 shares on or before November 30, 1965
- 25,000 shares on or before August 1, 1966
- 50,000 shares on or before August 1, 1967
- 100.000

This purchase option shall be exercised in full at any such time as the Company shall have issued to the Vendors an aggregate of 100,000 shares of the Company's capital stock.

2. Share capital:

Of the 1,683,952 shares issued, 750,000 shares are held in escrow subject to the order of the Vancouver Stock Exchange.

Under the terms of an agreement dated May 1, 1965, Rio Algom Mines Limited purchased 100,000 shares from the treasury of the Company at a price of 75c per share and acquired options to purchase a further 2,300,000 shares of the Company's capital stock (58.5% interest) for the prices and within the times set forth below---1

| | | | Aggregate Purchase |
|------------|-----------|-------------------|--------------------|
| No. Shares | Per Share | On or Before | Price |
| 100,000 | \$1.00 | September 1, 1965 | \$ 100,000 |
| 200,000 | 1.25 | March 1, 1966 | 250,000 |
| 200,000 | 1.50 | September 1, 1966 | 300,000 |
| 300,000 | 1.75 | March 1, 1967 | 525,000 |
| 500,000 | 2.00 | September 1, 1967 | 1,000,000 |
| 500,000 | 2.25 | March 1, 1968 | 1,125,000 |
| 500,000 | 2.50 | September 1, 1968 | 1,250,000 |
| 2,300,000 | | | \$4,550,000 |

Up to the date of the balance sheet, Rio Algom had subscribed for 50,000 shares of the option due March 1, 1966. The balance of this option, 150,000 shares, was paid for on November 9, 1965.

While this agreement is in force the Company may only issue a further 216,048 shares to the public, making a maximum total in this connection of 1,700,000 shares, or 41.5% of the possible 4,100,000 shares to be issued. The 216,048 shares includes the 150,000 shares to be issued for mineral claims referred to in Note 1 above.

| Exploration and development: | | |
|---|----|---------|
| Trenching and road building | \$ | 17,376 |
| Dry drilling and grid roads | | 57,351 |
| Diamond drilling | | 27,687 |
| 'Rio Tinto Canex' exploration charges | | 38,310 |
| Surveying and sampling | | 5,211 |
| Assaying | | 9,583 |
| Mine management | | 9,757 |
| Consulting engineers' fees and expenses | | 5,803 |
| Staking and recording fees | | 3,313 |
| General transportation | | 7,389 |
| Camp and cookhouse | | 10,479 |
| | _ | 192,259 |

| Expl | oration, | develo | pment |
|------|----------|---------|-------|
| and | adminis | tration | costs |

for the period from July 6, 1964 (date of incorporation) to SEPTEMBER 30, 1965

28,292

| Administrative and office salaries | \$ 9,011 |
|--|-------------|
| Hotel and travel | 4,049 |
| Telephone | 1,182 |
| Printing, stationery and office supplies | 2,628 |
| Office rent | 1,222 |
| Legal fees | 2,739 |
| Accounting and audit fees | 3,810 |
| Share issue and V.S.E. listing fee | 1,474 |
| Shareholders' information | 736 |
| Sundry | 1,441 |

\$ 220,551 Total per balance sheet



Close-up view of trenching on the Lornex property.

Percussion drilling in winter.

LORNEX MINING CORPORATION LTD. (N.P.L.)



Opposite page shows an aerial view of the claim area in the Highland Valley. The white outline shows the extent of the claims and the extent of the trenching program is seen as white lines in the centre of the claim area. Bethlehem Copper shows in the upper right corner.

